MACROTEXTUAL ANALYSIS OF NUTRITION MESSAGES FROM SELECTED BROADCASTS ON CANADIAN PRIME TIME TELEVISION

A Thesis Submitted to the College of
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By
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SUMMARY OF DISSERTATION

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Macrotextual Analysis of Nutrition Messages from Selected Broadcasts on Canadian Prime Time Television

This study was designed to identify and describe major recurrent themes in food related messages and body image attitudes (BIA) broadcast on Canadian prime time television commercials and fictional programs. Content and semiotic analyses were combined to examine textual data from the purposive sample of 10 top-rated programs. Six hours of broadcasts yielded 821 incidents (2.28/min). Foods shown were most often from the Other Foods category followed by Grain Products, Meat and Alternatives, Vegetables and Fruit, and Milk Products. Food incidents tended towards higher fat choices, made little use of higher fibre foods or green and deep yellow vegetables and fruit, and often contained alcohol or caffeine. Information on portion size and frequency of food choice was lacking. Thematic analysis showed that food portrayals held strong social and psychological meanings such as caring, self-identity and emotional support. In health terms, food was related to mortality while morbidity of chronic disease was absent. BIA portrayals consistently dealt negatively with larger body sizes. Fewer people outside a healthy body weight range were shown in this sample than actually occurs. Ads used persuasion techniques to draw attention, build trust, stimulate desire, and stress urgency or desired action. The findings presented a viewer paradox — energy dense foods were stressed, yet possible adverse health effects were absent. The lack of a total diet approach of food portrayals promoted the "good/bad" food dichotomy. This, and the negative view of larger body types, could work against current health promotion efforts. These findings carry many implications for public health nutrition programs.

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ABSTRACT

This study was designed to identify and describe major recurrent themes in food related messages and body image attitudes (BIA) broadcast on Canadian network prime time television commercials and fictional programs. Content and semiotic analyses were combined to examine textual data from the purposive sample of 10 top-rated programs. Six hours of broadcasts yielded 821 incidents (2.28/min). Foods shown were most often from the Other Foods category followed by Grain Products, Meat and Alternatives, Vegetables and Fruit, and Milk Products. Food incidents tended towards higher fat choices, made little use of higher fibre foods or green and deep yellow vegetables and fruit, and often contained alcohol or caffeine. Information on portion size and frequency of food choice was lacking. Thematic analysis showed that food portrayals held strong social and psychological meanings such as caring, self-identity and emotional support. In health terms, food was related to mortality while morbidity of chronic disease was absent. BIA portrayals consistently dealt negatively with larger body sizes. Fewer people outside a healthy body weight range were shown in this sample than actually occurs. Ads used persuasion techniques to draw attention, build trust, stimulate desire, and stress urgency or desired action. The findings presented a viewer paradox — energy dense foods were stressed, yet possible adverse health effects were absent. The lack of a total diet approach of food portrayals promoted the "good/bad" food dichotomy. This, and the negative view of larger body types, could work against current health promotion efforts. These findings carry many implications for public health nutrition programs.

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DEDICATION

To the many fine teachers and mentors who have graced my journey.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

BIAI	Body Image Attitude Incident
BMI	Body Mass Index
FRI	Food Related Incident
PSA	Public Service Announcement
VO	Voiceover

1. INTRODUCTION

1.1 Overview

> In the remote Amazonian rain forest village of Gorotire, Brazil, a satellite dish brings He-Man and the Flintstones to the naked Kaiapo Indian children. No longer do the families gather at night to meet and to talk, to pass on information or to tell stories. The villagers call television the "big ghost." Beptopup, the oldest medicine man, says, "The night is the time the old people teach the young people. Television has stolen the night" (Simons, 1989, p.36). If television has stolen the night away from the Kaiapo Indians, it has stolen the day and night away from most [North American] children (Singer, 1993, p.73).

With this quote, Singer (1993) illustrated the far-reaching cultural effects of television on a society. Since its arrival into North American culture in 1938, television has become an integral part of the daily lives of most people — either as foreground or as background (Huston et al., 1992). Two generations have grown up within the symbolic environment created by this technology (Gerbner, 1985). Television viewing has been reported to be the most time-consuming home activity and the dominant leisure activity of North Americans (Dubois, 1996; Kubey & Csikszentmihalyi, 1990). Television is such a central component of people's lives that 25% of Americans surveyed by TV Guide would refuse to stop watching television for the rest of their lives in exchange for $1 million (D. Davis, 1993). Such reports conjure the image of a vortex. Yet, like the mariner in Poe's *Descent into the Maelstrom*, an understanding of the action of this "electronically-configured whirl" (McLuhan, 1967, p. 150) should aid the survival of the viewer.

Researchers in the fields of psychology, education, social science and health have theorized about and studied the effects television may have on individuals, families and societies. Included in the plethora of research have been studies of the effect of

television on aggressive behaviours, family relationships, cognitive development (Rubinstein, 1983; Singer & Singer, 1983), purchasing behaviour (Collins, Tonnessen, Barry & Yeates, 1992; Galst & White, 1976; Ippolito & Mathios, 1990), and health-detracting behaviours such as high risk sexual activity, reckless driving and use of alcohol, tobacco and marijuana (Grube & Wallack, 1994; Klein et al., 1993; Tucker, 1985).

While television can play an important role in health promotion and disease prevention strategies (Casiro, Stanwick, Pelech, Taylor & Child Health Committee, 1994; Gorn & Goldberg, 1982; Østbye, Pomerleau, White, Coolich & McWhinney, 1993), extended television viewing has been labelled a health risk. Negative nutrition-related effects associated with heavy television viewing include an increased incidence of obesity (Dietz & Gortmaker, 1985; Tucker & Bagwell, 1991; Tucker & Friedman, 1989), reduced physical fitness levels (Tucker, 1986, 1990), increased serum cholesterol levels (Tucker & Bagwell, 1992; Wong et al., 1992) and increased consumption of low-nutrient dense snacks (Galst, 1980; Goldberg, Gorn & Gibson, 1978). As well, recent research has indicated that many consumers report obtaining much of their nutrition information from food product advertisements (Reid, Conrad & Hendricks, 1996) and that they hold television to be a purveyor of truth (Black & Bryant, 1992).

Claims for possible negative health effects of television viewing have led many health researchers to the examination of commercial television content. Most studies have investigated the advertisements broadcast on U.S. networks. Two recent studies have completed frequency content analyses of advertisements occurring on Canadian network television (Østbye et al., 1993; Wadsworth, 1992).

Body image issues portrayed on television have been studied rarely and have usually only looked at the body type portrayed, not the underlying attitudes towards body shape and size (Byrd-Bredbenner, 1994; Kurman, 1978). Again, traditional frequency content analyses have been most common in these determinations. These researchers have elucidated the cultural paradox of eating as portrayed on television. Characters have been portrayed most often eating low nutrient dense, high energy foods

but rarely have been shown to gain weight or suffer the ill effects of chronic diseases associated with eating styles (Byrd-Bredbenner, 1994; Kurman, 1978).

In nutrition related studies, there appears to be a great disparity between what is seen on television and what health promotion professionals recommend. The television diet and body image mores have yet to catch up to the new healthy lifestyles approach being adopted by that segment of society that could be termed "early adopters." Foods and eating behaviours portrayed in advertisements and programming tend towards lower nutrient dense products, often with high fat and/or sugar contents (Byrd-Bredbenner, 1994; Kaufman, 1980; Kotz & Story, 1994; Østbye et al., 1993; Wadsworth, 1992).

Due to the clear popularity of food and nutrition topics in the mass media (Lichter & Admundson, 1996), most researchers have recognized the need for further investigation into the nutrition messages portrayed on television (Dubois, 1996). This would serve to better describe the messages and the indirect representations provided by the televised media as well as to identify the impact of these messages. The need for a clearer understanding of the environment within which the television industry exists has also been noted (Rubinstein, 1983).

While many researchers have contributed to a better understanding of television within the perspective of their own fields of study, an interdisciplinary view and a combination of research techniques would provide a much clearer understanding of this medium (Wurtzel, 1983).

1.2 Purpose of Study

The purpose of this study was to identify and describe the major, recurrent patterns in food related messages and body image attitudes broadcast on English-language Canadian network prime time television both during advertisements and fictional programming. Results were compared to current nutrition recommendations for health promotion and disease prevention. Findings were discussed in terms of existing media effects research results and suggestions for further studies of this field were outlined. As well, suggestions for practice-based interventions were provided.

1.3 Research Questions

1. How are food related incidents portrayed on prime time Canadian network television programs and advertisements?
   a) In what context are food-related incidents portrayed?
   b) What meaning is given to food in portrayals of food-related incidents?
   c) What are the aired rates of food-related incidents during top-rated prime time programs broadcast in Saskatoon?
2. How are body image attitudes portrayed on prime time Canadian network television programs and advertisements?
   a) In what context do body image attitude incidents occur?
   b) What meaning is given to body image in these portrayals?
   c) What are the aired rates of body image attitude incidents during top-rated programs broadcast in Saskatoon?

1.4 Need for Study

This research was unique in that it studied Canadian network programming and advertisements. Virtually all of the available data on food-related messages from television come from network broadcasts in the United States. Since advertising and food labelling regulations differ between countries, it was of interest to study Canadian broadcasts. Also, there is a paucity of data concerning body image *attitudes* as portrayed on television from any country.

Due to the ever-expanding new technologies, media can be considered to be moving targets (Zillman, Bryant & Huston, 1994), or dynamic and constantly changing. Reliance on content information from 5 to 20 years ago is not adequate for fostering support of healthy eating habits and body images in the Canadian public. Much of this past research has stressed only the messages contained in commercials. More attention should be given to these messages embedded within programming itself given the recent increase in the practice of product placement (Babin & Carder, 1996). As well, the majority of existing research has been conducted from a focus other than nutrition. It is time nutrition professionals undertake food and body image related media research

(Sylvester, Achterberg & Williams, 1995).

To date, most studies have used only a quantified content analysis to describe the frequencies of food related images portrayed on television. There is a need to use both content and context analyses. The addition of qualitative data will provide a richer description of food related and body image attitude messages leading to an improved understanding of these phenomena.

1.5 Significance of Study

This study aimed to clarify what food-related information is broadcast to Saskatoon consumers via television during prime time viewing hours. Both the obvious behaviours and the more subtle attitude messages were evaluated. This information will assist nutrition professionals to understand the meanings of food and the social mores regarding body image as portrayed on television. Such understanding of environmental influences, including the cultural and societal context within which consumer behaviour occurs is needed (Novelli, 1991), for any work to alter food choice should take into account the environment which may shape these choices (Calnan, 1990). When developing nutrition programs, then, nutritionists will be able to reinforce or counteract common message themes and emphasize the discrepancies between the mediated and the non-mediated worlds. Also, the results of this study should provide information concerning social dynamics of food and body image attitudes useful to those formulating nutrition policy and to the health advocacy lobby working with the television industry.

1.6 The Researcher's Story

Halfway through my Master's work, I discovered the fascination of the socio-cultural aspects of food. Why do we choose to eat the foods we do? It was then that I realized that I wanted to search out answers and try to understand this complex process better. Why? As the ballerina in the movie *Red Shoes* replied, when asked by the company director why she wanted to dance, "Why do you want to live?"

I have always found anthropological-type studies to be captivating — whether they be of mammals, primates, humans or prehistoric beings. Many of the researchers

in these fields have spent lifetimes studying a single social phenomenon or culture. No matter which group is studied, there always seems to be something revealed that gives us a glimpse into who we are and why we do what we do.

As a public health nutritionist, I've become acutely aware of the mass media effects on food choices, body image and development of social norms for body shape and size. A recurring, and somewhat disturbing, theme among both youth and adults is, "I'd kill for a body like that." In the interactive body image workshops I've conducted, participants have often cited both the fashion industry and the mass media as precipitating factors for their personally held negative body image attitudes. While print media do have distinct effects here, the pervasive nature of television has held my attention. I have seen it promote the manufactured image — where nothing is as it seems. As George Balanchine once told his dancers, " 'The mirror is not you. The mirror is you yourself looking at yourself' and they're not the same thing" (Farrell, 1990, p. 151).

I remember the day our first television was delivered. We received two channels, Moose Jaw and Regina, which meant I could see the Flintstones twice each week. Today, we receive about 40 channels and the Flintstones five times each week. I can attest to the power of this medium. It was here that I saw the Kennedy brothers die, the Challenger explode, the Quebec crisis unfold and the chilling images of war from Viet Nam to the Persian Gulf. Yet, a favourite quote of mine by Edward R. Murrow points to the positive influences of television.

> This instrument can teach, it can illuminate; yes, and it can even inspire. But it can do so only to the extent that humans are determined to use it to those ends. Otherwise it is merely wires and lights in a box (cited in Black and Bryant, 1992, p. 320).

Television isn't all bad. After all, it was on television that I was first introduced to Jane Goodall, Mark and Delia Owens, Mikhail Baryshnikov and the works of George Balanchine.

A friend once laughingly introduced me by saying, "Laurie doesn't know what she wants to be when she grows up." But my broad, or eclectic, interests have led me to the multidisciplinary approach of this planned research endeavour.

Suzanne Farrell (1990), noted ballerina, stated that she "had no desire to see something finished, but rather something evolving. Dancing is a process, not a product" (p. 296). I believe the same can be said of research. My training has been in the realm of traditional inquiry. As I contemplated the possible research questions for the study, it became clear that the traditional methods would not adequately answer them. The choreographer George Balanchine was trained in classical ballet, yet he understood that that wouldn't allow him to show dance in its entirety.

> Russian training emphasizes the climaxes, the big jumps, the multiple turns, and the grand finales, while the transition steps are treated as such and given little thought or value. But for Balanchine, dancing did not reside in the pose but within the transitions themselves; the act of getting from one step to another, and one place to another, *is* the dancing (Farrell, 1990, p. 295).

Balanchine used his classical training as a platform from which to begin to place dance in context. Similarly, a traditionally trained researcher like me can study cultural "transitions" within a naturalistic paradigm realizing that truth like ". . . dance, music, and the energies they produce exist only in the moment in which they are spent" (Farrell, 1990, p. 297).

1.7 Assumptions

1. "Television dominates the symbolic environment of modern age" (Signorielli & Lears, 1992).
2. Television messages form a major communications system within our culture — one that not only entertains but constantly educates (Gerbner, 1990).
3. The content of televised message systems affords a view to socialization within a culture (Gerbner, 1990).
4. The proliferation of new technologies serves to expand the reach of the

televised message system (Gerbner, 1990).

5. Televised messages subtly affect viewers over time through their repetitive natures (Bandura, 1977; Black & Bryant, 1992).
6. Description of manifest content of television broadcasts and any impact on viewer behaviour is speculative, though theoretically linked to a body of effects research (Larson, 1991).

1.8 Delimitations

1. This study will investigate only television broadcasts available in the Saskatoon area.
2. This study confines itself to English-language Canadian television network broadcasts during primetime hours only.

1.9 Limitations

1. Due to the lack of random sampling procedures, the results cannot be generalizable to Canadian prime time television broadcasts as a whole.
2. While every effort can be made to avoid black weeks (See definition below) in network programming, it is possible that these time periods will be sampled unknowingly.

1.10 Definitions

Affiliate -- a "television station under contract with one of the commercial host networks" (CBC, CTV) which receives programming from this host. The affiliate does not have to air programming from the host network (Black & Bryant, 1992, p. 621).

Audience -- "large, anonymous, heterogeneous masses of individuals attending to mass communications" (Black & Bryant, 1992, p. 621).

Black Weeks -- periods during the year when no ratings are conducted by network agreement; characterized by re-runs, public affairs shows and mundane storylines that do not draw large audiences (Black & Bryant, 1992).

Body Image -- a psychological construct, it is the view of body shape, size and physical ability, of self or of others, as compared to the perceived norm (Ikeda & Naworski, 1992). It is closely linked to self-esteem, physical changes in the body (puberty, pregnancy, menopause), socialization, prevailing social values and judgements or feedback from others (Rice, 1993). This is not a static concept, but changes throughout the life cycle and in response to changing environmental stimuli (Myers & Biocca, 1992; Rice, 1993).

Body Image Attitude Incident -- any portrayed scene with verbal or non-verbal responses to body shape or size of self or others by a character in a televised production, including indications by the producer, director or actor (i.e., exaggerated costume or behaviour, use of a laugh track) presented to be perceived positively or negatively by the viewing audience (Kurman, 1978).

Broadcast -- programming produced for large, heterogeneous audiences, which appeals "to the largest possible mass" or "to the lowest common denominator"; that is, programming of a "broad-based" or "noncontroversial" nature (Black & Bryant, 1992, p. 291).

Canadian Content -- the federally regulated minimum percentage of broadcast time used for transmission of Canadian produced programs (Lorimer & McNulty, 1991)

Content Analysis -- an unobtrusive measure of documented communications (Rothe, 1993); "a research method that uses a set of procedures to make valid inferences from text" (Weber, 1990, p.9); methods often combine qualitative and quantitative operations on text.

Food -- "includes any article manufactured, sold or represented for use as food or drink for human beings, chewing gum, and any ingredient that may be mixed with food for any purpose whatever" (Canada Food and Drugs Act, 1995, p. 1).

Food-Related Incident -- any portrayed scenes including food, either physical or symbolic.

> **Consumptive behaviours** -- includes food related behaviours and portrayals of food which involve consumption of food.
>
> **Non-Consumptive behaviours** -- include food-related behaviours not involving food consumption, such as purchase, preparation, serving, speaking of, etc. These will not include spoken idioms, i.e., "That's a bunch of bologna" or "He's the top banana."

Form -- the technical and visual aspect of a television production, i.e., camera directions, lighting, switching, cutaways, reaction shots, etc. (Adams, 1978b); functions as television's syntax (Fitch, Huston & Wright, 1993); communicates ideas by using a complex combination of visual forms, auditory forms and program attributes (Berger, 1991); (See Appendix A for definitions of specific forms).

Genre -- drama of a specific subject matter, e.g., mystery, police show, professionals (doctors, lawyers, teachers, etc.), situational comedy, soap opera, variety show, news magazine, talk show, etc. (Smith, 1992).

Highly Rated -- a broadcast that attracts an audience of over 1 million viewers as per Nielsen ratings reports (Smith, 1992). For the purposes of this study, programs which were consistently rated in the top 20 programs by Nielsen over the first 5 weeks of the 1995-1996 season.

Incident -- the action, thought or expressed attitude portrayed by a character regarding food or body image, or the portrayal of a food item. More than one incident may be present in any given scene; includes Individual actions where one character only is involved, i.e., a woman making cookies and a child eating cookie dough would be two separate incidents, and Group actions, where several characters are doing the same thing at the same time, such as a family eating a meal together.

Meaning -- shared understanding expressed by language, gestures and ceremonies, often as taken-for-granted understanding (Rothe, 1993); a social construction residing in social practice (Dey, 1993).

Narrowcast -- specialized programming produced for a small, homogeneous, self-selected audience segment (Black & Bryant, 1992).

Nutrient Density -- in foods, relates to the amount of nutrients available per energy unit (calorie, joule). A high nutrient dense food will provide significant amounts of the major nutrients along with the energy. A low nutrient dense food provides little else than energy (Snook, 1984).

Prime Time -- for the purposes of this study, television broadcasts occurring between 1900 h and 2200 h CST seven days a week.

Product Placement -- the widespread practice in commercial programming and film production of the prominent display of brand-name products for which a fee is paid to producers by product manufacturers and advertisers (Black & Bryant, 1992).

Props -- any objects that are used or touched by actors in a television production.

Scene -- for the purposes of this study, a scene consists of all action occurring in a single location. A scene ends when the camera shot changes to another location or time period, e.g. action opens in the kitchen (scene 1), moves to the dining room (scene 2), moves back to the kitchen (scene 3), moves out to the patio (scene 4), etc.

Semiotics -- the science of signs and symbols; a research framework used to determine the potential meanings created by mass media messages (Black & Bryant, 1992; Manning & Cullem-Swan, 1994).

Set Decoration -- any objects that are used for background decoration purposes and are not used by the actors in a television production.

Snacks -- any food or beverage not consumed at meal time (Larson, 1991).

Sweeps Weeks -- weeks during the months of November, February and May during which the ratings companies determine program and network ratings; characterized by major movie events, specials and intriguing storylines (Black & Bryant, 1992).

Tagline -- a sloganized final line of an advertisement which sums up the main messages (Williamson, 1978).

Text -- includes all media products -- newspapers, magazines, books, television programs, films. In a broader sense, it can refer to many of the artifacts of

popular culture such as clothes, computer games, political campaigns, sports events, concerts, etc. In this study, text refers to televised images and the cultural symbols contained in television broadcasts.

1.11 Summary

"Television is an unavoidable and unremitting factor in shaping what we are and what we will become" and it is "intricately entwined in the braid of life, so much so that it is easy to mistake it for an entirely passive servant" (Lichter, Lichter and Rothman, 1994; p. 12). Research has indicated that television plays an active role in shaping health attitudes, beliefs and behaviours. For this reason, social science researchers have begun to study the content of television in terms of the health and nutrition messages it portrays. Such research is important due to the link between television viewing and social reality, especially amongst individuals who are heavy television viewers (Dubois, 1996). The reported study investigated the food and body image attitude messages broadcast on selected prime time programs and advertisements on Canadian networks in the Saskatoon area. It used an interpretive approach via content and context analysis to uncover information concerning the semiotic production of meanings of such studied portrayals.

1.12 Organization of Document

In this first chapter, the problem for study has been outlined. In Chapter 2, a review of the literature relating television viewing and nutritional health is presented. The research orientation, research design and methodologies are contained in Chapter 3. Chapters 4, 5 and 6 contain the research findings and discussion on frequency content analysis, advertising techniques and the meaning of food and body image attitude portrayals in the sample, respectively. In Chapter 7, a summary of the findings with recommendations for public health nutrition program planning and further research is offered.

2. REVIEW OF THE LITERATURE

2.1 Introduction

> All media work us over completely. They are so pervasive in their personal, political, economic, aesthetic, psychological, moral, ethical and social consequences that they leave no part of us untouched, unaffected, unaltered. The medium is the massage. Any understanding of social and cultural change is impossible without a knowledge of the way media work as environments (McLuhan, 1967, p. 26).

With this statement, H. Marshall McLuhan summed up the all-encompassing nature of the effects the mass media have on individuals, families and societies. The media mould and shape, or massage, our very beings. Media are unavoidable, either from direct viewing or second-hand reports. The majority of knowledge and beliefs about life outside of personal experience, comes from the mass media (Elliott, 1996). Yet, in terms of television, how does this occur?

This chapter will review research that has attempted to answer this question. Special attention will be given to the reported and purported effects of television viewing on nutrition, body image and general health.

2.2 Television Environment

The connection between the powerful, "expressive media and the receptive audience creates an amazing description of a mediated public" (Elliott, 1996; p.6). Since the invention of a marketable form of television in 1938, this medium has become ubiquitous (Black & Bryant, 1992). The growth of the television industry is apparent in the increase in the number of stations on the air in North America, from 6 in 1946, to 482 in 1955, to 1469 in 1990 (Black & Bryant, 1992). Cable television services have been largely responsible for the recent increases in number, with 1990 estimates of over 60% of cable systems offering more than 30 channels (McAllister, 1996). An estimated 79% of the 96% of Canadian homes with access were subscribed to cable services in

1995 (Information Highway Advisory Council, 1995), more than in any other country (Switzer & Znaimer, 1996). This "de-massing" (Willis, 1995) trend carries the promise of many future specialty networks being narrow-cast into homes across the country. To survive, many such specialty cable channels already have begun to contract with advertisers, giving the advertising executives greater control over promotion and programming decisions (McAllister, 1996).

The increase in the number of homes with televisions paralleled the increase in number of stations on the air. In 1946, only 0.02% of North American homes contained a television set. During the post-war boom, this increased to 64.5% of homes by 1955 and today an estimated 98.2% of homes contain a television set (Black & Bryant, 1992). In fact, an estimated 65% of homes contain two or more sets (Black & Bryant, 1992).

Newer technologies have also affected the way we view television. In 1976, 6% of television homes owned a video-cassette recorder (VCR). By 1987, this had increased to 53% of television homes and VCR ownership is expected to reach 90% of television homes by 2000 (Dobrow, 1990). VCRs can diversify viewed messages through the use of pre-recorded tapes, known as "source-shifting," as well as increase the televised messages viewed through the taping of broadcasts for playback at a later time. This latter activity has been termed "time-shifting" (Dobrow, 1990). It is interesting to note, though, that only about 80% of these programs ever are viewed in playback (Black & Bryant, 1992). Light and heavy television viewers have been shown to use VCRs differently, with light viewers viewing pre-recorded video-cassettes to a greater degree than heavy viewers who used the VCR most often to time shift viewing (Dobrow, 1990). A Nielsen survey reported that "49 percent of taping was done with the TV off, 18 percent with the TV on but tuned to a different channel and 33 percent with the set on and tuned to the same channel being watched" (Black & Bryant, 1992, p. 401). It was found in a 1987 Nielsen survey that about 70% of taping done was from network channels and was almost evenly divided between weekend and weekday programming (Singleton, 1989).

By 1990, about three-quarters of homes with televisions had remote control devices, a technology which added viewer power over advertisers (McAllister, 1996). A significant increase in "channel surfing" or "zapping" between channels during commercial breaks has occured in such homes (Zufryden, Pedrick & Sankaralingam, 1993). Surprisingly, zapped ads have proved to be significantly more effective in terms of brand purchase behaviour than non-zapped ads (Zufryden et al., 1993). Some viewers have used this remote control device to view two or three programs at one time (Black & Bryant, 1992; Huston et al., 1992). When coupled with the time-shifting use of the VCR, commercial messages can be eliminated using the fast-forward feature — a process known as "zipping" (Black & Bryant, 1992). Further technological advances will continue to affect viewing behaviour and create new challenges for the commercial aspects of the television industry.

In 1959, the amount of time spent viewing television in North America was estimated to be about 4.5 hours daily (Murray, 1993). This figure, which experienced a concomitant increase with the increasing number of television stations and sets, peaked in 1977. Recent research concerning the amount of time people spend viewing television has garnered much attention. Children spend more time in front of the television than they do in school — an estimated 28 hours weekly (Comstock & Paik, 1987). Each week, adult males and females watch 29 and 34 hours, respectively. After retirement, this figure increases (Black & Bryant, 1992). It is interesting to note that even though Sweden has a lower mean viewing time than North America, the same viewing changes by age occur (Huston et al., 1992). In the average household, the television is turned on about 55 hours each week (Comstock & Paik, 1987), indicating that families don't always view together. So, it seems that besides work or school and sleep, television occupies the greatest proportion of viewers' time (Black & Bryant, 1992; Dubois, 1996) — the "medium of privitized relaxation" (Stevenson, 1995). It has been estimated that over the period of one year Americans collectively spend 30 million person-years viewing television (Murray, 1993).

Comstock (1993) suggested that these viewing statistics have a certain folklore quality about them. He noted that typical television viewing is not marked by constant attention to the screen, but is discontinuous, often interrupted and is not the sole activity engaged in by the viewer. In fact, most viewers have been found to engage in "time deepening," by participating in several activities simultaneously (Kubey & Csikszentmihalyi, 1990). Viewing tends to be characterized by "'content indifference', 'low involvement' and 'monitoring'" (Comstock, 1993, p. 126). Thus, the estimated viewing hours, and those reported to ratings companies, define the upper limits of possible attending to the screen only (Comstock, 1993).

Visual attention to the television screen has been found to increase until five years of age, level off during school years and decline during adulthood (Sylvester, Achterberg & Williams, 1995). However, while the viewer may not be actively engaged in viewing while in the room with the television set, according to the selective attention theory, they are aware of the content at a lower level of consciousness; that is, they are monitoring the programming. Thus, the brain can still recognize some of what is broadcast (Adams, 1978b). While males tend to look at the set more than females when viewing television, no gender differences in content recall have been noted (Huston et al., 1992).

But, what is actually being seen? Since the television industry is built on commercialism, advertisements abound. On average, a child views 22,000 commercials annually (Heinz, 1983; Signorielli, 1990a). Advertisements for food products constitute at least 5000 of these ads, over half of which are for low nutrient dense foods (Signorielli, 1990a). With the advent of the 15-second commercial, many viewers now see more commercials than before with over 25% of these being for food products (Signorielli & Lears, 1992). As well, data from the long-term cultural indicators project showed that a typical viewer of prime time welcomes about 300 stable characters into their homes each week (Gerbner, 1985). Over 75% of television characters consume or talk about food at least once during the daily prime time broadcasts (Signorielli & Lears, 1992). Herbold (1985) found that the number of main characters seen eating food was

less than the number of main characters associated with non-consumptive food behaviours. Often the foods consumed by characters are of low nutritional quality and the foods are used to sooth unsettled emotions or as socialization tools rather than to curb hunger (Weinberg, 1993).

As McLuhan (1967) noted, this preponderance of television viewing must have major personal and lifestyle impacts on the viewer. Researchers in the fields of psychology, education, health and other social sciences have investigated such impacts extensively over the past several decades. Many theories have developed concerning the possible ways in which the television medium and the viewer interact.

2.3 Theoretical Frameworks for Mass Communication

Television culture is "irredeemably plural," necessitating many different research approaches to explore the many aspects of this culture (Stevensen, 1995). In an attempt to understand how mass media function in society, a variety of theories and models have been proposed. Stevenson (1995) outlined three paradigms of mass communication research. The first, *social power*, is based around political economy and is concerned with ideology and critical theory. The *postmodernist* paradigm works to explain emerging cultural practices and draws heavily on the concepts of media implosion and the restructuring of time and space introduced by McLuhan and Innes. The third paradigm, *audience research*, is based on unconscious effects of media and the semiotic production of meaning and aims to identify concerns of the daily relationship with the mass media.

Until the 1930s, mass media theorists held to the hypodermic theory of mass communication. This view saw each media message as a powerful stimulus that went directly to the public and resulted in an immediate, predictable response (Black & Bryant, 1992; Defleur & Ball-Rokeach, 1989). During the 1930s, social scientists began to understand and study the intervening variables between source and receiver of any communication process. By the 1960s, the complex relationships of source, message, medium and receiver resulted in theories focused on the roles played by the message receiver (Black & Bryant, 1992; DeFleur & Ball-Rokeach, 1989). Major television study

questions have looked at how the medium uses people, how people use the medium and more recently, how the two interrelate.

Stalagmite theories seek to explain effects of mass communication which occur subtly over a long period of time (Black & Bryant, 1992). Two of these theories, Social Learning Theory and Cultivation Analysis, have been the basis of much research concerned with the effects of television on the viewer.

2.3.1 Social Learning Theory

Social Learning Theory, also called Observational Learning Theory or Social Cognition Theory (Lytle & Achterberg, 1995), one of the most widely used theories in mass communication research (Black & Bryant, 1992; DeFleur & Ball-Rokeach, 1989), proposes that the key concepts of behaviour, environment and personal factors of the individual are constantly interacting. Any change in one of these areas will affect the others (Bandura, 191977; Boyle & Morris, 1994). With the construct of reciprocal determinism, this theory suggests that this interaction is important in behaviour change (Lytle & Achterberg, 1995). The environment, including the mass media, can provide cues for reinforcing positive or negative social and health behaviours. In the realm of mass communication, the television can be seen as an active educator, which can teach viewers both positive and negative behaviours and attitudes (Black & Bryant, 1992). This theory suggests that people can learn by observation of others. Television, then, can shape behaviours by providing examples (Comstock, 1993). This has been referred to as "modelling" behaviour (Boyle & Morris, 1994; DeFleur & Ball-Rokeach, 1989). Modelling theory, then, suggests that constant exposure to television programs and commercials portraying a health-detracting behaviour such as consumption of high fat snack foods as being "effective, normative or pertinent" (Comstock, 1993) might influence the snacking habits of the viewer. Thus, it is the context of the portrayal, not only the frequency, that is critical in predicting behaviour change (Potter & Ware, 1989).

2.3.2 Cultivation Analysis

Cultivation Analysis proposes that television can cultivate common beliefs about society by the way in which issues, persons and attitudes are repeatedly depicted by the medium (Comstock, 1993; Defleur & Ball-Rokeach, 1989). Such a process would tend to make audiences more homogeneous in terms of attitudes and beliefs (Comstock, 1993). Characteristic stereotyping in television programming may result in beliefs by the viewer that the portrayed world mirrors the non-mediated world (DeFleur & Ball-Rokeach, 1989; Gerbner, Gross, Morgan & Signorielli, 1986; Lester, 1996). For example, Silverstein, Perdue, Peterson and Kelly (1986) found that while 25.5% of males portrayed on television were rated as heavy, only 5% of female characters were so rated. Based on social learning theory and cultivation analysis, heavy viewing of television could cultivate the belief that few women are overweight in the non-mediated world.

Cultivation is viewed as a specific case of socialization in terms of social learning theory. This contemporary approach to mass communication effects research attempts to determine the degree of difference in social reality conceptions likely to be held by heavy television viewers as compared to light viewers (Morgan & Signorielli, 1990). It assumes that television is the most common and constant learning environment in society cultivating a group consciousness, in an otherwise heterogeneous audience, based upon the broad values and ideologies of the dominant culture. In other words, television is a culture broker (Signorielli & Lears, 1992). Thus, the term "mainstreaming" has been used to describe this social learning process. Morgan and Signorielli (1990, p.19) stated that television functions as an "affirmation for the believers" and an "indoctrination for the deviants." Cultivation analysis, then, studies the cumulative effects of longterm exposure to ubiquitous and repetitive messages.

2.3.3 Political Socialization

A group of theories known as *Political Socialization* borrows largely from social learning theory. This group of theories explains how political awareness is produced

(Black & Bryant, 1992; Patterson & McClure, 1976). These theories bear directly upon the concept of *agenda setting*, a theory which plays a major role in marketing products or ideas (Black & Bryant, 1992; R. Davis, 1993; DeFleur & Ball-Rokeach, 1989). This theory suggests that media are not very successful at telling people what to think, but they can powerfully tell people what to think *about* (Black & Bryant, 1992). Agenda setting, the first step in the policy cycle model, places controversial issues in the public forum and keeps these topics upper-most in the minds of both the public and the policy makers (Boyle & Morris, 1994; McCombs & Shaw, 1972; Wallack, Dorfman, Jernigan & Themba, 1993). For example, in recent years, the health and nutritional needs of the poor have been kept in the public eye by television series, specials and news programming.

2.3.4 Audience Use Theories

Audience use theories approach media communications from a different viewpoint. This group of theories examines how consumers use the media (Black & Bryant, 1992). Two major theories from this group are structural functionalism and uses and gratifications.

2.3.4.1 Structural Functionalism

Structural functionalism, or functional analysis, examines the operations and consequences of mass communication (Black & Bryant, 1992; Lasswell, 1966). The suggested functions of mass media have been classified as information, persuasion, cultural transmission and entertainment. These can have both positive and negative effects; that is, they can be both functional and dysfunctional (Black & Bryant, 1992). In a recent example noted by the Public Health Nutritionists of Saskatchewan, learning about the potential of *trans* fatty acids to increase total serum cholesterol levels caused some consumers to check their margarine labels for hydrogenated fats while others simply returned to using butter.

2.3.4.2 Uses and Gratifications

Uses and gratifications, an offshoot of structural functionalism, focuses on the ways in which people use the media rather than how the media use people (Black &

Bryant, 1992; DeFleur & Ball-rokeach, 1989). Research conducted in this area can be divided into three broad groups:

(1) What satisfactions are attributed to mass communication?

(2) What environmental situations influence people to turn to the media?

(3) What needs are consumers trying to satisfy through their media use? (Black & Bryant, 1992).

This framework for media analysis presupposes that the mass media serve more than one main purpose. Television, for example, is often believed to be designed simply for entertainment purposes. Yet, studies of viewers have indicated that television is used to keep updated on current events, to relax, to escape the tedium of daily living (Murray, 1993), to inform, to educate, to escape problems and to produce catharsis (Black & Bryant, 1992).

2.3.5 Meaning Theory

Television has been called "a window on the world" (Murray, 1993); yet, it creates and modifies the view of the world held by consumers. In a post-McLuhanist fashion, media accidentally or purposefully mould meaning by manipulating social symbols (Black & Bryant, 1992). As another stalagmite theory of mass communication, *meaning theory* contains aspects of political socialization and agenda setting research (Black & Bryant, 1992; DeFleur & Ball-Rokeach, 1989). Television plays a major role in the propagation and sustaining of social mores, fads, customs and stereotypes. It does this through stabilization of new meanings, change of old meanings and stimulating behaviour (Black & Bryant, 1992; DeFleur & Ball-Rokeach, 1989).

Such findings have led recent researchers to study the meaning of mass communication from within the frameworks of semiotic analysis and discourse analysis (Black & Bryant, 1992; Jensen, 1995; Stevenson, 1995). Results have indicated that meaning may, or may not, be shared between producer and audience. Either producers or audiences may attribute meaning without the knowledge or understanding of the other (Black & Bryant, 1992; Stevenson, 1995). Differences will exist within groups, as well. These differences have been ascribed to the coding of meaning by each individual

based on personal experiences (Bandura, 1977; Black & Bryant, 1992; Jensen, 1995).

2.3.6 Health Belief Model

Current mass communication theories dovetail well with current health promotion theories. The *Health Belief Model* consists of three component parts. These are a *threat* component where the perceived risk of a threat to health and the perceived seriousness of the condition are recognized, an *expectation* component where the perceived benefits of and barriers to action are recognized, and more recently added, a *self-efficacy* component where the belief that a behaviour change can occur resides (Boyle & Morris, 1994; Maiman & Becker, 1974; Rosenstock, 1990). Education based upon this model can utilize social learning theory and cultivation theory. This model acknowledges the role of the individual in the concept of readiness to adopt a suggested behaviour change (Boyle & Morris, 1994; Rosenstock, 1990). The agenda setting role of the media may be useful in marketing awareness of a health risk.

2.3.7 Diffusion of Innovations Theory

The diffusion of innovation model was developed to explore the process by which an idea or product spreads through, or becomes accepted by the majority of a population (Boyle & Morris, 1994; Orlandi, Landers, Weston & Haley, 1990; Rogers & Shoemaker, 1971). This model describes consumers according to their readiness to adopt new ideas, products or services, i.e., innovatiors, early adopters, early majority, late majority, and late adopters (Boyle & Morris, 1994; Orlandi et al., 1990; Rogers & Shoemaker, 1971). The diffusion of innovation model fits well with cultivation analysis and agenda setting theories of mass communication.

2.3.8 Transtheoretical Model of Behaviour Change

The *stages of change model*, or transtheoretical model of behaviour change, suggests that behaviour change is a dynamic variable with five stages through which individuals move when adopting new behaviours. These phases are precontemplation, contemplation, preparation, action and maintenance (Ounpuu, 1996; Sandoval, Heller, Wiese & Childs, 1994). When this is combined with the Health Belief Model, health promotion professionals have a framework from which the rate of behaviour change

within a population may be accelerated (Greene, Rossi, Reed, Willey & Prochaska, 1994). Such approaches have been used in health marketing to affect cognitive, action, behaviour and value changes (Boyle & Morris, 1994; Ounpuu, 1996). Health marketing is defined as a health promotion program "developed to meet consumer needs, strategized to reach as broad an audience as is in need of the program, and thereby enhance the organization's ability to effect population-wide changes in targeted risk behaviors" (Lefebvre & Flora, 1988, p. 302). These principles were fundamental to the success of the Stanford Five-City Project Smokers' Challenge II, a smoking cessation contest tied to a television series and a self-help print campaign (Lefebvre & Flora, 1988).

Much of current research in mass communication has conceded that the media have important long-term effects which are difficult to quantify. As well, the active role of audiences in the mass communication process has been recognized. While there are still many conflicting opinions regarding the social and individual consequences of media consumption, knowledge of such effects is being slowly gathered. This is

> typical of the way science proceeds toward its goal: each new discovery a tiny prism to catch the light from what we know and split it apart into new patterns of possibility, sharper questions, more certain uncertainties (Johanson & Shreeve, 1989, p. 282).

Nutrition and body image related research has extensively studied mass communication, particularly that of television. While most such research has been conducted in the area of media effects and meaning theory, much of the audience uses research has been useful, too. For it is this research that can be linked to health status when defining health in its broadest, holistic sense. Therefore, this body of research will be reviewed in terms of audience use research, media effects research and media content analysis.

2.4 Audience Uses of Television

In spite of the common misconception that television is solely an entertainment medium, many studies of viewers have uncovered a multitude of other uses. Television has the ability to lay foundations for attitude and behaviour adaptations. As well, it

validates existing attitudes and behaviours. Much research has pointed to the informal educational ability of the medium — not only with children, but with adults, as well. Television can serve as an entertainment medium and in some cases as a form of escapism (Black & Bryant, 1992). In fact, a study of low-income single mothers found that many purchased or rented-to-own television sets and VCRs and paid for basic or expanded cable services. The explanation for these expenditures was that these items were seen as the sole source of affordable entertainment (Tarasuk & Maclean, 1990).

Television is used as a source of information about the world, telling viewers what people eat, how people behave and what people wear. It has been termed an information source that affects behaviour.

> As the Paddy Chayefsky character, Howard Beale, in the movie *Network* put it when he chastised the viewing audience, "You think like the tube, you dress like the tube, you eat like the tube (Kubey & Csikszentmihalyi, 1990, p.186).

For many viewers, television is a source of knowledge, both factual and fictional (Singer, 1983). In a study of 100,000 French school-aged children, 70% reported that most of their science knowledge was obtained from the television (Dan, 1992). General Mills conducted a study which presented respondents with a list of 16 health information sources and asked that the main sources of the respondents be indicated. Television was cited by 31% of the respondents, second only to doctors and dentists, a group that was chosen by 45% of the sample (Signorielli, 1990a). In an American study, Heaton and Levy (1995) found that men were more likely to use television and radio as their main source for health and nutrition information. A recent Canadian survey (Reid et al., 1996), found that 70% of respondents obtained their nutrition information from the broadcast media. This same study showed that only 33% of respondents reported obtaining such information from a dietitian/nutritionist, though this was a much more trusted information source. As well, information from health professionals has been cited as less confusing than that obtained from the media (American Dietetic Association, 1995).

The validity of such self-reported information source studies may be suspect considering results from research which looked at television as a news information source. About two-thirds of American viewers reported that they received the majority of their news from television (Comstock, 1993). However, other research has indicated that over a two-week period, nearly twice as many people saw some portion of a newspaper compared to any portion of a televised evening news program. Only 1-5% of people viewed the television evening news daily (Comstock, 1993). There is no doubt, though, that television is seen as a credible news source, with the majority of survey respondents ranking television as either the most believable or the second most believable mass media news source (Black & Bryant, 1992; Robinson, Duet & Smith, 1995). Comstock (1993) stated that this reputation stems from the use of film, which implies validity, the careful placement of news personnel who appear authoritative and trustworthy, and the presentation style which tends towards "aloof observation." The viewers' perceptions of television as their major news source could also be due to coverage of memorable major news events. The combination of audio and visual components creates powerful images which can profoundly affect the viewers, making them "quasi-participants" in real events from around the globe (MZTV, 1996). Bennett and Lawrence (1995) have termed such images, "news icons" — images which live beyond the "originating event by being introduced into a variety of subsequent news contexts" (p. 20). Examples of these effects have been seen with events such as the shooting of President Kennedy, the Challenger explosion, the Gulf War, the San Francisco earthquake and the Oklahoma City bombing.

Other uses for television have been noted in the literature including significant other, house guest and teacher. In terms of family dynamics, television has been termed a family member and as such performs many interpersonal roles generally done by humans (Pawlowski, 1991). Singer (1983) alluded to the use of television as a babysitter or companion for children when caregivers are busy with other tasks. Parents have often reported placing young children, even infants, in front of the television to quiet them (Huston et al., 1992). In the early days of television, it was this practice that

led author, John Steinbeck, to label television as parents' newest method "to reduce their children to semi-consciousness and consequently to semi-noisiness" (Montgomery, 1990b, p. 17).

The role of television as companion or social support is also likely to occur with the socially isolated, such as the elderly or unemployed, since it has been noted that television viewing hours increase in these groups (Huston et al., 1992; Yanof, 1991). It also has been noted that certain subgroups of society without access to other social systems likely will use television as a means to participate in a mainstream culture (Gerbner, Gross, Morgan & Signorielli, 1986). Tarasuk and Maclean (1990) suggested that owning a television set and VCR not only provided the low-income family with a perceived source of affordable entertainment and escapism, but added to the sense of financial security due to the high resale value.

Another interesting affective motivation for television viewing expressed in the literature is that of ritual or icon. Television has become an authority or centre of life in many homes and as such has played a role in the development of family rules and rituals including supper-time news viewing, later bed-times and less conversation among family members (Andreasen, 1994; Leary, 1979). Gerbner (1985) saw television being used as a ritual with viewers not watching by the program, but by the clock. He contended it had "become the functional equivalent of a new religion" (p. 823). Television and religion have been said to share common social functions. They both define the world through repeated message patterns dealing with myths, ideologies and 'truths,' thus forming a common symbolic environment (Gerbner et al., 1986). This has a McLuhanesque association, for McLuhan (1964) wrote, when describing the television image,

> The resulting plastic contour appears by light *through*, not light *on*, and the image so formed has the quality of sculpture and icon, rather than of picture (p. 312-313). (original emphasis)

In an analysis of this passage (and one from *Finnegan's Wake* by James Joyce which had been referred to earlier in this same work by McLuhan), Theall (1971) likened the light shining through the television screen to the sunlight shining through a chapel window.

Since television was first introduced, it has been highly criticized. Many derogatory terms exist for this medium. Since the 1972 U.S. Surgeon General's Report on Television and Social Behavior, television's role as scapegoat has expanded. Health and social science researchers, regulatory bodies and lobbyists have fallen into the trap of dichotomization — the human tendency to see things as either black or white. Television has been cast in the role of the social villain. Joan Gussow (1980), well-known nutrition educator, stated:

> "We resemble one another in what we see together," Camus once wrote. When I walk in on 'The Price is Right' I tremble at the thought that these are the images that link us (p. 11).

If this had been written today, would she have chosen a game show or a day-time talk show?

There has been a call by some researchers for the separation of the positive and negative aspects of the medium from those of the programming presented on the medium (Black & Bryant, 1992; Pezdek, 1985) and for a clearer understanding of the environment within which the television industry functions (Montgomery, 1990a; Rubinstein, 1983). It should be noted here that since the 1970s Hollywood lobbyists have approached the television industry in the spirit of cooperation rather than making unrealistic demands of the industry (Montgomery, 1990a).

The uses and gratifications research literature is replete with motivations for television viewing — to be amused, to see authority figures exalted or deflated, to experience the beautiful or the grotesque, to satisfy curiosity, to be informed, to affirm values systems, to share experiences with others (Berger, 1991). The list seems endless. But, what effect do these uses have on the audience?

2.5 Television Viewing Effects

Upon review of the literature concerned with the effects of television viewing, three main categories of studies emerged — cognitive, behavioural and health risk effects. While the lines between categories may not be clearly defined, the major purpose of the studies within each group is similar. Therefore, this discussion will explore each separately.

2.5.1 Television as Reality

Much of the research on cognitive effects of television viewing has examined the attitudes and perceptions of the viewer. An area which has received much attention is that of perceived reality of television by the viewer. Research in the area began by treating perceived reality as a unidimensional concept. More recently, most researchers agree that television reality should be studied from a multidimensional perspective (Fitch, Huston & Wright, 1993; Potter, 1988). Regardless of the specific labels for, or the numbers of dimensions used in individual conceptual definitions of reality, the two main categories which arise are factuality and social realism (Fitch et al., 1993). *Factuality* refers to the degree of belief held by the viewer that television content accurately represents the non-mediated world — a type of "magic window" on life (Fitch et al., 1993; Potter, 1988). *Social realism* contains aspects of both the plausibility, or believability, of television content and the ability of the viewers to learn something useful from the content (Fitch et al., 1993; Potter, 1988).

Concepts about reality begin early in life. Children aged two to three years do not comprehend the representational nature of television (Fitch et al., 1993). They are not able to distinguish between the way things appear and the way they really are. A bizarre example of this from the literature involved a 3-year-old boy who presented to the physician with constipation. The child refused to sit on the toilet and had reverted to using a diaper after viewing a television commercial in which the toilet bowl turned into a monster with the lid making a biting movement (Pilapil, 1990). While this commercial was targeted towards adults, and was likely found amusing by adults, it was perceived very differently by a child. Such unrealistic portrayals are not likely to be understood until around seven or eight years of age when children are able to distinguish between active and symbolic events (Blosser & Roberts, 1985). Around age 10 years, children seem to judge factuality similarly to adults (Fitch et al., 1993).

In general, perceptions of televised reality decrease from preschool age to young adulthood. Then, from age 18 years onwards, perceived reality increases (Potter, 1988).

This increase may be attributed to an increase in the social utility aspect of social realism rather than in an increase in factuality (Potter, 1988).

Perception of message intent research has largely centred on child viewers of commercials. By late preschool age, children are able to perceive the difference between program and commercial content of television (Blosser & Roberts, 1985). In studies of children aged 4 to 11 years, increasing age has been directly related to improved ability to recognize message intent (Blosser & Roberts, 1985; Robertson & Rossiter, 1974). The most apparent increase in this ability occurred between eight and nine years of age (Blosser & Roberts, 1985) possibly due to improved ablility to attend to audio stimuli in addition to the visual stimuli (Scammon & Christopher, 1981). Robertson & Rossiter (1974) proposed that such improvement was due to both cognitive development and to the cumulative experience with commercial messages. However, a concern has been voiced that the merger of information and entertainment has become so widespread that it may threaten the distinction between fact and fiction in all age groups (Lichter, Lichter & Rothman, 1994).

2.5.2 Socialization of Attitudes and Television

Its ubiquity, visual appeal and the minimal skills required to use it, make television an ideal socialization agent. Based on the concepts of social learning theory, this medium assists viewers to acquire the values, beliefs, attitudes and mores of a culture — both their own and those of others. This acquisition process continues throughout life (Signorielli, 1993). In particular, the acquisition of food preferences and eating habits can be largely influenced by television — a compelling source of modeled behaviours (Jeffrey, McLellarn & Fox, 1982).

Television has allowed "an explosion in social connection," both vicarious and direct, making viewers a part of the global village (Willis, 1995). Signorielli (1993) stated that the "story-telling" function of television is paramount to viewers' learning of the world and its social structures. The images and popular culture portrayed by this medium tell the viewer about life. It is this same function which can be potentially damaging by misshaping perceptions of the non-mediated world through stereotyping

(Rubinstein, 1983). Television can portray a hegemonic view of life to the viewer through consistent use of dominant stereotypical images (Lichter, Lichter & Rothman, 1994). In terms of gender role images on television, the majority of female characters in prime time maintain traditional roles, tend to be younger than their male counterparts, are outnumbered by men by a ratio of two or three to one (Signorielli, 1993), and are slimmer than male characters (Silverstein et al., 1986). At the same time, the labour force on prime-time is vastly different from that of the real world. There is a preponderance of white collar workers portrayed on television. While blue-collar workers constitute 60% of the actual work force, they account for only 6-10% of the jobs portrayed in prime-time (Strasburger, 1986).

Recent research has pointed to the effect of awareness of advertising, not merely exposure, on development of beliefs. Grube and Wallack (1994), in a study of 468 fifth and sixth grade children, concluded that children who were more aware of beer advertisements held more favourable beliefs about drinking, had a greater knowledge of beer brands and slogans, and reported a greater intent to drink as adults. A British survey of over 7000 children aged 11 to 16 years, found that when asked for their favourite commercial, the most popular choices were beer and lager products (Nelson & While, 1994). The popularity of these commercials for boys increased significantly with age. Commercials involving humour were most popular. The researchers also found that beer and lager commercials were significantly more likely to be chosen as favourites by children who claimed to drink alcohol (Nelson & While, 1994). Thus, it is possible that attitudes and beliefs formed by television viewing may affect behaviour. This is of major concern since prime time televised alcohol consumption portrayals have been reported to appear twice as often as those of coffee or tea, 14 times as often as soft drinks and 15 times as often as water (Tucker, 1985).

2.5.3 Television, Body Image and Self Esteem

Of interest to nutrition and health professionals is the psychological research of how individuals construct mental models of themselves called self-schemas. One such self-schema is body image, the view of body shape, size and physical ability as

compared to the perceived norm (Ikeda & Naworski, 1992). It is closely linked to self-esteem, physical changes in the body (puberty, pregnancy, menopause), socialization, prevailing social values and judgements or feedback from others (Rice, 1993). This is not a static concept, but changes throughout the life cycle and in response to changing environmental stimuli, including television (Myers & Biocca, 1992; Rice, 1993). Research in this area combines social reality concepts with socialization theory.

Originating in feminist critique research, the notion of body image as a basis for health-detracting behaviour has focused on female bodies. Yet, adult males tend to express their ideas of health in terms of their own or others' bodies (Watson, 1993). Thus, television could affect the personal body image of males as well as their images of women.

Myers and Biocca (1992) described the concept of "elastic body image" which points to the non-static nature of self body image and its susceptibility to change based on environmental cues. They suggest that the socially represented ideal body image is internalized by the individual and varies with changing cultural representations of beauty. The individual also holds an objective body image which represents the imposed boundaries of genetics. The individual then constructs an internalized ideal body image which is the negotiated "possible self" based on the socially represented body image and the objective body image. Television can play a direct role in this negotiated body image through its portrayals of the socially represented ideal.

Myers and Biocca (1992) found that a woman's body image is responsive to televised ideal female body images. The researchers concluded that viewing less than 30 minutes of televised messages concentrated on the socially-accepted slim female body ideal resulted in the young women feeling thinner and slightly more euphoric than they did usually. Hall and Crum (1994) found that in televised commercials, female faces were shown less often than female bodies and body parts with the opposite being true for men. Another study found that after viewing commercials for diet food, women at high risk for developing anorexia nervosa reported more negative than positive appearance statements compared to a group of lower risk women (Kaltenbach, 1990). In

a study investigating possible gender message effects, adult women viewing diet product commercials with a male spokesperson were found to experience greater body image disparagement than when viewing diet product ads with a female spokesperson (Lintott, 1992). In terms of cultivation theory, these changes in self perception could be attributed to the adoption of the presented views of social reality by the viewer.

It has been estimated that viewers see over 5000 attractiveness messages each year through televised commercials (Downs & Harrison, 1985). As well, in prime time programs, a much smaller proportion of overweight characters is portrayed than would exist in the non-mediated world (Gerbner et al., 1981; Kaufman, 1980; Signorielli, 1993; Silverstein et al., 1986). At the same time, high energy foods are often referred to, giving the impression that eating excess calories is not associated with weight gain (Weinberg, 1993). Stereotypical male body images portrayed in the print media have been viewed negatively by males, who saw the body-builder image as an inappropriate and unattainable cultural representation (Watson, 1993). A cumulative effect of these messages may exist where "each of these body image messages is just one more strike on a chisel sculpting the ideal body inside a . . . mind" (Myers & Biocca, 1992, p.111).

The number and type of portrayals in the mass media of a particular group can be seen to symbolize the importance, power and social value given to that group (Huston et al., 1992). Negative portrayals and underrepresentation may affect self esteem and body image of subgroups of society with body sizes and shapes outside the culturally accepted ideal. Similarly, the attitudes and beliefs about these subgroups may be affected amongst all viewers (Huston et al., 1992). thus further cultivating a negative stereotype.

Low self-esteem, a concept closely related to negative body image, may be reinforced by television viewing. Lonely people viewing television to pass the time have reported increased boredom, passivity and withdrawal (Weinberg, 1993). These feelings, in turn, can lower self esteem. Adolescent males who were light television viewers (2 h/day) compared to moderate (2-4 h/day) or heavy (4+ h/day) viewers were more outgoing, self-controlled and emotionally stable and were less neurotic, frustrated

or troubled (Tucker, 1987). In nutritional health terms, boredom, frustration, low self esteem, loneliness and lack of control have been reported reasons for overeating (Weinberg, 1993). Thus, another behavioural component is added to the body image model.

2.6 Television and Health Behaviours

The scientific understanding of the possible roles television plays in human physical health status has little value alone. Unless behaviour is affected and, in turn, understood, causal links cannot be made and prevention strategies cannot be effectively implemented. The effect exerted by television on viewers is a function of the time spent viewing, the accumulation over time of what is seen (American Academy of Pediatrics, 1990), and the qualities and intentions of the viewer (Huston et al., 1992).

2.6.1 Purchasing and Product Choice Behaviour

The vast majority of research on effects of advertising has focused on consumer purchase behaviour. Television commercials implicitly and explicitly influence viewers to purchase products. In children, the effect manifests itself as either a direct product purchase or a request of the caregiver to purchase the product (Clancy-Hepburn, Hickey & Nevill, 1974). One study reported that 89% of parents actually purchased the requested items (Jeffrey et al., 1982). Children and youth are "consumers in training" who control US$41.5 billion annually of their own money and directly influence US$295 billion in household purchases, much of which is spent on food products (Crockett & Sims, 1995). In fact, the average 10-year-old in the United States makes 250 purchases each year without their parents (Crockett & Sims, 1995).

With an interviewer administered questionnaire for parents, the viewing habits and food requests of children aged 3 to 8 years were gathered (Taras, Sallis, Patterson, Nader & Nelson, 1989). Foods requested reportedly due to a television commercial were similar in frequency to the televised rates of the commercials themselves. Also, a significant positive correlation was found between viewing hours and television influenced purchase requests made by the children. In a laboratory setting, children who worked harder, by pressing a button, to keep commercials rather than program material

on a television monitor were observed to make a greater number of purchase-influencing attempts at the grocery store (Galst & White, 1976).

First grade children viewing commercials for highly sugared foods tended to choose more sugared foods as snacks when compared to controls or children who saw only pro-nutrition public service announcements (PSAs) (Goldberg et al., 1978). In a later study, Gorn and Goldberg (1982) exposed Canadian campers aged 5 to 8 years to one of four commercial treatments over 14 consecutive days. The treatments included candy commercials, fruit commercials, pro-nutrition PSAs and no commercial messages. Significant treatment effects were noted. Children exposed to the fruit commercials chose orange juice most often as a snack while those exposed to the candy commercials chose orange juice least often as a snack. As well, less fruit was chosen by the candy commercial group than any other group. Unlike most previous studies, this research attempted to improve the validity of any association found by using a longitudinal design and exerting some control over food choice and television viewing behaviour through the choice of a summer camp setting.

In a study in which 4- and 5-year-olds were randomly assigned to one of three treatment groups — pro-nutrition, low nutrition and non-food commercials — each group viewed a 9-minute cartoon segment with three minutes of commercials from the respective treatment. A post-test revealed that 31.8% of subjects correctly recalled one advertised item in the low-nutrition treatment, 6.75% did so in the pro-nutrition treatment and 25.1% of the toy treatment group completed this task (Jeffrey et al., 1982). The authors concluded that pro-nutrition commercials and PSAs needed to improve production techniques to compete with the highly funded commercials.

While most of the research relates children's food choices with televised commercials, Goldberg and colleagues (1978) investigated the effect of a pro-nutrition episode of *Fat Albert*, an animated half-hour program with Bill Cosby appearing intermittently to emphasize points. The results indicated that viewing the program, which dealt with the problems of eating excessive amounts of low nutrient dense foods, changed short-term food choices even when accompanied by commercials for snack and

breakfast foods with high sugar contents. Thus, television programming also can affect behaviour and perhaps even counteract commercial content.

Research with adults has shown similar effects of television advertising on food product choices. Marketing research surrounding the Kellogg All Bran® advertising strategy of 1984, has shown a major impact on product purchase. Levy and Stokes (1987) reported on the televised media campaign targeted to the 35-year-old and over audience. This All Bran® campaign presented the fibre-cancer prevention message and was endorsed by the National Cancer Institute (NCI) of the U.S. National Institutes of Health. Televised commercials contained the NCI Cancer Hotline telephone number (Warner, 1987). Market share was tracked using computerized purchase data from grocery store check-outs from 16 weeks prior to the campaign to 48 weeks following its initiation. In the first 24 weeks of the campaign, sales for all high fibre cereals (particularly Kellogg cereals) rose sharply. The growth in sales continued over the next 24 weeks, but this was due mainly to increases in sales of non-Kellogg high fibre cereals (Levy & Stokes, 1987). At the end of the study, high fibre cereal sales had increased to 8.4% of all ready-to-eat cereal sales, an increase of 2.3% (Levy and Stokes, 1987). It is interesting to note that this seemingly small increase was of major importance as a 1% market share was equal to over US$40 million (Levy & Stokes, 1987).

This advertising campaign by Kellogg gave impetus to a review of U.S. government policy towards health claims in food advertising and a suspension of the ban against health claims while the issue was being considered. Between 1984 and 1986, surveys reported an increase in public knowledge regarding the link between cereal fibre and cancer prevention from 9% to 32% (Ippolito & Mathios, 1990). These authors suggested that the increased choice of high fibre cereals by consumers over the study period of 1978 to 1987 was due to televised advertising. Lifting the advertising ban created a more accessible information source for consumers which resulted in their behaviour change. Televised cereal commercials and placement of health promotion messages on product packaging were better able to reach a wider audience than previously available information sources (Ippolito & Mathios, 1990). In terms of social

marketing theory, their evidence suggested that this form of communication reduced the cost of obtaining information for broad sectors of the population.

2.6.2 Health-Enhancing Behaviour

The transmission of positive health messages is well-suited to the television medium. It offers a route to population segments which are generally thought of as 'hard-to-reach,' such as older adults, lower income groups, those with lower education levels and other socially isolated persons (Dan, 1992). As well, it permits instant access to a large audience that is comfortable with the medium and may find its anonymity appealing for some types of health education (Warner, 1987). Warner (1987) noted that while the percentage effectiveness for behaviour change among viewers may be lower than more personal educational methods, in absolute numbers, the very size of the audience may make television a highly effective medium.

Televised health messages have assisted in increased rates of corneal donation, reduced delay time to treatment for people with chest pain, reduced anxiety states for people with suspected human immunodeficiency virus infection (Dan, 1992), and improved response to a smoking cessation program (Lefebvre & Flora, 1988). A recent Canadian campaign demonstrated improved knowledge by the public concerning the risk of alcohol consumption during pregnancy in a pre-test/post-test design (Casiro et al., 1994). Respondents reported that television was their main source of this information significantly more often after the campaign than before the campaign (Casiro et al., 1994).

Recently, nutrition education professionals and organizations have begun working in large coalitions or with corporate sponsorship to develop televised health marketing campaigns. Dole Foods™ partnered with the National Cancer Institute and the American Academy of Pediatrics to develop PSAs promoting fruit and vegetable consumption. The Society for Nutrition Education partnered with McDonald's™ to produce a series of PSAs based on the Food Pyramid targeted to children (Weinberg, 1993). Kellogg™ has worked with both the President's Council on Fitness and the National Urban League in the development of PSAs which recommended a healthy

breakfast ("New Saturday morning TV stars," 1992).

Health programming rather than PSAs has been used successfully in Finland (Puska et al, 1987; Weinberg, 1993). Five series of 15 segments each were aired between 1978 and 1985. The programs helped viewers develop the skills needed to make and sustain behavioural changes and encouraged a supportive social environment for the changes. Viewers reported smoking cessation, weight loss and reduced dietary intakes of fat, sugar and sodium (Puska et al, 1987; Weinberg, 1993). Also, a 20-week prime time series in Australia with supporting print materials has been linked to reduced sodium intakes amongst viewers (Chapman, Fahey, Clift & Millar, 1990).

In North America, health professionals are beginning to work cooperatively with the television industry to promote health-enhancing behaviours (Montgomery, 1990a; Weinberg, 1993). The Centre for Health Communications at the Harvard School of Public Health launched a campaign to increase the awareness of the dangers of drinking and driving. After the first year, the program took credit for scenes or entire programs devoted to the topic in 25 television programs (Montgomery, 1990a). This project has expanded to include technical consultation to the producers of *Beverly Hills 90210* for a story line involving body image and dieting in teenage women (Weinberg, 1993). Specialty programs promoting positive health behaviours have begun to be collaboratively created — work which is based largely on the agenda setting concept of social marketing theory.

Marketing lifestyle has had some commercial successes (Black & Bryant, 1992). However, health marketing, which follows the same principles, often has a lesser impact due to its obvious financial constraints. The recent trend to corporate partnership may alleviate this problem. This should prove to be a promising future area for the field of nutrition education.

2.6.3 Health-Detracting Behaviour

Heavy television viewing has been related to increased low nutritional knowledge and increased perceptions of validity of nutrition claims in commercials (Signorielli, 1990a). Many health-detracting behaviours may occur in persons who rely

heavily on television as a source of health information as well as those who view heavily (Signorielli, 1990a).

A *TV Guide* survey in 1992 showed the extent to which television viewing and eating habits have become linked (Weinberg, 1993). Two-thirds of respondents reported viewing television while eating their evening meal. In the 18- to 24-year-old segment, three-quarters of respondents reported this behaviour. In a study of pregnant adolescents, it was reported that subjects consumed 38% of their energy intakes while viewing television (Goldberg, 1990). That television is inextricably linked with eating in western culture (Crockett & Sims, 1995) may have an effect on the emotional as well as the physical health of viewers and their families.

Klein and associates (1993) reported that adolescents aged 14 to 16 years who were heavy viewers of music videos and televised movies were more likely to engage in health-detracting behaviours such as smoking cigarettes or marijuana, drinking alcohol or engaging in high risk sexual activity. Tucker (1987) studied 406 adolescent males with a mean age of 15.7 years. He found that males viewing less than two hours of television daily were significantly more physically fit than those viewing two or more hours each day, indicating that they likely were more physically active.

The portrayed ideal body image in the mass media has become slimmer since the 1960s (Myers & Biocca, 1992). The health effects of this societal ideal may be seen in the large numbers of people dieting to lose weight. Of adult Canadians who fall within a healthy weight range, 45% wanted to lose weight, while 7% of those who were already below a healthy weight range wanted to weigh less (Health and Welfare Canada, 1988). An American study showed that in a university population, 35.5% of all smokers, (39% of female smokers and 25% of male smokers) reported using smoking as a weight loss strategy (Health and Welfare Canada, 1988). As well, a study of preconceptual women found that those who viewed 15 or more hours of television weekly had significantly lower body image scores than women who viewed less television (Brennan, 1990).

As a perpetuating factor in these behaviours, television transmits the thin ideal for females and the muscular ideal for males. These messages, as dieting to lose weight,

are not exclusive to adults. Fear of becoming overweight affects children as early as age 6 to 9 years (Czajka-Narins & Parham, 1990). Weight loss dieting behaviours have been reported by 45% of 9-year-olds, 80% of 10- to 11-year-olds and 65% of 12-year-olds (Michaud & Terry, 1993). Further, inappropriate dieting behaviours were reported — purging by 10% of 9- to 10-year-olds. The incidence of binge eating grew steadily from 30% in grade three students to 95% in grade twelve students (Michaud & Terry, 1993). Such behaviours compromise growth, reduce vital body nutrient stores, decrease resistance to infection and perpetuate distorted body images (Michaud & Terry, 1993).

The "preternatural concern with [physical] appearance" (Rome, 1992; p. 6) has resulted in up to 95% of surveyed college males expressing some degree of body dissatisfaction (Mishkind, Rodin, Silberstein & Striegel-Moore, 1986). This is especially apparent in the underweight male population (Harmatz, Gronendyke & Thomas, 1985). Recent reports of increased anabolic-andronergic steroid abuse by school aged adolescent males have been linked to such difficulties with body image (Deacon, 1994; Turner, 1994). Surveys have indicated that about one-third of high school steroid abusers seem to have turned to these drugs to help them achieve the socially represented ideal body not to enhance performance in sport (Yesalis, 1992). While only a minority of young males participate in this behaviour, the physical and mental health consequences are significant (Mishkind et al., 1986).

Signorielli (1990a) recounted that heavy viewers of television reported not being concerned about body weight and that they ate or drank whatever they chose, whenever they chose. Thus, television viewing can be linked to a complacency about positive health attitudes and behaviours. Gerbner, Gross, Morgan and Signorielli (1981) termed this the "cultivation of complacency." These authors based this effect on the unrealistic belief held by the viewer in the "magic of medicine" perpetuated by television programming and commercials. The authors argued this belief resulted in continued unhealthy lifestyle choices by viewers who felt that modern medicine would fix them if health problems arose. In a later study, Turow and Coe (1985) found similar portrayals of health care which stressed biomedical interventions and showed these as

"overwhelmingly appropriate, nonpolitical and an unlimited resource" (p. 47). Dubois (1996) found that television could be a source of information regarding health, illness and the politics of health. It provided a vision of health that was almost exclusively medical in nature, adopting an individual message strategy when dealing with health risk behaviours, while omitting the portrayal of the social determinants of health. In light of the present health care system reforms, this continued reliance on the traditional view of medicine, or the illness-care model, will have far-reaching and perhaps devastating effects. There not only is a threat to personal health but a threat to an already over-burdened health care system.

2.7 Television Viewing and Chronic Disease Risk

Television viewing has been linked to body image distortions, reduced fitness levels, increased consumption of low nutrient dense foods and changes in social eating patterns. What are the personal and public health impacts of these behaviours?

2.7.1 Obesity

A recent report stated that 1 in 5 U.S. teenagers was overweight ("Prevalence of overweight," 1994). The prevalence has increased from 1 in 7 which was reported for the 1970s. An increased prevalence of adolescent obesity will lead to a future increase in obesity of the adult population ("Prevalence of overweight," 1994). Canadian figures have estimated that since 1980, there has been a 50% increase in obesity prevalence amongst children aged 6 to 11 years and a 40% increase in adolescents aged 12 to 17 years (Lechky, 1994). Of these overweight youth, 40 - 90% are likely to become overweight adults (Lechky, 1994). The health risks of this future obesity include increased hypertension, cardiovascular disease, non-insulin dependent diabetes, orthopaedic disorders, gallbladder disease and sustained self esteem and body image problems (Groves, 1988; "Prevalence of overweight," 1994), to name only a few.

In a cross-sectional study to estimate the association between viewing times and both obesity and superobesity, researchers administered a questionnaire to a sample of over 6000 adult males (Tucker & Friedman, 1989). Obesity was defined as 21% to 30% body fat and superobesity as greater than 31% body fat. For men viewing three or more

hours of television daily, adjusted estimates showed over twice the prevalence of obesity and superobesity as seen in lighter viewers. A dose-response effect was seen as risk increased with increased daily viewing time (Tucker & Friedman, 1989). In a similar study of almost 5000 adult females, Tucker and Bagwell (1991) concluded that women who watched four or more hours of television daily had more than twice the prevalence of obesity seen in infrequent viewers. In this study, obesity was defined as 30% or more body fat. Again, a dose-response relationship was apparent (Tucker & Bagwell, 1991).

Television use has been termed the strongest environmental predictor of subsequent obesity in children (Boyle & Morris, 1994; Sallis et al., 1995). Using food frequency data, Taras and co-workers (1989) found a significant correlation between caloric intake and the number of hours spent viewing television. Exposure to food product commercials has been shown to increase the number of low nutrient dense snacks consumed by child viewers (Signorielli & Lears, 1992). A study of fourth and fifth grade children revealed a positive relationship between television viewing and poor eating habits, misconceptions about basic nutrition tenets, and unhealthy beliefs about the nutritional quality of foods (Signorielli & Lears, 1992).

In a sample of 489 sixth grade students, only a weak relationship between television viewing and body fatness was found (Shannon, Peacock & Brown, 1991). The researchers hypothesized that the relationship between television viewing and body fatness was likely mediated through energy output rather than energy intake. Dietz and Gortmaker (1985) were able to find stronger associations between obesity and television viewing in a study using cross-sectional data from the National Health Examination Surveys (NHES II and III) on 6965 children aged 6 to 11 years and 6671 children aged 12 to 17 years. As well, a longitudinal component was present as data from the NHES III included information on 2153 children previously seen in NHES II. Obesity was defined as a triceps skinfold at the 85th percentile or over and superobesity as a triceps skinfold at the 95th percentile or over. For both age groups, there was a significantly greater prevalence of obesity and superobesity in those who spent more time viewing

television. Gortmaker, Dietz and Cheung (1990) supported a causal connection between daily television viewing duration and obesity in youth based on both cross-sectional and longitudinal data. Their cross-sectional study identified a 2% increased obesity prevalence with each additional hour of television viewed by children and adolescents, after controlling for possible confounding variables. Dietz (1990) noted that television was only part of the mechanism, though, as only about 25% of the increase in obesity prevalence between 1967 and 1980 could be accounted for by television viewing behaviour. From longitudinal data, these authors also reported that television viewing was associated with development of obesity, with an increased incidence rate of 1.3% for each additional hour of television viewing. Rates of remission of obesity decreased by 6.3% for each additional hour of viewed (Gortmaker et al., 1990).

A cyclical model for the association between television viewing and obesity has been proposed (Dietz & Gortmaker, 1985; "TV making children obese," 1991; Weinberg, 1993). Television viewing appears to affect both energy intake and energy expenditure. Energy expenditure may be reduced as viewing television requires little energy and also, as it displaces more active pursuits. While viewing television, high energy, low nutrient foods are advertised and portrayed within programs. Snacking behaviour increases when viewing television and often takes the form of energy dense foods promoted. These factors can result in viewer weight gain. In turn, the weight gain may result in less motivation to exercise on the part of the viewer which leads to greater time spent viewing television, and the cycle continues (Weinberg, 1993).

To compound this obesity problem, Klesges, Shelton and Klesges (1993) found that in normal weight and obese children aged 8 to 12 years, viewing television resulted in a greatly reduced metabolic rate. The metabolic rates of child viewers were significantly lower than during rest. Other researchers have found a reduced activity level and hence, a reduced energy expenditure during viewing compared with sitting quietly or reading (Dietz, Bondini, Morelli, Peers & Ching, 1994; DuRant, Baranowski, Johnson & Thompson, 1994). Thus, television viewing may contribute to obesity through a reduced rate of energy expenditure while viewing.

2.7.2 Fitness

A study to relate television viewing to obesity and physical fitness in adolescent males found light viewers scored significantly better on tests of fitness level than did heavy viewers (Tucker, 1986). However, no significant differences in obesity prevalence were found between viewing groups. A cohort study of adolescent females found only weak associations between adiposity, activity level or a change in either over a two year period, and television viewing time (Robinson et al., 1993).

In almost 9000 adults, Tucker (1990) investigated the association between television viewing and cardiovascular fitness level. Adults who viewed television for more than four hours each day were only less than half as likely to be fit as adults viewing for less than one hour daily and were about three-quarters as likely to be as fit as those viewing three to four hours daily.

A cyclical mechanism for the television viewing association with fitness level was proposed by Tucker (1986).

> As television viewing time increases, physical activity tends to decrease. As physical activity declines, physical fitness tends to decline. As physical fitness declines, attraction to passive recreation tends to increase (p. 803).

Increased television viewing is a likely form of passive recreation to be adopted. Thus, a major impact of television viewing is not only the behaviour it promotes but also the behaviour it prevents (Tucker, 1986).

2.7.3 Serum Cholesterol Levels

One risk factor for cardiovascular disease is present in 40% of North American youth, while about 33% have two major risk factors (Goldman, 1988). As discussed, an association exists between television viewing and obesity, fitness level and high fat intake. Recent research now points to a link with increased serum cholesterol levels adding yet another important physiological effect associated with television viewing.

The association between time spent viewing television and the prevalence of hypercholesterolemia was studied in a sample of almost 12,000 employed adults (Tucker & Bagwell, 1992). Results indicated that adults viewing television for three or

more hours daily were almost twice as likely to have a serum cholesterol level in excess of 6.2 mmol/L (240 mg/dL) than adults viewing less than one hour daily. Moderate duration viewers (1-2 h/day) were almost one to five times as likely to have hypercholesterolemia. Neither group was more likely to suffer moderately increased serum cholesterol levels (5.2-6.2 mmol/L; 200-240 mg/dL). The researchers concluded that excessive television viewing may be an important lifestyle factor linked to cardiovascular disease risk (Tucker & Bagwell, 1992).

In a study of over 1000 children aged 2 to 20 years (mean age 7.4 ± 3.6 [SD] years), Wong and co-workers (1992) found that excessive television viewing strongly predicted an elevated serum cholesterol level of 5.2 mmol/L (200 mg/dL) or higher. Compared to children who viewed television for less than two hours daily, children viewing more than four hours daily were 4.8 times as likely to have an elevated cholesterol level. In children viewing for two to four hours daily, this risk was 2.2 times that of infrequent viewers. While 88% of the children viewing two or more hours daily did not have cholesterol levels over 5.2 mmol/L (200 mg/dL), this high false-positive rate should not overshadow the implied association between excessive television viewing and other behavioural factors which impact on the serum cholesterol levels of children (Wong et al., 1992).

Excessive television viewing has been termed a purported risk for lifestyle, or chronic, disease (Dietz, 1990). While a causal link cannot be made at this time, television viewing appears to be an indicator of other health-related behaviours which can be more directly linked with morbidity and mortality.

2.8 Health and Nutrition Messages on Television

Media effects research has concluded that television viewing can exert a variety of effects on viewers. These effects, though, are dependent on the televised content to which the viewer is exposed (Potter & Ware, 1989). Content analyses of television broadcasts have suggested that the airwaves are saturated with overt and subtle health and nutrition messages.

Based on 17 years of collected data, the cultural indicators project reported that 40% of prime time television programs, and 8% of the major prime time characters, presented situations involving physical illness. Children's weekend programming showed only 3% of major characters requiring medical treatment (Signorielli, 1990a). Signorielli (1990a) noted that about one-third of the illness coverage on prime time television occurred in commercials for pharmaceuticals. As well, portrayed illnesses tended to be both acute and curable. News stories about cancer tended to be unbalanced, emphasizing dying rather than coping and mentioning possible preventive measures in only 5% of the stories (Signorielli, 1990a).

2.8.1 Food Related Messages

Early nutrition content research efforts focused on the commercial content of weekend television. These studies indicated that Saturday morning television promoted highly sugared breakfast cereals, snack foods and low nutrient dense beverages (Brown, 1977; Gussow, 1972). More recent analyses have found that very few changes have occurred during the intervening years (Cotugna, 1988; Kotz & Story, 1994). Cotugna (1988) reported that on Saturday mornings, 80% of food commercials aired on the major U.S. television networks were for foods of low nutritional quality and that ads for high sugar products still prevailed. She also reported that the proportion of commercials for high fat fast foods, high sodium canned pastas and high sugar cereals had increased. Kotz and Story (1994) reported that 56.6% of all commercials on Saturday morning U.S. network broadcasts were for food products. Of these, 43.6% were for foods high in fat and/or sugars. Again, highly sugared breakfast cereals were the most frequently advertised product. Further, Taras and Gage (1995) found that 91% of foods advertised during children's programming were high in fat, sugar and/or sodium:

Studies of Canadian network commercials on Saturday morning television found similar content concerns (Østbye et al., 1993; Wadsworth, 1992). Food product ads represented 28.8% of total advertising (Wadsworth, 1992). Breakfast cereal ads comprised 25% of all food ads with 57% of these being for high sugar cereals (Wadsworth, 1992). Other major product categories advertised included sweets, low

nutrient dense beverages and canned pastas (Østbye et al., 1993; Wadsworth, 1992). Significant differences between networks were found, with 71.6% of the commercials on YTV being for food products (Wadsworth, 1992) and neither CBC-English nor CBC-French airing any food commercials (Østbye et al., 1993; Wadsworth, 1992). As well, Østbye and associates (1993) reported that Much Music aired a significantly greater proportion of commercials for low nutrient dense beverages. Such differences suggest both targeting of particular audience groups by the food industry and dissimilar advertising policies amongst the networks.

Byrd-Bredbenner (1994) took this Saturday morning television research one step further by analyzing nutrition related incidents in the programming itself. She found that food and body image incidents occurred an average of six times per hour. Program characters ate to socialize or to cope with emotions. When a food pyramid was constructed based on the frequency of televised food portrayals, it was nearly opposite to the U.S. Food Pyramid (Byrd-Bredbenner, 1994). A similar result had been found using only advertised food products (Kotz & Story, 1994).

Nutritional messages contradictory to current nutritional guidelines are not exclusive to children's programming. Research results have indicated that prime time television is far from immune to these pervasive messages. A major early study by Kurman (1978) reported that about 30% of prime time commercials were for food products. The cultural indicators project data indicated that food advertisements constituted over 25% of all commercials, with nearly one-half of these being for foods of lower nutritional quality (Signorielli, 1990a). A study of Quebec television found that 62% of all ads were for food products, the most prominent of the health themes studied (Dubois, 1996). Østbye and co-workers (1993) found that food products represented 28% of Canadian prime time commercials, the largest single category of advertisements. They found the most common foods advertised were beverages, including alcoholic beverages, complete meals, breakfast cereals and french fries. Significant network differences were evident with beverage commercials being heaviest on Much Music — 66% of total advertisements on the network with 41% of total

advertisements being for soft drinks. However, a recent study of prime-time found that foods were portrayed more often within programming than in commercials (Story & Faulkner, 1990).

The practice of "product placement," which consists of the paid, prominent placement of brand-name products within program content (Babin & Carder, 1996; Black & Bryant, 1992), has resulted in much greater exposure to brand-name food items for the viewer. With the splitting of audiences by the increased availability of television channels and competing technologies, the traditional commercial began to reach fewer people. To compensate, alternative vehicles for commercial messages were sought and product placement has become a major industry initiative (Black & Bryant, 1992). Product placement in television programs, movies and music videos accounts for the expenditure of an estimated US$50 million each year by marketers (Sylvester et al., 1995). This covert commercial practice, coupled with other possible nutrition messages embedded in programs, led researchers to the analysis of prime-time program content.

Kaufman (1980) made many interesting observations in her study of prime time television. She reported that references to food occurred two to three times in each 30-minute segment analyzed. She also found more food references in program content than in commercials. Despite the obvious bias evident in terms of actual minutes of programs versus commercials, this finding pointed to the importance of television programs as sources of nutrition messages.

In prime time programs, 65% of food references were for beverages and sweets (Kaufman, 1980). More foods of lower nutritional quality were represented in program content (64%) than in commercials. However, 62% of all references to foods of higher nutritional quality were found in commercials (Kaufman, 1980). In commercial content, about 50% of food references were to less nutrient dense foods, while in program content almost 70% of food references were for less nutrient dense foods (Kaufman, 1980).

Way (1983), in a study of 51 ongoing prime time series, found food related behaviours occurred at a rate of 1.77 per character, 5.3 per program and 7.67 per hour of

programming analyzed. As well, food related behaviours which involved foods of higher nutritional quality almost equalled behaviours related to lower nutritional quality foods. Upon closer inspection of the behaviours, Way (1983) discovered that foods which were eaten were of lower nutritional quality than foods which were purchased, prepared, served or requested. She also found that there were fewer food-related behaviours and more portrayals of less nutritious foods in situation comedies than in dramas or mixed programs.

Higher televised rates of food references had been found by Gerbner and co-workers (1981). In a study of one week of prime time broadcasts, they found an average of 9 incidents per hour. A more recent study found similar aired frequencies — 4.8 incidents per 30 minutes (Story & Faulkner, 1990). Difficulties in comparisons between studies exist though, due to the lack of standardized definitions of food incidents and differences in data collection procedures (Sylvester et al., 1995). Content analysis often occurs using different data sets, recording instruments and recording procedures (Krippendorf, 1980). In content analysis, sampling techniques, the conceptualization of category definitions and the choice of the unit of analysis tend to be tailored to the research question of interest and thus, often vary from study to study (Cantor, 1980; Sylvester et al., 1995).

Since major motion pictures are often broadcast on television, knowledge of the nutrition messages they contain would be useful information for the nutrition educator. Sylvester and associates (1993) analyzed 71 of the top 100 dollar-grossing films of 1991 for food and nutrition related messages. They found that 76% of the films contained at least one major food scene. Portrayal of higher nutrient density, lower fat foods was related to higher socioeconomic and educational status of the characters.

The context surrounding food related behaviours in television broadcasts has received some attention (Gerbner et al., 1981; Kaufman, 1980). Snacking constituted 39% of eating incidents and eating a meal constituted 42%. As well, episodes involving drinking were dominated by alcoholic beverages followed by coffee and tea (Gerbner et al., 1981). Kaufman (1980) found television characters were portrayed as happy in the

presence of food, snacked often and rarely ate alone. Only once in the 600 minutes of broadcasts she analyzed did a character eat alone, thus, indicating the emphasis on social aspects of eating.

The "prime time diet" appears to consist of foods of lower nutrient density with an emphasis on low nutrient beverages, sweets and snack foods. These portrayals have been likened to the typical North American consumption pattern (Østbye et al., 1993; Story & Faulkner, 1990). This eating pattern is lower in fibre and complex carbohydrates and higher in fat, sodium, simple carbohydrates, caffeine and alcohol than current nutrition recommendations suggest (Health and Welfare Canada, 1990a; Health and Welfare Canada, 1990b).

2.8.2 Body Image Messages

Kaufman (1980) investigated the body image portrayed in the ten top ranked prime time programs on U.S. network television. Of persons portrayed in food related situations, 88% were rated as being of thin or average body size and 12% as being overweight or obese. More men (15%) than women (8%) were rated as overweight or obese (Kaufman, 1980). This trend towards portrayal of larger male body types more often than larger women was confirmed by other researchers (Signorielli, 1990a; Silverstein et al., 1986). Overweight persons were deemed to be under-represented in box office films, as well (Sylvester et al., 1993). Films also showed overweight characters eating more high energy foods than thinner characters.

Children, adolescents and young adults were rarely portrayed as overweight or obese (Kaufman, 1980). This study also found disproportionate obesity among racial minority characters. Personal characteristics of overweight and obese persons tended to be more negative than for their thin counterparts (Kaufman, 1980). Thus, the dramatic functions of larger body sizes seem to be limited.

It seems, therefore, that television provides a paradoxical view of food. Slim characters abound, yet they continually eat high energy foods. Eating is portrayed as a "consequence-free" activity (Byrd-Bredbenner, 1994).

Content analyses of television programs and commercials have indicated many subtle nutrition and body image messages are continuously portrayed. According to social learning theory principles, with time, repeated viewing of such messages may affect viewers. As lower nutrient dense food was often presented as a prop or to give characters something to do with their hands (Byrd-Bredbenner, 1994), it may be a result of writers and producers not understanding the potential such scenes may have on viewer learning or their not being aware of higher nutrient dense food substitutes. It is possible also that these portrayals may be due to a contract situation with a food manufacturer. As noted by Gerbner (1990), the "coherence and stability of the symbolic structure of the television world is not due to the lack of creativity and talent producing it. It is an expression of the coherence and stability of the commercial and sociopolitical constraints on the industry" (p. 256).

2.9 Summary

There is no question that television viewing is a powerful and pervasive lifestyle factor in present day society. The sheer magnitude of leisure time devoted to television viewing, along with the multitude of health related messages portrayed by the medium, influence health attitudes and behaviours. From the literature we can clearly see that television affects the viewer attitudinally, cognitively, behaviourally and physiologically. It seems that the widespread use of this medium by all sectors of the population may contribute to maladaptive health habits and hence, affect chronic disease risk. While the development of eating habits and food choice behaviour is multifactorial in nature, television can be seen as one major influence shaping these behaviours.

In light of research findings, calls for increased efforts to improve media literacy levels of the television viewing public have been made (Kubey, 1994; Tucker, 1990). Without such efforts, Tucker (1990) feared the effects of television viewing would outweigh those of health promotion campaigns. With the expected future growth of cable television and VCR use, increases in television viewing may occur.

Further research needs to look at the nutrition related messages portrayed in television programs and commercials and the effects these have on food behaviours and

body image attitudes. At the same time, however, the nutrition community must continue to build working relationships with producers, directors and writers, to assist in the presentation of positive nutritional messages, both in eating scenes and scenes where food is merely a prop or set decoration.

Several researchers have begun to work with television rather than against this form of popular culture. The need to consider the environment within which the television industry functions is beginning to be recognized. As well, adoption of a combined qualitative and quantitative methodology for media research has been recognized. This shift away from research based on a single aspect of a complex communication process should lead to a greater understanding of the social and cultural contexts of television — a vision of the totality of television viewing.

As can be seen, television is not an evil medium, but one that requires understanding, as noted earlier in the quote by McLuhan (1967). The environment of the television medium, as well as the messages it carries, must be understood by viewers, researchers and the television industry itself.

3. RESEARCH DESIGN AND METHODOLOGY

3.1 Research Orientation

Qualitative and quantitative research each embrace a distinct set of beliefs, assumptions and values. The dominant scientific paradigm holds quantitative researchers, who work from logical, empirical, positivist and analytic-empiricist approaches (Chapman & Maclean, 1990). The main tenets of this philosophy are that research should be value-free and that there is a single true reality free of human beings (Achterberg, 1988). Studies of this nature strive to uncover causal explanations for observed social and physical events (Achterberg, 1988; Chapman & Maclean, 1990). Such methods produce discrete numerical or quantifiable data (Lincoln & Guba, 1985). While it is important not to discount numbers, it must be recognized that they don't tell the whole story (Dey, 1993).

Qualitative research, on the other hand, dwells in the naturalistic paradigm. This approach has an interpretive orientation (Chapman & Maclean, 1990). Rather than relying on deductive reasoning, it utilizes inductive reasoning. This philosophy sees reality as a construct of the human mind. Hence, multiple realities exist for any given phenomenon (Achterberg, 1988). Qualitative data tend to be words grouped into categories, rather than numbers (Lincoln & Guba, 1985). Qualitative research can provide a rich source of information not available through quantitative research. Explanatory power of phenomena is increased with qualitative methods (Achterberg, 1988). Such methods provide insight into the meaning of everyday life from the viewpoint of those living it.

The two types of research can complement each other in several ways. Qualitative field work can form the theoretical base for quantitative studies. Those same field observations can enrich interpretation of quantitative research. The qualitative research component of a study can improve the selection and construction of scales and

the development of questionnaires with guidelines for language appropriate to the study population of a quantitative part of a study. In short, qualitative methods uncover the meaning and contextual basis from which quantitative methods can be understood (Achterberg, 1988).

The need for the expanded use of qualitative methods in nutrition education research has been clearly defined (Achterberg, 1988; Chapman & Maclean, 1990). Such efforts can add to the existing knowledge base information which collectively can be used to develop effective nutrition education strategies based on shared meanings. Recently the Canadian nutrition community has begun to employ qualitative research methods. Examples include an examination of women's breastfeeding experiences (Maclean, 1990), food-related problems of low-income single mothers (Tarasuk & Maclean, 1990), the meaning of food for adolescent women (Chapman, 1992) and health promotion with homeless and socially isolated adults (Woolcott & Tarasuk, 1992).

In Lincoln and Guba's (1985) presentation of the work of Goetz and LeCompte, they propose that qualitative and quantitative data are not simply dichotomous in nature but rather exist as a continuum with "inductive-generative-constructive-subjective" methods at one pole and "deductive-verificative-enumerative-objective" techniques at the opposite pole. Achterberg (1988) stated that distinctions between qualitative and quantitative data may not be as clear in practice as they are in theory. To make this point she cites the example of food frequency data which contain both qualitative and quantitative aspects.

The methods used in any study, however, should be determined by the research question posed. Depending on the purpose of the research, Achterberg (1988) states there are cases where there is a role for both methods within the same study. Brown (1981) also supports the use of both types of data whenever possible as some research questions require both statistical *and* rich descriptive information. Glaser and Strauss (1967) established that both forms of data may be needed in certain instances since each form can be useful on its own and be supplemental to the other. More specifically, the

call for further qualitative and quantitative research to investigate nutrition messages on television has been made (Østbye et al., 1993).

Any discord between qualitative and quantitative techniques exists within the philosophy, or paradigm, supporting the research project, not from the data collection methods themselves (Creswell, 1994; Glaser & Strauss, 1967). Any combined design is likely to offend the purists of either paradigm, yet the combination of methods can result in a better understanding of the concept being studied (Creswell, 1994).

Creswell (1994) presents three models of combined qualitative and quantitative designs. In the "two-phase" design, two separate parts of a study are conducted, each based on a separate paradigm. The "dominant-less dominant" design proposes that a study be firmly based within one paradigm with only one small section of the study based in the other paradigm. A "mixed-methodology" design presents a mix of both paradigms throughout the study.

Dey (1993, p. 28) proposed that qualitative and quantitative data are mutually dependent. He expressed this concept using a yin-yang diagram (see Figure 3.1) to emphasize the dynamic balance of these complementary data types.

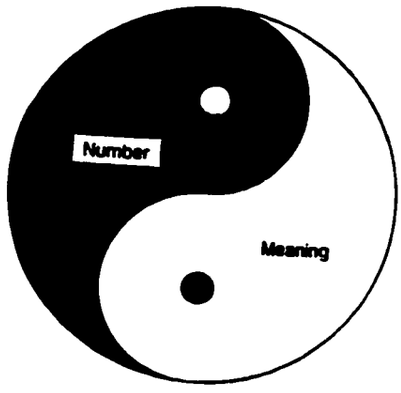

Figure 3.1. Quantitative and qualitative data in dynamic balance
Note. From *Qualitative data analysis. A user-friendly guide for social scientists* (p. 28), by I. Dey, 1993, New York: Routledge. Copyright 1993 by Ian Dey. Reprinted with permission.

3.2 Theoretical Framework

To effectively change nutritional behaviours, research should integrate a variety of theories of human behaviour to identify, explain and predict the determinants of food choice. The research presented here found its basis in the *Audience Research* paradigm described by Stevenson (1995). This interpretive approach encompasses the concepts of unconscious media effects, media as integral parts of daily life and the semiotic production of meaning. In particular, this study drew heavily from *Meaning Theory*, a multidisciplinary approach which uses the tools of psychology, sociology, anthropology, cultural history and communications researchers to understand the manner in which media shape, or mould, the cultural and meaning-centred environment. This theory is based on socialization theories including social learning theory, cultivation analysis and agenda setting. An underlying premise of Meaning Theory is that by understanding media, consumers gain some control over the effect it may have and thus, are not unwittingly controlled by the mass media (Black & Bryant, 1992).

3.3 Research Design

In the reported study, the research questions lent themselves best to a combined qualitative and quantitative design. This study followed the dominant-less dominant study design outlined by Creswell (1994). To answer the research questions the investigation was anchored in the naturalistic paradigm which is well-suited to the examination of culture and meaning systems (Chapman & Maclean, 1990; Lincoln & Guba, 1985). This design borrowed from the conventional paradigm for methods to answer the questions regarding aired frequencies of food related and body image attitude incidents. The combined systematic observation of frequency content analysis with a contextual approach allowed examination of individual portrayals as well as plots, themes and structure. Since both the qualitative and the quantitative questions were answered at the same time, methodological triangulation was of a simultaneous nature (Creswell, 1994).

3.3.1 Methodological Approach

For the purposes of this study, content analysis was employed to provide frequency data for specific quantifiable variables. The techniques "may be applied to both manifest and latent content through a series of judgements which are made under specifically defined conditions by judges trained in objectively defined coding procedures" (Weston & Ruggiero, 1986, p. 50-51). With this analysis method, "information that might be difficult or impossible to obtain through observation or interviews can be gained without the text producer's awareness of being examined" (Rothe, 1993, p. 103). Traditionally, this method has been used to emphasize semantical references and expressions of attitude (Krippendorf, 1980); hence, it is most suitable to the research questions of this study. A drawback of this system of analysis is its inability to extract fully the contextual components of texts (Manning & Cullum-Swan, 1994). In audio-visual texts the context of an incident springs from the plot, background action and the use of colour, sound, camera angles and other symbols to name only a few. Semiotics, or the science of signs and symbols, provides a framework for analysis of such symbolic systems and the construction of organizationally produced meanings (Manning & Cullum-Swan, 1994).

Gerbner (1990) stated that background information which may not be consciously attended to by the viewer may be more readily assimilated than the foreground information presented. He also noted that drama has the ability to elucidate the intricacies of social relationships through a contrived story. In this study, the phenomena of interest, food-related and body image attitude incidents from videotaped television broadcasts, were examined within their contexts, including their physical, social and cultural environments. The meaning of a communication depends on understanding the context within which it originated, not merely the frequency with which it occurs. Thus, the reported analysis of content and context allowed the construction of relevant context-dependent meanings of the incidents portrayed.

3.3.1.1 Textual Analysis

Social science research and theorizing have long depended upon the analysis of documentary or textual data to understand cultures, societies, communication and the meanings of social phenomena. Research techniques have developed including content, narrative, discourse and semiotic analyses (Manning & Cullam-Swan, 1994). Postmodern textual analysis has highlighted the difficulties encountered through the use of strictly enumerative methods of content analysis (Budgeon & Currie, 1995). As a result, several methods which combine quantitative and qualitative aspects have evolved. These macrotextual analyses have their roots in dramatism and dramaturgy (Manning & Cullam-Swan, 1994). They view texts as symbolic action or the means within which "to frame a situation, define it, grant it meaning and mobilize appropriate responses to it" (Manning & Cullam-Swan, 1994, p. 465). Basic discourse analysis relies upon the five basics of dramatism — act, scene, agent, agency and purpose (Manning & Cullam-Swan, 1994). Macrotextual analysis, or more specifically, societal-level analysis of discourse, then, "works by identifying broad themes, audiences, and symbols used to persuade or mobilize groups" and "sees society as a 'speaker' and social signs, including words, as texts" (Manning & Cullam-Swan, 1994, p.466).

3.3.1.2 Content Analysis

Mass communication research has relied heavily upon the largely quantitative techniques found with content analysis (Wimmer & Dominick, 1987). Content analysis, an objective and sytematic description of media communications, produces quantitative indicators of the degree of attention received by a specific concern (person, thing, group or concept) in a given textual system (Weber, 1990). This has been termed "designations analysis" or "subject matter analysis" (Krippendorf, 1980). Many other uses of content analysis have been outlined. It has been described as a useful technique to describe trends in communication content among networks or media over time (Krippendorf, 1980), to provide concrete evidence regarding a phenomenon of interest (Smith, 1992), and to uncover international differences in communication content (Weber, 1990). Adams (1978a) noted that data from content analysis studies not only

could help explain associations found in effects research and to understand better the possible reasons for viewer behaviour and attitude, but these data could also reveal possible hypotheses for impact studies.

Krippendorf (1980) stated that traditional media content analysis research has long relied on the three indices of frequency, balance and qualification. He stated that

> - The frequency with which symbol, idea, or subject matter occurs in a stream of messages tends to be interpreted as a measure of importance, attention, or *emphasis*.
> - The balance in numbers of *favorable and unfavorable* attributes of a symbol, idea or subject matter tends to be interpreted as a measure of the *direction or bias*.
> -The kind of qualifications made and associations expressed toward a symbol, idea, or subject matters tends to be interpreted as a measure of the *intensity or strength* of a belief, conviction, or motivation (p. 40). (original emphasis)

Gerbner and Signorielli (1978) outlined a similar framework with four analytic measures.

1. Attention — the determination of presence and frequency of given subjects within the message system (prevalence, rate)
2. Emphasis — an isolation of the common themes in the message system
3. Tendency — a description of how subjects are presented in the message system (context)
4. Structure — the determination of any existing relationships amongst attention, emphasis and tendency in the message system

While content analysis can be used to answer questions of agenda and depiction, it does have limitations (Adams, 1978a). Content analysis cannot be used to prove the findings of effects research, since viewers are not a homogeneous group and will be affected differently by media content (Lichty & Bailey, 1978). Neither can content analysis indicate the extent to which uncovered direction or bias is an accurate reflection of the times (Lichty & Bailey, 1978). It must be remembered that content analysis is a tool not a conclusion. Reliance on only counted incidents will ignore the "nuances" and "matters of judgement" (Lichty & Bailey, 1978, p.128). In short, the context will be

omitted.

3.3.1.2 Contextual Analysis

Study of the symbolic significance attached to foods can "demonstrate the human ability to construct a world of ideas that imbues the material environment with meaning" (Murcott, 1988). To be symbolically accessable, the mass media must use images which people can access regardless of their backgrounds. Since frequency content analysis assumes a straight-forward meaning of a text, another methodology is required to provide information on the latent content, or meanings, within the text. The ubiquitous image orientation of television lends itself to semiotic and deconstructive analytical techniques (McAllister, 1996).

3.3.1.2.1 Semiotics

Saussurian semiotics defines a sign as a dyadic relationship between the signifier and the signified (Jensen, 1995).

> "A sign is quite simply a thing — whether object, word or picture — which has a particular meaning to a person or group of people. It is neither the thing nor the meaning alone, but the two together. The sign consists of the Signifier, the material object, and the Signified, which is its meaning. These are only divided for analytical purposes; in practice a sign is always thing-plus-meaning" (p. 17) (Williamson, 1978).

Thus signs are conditions of "perception, interpretation, dialogue and action" — a particular type of phenomenal experience (Jensen, 1995). Saussure further defined a group of such signs as a 'referent system' (Stevenson, 1995).

3.3.1.2.2 Deconstruction

The technique of deconstruction involves taking apart a communication and identifying its component parts along with the implied and explicit relations. This type of analysis allows for the understanding of the message meaning and the exposure of any paradoxes of the constructed whole by focusing on the elements and particulars of a communication rather than the general and the composite (Lorimer & McNulty, 1991).

3.3.1.2 Summary

Weber (1990) has stated that "the best content analytic studies use both qualitative and quantitative operations on text" (p.10), thus combining commonly

considered antithetical methods. However, it has been recognized that these two data treatment modalities can co-exist in the same study and strengthen the findings (Creswell, 1994; Dey, 1993). Paletz and Pearson (1978) acknowledged the difficulty of devising a coding scheme which encompasses the totality of a broadcast. They also stressed the need to include visual variables because what is seen on a television screen depends on "cultural definitions of visual perception" and "patterned role expectations concerning the use of space" (Paletz & Pearson, 1978, p. 74).

3.4 Data Collection

3.4.1 Site Selection

The reported work studied highly-rated Canadian network broadcasts available to residents in the Saskatoon area.

3.4.2 Sampling

Within the conventional paradigm, random sampling occurs to provide a group representative of the total population. In contrast, sampling for qualitative methods aids the discovery and description of categories of phenomena (Glaser & Strauss, 1967). It is information-based not statistical-based (Lincoln & Guba, 1985). This concept of sampling precludes the randomized approach because such procedures may fail to uncover the true heterogeneous nature of the phenomena under study (Achterberg, 1988). In naturalistic investigations, both typical and extreme or deviant cases are sampled. This purposeful sampling ensures inclusion of as much information as possible with all the richness of context (Lincoln & Guba, 1985).

The reported study used purposive sampling. Random sampling is most appropriate when all content sources are considered to be equally important (Eaton & Dominick, 1991). Since this study was limited to highly-rated television broadcasts accessible to Saskatoon residents, a small, carefully constructed sample was chosen which was illustrative, not definitive. Such sampling is useful for the exploration of abstract concepts. Resulting data involved in-depth case descriptions and shared common patterns across identified units. The sample in this study was one of convenience — ten highly-rated programs and the surrounding commercials, videotaped

during the week of November 1-7, 1995 — providing the typical case sampling. Due to the pre-empting which occured during the first five weeks of the 1995-1996 season (i.e., World Series, O.J. Simpson murder trial verdict, Quebec Referendum, assassination of Yitzak Rabin), recording during this week was deemed to avoid the effect of the November sweeps as most programs were one week behind in their planned airing schedules.

Nielsen ratings for the top 20 programs were obtained from Associated Press releases published in the *Saskatoon Star Phoenix* newspaper and on the Usenet newsgroup clari.biz.industry.broadcasting. The 10 sampled programs were shows which had been consistently rated in the top 20 list over the first five weeks of the 1995-96 television season (Table 3.1). It was necessary to choose the sample from the top 20 rated programs to ensure inclusion of programs aired on Canadian networks after the elimination of programs with a news magazine format.

Table 3.1. Early Season and End of Season Nielsen Ratings for Sampled Programs

Program	**Number Top 20 Nielsen Rated Airings over 5 weeks***	**End of Season Nielsen Rating#**
er	5	1
Friends	5	3
Murphy Brown	5	24
Caroline in the City	4	4
Seinfeld	4	2
Home Improvement	4	5
Chicago Hope	4	33
Grace Under Fire	4	14
Hudson Street	3	37
Single Guy	3	6

* Source: Saskatoon Star Phoenix and clari.biz.industry.tv AP releases
# Source: *Entertainment Weekly*, #330, June 7/96, p. 23.

3.4.2.1 Networks

Canadian television network broadcasts were chosen due to their fundamental differences to U.S. broadcasts, namely their Canadian content advertisements adhering to Canadian advertising regulations.

The content universe for this study included broadcasts of top rated programs on major Canadian network signals available in Saskatoon. Selected programs were aired from network broadcasts from local stations with signals widely available to homes with and without cable access — BBS (CFQC - Saskatoon), a part of the Baton Broadcasting System and a CTV affiliate, and STV-Saskatoon, a station from the CanWest Global System (Toronto).

3.4.2.2 Time Period

Prime time broadcasts were studied. This time period, with its "lowest common denominator" programming, attracts a large heterogeneous audience (Black & Bryant, 1992), with a greater likelihood that most television viewers will spend some time viewing during these hours.

3.4.2.3 Time of Year

Care was taken to record broadcasts during a time of year that was:

1) not during a major holiday (i.e., Christmas, Thanksgiving)

2) not too close to season premieres (mid-September to Mid-October) or season finales (April)

3) not during a sweeps period (February, May, November)

3.4.3 Data Collection Methods

3.4.3.1 Frequency Content Analysis Instruments

The content analysis was conducted on videotaped segments of network broadcasts using a structured coding form. This form was adapted from existing validated forms (e.g., Barr, 1989; Hickman, Gates & Dowdy, 1993; Kotz & Story, 1994). The form contained sections to record the type of event, number and type of characters involved, activity involved, setting of event and either body image attitude or

food(s) portrayed. Additional information recorded for televised advertisements included the type of advertiser and length of the commercial.

3.4.3.1.1 Content analysis instrument development.

Two schemes were devised to record the observations made of the videotaped data — one to deal with commercials and one to deal with programming. While similar in some respects, each of these data sources has inherent information differences. For this study, the coding scheme and instrument development roughly followed the procedure outlined by Weber (1990).

1. Definition of Coding Units

For the purposes of this study, the coding unit was defined as either a food related incident or a body image attitude incident. Specific definitions of these incidents were developed.

Incident -- the action, thought or expressed attitude portrayed by a character regarding food or body image, or the portrayal of food. More than one incident may be present in any given scene.

Body Image Attitude Incident -- any portrayed scene with verbal or non-verbal responses to body shape or size of self or others by a character in a televised production, including indications by the producer, director or actor (i.e., exaggerated costume or behaviour, use of a laugh track) presented to be perceived positively or negatively by the viewing audience (Kurman, 1978).

Food Related Incident -- any portrayed scenes including food, either physical or symbolic.

Consumptive behaviours -- include food related behaviours which involve consumption of food

Non-Consumptive behaviours -- include food related behaviours not involving food consumption, such as purchase, preparation, serving, speaking of, etc. These will not include spoken idioms, i.e., "That's a bunch of bologna" or "He's the top banana."

As well, the term 'scene' was defined to accommodate the coding of information

from within programming.

Scene -- consists of all action occurring in a single location. A scene ends when the camera shot changes to another location or time period, e.g. action opens in the kitchen (scene 1), moves to the dining room (scene 2), moves back to the kitchen (scene 3), moves out to the patio (scene 4), etc.

2. Category Definitions

To avoid ambiguity when coding, every effort was made to ensure that categories were both mutually exclusive and exhaustive. Categories were also made sufficiently narrow to elicit adequate insights into available information but still remain broad enough to gather adequate occurrences of similar information.

Characteristics and their categories relevant to the research questions were developed. Some of the content and design of the coding instruments was based on existing tested tools (Barr, 1989; Hickman, Gates & Dowdy, 1993). The two forms were designed to describe the commercial or program scene as a whole and then the food related or body image attitude related incident specifically. To accompany these preliminary forms, two sets of coding instructions were developed based on existing tools (Garlington, 1977; Kurman, 1978). These preliminary instruments and instructions were reviewed by the research supervisor for content and form. After a discussion of possible changes, the instruments were revised and readied for testing (Appendix B).

To avoid the bias of individual and socially accepted ideal body images, the decision was made to introduce some degree of objectivity into the coding of the body type characteristic. A set of male and female body image silhouettes was chosen to visually define this characteristic (Canadian Dietetic Association, 1988). Similar techniques have been used in the determination of ideal body shape (Fallon & Rozin, 1985; Guy, Rankin & Norvell, 1980) and to study impressions of personality

(Johnson, 1990). However, its use to improve reliability of coding body type in content analysis appears to be unique.

3. Pilot Test

Testing of draft instruments can reveal ambiguities in coding instructions, provide insight into possible revisions to the coding scheme and determine instrument reliability (Weber, 1980). For these reasons, the developed coding instruments and instructions were pilot tested.

A 30-minute segment from prime time television was videotaped for the pilot test [*Friends* episode, re-run 13 July 95 (Astrof & Sikowitz, 1995)]. Three female volunteer coders were recruited. All had post-secondary level education — two in human nutrition and one in business communications. Coders were instructed individually by the author, regarding the coding procedures with each training session lasting about 45 minutes. When questions arose, the coders communicated only with the author, thus ensuring independent coding activities. Information as given in the training session was used to answer questions of coders. Thus, decisions regarding how or if to code an incident were left solely to the coders based on the verbal and written instructions they had received.

4. Reliability Assessment

To assess instrument stability, or intra-coder reliability, the author completed the coding process twice with a three-week interval between sessions. During this time, the author did not review any of the completed coding sheets or the videotaped segment. Using Scott's *pi* (Scott, 1955; Wimmer & Dominick, 1987) and Holsti's reliability measure (Wimmer & Dominick, 1987), reliability coefficients were calculated for each characteristic.

Completion of the coding tasks by the three volunteers allowed the measurement of instrument reproducibility, or inter-coder reliability. Reliability coefficients were calculated for each characteristic. (Appendix B).

5. Revision of Coding Instrument

Based on the Scott's *pi* values, data gathered from interviews with the coders and discussions with the research supervisor, the coding instrument and instructions were revised. (Appendix C).

6. Retest

A 30-minute prime time broadcast was videotaped for the test of the revised coding forms [*Frasier* episode, aired 31 October 95 (Ranberg & Flett-Giordano, 1995)]. The author and one volunteer coder reviewed the revised coding instructions prior to completing the coding exercise. The volunteer coder held postgraduate training in human nutrtion and had participated in the earlier testing of the instrument. The author completed the coding process twice with a 3-week interval between sessions. Scott's *pi* (Scott, 1955; Wimmer & Dominick, 1987) values were calculated for each characteristic to measure the inter-coder and intra-coder reliability. (Appendix C).

7. Finalized Coding Instrument and Instructions

Based on the reliability coefficients and discussions with the research supervisor, the revised coding instrument and instructions were finalized. (Appendix D). The resulting instrument was used by the author to code all videotaped television broadcast data for the study. A randomly selected 30-minute segment of the data was coded twice by the author with 7 months between coding sessions, to ensure continued stability of the coding instrument and consistent application of the coding rules. A high degree of intra-coder reliability was shown with all coefficients ranging from 0.86 to 1.0 (above 0.75 accepted level).

3.4.3.1.2 Contextual analysis.

For the contextual analyses, I was the research instrument.

> It's not just what we inherit from our mothers and fathers that haunts us. It's all kinds of old defunct theories, all sorts of old defunct beliefs, and things like that. It's not that they actually live on in us; they are simply lodged there, and we cannot get rid of them (Ibsen, *Ghosts*; cited in Johanson & Shreeve, 1989, p. 102).

This qualitative section of the study was interpretive and thus, included my biases, values and judgements (Creswell, 1994). Such candidness and honesty describes the human-as-instrument — an instrument capable of amazing responsiveness, adaptability, holistic emphasis, knowledge base expansion and processual immediacy (Lincoln & Guba, 1985). Such attributes are both positive and useful to the naturalistic inquiry (Lincoln & Guba, 1985; Locke, Spirduso & Silverman, 1987).

A transcript of each food incident and body image attitude incident within programming and each commercial containing an incident was made to provide a record of "all surrounding conditions, antecedent, coexisting, or consequent" (Krippendorf, 1980, p. 26). This transcript included:

a) all verbal and nonverbal information presented during the incident which reflected attitudes or behaviours

b) the context in which the incident occurred, i.e., relationship to plot

c) character traits, e.g. popularity, socioeconomic status, intelligence, attractiveness, emotive state, etc.

d) environmental cues, e.g. location of incident, relationship of characters, etc.

e) production techniques which emphasized or de-emphasized an incident, e.g., camera angle, shot length, music, laugh track, costuming, props, etc.

These transcripts were completed from the videotapes through word processing. (See Appendix E for sample.)

Since "any description entails inferences" (Krippendorf, 1980, p. 251), to improve reliability peer-debriefing with the research supervisor occurred where descriptions were discussed.

3.4.3.1.3 Journal Notes.

A daily journal was kept to detail methodological decisions, day-to-day logistics and information on the human instrument. There were three components to this journal:

1. *Chronolog* containing daily schedules and study logistics

2. *Methodological log* containing methods-related decisions and their rationales

3. *Personal reflective journal* providing a place for reflection, speculation and catharsis.

As well, observational notes taken "on-the-fly," served as reminders for inclusions into daily field journal entries. These brief thoughts and observations were expanded into a reconstruction of the field experience and were recorded in chronological sequence in the field journal.

This technique assisted with the establishment of trustworthiness of the study (Lincoln & Guba, 1985).

3.5 Data Analysis

3.5.1 Frequency Data Analysis

Frequency data analysis began once the systematic coding of videotaped television programming had been completed. Simple, descriptive statistics were used to give an indication of message prevalence and rates within the sampled portion of the mediated world as discussed by Gerbner and Signorielli (1978).

Information from the completed coding forms was entered into a computerized data base file for analysis. These data from both body image attitude incidents (BIAIs) and food related incidents (FRIs) were subjected to descriptive statistical analysis using KwikStat 3.3 (TexaSoft, 1992). These analyses determined:

1. the proportion of total advertisements and programs containing an incident (prevalence)
2. the frequency of both body image attitude and food related incidents expressed in units of time and program (Incident rates) (Signorielli, 1990b),

i.e., rate/hour = # incidents/# hours in sample

rate/program = # incidents/# programs

3.5.1.1 Validity and Reliability

Review of the preliminary coding instruments and instructions by the research supervisor helped to ensure their content validity. As the instruments underwent revisions, they were continually reviewed by the research supervisor. The volunteer coders also assisted in ensuring that the characteristic and category definitions were

adequately defined.

To improve the reliability of the coding instrument, categories were defined with maximum detail, coders underwent individualized instruction and a pilot study was conducted prior to finalizing the coding instruments and instructions.

Coding instrument reliability was measured using Scott's *pi* for nominal scale coding (Scott, 1955). This method is an improvement over a simple index based on the percentage of judgements on which coders agree as it corrects for the bias of chance by accounting for the number of categories within a single dimension (Scott, 1955). Another positive aspect of Scott's *pi* is its accounting for the probable frequency of cases being distributed into the different categories of a given dimension, even if unevenly distributed (Scott, 1955; Wimmer & Dominick, 1987). A minimum reliability coefficient of 0.75 is the generally accepted standard for Scott's *pi* (Wimmer & Dominick, 1987).

3.5.2 Nutrient and Energy Density Description

Foods and food products from advertisements and those portrayed in programming were categorized using groupings based on *Canada's Food Guide to Healthy Eating* (Health and Welfare Canada, 1992). This included the four main food groups and the "Other Foods" category along with several subgroupings (Østbye et al., 1993; Wadsworth, 1992). Difficult to place foods were categorized in consultation with *Canada's Food Guide to Healthy Eating* and nutrition professional peers. Numerical category descriptors based on those used by Barr (1989), were assigned to each food item to assist with identification of the subgroups of foods within each major food group category (Appendix F). These subgroup descriptors enabled comparison of data with suggestions from *Canada's Guidelines for Healthy Eating* (Health and Welfare Canada, 1990a) and *Canada's Food Guide to Healthy Eating* (Health and Welfare Canada, 1992).

3.5.3 Contextual Data Analysis

Qualitative data analysis and interpretation occur simultaneously with the data collection. This process ends when the final report is completed (Chapman & Maclean,

1990). This inductive analysis involved identifying emergent categories, themes and patterns from the data, transcripts of incidents of interest taken from the videotaped television broadcasts. The framework of deconstructionism allowed the message to be taken apart and its component parts assessed to understand better the constructed whole (Lorimer & McNulty, 1991).

Analysis began by reading and annotating the data transcripts and journal entries. Data were interpreted both fairly literally and symbolically. Summary memos were written for the recorded incidents to identify the major presented issues and their contexts. Data were coded into broad categories which were constructed from the data. This task was completed for meaning of food and body image attitude, television form/production techniques and advertising techniques. Once this taxonomic process had occurred, the categories were linked into themes that connected the categories at a conceptual level. Themes emerged from the data for the meaning categories, while an existing thematic framework was used for the advertising techniques and television form categories (Rank, 1988). The latter was chosen due to its comprehensive nature and congruence with the emergent categories. Rank's (1988) framework consisted of six thematic areas — attention getting, confidence building, desire stimulating, benefit promise, urgency and response seeking.

Once categories had been grouped into themes, summary reports for each theme were written to compare issues among incidents. Memo writing and journal entries summarized the thoughts and reflections of the researcher throughout the process. The end result was an in-depth reflective description of the cultural meaning of food and body image attitudes as constructed by television actors, writers, directors and producers.

To assist the researcher with the storage, retrieval, linking and reporting processes required in the analysis and management of voluminous data, the data were entered into a word processing program. This allowed for the copying and moving of categorized data from the coded transcripts to pages devoted to each emergent theme.

The data analysis process was not a linear progression but a recursive one. Rather than being a simple circular approach, Dey (1993) described it as a spiral approach with each cycle occurring at a higher level of understanding as concepts become clearer (Figure 3.2). Thus, the analysis phases described here were repeated many times before the final report was produced. Summary reports were compared to previously written memos and reports and to the original transcripts. This process ensured the most recent report reflected what was in the data. The generation of multiple drafts of reports assisted with the clarification and refinement of the final research results.

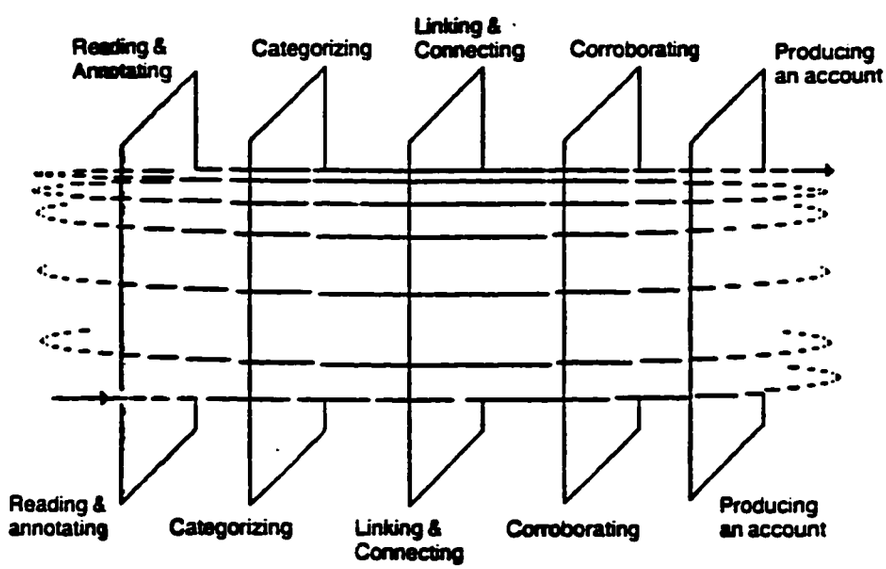

Figure 3.2. Qualitative analysis as an iterative process
Note. From *Qualitative data analysis. A user-friendly guide for social scientists* (p. 265), by I. Dey, 1993, New York: Routledge. Copyright 1993 by Ian Dey. Reprinted with permission.

3.5.3.1 Adequacy of Interpretation

While interpretation is an intuitive, creative process (Chapman & Maclean, 1990), the adequacy of interpretation must be established (Achterberg, 1988; Chapman & Maclean, 1993; Lincoln & Guba, 1985). In the naturalistic paradigm, the terms credibility, transferability, dependability and confirmability are roughly equivalent to the conventional terms internal validity, external validity, reliability and objectivity (Lincoln & Guba, 1985).

Several checks on adequacy of interpretation had been built into this research project.

3.5.3.1.1 Credibility.

1. Purposive sampling ensured that a variety of sources of food related and body image attitude incidents were included in the study.
2. Transcripts and summaries were read by the research supervisor and selected summaries and reports were read by the research advisory committee. This ensured referential adequacy.
3. To avoid premature closure and thus, a possibility of an inaccurate focus, prolonged and intensive contact with the field of study occurred. With just one researcher, immersion in the data readily happened. The researcher developed a high level of saturation with the data to facilitate persistent observation. These efforts assisted in uncovering context, minimizing distortions and recognizing salient and crucial atypical factors (Lincoln & Guba, 1985).
4. Peer debriefing occurred with the research supervisor. These sessions provided an opportunity for the researcher to clarify interpretations and explore emerging themes. These discussions assisted in the determination of successive steps in the study process. As well, peer debriefing furnished the researcher with a suitable cathartic release. This left the researcher free to explore all aspects of the study with a clearer mind.
5. Triangulation of data sources, investigators, theories, methods and disciplines has been outlined by Janesick (1994). Each of these types of triangulation adds

credibility to the findings. According to Brewer and Hunter (1989), the goal of this approach "is to attack a research problem with an arsenal of methods that have nonoverlapping weaknesses in addition to their complementary strengths" (p. 17).

In the reported study, data source triangulation of food related and body image attitude incident data occurred through collection of data from different networks and from programming for distinctly different audiences and from different production personnel.

The use of both qualitative and quantitative methods is a common form of triangulation (Chapman & Maclean, 1990). The strength of findings is increased when both methods yield comparable results. The reported study, drawing on both qualitative and quantitative methods, provided triangulation of both methods and theories.

The research advisory committee included members from metabolic nutrition, community nutrition, health promotion and education backgrounds. By using information from and with research advisors from disciplines outside community nutrition, interdisciplinary triangulation could occur.

3.5.3.1.2 Dependability and confirmability.

An audit trail was constructed to allow the assessment of dependability of the study. As stated by Lincoln and Guba (1985), the inquiry audit uses

> methods analogous to those of the fiscal auditor, the inquiry auditor carefully examines both the process and the product of the inquiry, in order to arrive at certain trustworthiness judgments and provide certain attestations. Just as a fiscal audit cannot be carried out in the absence of an audit trail — fiscal records — so the inquiry audit poses requirements for records as well. It is imperative that such records be maintained during the inquiry; otherwise there will be no possibility of an audit later (p.283-284).

The trail of records kept and coded for ease of retrieval included raw data, data reduction and analysis products, data reconstruction products, process notes and instrument development information (Lincoln & Guba, 1985).

3.5.3.1.3 Transferability.

Accurate and detailed descriptions of how, under what conditions and from where data were collected will assist others with the determination of transferability.

3.6 Summary

The reported study used a combination of qualitative and quantitative methods in the study design. Data were gathered from videotaped segments of highly-rated Canadian network prime time broadcasts including both fictional programming and the surrounding commercials. Analysis of the identified food related and body image attitude incidents included a frequency content analysis and a contextual qualitative analysis. As well, food group description was conducted using the foods portrayed or mentioned during the identified incidents. These analysis techniques helped to identify the meaning of food and body image as portrayed in the sampled television broadcasts.

4. FREQUENCY CONTENT ANALYSIS: RESULTS AND DISCUSSION

The results of the frequency content analysis were based on the concept that this methodology implies that each incident of interest has equal impact. This analysis, then, assumed that the text said what it meant and meant what it said (Budgeon & Currie, 1995). Due to the purposive sampling procedure used in this study, only frequency statistics were calculated. This data was meant as an adjunct to the qualitative data components presented in later chapters. The content analysis method provided the necessary triangulation of data analysis methods for this naturalistic study.

The six hours of prime time programming purposively sampled contained 821 incidents of interest. Of these, the majority (65.5%) occurred during commercials. The overwhelming incident type was the Food Related Incident (FRI) (Table 4.1). Body Image Attitude Incidents (BIAI) referred only to overt attitudes expressed about body shape or size and were expected to occur less frequently. One commercial incident was coded as neither a FRI nor a BIAI. This referred to a commercial for Molson Canadian™ beer in which the product was never shown or articulated. However, the product label, without the word 'beer,' appeared at the end of the commercial. This incident was retained in the database both due to its food advertisement nature and the likelihood of viewer familiarity with the product logo.

Table 4.1. Frequency of Incidents of Interest by Incident Type

Incident Type	Number of Commercial Incidents (%)	Number of Program Incidents (%)	Number of Total Incidents (%)
Food Related	527 (97.77)	278 (98.6)	805 (98.05)
Body Image Attitude	11 (2.04)	4 (1.4)	15 (1.83)
Neither	1 (0.19)	0 (0)	1 (0.12)
Total	539 (100)	282 (100)	821 (100)

The six hours of prime time television broadcasts examined contained 2.28 incidents of interest per minute (2.24 FRI/min; 0.04 BIAI/min). From Table 4.1 it can be seen that in the absolute numbers, commercial based incidents were reported 1.9 times as often as program based incidents, though the incidents occurred at much higher rates (Table 4.2). This was a factor of both the greater number of incidents presented during commercials and the fewer commercial minutes contained in the sample. While commercials take up less air time than programs, advertisers often urge networks to ensure that there is a close association between program content and product imagery (Coltrane & Allan, 1994).

Rates found in this study were higher than those found with other studies (Gerbner, et al., 1981; Kaufman, 1980; Way, 1983) likely due to the operational definition of an incident. In this study, the incident of interest was very narrowly defined in order to gather information on the true number of food incidents occurring in the sampled broadcasts. Other researchers have defined their units of analysis more broadly and thus found lower rates of occurrences. It is this difference in definition, often due to differences in research questions, that makes direct comparison between content analysis studies impossible.

Table 4.2. Rates of Incidents in Sample

Incident Type	Incident Rates in Commercials	Incident Rates in Programs	Incident Rates in Total Sample
Food Related Incidents	6.19/min	1.01/min	2.24/min
Body Image Attitude Incidents	0.13/min	0.01/min	0.04/min
All Incidents	6.34/min	1.03/min	2.28/min

Table 4.3 depicts the varied rates of the incidents of interest between programs in the sample. The sampled episodes of *Seinfeld*, *Single Guy*, *Hudson Street* and *Home Improvement* contributed over two-thirds of the programming incidents. Each of these episodes dealt with food situations as integral parts of the plots through major story lines. Other programs tended to use food more as a prop, background occurrence or as part of a minor story line.

Table 4.3. Frequency of All Incidents and Their Rates of Occurrence Within Sampled Programs

Program Title	Number of Program Incidents	Percentage of Program Incidents	Incident Rate
Caroline in the City	33	11.66	1.5/min
Chicago Hope	13	4.59	0.3/min
er	15	5.30	0.34/min
Friends	16	5.65	0.73/min
Grace Under Fire	12	4.24	0.54/min
Home Improvement	36	12.72	1.64/min
Hudson Street	38	13.78	1.73/min
Murphy Brown	8	2.83	0.36/min
Seinfeld	68	24.03	3.1/min
Single Guy	43	15.19	1.95/min
Total	282	100.00	1.07/min

The drama programs, *Chicago Hope* and *er*, included fewer incidents of interest than comedy programs in this sample. Sitcoms provide attributes desired by advertisers. This program type contains likeable characters, tends to make viewers laugh and leaves viewers with positive emotional responses. Comedies are considered safe program choices for advertisers (McAllister, 1996). Sitcoms thrived in the top rated programs sampled in this study. Networks present many of these types of programs in order to deliver the audience required by advertisers. Sitcoms examined in this study, like the

many other sitcoms, provided a general audience orientation in order to appeal to the broadest possible viewership and accommodate the demands of the advertisers.

4.1 Commercials Broadcast in Sample

4.1.1 Commercial Length

The sample contained a total of 209 commercials which ranged from 5 s to 60 s in length (Table 4.4). Of these commercials, 64.1% were 30 s in length — the median length. It is interesting to note that about one-fifth of commercials fell into the 15 s category — a category which has increased greatly since 1986 when this less expensive advertising unit was introduced (McAllister, 1996). While offering single 15 s advertising units allowed smaller companies to purchase television advertising time, the increase in the number of shorter commercials, PSAs and station breaks has added to the the "clutter," or the non-program content, found on television broadcasts. This, along with remote control devices, has created an audience that seeks to reduce the clutter during viewing by channel surfing. This has created major concerns for television network executives who are unable to deliver the audiences expected by advertisers as well as for advertisers who, aware that clutter reduces the effectiveness of viewed commercials, have strategized to reduce the clutter and hence, the zapping of televised commericials (McAllister, 1996).

Table 4.4. Frequency of Commercials by Commercial Length

Commercial Length (s)	Number of Commercials	Percentage of Commercials
5	21	10.1
10	5	2.39
15	44	21.1
20	1	0.48
30	134	64.1
60	4	1.91
Total	209	100

4.1.2 Categories of Advertised Products

Table 4.5 shows the different categories of commercials contained in the sample. As has been seen in previous research (Østbye et al., 1993), food commercials accounted for the largest single category (28.2%; n=59). Station breaks and program promotions followed closely at about one-quarter of all commercials (n=53). However, it should be noted that this latter group mainly consisted of commercials in the 5 s to 15 s length range. Thus, the food ads, which ranged from 15 s to 60 s in length, comprised a greater proportion of the total commercial minutes in the sample.

Table 4.5. Frequency of All Sampled Commercials by Advertised Product Category

Commercial Category	Number of Commercials	Percentage of Commercials
Food	59	28.23
Station Breaks/Program Promotions	53	25.36
Automotive	16	7.66
Department Stores	12	5.74
Services	12	5.74
Household Furnishings	11	5.26
Leisure	11	5.26
Personal Hygiene/Beauty Aids	10	4.78
Medicine	9	4.31
Apparel/Jewellery	6	2.87
Public Service Announcement	5	2.39
Home Maintenance	3	1.44
Other	2	0.96
Total	209	100

Food related incidents (FRI) occurred in commercials from many product categories not just in commercials for food products, e.g., banks, household furnishings, automobiles, program promotions and leisure ads (holiday packages, box office movies) (Appendix H).

The majority of commercials containing FRIs were sponsored by commercial food companies (Table 4.6). Marketing board sponsorship occurred much less often in the sample which could be an indication of reduced funding available for large scale prime time marketing in comparison with profit-oriented companies. The Dairy Farmers of Canada and the Beef Information Centre sponsored most of the marketing board incidents with a series of ads for milk, cheese and beef. Those sponsored by non-food related companies (e.g., Bank of Montreal, Sony™, Eagle Vision™, etc.) included references to meals or specific food items (e.g., beer, pizza, cake, etc.). A complete list is included in Appendix H.

Commercial BIAIs occurred exclusively in the program promotion category sponsored by the local station or network. In fact, all 11 BIAIs were found in 2 different spots promoting an upcoming episode of *The Simpsons*.

Table 4.6. Sponsors of Commercials Containing Incidents of Interest

Sponsor of Commercial	Number of Commercial FRIs (%)	Number of Commercial BIAIs (%)	Total Number of Commercial Incidents (%)
Commercial Food Related Company	393 (74.6)	0	393 (73.0)
Marketing Board	67 (12.7)	0	67 (12.5)
Commercial Non-Food Related Company	66 (12.5)	0	66 (12.3)
Station or Network	1 (0.2)	11 (100)	12 (2.2)
Total	527 (100)	11 (100)	538 (100)

4.2 Food Related Incidents

Of the 805 FRIs in the sample, 526 (65.3%) occurred in commercials and 279 (34.7%) in programs (Table 4.7). Single foods were portrayed in 78.5% (n=628) of the FRIs. The remainder contained more than one food item or showed a combination dish (Mixed Foods) or were references to a meal rather than to a specific food item (Not Indicated). Of the single foods portrayed, 45.4% (n=365) were prepared or cooked products, 22.9% (n=184) were in the fresh or raw state, with the remaining FRIs appearing as processed or packaged food items.

4.2.1 Food Group Categories

Table 4.7. Frequency of Food Related Incidents by Food Group

Food Group	Number of Commercial Food Related Incidents (%)	Number of Program Food Related Incidents (%)	Number of Total Food Related Incidents (%)
Other Foods	138 (26.2)	96 (34.5)	234 (29.1)
Grain Products	107 (20.3)	35 (12.6)	142 (17.6)
Meat & Alternatives	81 (15.4)	19 (6.8)	100 (12.4)
Vegetables & Fruit	28 (5.3)	21 (7.6)	49 (6.1)
Milk Products	47 (8.9)	1 (0.36)	48 (6.0)
Mixed Foods	99 (18.8)	83 (29.8)	182 (22.6)
Not Indicated	27 (5.1)	23 (8.3)	50 (6.2)
Total	527 (100)	278 (100)	805 (100)

Foods portrayed in FRIs fell into all food groups contained in *Canada's Food Guide to Healthy Eating* (Health and Welfare Canada, 1992). The largest single category of foods portrayed was the "Others Foods" category. This was followed by a "Mixed Foods" category — foods consisting of two or more foods from different food groups, e.g., macaroni and cheese, burger and fries, etc. Of the four main food groups, the "Grain Products" group accounted for 17.6% (n=142) of FRIs. These foods were

often easy for characters to carry in scenes and were readily used in non-meal situations such as coffee breaks and snacks. Both the "Vegetables and Fruit" group and the "Milk Products" group received little attention in either commercials or programs with 6.1% and 6.0%, respectively. These foods generally would be featured in commercials from smaller marketing boards and would not likely appear often in prime time due to the enormous costs of purchasing advertising time. In this study, foods from the "Vegetables and Fruit" group often appeared in the background in a fruit bowl on a kitchen counter, fruit stands outside a corner market or as meal accompaniments rather than the meal focus.

Portrayal of foods from the "Milk Products" group occurred almost exclusively in commercial based FRIs such as the marketing board sponsored milk and cheese commercials as well as commercials for breakfast cereals and macaroni and cheese products. The only program based FRI which referred to a milk product was a passing reference in *Friends* (Borns, 1995) to the storage location of the milk for the infant son of a male character.

4.2.2 Nutritional Quality

Upon closer inspection of the specific food items portrayed in the FRIs, the nutritional quality of the foods comes into question. Based on directional statements in *Canada's Food Guide to Healthy Eating* (Health and Welfare Canada, 1992) and *Canada's Guidelines for Healthy Eating* (Health and Welfare Canada, 1990a), many portrayed food items were those for which moderate consumption has been suggested due to the fat and/or sodium contents.

Of the 100 FRIs which portrayed single foods from the "Meat and Alternatives" group of *Canada's Food Guide to Healthy Eating* (Health and Welfare Canada, 1992) (Table 4.8), slightly over one-half (54%; n=54) were for foods which should be eaten in moderation (Health and Welfare Canada, 1992). [NOTE: These 54 foods consisted of Processed Meat, Fish and Poultry (n=34), Nuts and Seeds (n=12), Fish and Seafood (n=6), Poultry (n=1) and Red Meats (n=1).] These foods tended to be higher in fat or sodium, or both, than recommended for regular choices in the daily diet. One-half of

these incidents (n=27) involved fried chicken or fried chicken strips and occurred solely in commercials for KFC™ and Labatt Lite™. The remaining lower nutritional quality FRIs in this food group involved higher fat and/or sodium food choices such as deep fried shrimp, shrimp in garlic butter sauce, cold cuts, sausages, nuts, peanut butter, canned fish and meat or shrimp in seasoned sauces.

Table 4.8. Nutritional Quality of Portrayed Single "Meat and Alternatives" Foods in Food Related Incidents (FRI)

Food Category[a]	Number of FRIs Involved	Percentage of "Meat and Alternative" FRIs	Percentage of Total FRIs (n=805)
Processed Meat, Fish and Poultry	34	34.0	4.22
Red Meats	27	27.0	3.35
Nuts and Seeds	12	12.0	1.50
Fish and Seafood	9	9.0	1.12
Poultry	9	9.0	1.12
Eggs	9	9.0	1.12
Total	100	100	12.43

[a]based on food category scheme of Barr (1989)

Canada's Food Guide to Healthy Eating (Health and Welfare Canada, 1992) recommends choosing lower fat foods more often. Lower fat food choices from the "Meat and Alternatives" group which were portrayed in FRIs included grilled lean beef steak, roasted veal, grilled chicken, roasted turkey and grilled shrimp (n=37). Portrayals of eggs occurred nine times as either part of a large breakfast meal or as an ingredient in fresh pasta. Though eggs have not been termed a higher fat choice by *Canada's Food Guide to Healthy Eating* (Health and Welfare Canada, 1992), it has recommended that eggs not be consumed daily.

Food related incidents from the "Grain Products" group accounted for 17.7% of all FRIs (Table 4.9). Of these 142 FRIs, 53% (n=75) were for foods of lower nutritional quality — higher fat and sodium food choices. Fifty-one (68%) FRIs from this sub-

group were for cakes, cookies and pastries, i.e., danish and doughnuts. Other foods of lower nutrient density included granola-type breakfast cereal, popcorn and crackers.

Table 4.9. Nutritional Quality of Portrayed Single "Grain Products" Foods in Food Related Incidents (FRI)

Food Category[a]	Number of FRIs Involved	Percentage of "Grain Product" FRIs	Percentage of Total FRIs (n=805)
Breakfast Cereal lower sugar, RTE and cooked	37	26.1	4.6
Cake	21	14.8	2.6
Pastries (doughnuts, danish)	21	14.8	2.6
Breakfast Cereal, sweetened granola type	12	8.45	1.50
Bread/Rolls	10	7.04	1.24
Pasta	10	7.04	1.24
Cookies	9	6.34	1.12
Popcorn	9	6.34	1.12
Pancakes	6	4.22	0.75
Crackers	3	2.11	0.37
Flour, white	3	2.11	0.37
Rice	1	0.70	0.12
Total	142	100	17.63

[a]based on food category scheme of Barr (1989)

Lower fat and sodium food choices portrayed (n=67) consisted of ready-to-eat (RTE) and cooked breakfast cereals, i.e., corn flakes, Special K™, Crispix™ and an instant oatmeal product. Higher nutrient density foods also portrayed were bread, rolls, rice, pasta, pancakes and white flour.

Virtually all "Grain Products" portrayed were produced with refined flour and thus while providing a source of complex carbohydrate, were low in fibre. The higher fibre FRIs (n=17; 12%) involved instant oatmeal and popcorn.

Portrayals of "Milk Products" accounted for 6.0% (n=48) of total FRIs (Table 4.10). Higher fat and/or sodium food choices were evident for nine (18.8%) of the "Milk Products" single food portrayals. These included aged cheddar cheese, processed cheese slices and ice cream. The remainder of the FRIs for the food group involved fluid milk, products with varying fat contents. None of the fluid milk incidents made reference to the fat content of the milk involved. However, all such incidents did not visibly appear to have the blue colour note found with lower fat milks (i.e., 1% or skim), but were more cream-like in colour and consistency. This was most notable in a commercial for packaged macaroni and cheese where the fluid milk product had the richer appearance of cream.

Table 4.10. Nutritional Quality of Portrayed Single "Milk Products" Foods in Food Related Incidents (FRIs)

Food Category[a]	Number of FRIs Involved	Percentage of "Milk Products" FRIs	Percentage of Total FRIs (n=805)
Fluid Milk	37	77.1	4.6
Cheese, aged and processed	8	16.67	1.0
Ice Cream	1	2.1	0.12
Miscellaneous Milk-based Beverage	2	4.17	0.25
Total	48	100	6.0

[a]based on food category scheme of Barr (1989)

Single foods portrayed from the "Vegetables and Fruit" group appeared in 6.1% (n=49) of all FRIs (Table 4.11). A small portion (n=3) of these incidents were for higher fat and/or sodium food choices which included vegetable soup and breaded fried

potato nuggets. The miscellaneous incident referred to a salad bar — sites which often are replete with higher fat and sodium vegetable and fruit choices. The majority (95.7%) of "Vegetables and Fruit" group FRIs involved fresh produce. Common North American food choices predominated. For example, fruits portrayed included apples, oranges, bananas and raisins. FRIs with grapes, kiwi and lemon occurred less often in the sample. Portrayed vegetables seen most often included potatoes, red and green bell peppers, salad greens, onions and tomatoes. FRIs with carrots were seen only twice in this sample. Orange juice was the only juice portrayed and was shown as part of a balanced breakfast.

Table 4.11. Nutritional Quality of Portrayed Single "Vegetables and Fruit" Foods in Food Related Incidents (FRI)

Food Category[a]	Number of FRIs Involved	Percentage of "Vegetables and Fruit" FRIs	Percentage of Total FRIs (n=805)
Vegetables	28	57.14	3.48
Fruit	17	34.7	2.11
Fruit Juice	3	6.12	0.37
Miscellaneous	1	2.04	0.12
Total	49	100	6.12

[a]based on food category scheme of Barr (1989)

Canada's Food Guide to Healthy Eating (Health and Welfare Canada, 1992) highlights dark orange, yellow and green vegetables and fruit. With the exception of salad greens, tomatoes, peppers and oranges/orange juice, which were often seen in the background of the scene, portrayals from this sample did not emphasize these nutrient dense choices.

Food items from the "Other Foods" group provided 29.1% (n=234) of all FRIs (Table 4.12). These portrayals consisted entirely of lower nutrient dense food choices as this is the nature of the food group. Higher fat and sodium foods occurred in 18.8% (n=44) of the FRIs for this food group. Included were cooking oil, butter, salad

dressing, potato chips, chocolate bars, icing, chili sauces and flavoured instant coffee mixes. Lower fat and sodium choices comprising 20.1% (n=47) of FRIs from the "Other Foods" group, consisted of many sugar-added food items. Examples included sugar, syrup, candy, soft drinks and fruit drinks. Other lower fat and sodium FRIs which were also lower in simple sugars included sugar-free gum, spices, cooking spray, pretzels and water.

Table 4.12. Nutritional Quality of Single Portrayed "Other Foods" Category Foods in Food Related Incidents (FRI)

Food Category[a]	Number of FRIs Involved	Percentage of "Other Foods" FRIs	Percentage of Total FRIs (n=805)
Low Nutrient Dense Beverages			
Alcohol	78	33.3	9.69
Coffee and Tea	61	26.1	7.58
Water	14	6.0	1.74
Other, High fat, high sugar	9	3.85	1.12
Fruit Drinks	6	2.56	0.74
Hot Beverages, type not clear	4	1.71	0.50
Soft Drinks	3	1.28	0.37
subtotal	**175**	**74.8**	**21.74**
Condiments			
Bottled Sauces	15	6.4	1.86
Seasonings	8	3.42	1.0
Cooking Spray	1	0.43	0.12
subtotal	**24**	**10.25**	**2.98**
Sweets			
Gum	8	3.42	1.0

Food Category[a]	Number of FRIs Involved	Percentage of "Other Foods" FRIs	Percentage of Total FRIs (n=805)
Candy and Chocolate	5	2.14	0.62
Sugar/Syrup	3	1.28	0.37
Icing	2	0.85	0.25
subtotal	**18**	**7.69**	**2.24**
Higher Fat Foods			
Fats and Oils	12	5.13	1.5
Snack Foods, chips	3	1.28	0.37
subtotal	**15**	**6.41**	**1.87**
Salty Snack Foods (lower fat)			
Pretzels	2	0.85	0.25
subtotal	**2**	**0.85**	**0.25**
Total	234	100	29.1

[a]based on food category scheme of Barr (1989)

Canada's Guidelines for Healthy Eating (Health and Welfare Canada, 1990a) also recommend only moderate consumption of caffeine and alcohol. Portrayals of alcoholic beverages occurred in 33.3% (n=78) of FRIs in which the "Other Foods" group was involved. These portrayals were responsible for 9.69% of all FRIs. Beer references occurred most frequently (n=36), due to the occurrence of 6 beer commercials in the 6 hours of sampled broadcasts (4.3% total commercials; 15.2% total food commercials). Wine incidents occurred 28 times in program and commercial scenes involving social interaction. The remaining alcohol FRIs (n=14) involved mixed drinks and offers or invitations for "a drink."

Caffeine-containing food items were responsible for 30.8% (n=72) of FRIs for the "Other Foods" group or 8.9% of all FRIs. One FRI involved tea and two involved

chocolate bars. The remaining 69 incidents were devoted to regular coffee or flavoured coffee products. None of these references indicated that the product was caffeine-reduced.

FRIs consisting of "Mixed Foods" accounted for 22.6% (n=182) of all FRIs. Table 4.13 shows the various categories of "Mixed Foods" encountered in the sample. The "Miscellaneous" incident referred to an appliance commercial which showed a refrigerator stocked with food items. Within these 182 FRIs, there were 466 individual foods clearly recognizable. These consisted of 144 from the "Vegetables and Fruit" group, 120 from the "Meat and Alternatives" group, 89 from the "Grain Products" group, 54 from the "Milk Products" group and 59 from the "Other Foods" category. The nutritional quality of the "Mixed Foods" varied, though higher fat and sodium ingredients and menu items abounded.

Table 4.13. Type of Products Portrayed in "Mixed Food" Food Related Incidents (FRI)

Food Type	Number of FRIs Involved	Percentage of "Mixed Foods" FRIs	Percentage of Total FRIs (n=805)
Combination Foods	132	72.5	16.4
Complete Meals	34	18.7	4.2
Burgers and Sandwiches	15	8.2	1.9
Miscellaneous	1	0.55	0.12
Total	182	100	22.6

"Burgers and Sandwiches" seen in FRIs, tended to be made with higher fat spreads and sauces. As well, all sandwiches were made of either cured meat and sausage products, peanut butter or cheese. The focus food in portrayed "Complete Meals" was often a higher fat and/or sodium product, many times with similar nutritional quality meal accompaniments. Examples included the Mega Meal™ from KFC™. This meal was portrayed four times. It consisted of fried chicken, fried chicken

strips, french fries, fried potato wedges, coleslaw, potato or macaroni salad, gravy, dipping sauce and iced chocolate cake. Also shown eight times in these KFC™ commercials was an individual dinner package of fried chicken strips, dipping sauce, french fries and coleslaw.

Other "Complete Meals" shown also were higher fat and sodium choices. A breakfast meal shown contained pancakes, eggs, chili, sausage and hash browns. Higher fat and sodium lunches included a hamburger with fries, and soup, cured meat/cold cut sandwich with a beverage of either milk, coffee or a fruit drink. Potato chips were added to one of these sandwich lunch meals, as well. Dinner meals portrayed in this lower nutrient dense category included a t-bone steak with packaged macaroni and cheese, tomatoes and greens and an Indian meal with several coconut cream sauces.

The eight (23%) lower fat and sodium "Complete Meal" choices portrayed were breakfast meals with cereal, toast, milk and orange juice, a roast turkey meal and grilled chicken, shrimp and vegetables.

The FRIs of "Combination Foods" also tended to be mainly food choices that were higher in fat and sodium. All pies (n=5) shown were cream-based. Packaged pasta products (n=17) included macaroni and cheese mixes and canned pastas with meat. Soups, many cream-based, were portrayed in 36% (n=65) of FRIs for "Combination Foods." Of these portrayals, 18 were of canned soups and 47 were restaurant prepared soups. Meat-based "Combination Foods" including chili, curry and Chinese foods were included in 13 FRIs, while cheese-based dishes such as tacos, burritos and pizza were seen in 9 FRIs. Other higher fat and/or sodium "Combination Food" FRIs were for cheeseburgers, hamburgers, peanut butter and bread, and selected ingredients for pies and soups.

Lower fat and sodium food choices were portrayed in 7.5% (n=11) of the FRIs for "Combination Foods." Included were pasta with fresh tomato sauce, roast chicken with salad and grilled chicken with vegetables.

4.2.3 Actions Involved in Food Related Incidents

All actions involved in FRIs are shown in Table 4.14. Portrayals of food items without character interaction occurred in 26% of FRIs. This large proportion was due to the use of this sales technique in commercials. Commercials also contained a greater proportion of FRIs which involved cooking than found in program FRIs, while more food ordering actions were contained in program FRIs. Miscellaneous actions included cleaning, smelling, shaking, spilling, spitting out food and one incident of an infant throwing food.

Table 4.14. Actions Involved in Food Related Incidents (FRI)

Action Involved	Number of Commercial FRIs (%)	Number of Program FRIs (%)	Number of Total FRIs (%)
Portrayal	191 (36.3)	18 (6.45)	209 (26.0)
Speak of	95 (18.06)	105 (37.63)	200 (24.84)
Consumption	53 (10.08)	54 (19.35)	107 (13.29)
Serve/Offer	61 (11.6)	39 (13.98)	100 (12.42)
Carry/Hold	25 (4.75)	21 (7.53)	46 (5.71)
Cook	38 (7.22)	7 (2.51)	45 (5.54)
Preparation	31 (5.89)	8 (2.87)	39 (4.84)
Order	1 (0.19)	9 (3.23)	10 (1.24)
Choose	3 (0.57)	6 (2.15)	9 (1.11)
Purchase	2 (0.38)	6 (2.15)	8 (0.99)
Miscellaneous	26 (4.94)	6 (2.15)	32 (3.98)
Total	526 (100)	279 (100)	805 (100)

4.2.4 Characters

Characters were present in 63% (n=534) of all FRIs and were involved either as individuals (94.6%; n=505) or groups (5.4%; n=29). All characters involved were

human except for one incident containing a cartoon character and one with a cat. Male characters were present in 67.8% (n=363) of FRIs involving any character, with female characters seen in 33.3% (n=178) of FRIs. Genders were unknown for 4.3% (n=23) of FRIs involving characters. [NOTE: These total more than 100% due to the presence of both genders in some group FRIs.] Other researchers have found that males were portrayed more often than females on prime time television broadcasts (Coltrane & Allan, 1994; Signorielli, 1993).

Adults aged 20 to 60 years appeared in 74.7% (n=399) of FRIs with characters. Older adults were seen less often (3.2%; n=17) as were children (5.3%; n=20), adolescents (0.4%; n=2), and infants (0.2%; n=1). Mixed ages were present in 5 (0.9%) FRIs, while 15.5% (n=83) of FRIs contained characters of indeterminate age. These findings are similar to those found in other studies of television content that have found fewer characters portrayed from the younger and older age groups (Signorielli, 1993).

It is interesting to note that children and infants involved in FRIs appeared only in commercial FRIs. Children spend five to ten times more time watching prime time television broadcasts than Saturday morning television (Crockett & Sims, 1995). From the total sample presented here, few of their peers were portrayed and most of the role models seen were adults. That no children were involved in the incidents of interest in these highly rated programs is of concern, as children may not have many age appropriate role models in prime time television and thus, would lack an important component of the socialization and education processes provided by television. Similarly, the shortage of older adults portrayed in the incidents of interest — a group known to be heavy viewers of television (Huston et al., 1992) — could exacerbate the social isolation experienced by many older adults.

The majority (65.4%) of FRIs involved characters within a healthy weight range (Table 4.15). Characters above a healthy weight range (BMI above 27) were portrayed more often than those in the caution zone (BMI 25-27) or below a healthy weight range (BMI below 20).

Table 4.15. Character Body Types[a] Found in Food Related Incidents (FRIs)

Body Type	Number of Commercial FRIs	Number of Program FRIs	Total Number of FRIs
1[b]	0 (0)	2 (0.7%)	2 (0.4%)
2[c]	145 (53.5%)	204 (77.6%)	349 (65.4%)
3[d]	7 (2.6%)	20 (7.6%)	27 (5.0%)
4[e]	25 (9.2%)	35 (13.3%)	60 (11.2%)
Mixed Types	0 (0)	1 (0.4%)	1 (0.2%)
Unknown	94 (34.7%)	1 (0.4%)	95 (17.8%)
Total	271 (100%)	263 (100%)	534 (100%)

[a]based on Body Mass Index (BMI) of body image silhouettes (Canadian Dietetic Association, 1988)
[b]BMI under 20
[c]BMI between 20 and 25
[d]BMI between 25 and 27
[e]BMI over 27

4.3 Body Image Attitude Incidents

Fifteen BIAIs occurred in the sample examined. Eleven (73.3%) were found in commercials and 4 (27%) were found in programs. All incidents occurred in comedy programs or the surrounding commercials. The 11 commercial BIAI were found in two different program promotions for *The Simpsons*, while the program BIAIs were from *Grace Under Fire* (Raley, 1995) (n=3) and *Caroline in the City* (Barron & Pennette, 1995) (n=1). All BIAIs denigrated the larger body type, though one had a slightly positive bent to it.

4.3.1 Characters

Characters exhibited the body image attitudes coded in 12 of the BIAIs. The remaining three BIAIs dealt with costuming, camera angle and props which accentuated body size. Seven (46.7%) BIAIs involved the attitude verbalized or portrayed by a cartoon character and six (40%) involved human characters. Two (13.3%) BIAI had no clear character involved in the attitude.

Of the 13 BIAIs involving characters, males portrayed the body image attitude for 12 (92.3%), while a female character was involved in only one (7.7%) incident.

Middle adults (30-60 years) were responsible for 7 of 13 BIAIs (Table 4.16). Older adults, adolescents and children were involved less often in the study sample. This, however, is likely due to the portrayal of fewer people from these particular age groups, a similar finding to other studies of prime time television content (Robinson & Skill, 1995).

Table 4.16. Age of Characters Responsible for Body Image Attitude Incidents (BIAI)

Character Age	Number of BIAIs
Child	1 (7.7%)
Adolescent	1 (7.7%)
Middle Adult	7 (53.8%)
Older Adult	2 (15.4%)
Unknown	2 (15.4%)
Total	13 (100%)

Characters with discernable body type responsible for body image attitudes were distributed between those within a healthy weight range and those above a healthy weight range (Table 4.17).

Table 4.17. Body Type[a] of Characters Responsible for Body Image Attitude Incidents (BIAI)

Character Body Type	Number of BIAIs
2[b]	5 (38.5%)
4[c]	6 (46.1%)
Unknown	2 (15.4%)
Total	13 (100%)

[a]based on BMI of body image silhouettes (Canadian Dietetic Association, 1988)
[b]BMI between 20 and 25
[c]BMI over 27

4.4 Summary

This study did not use random sampling techniques. Thus, these findings are not generalizable to the larger universe of all prime time broadcasts. The findings, however,

have been compared to existing literature to show any similarities or differences in trends.

Based on *Canada's Food Guide to Healthy Eating* (Health and Welfare Canada, 1992) and *Canada's Guidelines for Healthy Eating* (Health and Welfare Canada, 1990a), food portrayals from this purposive sample of prime time television broadcasts did not support current recommendations. While all foods can fit into a healthy diet, many food products promoted to television viewers were largely those that recommendations have stated should be chosen in moderation. In this sample, 43% (n=348) of FRIs were for foods higher in fat and sodium than the guidelines recommend for regular consumption (Health and Welfare Canada, 1992). This figure is slightly lower than the near 50% figures found in other studies (Kotz & Story, 1994; Østbye et al., 1993; Story & Faulkner, 1990). It should be reiterated though, that this study did not use random sampling techniques as seen in these other studies, making in-depth comparisons invalid. As well, while there were relatively few FRIs dealing solely with "Vegetables and Fruit," the nutrition quality of these foods seems higher than found by Østbye and associates (1993), though this earlier study dealt only with food product commercials.

Findings related to the age and gender of characters involved in FRIs were similar to studies of prime time images (Kaufman, 1980; Robinson & Skill, 1995; Signorielli, 1993). Contrary to findings of other studies (Kaufman, 1980; Silverstein et al., 1986), though, this sample produced only 16.2% of characters involved in FRIs who could be termed overweight or obese. This is possibly due to the coding instrument used in the determination of body type. The instrument used in this study produced highly reliable results amongst and between coders. As well, the definitions of body type were closely linked to BMI — a validated measure. Previous studies have used subjective descriptors to determine body type. Such subjectivity may have allowed personal and societal biases to impair judgement of body size by coders. It is interesting to note that coders in this study, while still producing reliable results, tended to argue the definitions of degree of overweight with the researcher in early drafts of the coding instrument. This pointed to the high degree of cognitive dissonance between the instrument

descriptors and the coders' internalized view of acceptable weight ranges. For this reason, the descriptors were changed to a simple number system. The possible strength of this method of coding body size is an important consideration for future research in this area and the cautious interpretation of past research.

When compared to FRIs, relatively few BIAIs were found in this sample. This was due to the operationalization of the definition of body image attitude incident. Previous studies of this nature tended to look at the subtle influences on body image presented in television broadcasts. For this study, the portrayal of attitudes related to body image of self and others was examined. Fewer overt attitudes were expected. It is interesting to note that all 15 BIAIs portrayed the larger body size in a negative manner. Even the BIAI from *Grace Under Fire* (Raley, 1995) involved Grace stating that she had voted for the US commemorative postage stamp depicting the "fat Elvis." This action, of which Grace was proud for its underdog support, still indicated that this image was not the socially accepted image.

Based on social learning theory and cultivation analysis, it would appear that the sampled prime time television broadcasts could possibly perpetuate poorer nutritional habits and negative body image attitudes. Food and body image attitude portrayals constituted less healthy lifestyles and behaviours. Thus television viewing could not only encourage sedentary activity, but advocate energy dense food consumption.

5. MARKETING AND PRODUCTION TECHNIQUES IN TELEVISED COMMERCIALS

> Advertising is not something to be scorned and quickly dismissed. It is not something we can avoid, even if and when we pretend to ignore it, to rise above it. It is part of our cultural surround. Like fish, we hardly stop to think about the water. — Diane Barthel, *Putting on Appearances*, 1988, p. 13. (quoted in Coltrane and Allan, 1994, p. 43)

Ubiquitous advertisements are not only marketing tools but cultural artifacts (Frith, 1995). As such they have become one of the most important cultural factors shaping and reflecting daily life (Williamson, 1978). While all the far-reaching social effects of advertisements may not be intended by the advertiser (McAllister, 1996), the veracity of the world view provided by advertisements can be fully accepted by the consumer (Frith, 1995; Potter, 1988). This belief can propagate cultural stereotypes and the values of the dominant culture.

In less than a minute, television commercials "set a scene, create a mood and invoke images of empowerment or wish fulfilment" (Coltrane & Allan, 1994; p. 58). Consumer preferences and behavioral intentions may be developed without the viewer actually liking the advertisement; thus, the perceptual structure of viewers may be altered by television commercials (del Toro, 1988). This points to the recognized importance of framing a marketing message. Through specific framing of a message, viewers are asked not only to consume a given product or idea, but to accept the associated identity as well.

Marketing theory suggests that framing a message will involve the symbolic significance of accepted rituals, allow consumers to place themselves in highly desirable social roles and encourage real and vicarious life experiences (Coltrane & Allan, 1994). This is often done through careful mixing of audio and video messages. With television viewers, the more powerful visual image becomes most important for it is this portion

of a televised message which leaves an overall impression with the viewer (Comstock, 1993; Willis, 1995).

To understand the meaning of food and body image attitudes in this study, it was necessary to begin with the examination of the mediated messages to reveal the advertising techniques used in television commercials. Techniques were identified from transcripts of the incidents of interest and then placed into categories which emerged from the data. These categories were then placed into an existing thematic framework of advertising techniques (Rank, 1988). The same process occurred with indicators of television form — the production or construction techniques used. These two areas will be presented and discussed in this chapter.

Advertising techniques, which fell into 30 emergent categories, and the 8 emergent television form categories, were placed into the six theme areas presented by Rank (1988) (Appendix G):

- Attention-Getting
- Confidence-Building
- Desire-Stimulating
- Benefit Promise
- Urgency
- Response-Seeking

The emergent categories will be discussed in terms of these six themes. All commercials contained aspects of Attention-Getting, Confidence-Building and Desire-Stimulating or Benefit Promise, while only some commercials employed Urgency and Response-Seeking techniques.

5.1 Attention-Getting Techniques

Rank (1988) described "attention-getting" techniques as those subtle strategies which operate through the senses, emotions and thoughts of the consumer. These techniques also may include more overt approaches such as product demonstrations and

physical attention-grabbers. The televised commercials examined in this study used a variety of these techniques.

5.1.1 Humour

Everyone likes to laugh and advertisers have made use of this aspect of our culture. Since most study commercials surrounded sitcom programming, humour in advertisements seemed a natural extension. Advertisers capitalized on the positive emotive state of viewers by providing a continuation of the upbeat humour of sitcoms. In this study, humour appeared in many forms.

Exaggerated domestic scenes provided a degree of familiarity mixed with the absurd. In the commercial for Windex™, an infant and female adult were seen in a kitchen.

> Open on baby in high chair playing with spaghetti and tomato sauce. Cut to spaghetti hitting stove top.
> Cut to spaghetti hitting fridge door.
> Cut to spaghetti hitting picture of baby in ceramic frame.
> Cut to long shot on woman standing in kitchen. Zoom onto terrified face. She ducks out of scene as spaghetti hits upper cupboard door.
> Close on woman's face looking stunned.

Here, the foibles of toddler feeding behaviours were exploited to sell the product necessary to clean up after meal times.

The Labatt Lite™ commercial in the sample showed a party of young adults preparing a group supper. The format used had decidedly strong resemblance to the *Friends* genre of 20-something programming. McAllister (1996) has noted that such camouflaged advertisements have been used by many advertisers to reduce channel-surfing or fast-forwarding through commercials of time-shifted taped programming. This Labatt's commercial was shown during *Home Improvement*, *Friends*, and *Seinfeld* — the latter two with formats that were mimicked in the commercial construction.

> VO: (Male1) Tonight's menu features Jill's fettucine flambé, . . .
> (Suddenly flames shoot from the stove top where she is stirring something. She shouts in surprise. Male2 does "Krammer-like" double-take.)
> VO: . . . Scott and Lisa's entrée . . .

(Cut to close on octopus. Pull back to high angle of Female2 (Lisa) holding octopus while Male3 (Scott) looks on holding a bottle of beer.)
VO: Mmmm. Seafood.
(Cut to close on Male1 face looking stunned.)
VO: . . . and Steve's five-alarm chili.
(Cut to up angle on Male2 (Steve) stirring pot and tasting mixture from large cooking spoon. Female1 (Jill) looks on eagerly. He smiles and seems to assure her then pulls back as flavour hits him.)
(Cut to close on face of male1 as he closes his eyes and shakes his head.)
VO: Good thing I selected the clean refreshing taste of a perfectly chilled Labatt Lite '95 <door buzzer> and the perfect caterer.
(Cut to shot of door opening to show a man dressed in a chicken suit carrying a bucket of chicken.)

This commercial utilized the humorous reactions of characters to situations presented. This was done in a manner which clearly invited the viewer to be a vicarious participant in the informal social gathering. In this way, the viewer was invited to participate in the commercial by filling an absence (Williamson, 1978). The male host (MALE1) provided the narrations yet wasn't clearly involved in food preparation. His reactions to octopus as a meal item were humorous, but also reflected the opinion of the dominant culture regarding usual food items. However, in the current market place, adults aged 20 to 30 years are the target audience for spicy, ethnic cuisines (Herzog, 1996), an interest that was shown in this commercial, as well. The host/narrator's "selection of the perfect caterer" reflected an attitude common in Canadian society. In 1995, 53.9% of restaurant meals were eaten off-premises either through take-out or delivery orders (Herzog, 1996). This attitude and behaviour may be common in society due to lack of time for food preparation as well as reduced levels of food preparation skills. With changes in social and family demands, increased working out of home offices, and an aging population, the trend to regular socializing over meals eaten in restaurants or off-premises is expected to grow (Herzog, 1996).

A commercial for Kraft™ Macaroni and Cheese drew upon improbability and plays on words for its humorous effects. A rotund mouse character, dressed in a tuxedo, made a pun-like comment.

VO: You could say we've invented a better mouth-trap.
MOUSE: Yikes! I thought you said mouse-trap. So sorry, sir.

The stereotypical mouse/cheese image was altered and became more incongruous by the upper-class image of the mouse's tuxedo and faintly British accent.

Advertisers have recognized the value of humour and tend to use humour 2 to 3 times more often in broadcast media than in print media (Weinberger, Spotts, Campbell & Parsons, 1995). Televised advertisements have used humour most often for nondurable, lower cost goods — those that are part of consumer routinized purchase behaviours. This study further indicated this common humour use in televised advertisements especially amongst smaller treat-like products (Weinberger et al., 1995) such as beverages, sweets and alcohol.

5.1.2 Music

Music was used in the construction of the sampled commercials to create a mood, set the pace or invoke a shared image. Such strategies would attract the attention of the viewer at the onset of the commercial. Comstock and Paik (1987) noted that music can function as an attention-getting cue by informing the viewer of an impending important or interesting event within a program and by assisting the viewer with interpretation of the intent of an action seen on the screen. Also, these authors stated that music may provide a stimulus of interest which is gender-specific — in effect telling viewers that the program may be of more interest to either male or female viewers.

Scenes of foreign locales were conjured through stereotypical music — music with a shared knowledge of place of origin. General Foods International Coffees™ used this method in four different commercials in the sample:

- Irish jig played on a tin flute (Cafe Irish Cream™)
- can-can dance music (French Vanilla Cafe™)
- slow Italian mandolin (Italian Cappuccino™)
- alpenhorn (Cafe Swisse™)

In a similar manner, Nabob™ used fast-paced drums played with hands and fingers to produce the image of a jungle in a commercial for South Pacific Blend™ coffee.

Up-tempo music was found in the background of higher energy commercials such as the party atmosphere of the Labatt Lite™ dinner commercials and the celebratory air of the Walmart™ first anniversary commercials. The two different commercials for fluid milk presented by the Dairy Farmers of Canada emphasized active living and employed an energetic musical background to the narration. The merriment associated with cartoon programs was evident with the fast-paced music used in both program promotions for *The Simpsons*.

Slower paced commercials used slower musical background for mood and pacing. In the commercial for Nabob Full City Dark™ coffee, a solo-saxophone produced a relaxing, sensuous, bluesy background linking the product with evening relaxation. A slow-tempo orchestral arrangement produced a romantic background sound for the puppy-love theme in the Trident™ gum commercial.

A commercial for the automobile, Eagle Vision™, used two distinct music tempos — a slow, calm European sound followed by a faster-paced electric guitar rock. These accompanied a voiceover discussion of the differences between Old World and New World societies.

Familiar tunes also were used to grab the viewer's attention. McDonalds™ commercial featured the Muppets™, while the Muppets™ theme played throughout. This technique was based on viewer recognition of the theme and expectation of seeing the well-liked Muppet™ characters.

Music was used to create nostalgia in the Special K™ commercial, where "Sea of Love" was used in the opening and closing scenes. Nostalgia is used by advertisers to create a desirable referent system in different market segments. The current use of this particular song would have nostalgic value for the baby boomer and "retro" markets. If the song were to become popular again, there is a strong chance that the cereal product would be inextricably linked with airings of the song, thus further benefiting the advertiser (McAllister, 1996). Use of nostalgia in commercials, as in this case, can carry a strong emotive aspect for the viewer and take advantage of the longing for youth commonly seen in North American society.

5.1.3 Written Word

The use of the written word in televised commercials played several roles. Small inconspicuous words at the bottom of the screen were found in all food commercials making a nutrition claim. This was seen in ads for milk and breakfast cereals. An interesting example of attention-getting technique with such text occurred in the Special K™ commercial. The disclaimer at the bottom of the screen read:

> ▪ As part of healthy eating this food may assist in achieving and maintaining a healthy weight because it is low in fat.

This white text was placed on a white background such that even when the videotaped image was paused, the text was difficult to read. However, the phrase "low in fat" was clearly visible as this portion of the white text was situated over the red 'K' logo.

Most commercials used written text for a tagline at the end of the advertisement to highlight a logo or slogan. This text, in contrast to that used as warning or to comply with regulatory demands, was clearly visible and used a much larger point size. In fact, such written information was often highlighted in some manner to ensure it caught the attention of the viewer. The use of colour in taglines was seen with the Trident™ gum commercial which had been shot in sepia tones and the black and white Special K™ commercial. In both instances, the company logo or product package were the only spots of colour in the final scenes. Colours used were bright and pure — red in the case of Special K™ and green, blue and red in the Trident™ commercial. As noted by Williamson (1978), a splash of colour like this can serve to focus viewer attention on the logo or package and thus increase brand recognition.

A recent variation in the use of the written word in television commercials has been described by McAllister (1996). Through the use of only one or two words per screen, advertisers have created a method of delivering their message through an imaginary dialogue with the viewer. Such commercial formats also allow the message to be grasped by viewers who zip or fast forward, through time shifted programming. In this study, this method was readily apparent in the commercials for Molson Canadian™

beer, the Bank of Montreal™ and Redenbudder Lite™ popcorn.

In the two commercials presented for Molson Canadian™ beer, the one word per screen strategy was used. At the end of the commercial, the words "I" and "am" were presented in an altered tagline format. The final screen showed the product logo. When taken as a whole, this became the slogan "I am Canadian." The Bank of Montreal™ commercial showed a series of signs in shop windows or held by working people. The signs proclaimed accomplishments or attitudes to the viewer. Included were "I am not a number," "Everybody is Learning," "Learning to Read and Write," and "Can a bank learn?" This commercial used rule breaking or trend-setting as the theme of both the advertisement and the presentation style. In these commercials, the words or phrases appeared as decontextualized, fragmented images which relied on the viewer to pull them into a cohesive whole.

The Redenbudder Lite™ commercial was less erudite in appearance than the previously described commercials. The message presented was straight-forward and dealt with nutrition claims made for the product. Here, a series of signs, shot in black and white without characters seen, were shown. The signs stated "50% less Fat," "25% less calories" and "33% less salt." This commercial was visibly different from the majority of televised advertisements. McAllister (1996) stated that this attention-getting strategy deliberately aimed for the commercial to stand out "like a reference to Goethe in the middle of a *Baywatch* episode" (p. 98).

5.1.4 Demonstrations

Demonstrations have been used in televised commercials to gain and hold viewer attention. In this study, two commercials from Pillsbury™ used abbreviated food preparation sessions. Simple recipes for Cinnamon Loaf and a Colossal Cookie were presented visually. Each session was introduced with the Pillsbury Doughboy™ in a classroom setting — a constant reference point to grab viewer attention for the recipe to follow.

5.1.5 Physical Attention-Getting Techniques

Several physical attention-getters were used in commercial construction to garner viewer attention. These were categorized as television form variables which drew attention by creating unusual or atypical viewing experiences (Appendix G).

5.1.5.1 Close-up Shots

One of the most apparent appeals to the senses was the extensive use of the close-up shot in food commercials. Food photography was given much attention. Just as with a facial close-up (Berger, 1991), these shots of food can signify intimacy — the implied close relationship between the viewer and food. Lighting created colours which were highly realistic. Zoom shots were used to signify focus and observation on a particular portion of the food portrayed. For example, in the commercial from KFC™, a close-up shot of a plate of coleslaw, dipping sauce and three chicken strips changed to a zoom shot of one chicken strip as it was cut by a knife with the white meat and crispy batter clearly visible. As well, close-ups of character faces were used often to show positive reactions to food products. Such use of close-up shots not only attracts attention but may also stimulate desire for the food item.

5.1.5.2 Colour

Another physical attention-getting technique included the use of black and white or sepia tones giving a lack of colour. This was seen with commercials for Special K™, Trident™ gum, Bank of Montreal™, Redenbudder Lite™ popcorn and Molson Canadian™ beer. As noted previously, the company logo or food item were the only uses of colour in these advertisements.

Commercials for Canadian Tire™ featured scenes of Scrooge in Dickensian Old England. Lighting throughout was very yellow and colours subdued implying the warm glow of fire, oil lamps and candles. The commercial for Nabob South Pacific Blend™ coffee used bright, vivid colours and warm, natural lighting to approximate the tropical paradise of a South Seas island.

5.1.5.3 Angle Shots

Long, high angled shots were used to set the scene in many commercials. A scene of young boys playing soccer in an Old World city setting (Chef Boyardee™), children running in a playground area (Trident™ gum), an aerial view of a tropical island in a blue sea (Signature Vacations™), a rooftop view of a courtyard outside an apartment building (Chunky Soup™) — each of these scenes assisted with development of context for the commercial (Berger, 1991) and in some cases, may have increased the degree of familiarity, thus gaining viewer attention.

The use of a camera angle that was less than 90° with the horizontal plane was often mixed with up and down angles to produce either an artistic or informal atmosphere. A variety of angle shots in the commercial for Bank of Montreal™ coupled with the black and white filming created an artistic mood. The cheese commercial, however, used these angles throughout to create a more informal, light-hearted mood. Informality and spontaneity were established through the use of the 'shaky-cam,' or hand-held camera technique in the Miracle Whip™ commercial. This technique also increased the reality of the advertisement. In each case, this strategy aimed to capture the visual attention of the viewer through an unusual look.

5.1.5.4 Pacing

Excitement was created visually in several commercials through a series of fast-paced scene cut-aways, wipes and fades. In 1985, the average shot length was 3.5 seconds and is likely much shorter now as fast-paced productions appear more entertaining to watch (McAllister, 1996).

The two 30-second fluid milk commercials portrayed 9 and 10 scenes, respectively. While shot length averaged 3.2 seconds for these two advertisements, action was produced through combined visual and auditory stimuli. Scene changes occurred similarly to slides changing. Each new image pushed the previous image off the screen, alternating between left, right, up and down wipes. Every scene portrayed some aspect of active living — cycling, walking, kayaking, practicing tai chi — and was accompanied by up-tempo music. As well, the action words of the narrations, "turn"

and "move," were closely linked to the action on the screen.

A contrasting method of producing action was used with the two commercials for Molson Canadian™ beer. These commercials had 49 and 61 different camera shots over 30 seconds, resulting in average shot lengths of 0.5 and 0.6 seconds. This technique would appeal to the viewer who is very familiar with televised media. Such viewers may require high energy programming such as this in order to hold their attention.

The attention of the viewer was cultivated in the commercials of this study in a variety of ways. Using humour as a marketing strategy provided common reference points for the heterogenous viewing audience — everyone eats and people like to laugh. Mood and pacing were developed with the assistance of background music. Use of written words and demonstrations provided the viewer with something out of the ordinary to view, while the physical composition created through camera angles, shot length and use of colour provided an escape from routine commercial viewing.

5.2 Confidence-Building Techniques

Establishing trust in a product, idea or service provider is paramount to consumer persuasion. This often is accomplished by the advertiser through projection of their image as an expert, caring and trustworthy organization (Rank, 1988). This can be done with words and non-verbal actions. The commercials examined in this study used a variety of methods to establish trust.

5.2.1 Corporate Image

The projected image of the corporate persuaders or advertisers was exhibited through the presentation of familiar, long-standing and well-known products. As familiar, popular products and companies, their degree of likeability and trustworthiness can be increased in the mind of the viewer (Rank, 1988). This was accomplished through presentation of recognizable product logos, slogans and product packages in the commercials.

The advertisers also presented themselves as companies devoted to both the product and the consumer. In some cases, words were used to authenticate this

characteristic.

- All we think about is gum. (Trident™)
- Hector Boyardee never forgot the importance of quality ingredients when he became Chef Boyardee making wholesome food families love. (Chef Boyardee™)
- At Nabob Coffee Company, we're picky . . . but at the Nabob Coffee Company picking better beans means better coffee. (Nabob™)

The devoted company theme also appeared in the non-verbal portion of commercials. The Nabob™ commercials, for example, emphasized their hand-picked approach to coffee beans with scenes of a male hand carefully placing Nabob™ coffee packages into a packing crate. The crate is then hand-stamped with the company logo.

To establish a trustworthy image, advertisers also showed their support for major events and visible minorities. The Beef Information Centre commercial acknowledged their official sponsorship of Canada's Olympic Team, while the Kellogg™ Company presented a commercial for Corn Flakes with a young woman who spoke using American Sign Language.

A commercial presented for Canadian Tire™ aimed to produce a positive image with an interesting technique. Scrooge's niece stated:

- Canadian Tire gave us this electric wok or this 12-cup coffee maker with timer for only $39.99 each.

While this emphasized the economical value of the products, it was phrased in a way that presented the company in a benevolent light. The product cost was likened to the gift-giving of the holiday season through the use of the euphemistic verb "gave" instead of "sold."

Each of these examples was used by advertisers to increase consumer trust in both the company and the advertised product by increasing the kind and caring image of the advertiser. This has been known as an effective means of persuasion since the time of Aristotle (Rank, 1988).

5.2.2 Presenter

Presenters, the characters who delivered the advertising messages whether face-to-face or in voiceover, were authority, friend or well-known figures. The only famous

figures used in the commercials studied were the Pillsbury Doughboy™, the Muppets™ and Chef Boyardee™ as a boy. The puppet and animated characters appeared friendly, cute and likeable. Presentation of Chef Boyardee as a child created a more familiar image of this icon usually seen only as the older man on the food product label. Though the Muppets™ neither mentioned McDonalds™ nor were shown with the products, they were used as indirect celebrity spokespersons for the advertiser, thus linking McDonalds™ with the fun and enjoyment of the Muppets™.

Authority figures generated the perception of trustworthy, caring individuals dispensing guidance and wisdom — a pseudo-parent image. In the commercial for Crispix™, when considering her son's liking of the cereal, the mother character stated, "And that's fine by me." The male voiceover in the Trident™ gum commercial presented authoritative data regarding the reduction of cavities by an ingredient in the gum.

> Years ago the introduction of fluoride into the water supply reduced the incidence of tooth decay. Today, another step has been taken. It's called Dentec™. Dentec™ helps prevent tooth decay — reducing cavities by up to 62%. And that is why we put Dentec™ in Trident™. After all, while the other kids were playing doctor, we were playing dentist. Trident™. Recognized by the Canadian Dental Association.

Ending this voiceover with the statement of approval by the dental profession coupled with the visual and verbal images of childhood, created a strong, positive image of this product. It could be seen as a product from a company whose goal is to protect Canadian children.

The Kraft™ Macaroni & Cheese commercial noted that the product was from "the cheese experts at Kraft™," thus positioning themselves as a cheese authority and the product as an exceptional one in the minds of the viewer.

Friend figures were used as presenters in many of the commercials studied. As noted by Rank (1988), these presenters also tended to be people that the viewer would like to be, to be with or be liked by.

The commercials from Walmart™ employed sales staff as presenters. Each person was introduced to the viewer through graphics stating their first name and

position at the store. When speaking, each presenter used a positive, friendly tone of voice and spoke directly to the viewer. The inclusion of both sales clerks and sales managers also portrayed the company as friendly and people-centred.

The Quaker™ instant oatmeal commercial carried the tone of a friendly confidante and advisor. It presented an empathetic view of the busy dual-income family with a female voiceover and a kitchen scene of two parents and two children.

> Perhaps you can't always be there with a word of encouragement. Perhaps you can't always be there with a hand to hold. But what you can do, even with your busy schedule, is start them off with the goodness of Quaker™ Oatmeal inside them . . . It's as much as you can do.

As a friend might offer advice, this narrator offered the advertised product as a solution to the parental caregiving that may be missed throughout the day.

Commercials also sought to build confidence in the advertised products with assertions of their likeability and quality. The slogan for Crispix™ cereal, "Kid tested. Mother approved," presented the idea that families would enjoy the product and that caregivers would see it as a healthy food product. Sponsorship of the Canadian Olympic Team by the Beef Information Centre also carried an implied health benefit for beef.

The inclusion of real rather than artificial ingredients was noted by some advertisers. The commercial for Apple Cinnamon Cheerios™ contained visuals of Delicious apple halves falling through the air and a cinnamon stick grating across a nutmeg grater. These were accompanied by the voiceover:

> ▪ Real bits of apple, a sprinkle of cinnamon and these crunchy O's, makes an oh so tasty O.

A similar idea was presented non-verbally in the Kraft™ Macaroni & Cheese commercial. Here, the product package was shown beside a large block of cheddar cheese with the Kraft™ logo cut into it. This scene then dissolved to a close-up of a smaller piece of cheddar cheese breaking in two, which showed the rougher texture of a natural cheese.

Each of these products contained a processed version of the original product portrayed. The intent was to link the processed product with the natural food item in the mind of the viewer. Similar visual strategies were used to compare KFC™ Crispy Strips with fresh chicken breast strips, Harvest Crunch™ cereal with oats, raisins, almonds and coconut, Chef Boyardee™ canned pastas with fresh pasta, tomatoes, garlic and ground beef, and Kokanee™ beer with mountain stream water.

Confidence in some advertised food products was obtained by stressing the simplicity of the food item. References to the product as natural occurred by noting the lack of artificial, added ingredients. For example,

- . . . and no artificial flavours, colours or preservatives. (Crispix™)
- VO: (male) Up high in the mountains of the Kootenays is the only place we brew Kokanee Beer. Here in the clean mountain air, rushing streams run cold and clear. It's nature at its best. Nothing added. No preservatives. We figure, if it works up here, it'll work for us. That's why Kokanee Beer is naturally aged for a glacier fresh taste that goes down easy. Kokanee. Pure refreshing taste. Straight from the Kootenays. (Kokanee™ beer)

The Kokanee commercial was accompanied by visual images of pristine mountain glacial streams.

The freshness of the ingredients used to produce the advertised food item also were emphasized by many advertisers. Examples included:

- . . . preparing tantalizing dishes using the freshest of products and finest of spices. (Taj Mahal restaurant)
- With freshly baked bread for sandwiches . . . (Tim Horton's™)
- So fresh. (Milk)
- Vine ripened tomatoes. Fresh tasting ingredients for delicious pasta and more. (Chef Boyardee™)

Wholesomeness of the advertised products was implied by presenting verbal and visual statements attesting to the high quality of ingredients. The commercial for Nabob™ coffee contained scenes of fresh and roasted coffee beans. The narration included statements such as:

- Because picking only those coffee beans that meet our high standards for quality actually makes a better cup of coffee.

- . . . at the Nabob™ Coffee Company picking better beans means better coffee.

These statements were accompanied by the company logo and the written words — "Better beans. Better coffee." Another commercial spoke of the freshness of the raisins included in Kellogg™ Raisin Bran cereal.

- Two scoops of plump, juicy raisins and whole grain flakes with bran.

The written word only was used in a commercial for Harvest Crunch™ cereal. After presenting close-up shots of oats, raisins, coconut and almonds, the graphics at the bottom of the screen stated, "Also includes other wholesome ingredients."

In this study, advertisers made use of spoken and written words and photographic images to establish a degree of trust with the viewer. Through this trust, the consumer develops confidence in the advertiser and the product.

5.3 Desire-Stimulating and Benefit Promise Techniques

This advertising technique generally asserts that the viewer desires the product or should desire the product and that the product produces a desired effect or benefit. This is accomplished by linking the product with something tangible or intangible that the viewer already likes or wants. With this technique, the advertiser not only asserts desire but also may assert satisfaction for the viewer or others. In fact, an advertisement may not only imply a link between the product and this positive referent system, but also may imply that the product actually creates the desired quality (McAllister, 1996). Some advertisements will make indirect product claims or imply a promised benefit with the acceptance of the advertised product — techniques which require the viewer to make inferences in order to complete the message (Rank, 1988). Since the stimulation of desire, then, includes both implicit and explicit messages, this section will discuss the two themes Desire-Stimulating and Benefit Promise.

5.3.1 Emotive Appeals

Social and emotional appeals occurred in several commercials in this study. These dealt with the desires for wish fulfilment, nostalgia, enjoyment and social status. Other researchers have found this type of advertising technique in food commercials on daytime television (Lank, Vickery, Cotugna & Shade, 1992).

Fantasy and wish fulfilment were evident in several commercials. An underlying message of discontent with the tedium and mediocrity of day-to-day living appeared both verbally and non-verbally. In the four commercials for General Foods International Coffees™, each tagline emphasized this concept with the phrase, "A getaway from the everyday." The visuals in the commercial consisted of steam tendrils rising from a cup of prepared product. The steam briefly portrayed a fantasy scene before wafting off the screen. The images produced included can-can dancers (French Vanilla Cafe™), a leprechaun dancing a jig (Cafe Irish Cream™), a man and a woman seated at a cafe table (Italian Cappuccino™) and a person skiing down a mountain slope (Cafe Swisse™). Similarly, the viewer desire to escape to an exotic locale was used in commercials for Nabob South Pacific Blend™ coffee and Signature Vacations™. Both of these commercials used visuals of tropical islands, flowers, birds and beaches to stimulate the desire for the exotic in the viewer. The Nabob™ commercial also contained a female Tahitian dancer, who was also shown drinking coffee. In the Signature Vacations™ commercial, a male and female vacationer discussed, in voiceover, the time they should go to dinner. Throughout the discussion, visuals took the viewer on an aerial approach to an island, across the sand, through the jungle and to a beach. Here, the sunbathing couple were revealed to the viewer. This presentation emphasized the lack of stress and time lines of a vacation get-away.

A more personal fantasy was suggested by the Special K™ commercial. The opening and closing scenes, shot in black and white, focussed on a woman walking from the ocean across the sand then standing on an outdoor balcony overlooking the beach. In each scene, there was a male figure in the background. In this way, the product was linked with a need for romance.

Nostalgia provided a strong emotional component of commercials in this study. As previously discussed, Special K™ used a well-known song from the early 1960s as the commercial theme. This likely was done to create an emotional response in the baby boomer target market which could link the product with the current youth-oriented culture. Fond memories of youth also were found in the Tim Horton's™ commercial.

> VO: (male) I'll never forget that bright yellow slicker, <hear female voice calling, "Tommy. Time for lunch."> puddles wide as oceans and that hot bowl of soup that would warm you to your toes. Thank goodness Tim Horton's remembers, too. (Tim Horton's™)

This commercial also used a negatively phrased rhetorical question, a construction commonly used to assert desire (Rank, 1988).

- Who says you can't go home again? (Tim Hortons™)

Further memories of years gone by were evoked by the Kellogg™ Corn Flakes commercial which invited the viewer verbally and graphically to:

- Taste them again for the first time. (Kellogg™)

These commercials clearly presented nostalgic feelings, yet each offered a method to regain those feelings through use of the advertised product. It has been noted that the nostalgia trend will remain popular and will likely segment the market in specific decades (Naval, 1996). With this continued trend, we can expect to see further use of the nostalgia theme by advertisers.

The human need for play was recognized by several advertisers who presented commercials linking their product with fun and playfulness. The Labatt Lite™ commercial showed a group of young adults enjoying the preparation of a shared meal. Characters were portrayed in a light-hearted setting with liberal use of up tempo cajun-style music and close and medium camera shots to show cheerful facial expressions and entertaining body language. This commercial created a way for the viewer to vicariously experience the fun-filled atmosphere of companionship while more subtly linking that positive event with the product advertised.

A young boy was seen skate-boarding into the kitchen for breakfast in the

Crispix™ commercial. He also threw a cereal square into the air and playfully caught it in his mouth. In the Apple Cinnamon Cheerios™ commercial people were shown dancing.

> Cut to overhead shot of people in white bath robes gathering around table where a family of four sits eating breakfast. The robed people join hands and begin to dance around table in two rings -- one going clockwise and one going counter-clockwise.

Each of these commercials provided scenes of people playing and having fun, again linking the desire for fun and companionship with an advertised product.

5.3.2 Social Status Appeals

The association technique linking a product with something desired by the target audience appeared in several commercials which clearly played to the viewer ego. Kraft™ Macaroni & Cheese was associated with a higher social class in a commercial likely aimed at the creation of a changed product image.

> Music: classical
> VO: (male - English accent) . . .
> Open on up angle of satiny material being blown away to unveil a box of product beside a large block of cheddar cheese with the Kraft™ logo cut into it. . .
> Cut to close on macaroni and cheese on red plate with a cherry tomato and greens and a t-bone steak. . .
> Dissolve to close of mound of macaroni and cheese on red plate in front of a product box. Both are sitting on satiny material which continues to billow in background. Graphics appear in fancy script font -- A saucier macaroni and cheese. It's new.

With this presentation, the advertisers linked the product with the viewer desire to "live the good life." Often advertisers promote products to a target market with a greater disposable income. In so doing, they exploited the desire of the middle-class market to be seen as or to see themselves as wealthy or important (Rank, 1988).

The viewer desire to be special was addressed by commercials claiming their products were novel or unique. "Nothing else is beef" was the statement presented in the commercial from the Beef Information Centre. This statement of fact appeared somewhat redundant yet made the point that anything eaten in place of beef would not

be the same in all ways as beef. Other absolute comparisons included information presented for Pam™ and Extra™ gum.

- For no-stick frying, no other cooking spray beats Pam™.

- Only Extra™ has our special time-release formula so it keeps on tasting fresh.

Each of these statements verbally compared the advertised product to all other products in the same food category, thus making them complete comparisons.

KFC™ used a superlative intensifier in the rhetorical question which opened the commercial

- Been waiting for the ulitmate chicken finger food?

Rhetorical questions were also used as opening lines for two Nabob™ coffee commercials. In these cases, however, metaphors of implicit comparison were used.

- VO: (male) Which coffee company can bring the sensuous exotic tastes of South Pacific blend right to your cup?

- VO: (male) Which coffee company can bring the dark secrets of a Full City Dark roast right to your cup?

In a similar manner, advertisers created the desire to be a trendsetter and used the human trait of curiosity to promote several products. Pillsbury™ presented a simple metaphorical statement with "We're baking up new ideas." The Kraft™ Peanut Butter commercial stated that the product was

- Triple blended to be our creamiest peanut butter yet. Kraft's new Extra Creamy Peanut Butter.

This commercial added the complete superlative comparison phrase to the announcement of this updated product. The advertisers also used an intensifier in the product name.

A rhetorical question appeared at the beginning of the Apple Cinnamon Cheerios™ commercial.

- Hey. You wanna change the pace? Break away to the lively taste of Apple-Cinnamon Cheerios™. Completely different and totally delicious.

Again, an incomplete comparison was used in the description of the product.

The common rhetoric used to assert desire and product benefits relied on a variety of figures of speech. These compared the products and their properties through use of intensifying words and phrases. In some cases, incomplete comparisons required the viewer to infer the complete comparison.

5.3.3 Sensory Appeals

Many commercials asserted satisfaction based on the sensory components of the food product. This satisfaction referred to either the viewer or social groups of the viewer. Often body language created the impression of satisfaction. Characters were seen smiling and nodding approval when consuming the food products. In a change of pace, this idea was conveyed without showing faces in the KFC™ commercial.

> ▪ Cut to plate of chicken strips with many hands quickly grabbing the strips and leaving the plate empty. One hand is shown dipping a strip in sauce.

This showed the apparent satisfaction with the chicken strips by a group of people and implied that others would be pleased to be served this product.

Other commercials used verbal and written word techniques to assert product satisfaction. When presenting the lunch special in the Tim Horton's™ commercial, the waitress is heard in voiceover to say, "This'll hit the spot." The viewer is left with the impression that these are satisfying lunches.

The Crunch 'n' Munch™ commercial took a different tack as the advertisers used food as a metaphor for romantic passions. A female young adult was shown watching a daytime soap opera. The two product spokesmen appeared to her on the television screen.

> VO: (male) TV merely satisfies your hunger for romance.
> MALE1: But, Crunch 'n' Munch satisfies your deeper passions for fluffy popcorn,
> MALE2: crunchy nuts,
> MALE1: rich, buttery toffee
> MALE2: Try it. It's all your passions in one bite. The graphics at the bottom of the screen state --"All your passions in one bite."

This technique presented the product as a means to satisfying deeper passions rather than only the desire for food. It also attempted to establish the food product as a solution to emotional needs.

Consumption of Crispix™ cereal was presented as a way for female caregivers to please children. The female voiceover stated, "Of all the things my Shredder likes, I'm glad Crispix™ is one of them." The tagline in this commercial reiterated this concept through the written word and a male voiceover of the line — "Fun for kids. Fine by moms." This commercial used repetition as a technique to assert satisfaction in both the adult viewer and the children in their care. In a more straight-forward manner, Pillsbury™ stressed family product satisfaction with the statement, "Your family will love our Cinnamon Loaf made with Pillsbury™ Cinnamon Rolls."

In another example, a young Hector Boyardee vowed hunger satisfaction in future generations while the male voiceover implied the satisfaction based on sensory qualities of the products.

> ▪ Hector Boyardee never forgot the importance of quality ingredients when he became Chef Boyardee making wholesome food families love.
> HECTOR: One day hungry kids everywhere are gonna thank me.

Television production techniques were used to assert desire for food products. The close-up camera shots accentuated and highlighted food products. Shots of glossy fresh fruits, baking loaves and steaming hot meals were designed to stimulate the appetite of the viewer — a type of Pavlovian salivation in response to food photography. This stimulus-response reaction may be part of the mechanism responsible for the situation documented by other studies whereby viewer energy consumption increased with increased viewing time (Signorielli & Lears, 1992; Taras et al., 1989).

Verbal and written statements were used by advertisers to attest to the pleasing tastes and textures of food products. In another study, the added value of palatability had been noted in 85% of food commercials on daytime television (Lank et al., 1992).

In a commercial for Kellogg™ Corn Flakes, the young female character stated

candidly, "These taste great!" Most other commercials presented the flavour and texture aspects of the food products through standard rhetoric. Intensifiers, metaphors and comparisons abounded. Examples of words and phrases to describe taste found in this study included:

- Tastier. Tangier. (Miracle Whip™)
- glacier fresh taste (Kokanee™ beer)
- tantalizing taste (Beef)
- clean refreshing taste (Labatt Lite™)
- buttery flavour (Pam™)
- rich, buttery flavour (Crunch 'n' Munch™)

A further flavour benefit was presented for Extra™ gum which claimed, "Extra™'s the gum with flavour that won't quit."

Texture also was described with intensifying words and phrases in many persuasive messages. Examples included:

- tender, plump breast of chicken (KFC™)
- special crispy recipe (KFC™)
- crunchy clusters of goodness (Harvest Crunch™)
- so extraordinarily creamy that it actually melts in your mouth (Kraft™ Peanut Butter)
- fluffy popcorn, crunchy nuts (Crunch 'n' Munch™)

Such use of descriptive words and phrases served to praise certain aspects of the food products without submitting to specific measurable claims. This has been termed "puffery" (Rank, 1988), and consists of subjective opinion statements with no fact content.

5.3.4 Simplicity

The viewer desire for simplicity and efficiency was asserted in commercials for convenience food items. Assertions of simplicity and ease of preparation appeared verbally and visually in commercials. For example, Pillsbury™ made a forthright statement in reference to their convenience products.

- DOUGHBOY: Baking has never been easier, thanks to Pillsbury™.

This referred to the partially prepared product line as well as the recipe ideas presented by the advertiser. Campbells™ Soup Company asked and answered a rhetorical question to open the commercial for Chunky Soup™.

> ▪ VO: (female) What are you going to have for dinner tonight? That's easy. Try new Hearty Vegetable with Pasta from Chunky.

The remainder of the Chunky Soup™ commercial showed a male character opening a can of soup, heating and serving the product — actions which stressed not only the ease of use but the short time needed, as well. Advertisers for Quaker™ Instant Oatmeal asserted the need for an easy, quick breakfast product both verbally and visually.

> And there's no simpler, tastier way to do that than with Instant Quaker Oatmeal.
> Cut to close on boy as he opens a package of instant oatmeal. . . Cut to close on boy as he empties package into bowl. . .
> Cut to long shot of all four as adult male closes microwave oven door, . . .
> Cut to adult male hand starting microwave oven.

This commercial alluded to the fast-paced lifestyle of dual-income families with the presentation of a family of four where both parents clearly worked outside the home. The perceived viewer desire for time-sensitive dining also was apparent in the slogan for Tim Horton's™ — "You've always got time for Tim Horton's™." This concept was emphasized through repetition with both the written tagline at the end of the commercial and the jingle format.

Simple versatility of a single product was noted in the commercial for cheese which stated

> ▪ You'll never run out of things to make as long as you never run out of cheese.

This convenience theme will doubtless continue to be seen in advertisements. Consumers are expected to continue the demand for quick and easy-to-prepare food products and pre-prepared food items (Naval, 1996).

5.3.5 Body Aesthetics

The desire for beauty apparent in the Special K™ commercial both exploited female insecurity and perpetuated a slim female ideal body shape. The voiceover in this commercial stated:

> ▪ Regular exercise and a balanced diet, including Kellogg's Special K cereal, can be a delicious way to help you lose your fat.

The written words used along with this verbal message stressed that the product was low in fat. This commercial construction prompted the viewer to infer that lower fat food items are the key to less body fat. Such media portrayals propagate the differential importance of physical attractiveness for men and women and enhance the concerns about food choice and body image which are embedded within the North American cultural context (Pliner, Chaiken & Flett, 1990).

5.3.6 Explicit Health and Nutrition Claims

Advertisers promised health-related benefits through explicit health and nutrition claims. Such claims were accompanied by qualifying statements which usually appeared in small print at the bottom of the screen. These qualifiers generally are required by consumer protection laws (Rank, 1988).

The Trident™ gum commercial stated that, "Dentec™ helps prevent tooth decay -- reducing cavities by up to 62%." The following qualifying statement appeared in small print at the bottom of the screen:

> ▪ When used with a proper oral hygiene program. Based on a two year study.

As part of the Special K™ commercial, the following claim was made:

> ▪ Regular exercise and a balanced diet, including Kellogg's Special K cereal, can be a delicious way to help you lose your fat. Looking good never felt so great.

This statement was accompanied by the qualifying announcement that:

> As part of healthy eating this food may assist in achieving and maintaining a healthy body weight because it is low in fat.

(NOTE: As mentioned previously, this was written in white letters on a white background except for the few words that fell over the red K — "Low in fat" — which were clearly visible, while the rest of the disclaimer was difficult to read.)

The Miracle Whip™ commercial verbally made the nutrition claim that "Miracle Whip™ has a third less fat than mayo." No qualifiers were necessary in this case since the product comparison was clearly stated. The same held true for the Crispix™ cereal commercial which claimed that "Crispix™ has less than a teaspoon of sugar per serving." The written words repeating this claim were large enough to fill two-thirds of the viewing screen. A similarly styled claim for Redenbudder's Lite™ popcorn, however, required the addition of the smaller print explanations since the claims made involved incomplete comparisons.

Cut to lit sign with word FAT. Zoom in.
Cut to close of sign stating — "50% less Fat." In smaller print — "than Redenbudders gourmet movie theatre butter flavoured popping corn."

Cut to lit sign with word — CALORIES.
Switch to second sign with close on words — 25% less calories. Small print below states — "than Redenbudders gourmet movie theatre butter flavoured popping corn."

Cut to lit sign with word — SALT. Zoom in.
Switch to close on words — 33% less salt. Small print below states — "than Redenbudders' gourmet movie theatre butter flavoured popping corn."

In this commercial, the qualifying statements included multiple modifiers of the product "popping corn" which, along with the small print, may have made the comparison difficult to decipher by the viewer.

The commercial for fluid milk presented by the Dairy Farmers of Canada, declared that milk provided "Energy plus 15 essential nutrients." Throughout the remainder of the commercial, a series of statements appeared declaring the selected nutrient content supplied by "each 250 mL glass of 2% milk." In very small letters at

the bottom of the screen, nutrient content information was presented for energy, protein, carbohydrate and the percentage Recommended Daily Intake for vitamins A, D, B_6 and B_{12}, thiamine, riboflavin, niacin, folacin, pantothenate, calcium, phosphorus, magnesium and zinc. It is interesting to note that the advertisers chose to exclude information on fat content of this product.

The commercials in this study used a wide array of strategies to assert a benefit, desire and desired effect of an advertised product. These strategies enticed through acknowledgement of basic human needs and wants including novelty, caring, belonging, esteem and play, among others. Word-smithing played an important role in stimulation of desire as seen with the extensive use of rhetoric and figures of speech. The commercials studied also illustrated the use of repetition, explicit and implicit statement and non-verbals to assert desire and satisfaction by the viewer and by others.

5.4 Urgency-Stressing Techniques

The sense of urgency in advertisements is commonly related to time, scarcity or availability concepts (Rank, 1988). While attention-getting, desire-stimulating and confidence-building techniques are common to all advertisements, it should be noted that the urgency-stressing technique is not found in all advertisements (Rank, 1988). While some advertisements may be "hard sells" wanting a short term response only, the majority are conditioning for long term behaviours. Urgency can be created by increasing music tempo or by visual and verbal stimuli. The objective of this strategy is to increase viewer anxiety over possible benefit loss (Rank, 1988).

In this study, three examples of overt urgency pleas occurred. McDonalds™ offered viewers the chance to participate in a contest using techniques which emphasized time and availability concepts.

> VO: (male) Play NHL Muppet™ Mania at McDonald's™ today and you could win great prizes. Like one of 50 all new 1996 Ford Taurus™ or Mercury Sable™ vehicles, Bauer™ in-line skates, Nestle Crunch™ bars or $100,000 dollars cash instantly.

Words such as "mania," "today" and "instantly" in this appeal helped to create the sense

of urgency. As well, the final statement in the voiceover repeated the main message, again stressing the need to act immediately. The visuals created excitement and desire while presenting an opportunity to viewers. This was done through the use of up and down angles on vehicles moving towards the camera, cutaways to in-line skates, a close up on a pile of chocolate bars and a close up on bundles of money.

Commercials for both Red Lobster™ and KFC™ stressed urgency with time, scarcity and availability appeals. The KFC™ commercial noted that the opportunity to purchase the chicken strips was subject to a time limitation —

- But get 'em soon 'cause they're only here for a limited time.

However, the length of time was not clearly defined for the viewer. This type of technique stimulates a sense of urgency and anxiety in the viewer who may not wish to miss the chance to sample this product. Other urgency-stressing strategies found in this commercial involved the use of up-tempo music, camera shots of moving objects and camera panning of static objects. Action was implied throughout.

The Red Lobster™ commercial implied a time limitation with the wrap-up statement — "But hurry. Shrimp and Chicken Sensation. Only at Red Lobster™ Canada." The time sensitivity of the product offer was implied by the command to hurry. Scarcity of the product and the possibility of missing the opportunity to purchase the product were presented in the phrase "only at Red Lobster™ Canada." Again, a high energy level was maintained by action shots and multiple camera cutaways.

These urgency-stressing techniques were designed to stimulate an impulse buying action in the viewer. The urgency was not real, but manufactured. It was carefully composed with the goal of an emotional rather than reasoned response (Rank, 1988).

5.5 Response-Seeking Techniques

The ultimate goal of all product advertisements is to stimulate a purchase response in the consumer. One technique to accomplish this is to provide simple directional statements which indicate to the consumer the desired action. Not all advertisements contain these direct commands. Those that don't are generally

conditioning for a later response (Rank, 1988).

In this study, several commercials contained direct response-seeking directives. The Apple Cinnamon Cheerios™ commercial challenged the viewer to try a new product with the statement, "Don't just wake up, shake it up." Other commercials used specific response verbs to present the desired action.

- Taste them again for the first time (Kellogg™ Corn Flakes)
- Try new Hearty Vegetable with Pasta from Chunky™. (Chunky™ Soup)
- Play NHL Muppet Mania at McDonald's™ today. (McDonald's™)
- But get 'em soon 'cause . . . (KFC™)
- At breakfast, include Instant Quaker™ Oatmeal (Quaker™)
- . . . visit Saskatoon's very own Taj Mahal . . . (Taj Mahal restaurant)
- Don't miss Walmart's™ first anniversary (Walmart™)

Use of directional statements narrowed the options for action of the viewer, thus making the viewer response easier.

5.6 Summary

All advertisements contain strategies which are designed to get viewer attention, to build trust and confidence and to initiate desire for the advertised product. A few advertisements also include an urgency plea or direct response-seeking words and phrases (Rank, 1988). The goal of advertising, then, is to sell a product. This commercial nature of television has been recognized since Phillo Farnsworth demonstrated an all-electronic television system in 1926. The second image he broadcast in that demonstration was a dollar sign (MZTV, 1996).

The commercials in this study provided a wealth of examples of each of the advertising techniques outlined by Rank (1988). The importance of words and visual images in the construction of a persuasive message has been clearly presented. As well, the role of music in the creation of mood and pacing of the commercial has been demonstrated. Visual images made use of colour, action, lighting and various camera shots to create memorable advertising messages. While it is the visual message which is most likely to be retained and recalled by the viewer (Entman, 1995), words played an important part in message development. Extensive use of figurative speech was seen.

Common strategies to assert desire or satisfaction often involved incomplete comparisons. This necessitated inference by the viewer to complete the fragmented message. Based on cognitive dissonance theory, viewers are likely to infer what fits best with their beliefs, values and needs. As noted by Rank (1988), "advertisements can present a world of illusions, carefully edited and designed to stimulate our inferences" (p. 98), thus the persuasive message is co-created by the viewer. This increases the likelihood of the product meeting the perceived needs and wants of the viewer.

Viewers, then, must sort through masses of attractive, attention-grabbing information and then combine and interpret both concrete and abstract audio and visual material (Ross, Campbell, Huston-Stein & Wright, 1981).

With techniques based on theories of psychology and traditional rhetoric, advertisers aim to influence consumer spending. With increased awareness of these techniques, consumers should become empowered to make wise purchase decisions.

6. MEANING OF FOOD AND BODY IMAGE ATTITUDE PORTRAYALS

In this chapter, data from the qualitative analysis of Food Related Incidents (FRI) and Body Image Attitude Incidents (BIAI) will be presented. Discussion of the context and generated meanings will draw not only on these data but on the body of data presented in the previous two chapters, as well.

The mass media have become ubiquitous in North American society. They function as important cultural factors moulding and reflecting daily life. They have been referred to as the signposts of cultural geography (Lichter et al., 1994) due to their ability to reflect current sociocultural situations and to indicate future directions. "Mass media serve as both authoritative resources, circulating meanings that legitimate particular forms of conduct, and allocative resources, producing economic value like other means of production" (Jensen, 1995, p. 38). Thus, the direct and indirect messages portrayed on televised programs and advertisements provide behaviour and lifestyle models for the viewing audience (Dubois, 1996).

Previous chapters have demonstrated the omnipresent nature of FRIs and BIAIs on prime time television (n=821). Lévi-Strauss described a natural world with signs to be decoded; the mediated world appears to have supplanted that natural world (Williamson, 1978). With its heavy reliance on visual discourse, television presents the viewer with a world that needs to be interpreted.

In all communications, meanings are embedded in a message by the sender and decoded or interpreted by the receiver. In mass communication, senders rely on sociopolitical assumptions about the target audience (Newhagen, Cordes & Levy, 1995). In televised communications, often senders will use stereotyped attitudes and behaviours in messages to assist the receiver with message interpretation (Alexander, 1994). The viewpoint of the television creative community cannot help but influence the mediated world seen by television viewers, even if that is not the intent of the writer,

director, actor or producer (Lichter et al., 1994).

Television discovered the world of sociopolitical issues during the 1960s and 1970s (Lichter et al., 1994) — a time when daily life experienced a coming of age. As '60s songwriters Mann and Weil (1967) wrote, "Today there is no black or white, only shades of gray" (track 6). More recent surveys of television writers, producers and network executives have shown that attitudes and beliefs continue to support the sociopolitical role of television broadcasts both to portray society realistically and to promote social reform (Lichter et al., 1994). Noted executive producers Quinn Martin and Linda Bloodworth-Thomason have stated as much:

- "I try to be as up to date as possible, reflecting the mores of society . . ." -- Quinn Martin (quoted in Lichter et al., 1994, p. 427-428).

- "I'd be lying if I didn't say I put my personal opinions in. I do get my own propaganda in." -- Linda Bloodworth-Thomason (quoted in Lichter et al., 1994, p. 427).

Thus, some social messages are knowingly placed by television's creative community. However, the meaning of embedded messages may not be shared between the producer and the viewer.

Constructed meanings from televised communications are those "whose origins are essentially social to external objects, events, circumstances — and also one another — in a way that is familiar and makes sense" to the viewer (Murcott, 1988, p. 5). Thus, meaning is pluralistic in nature. Based on theories from hermeneutics, post-structuralism and psychoanalysis, this instability of meaning is founded in the heterogeneity of the television viewing audience (Newhagen et al., 1995; Stevenson, 1995). To narrow the interpretive options, message producers often use signs, symbols and frames to position ideas and convey specific realities (Coltrane & Allan, 1994). Thus, the combination of audio and video images in a message may use persuasive techniques to sway the meaning interpreted by the viewer.

This study not only examined the frequency and quantity of FRIs and BIAIs, but the context in which these incidents occurred. "Meaning exists when implicit

knowledge is conveyed explicitly to others . . . context must be addressed to do this adequately" (Hinds, Chaves & Cypess, 1992). Food has come to mean more than hunger satisfaction in the affluence of North American society (Hirschmann & Munter, 1995). The meaning of food and body image attitude portrayals, then, arose from thematic analysis of the textual data. For this analysis, incidents of interest from programming and commercials were combined. A total of 52 categories emerged from the data. These, in turn, were placed into 11 emergent themes (Appendix G).

6.1 Social Themes

Eight of the 11 emergent themes had strong sociocultural components and were grouped together under an over-arching "Social" theme. Also, the sheer number of FRIs and BIAIs (n=821) found in the sample pointed to the importance of food as a direct or intermediate communication device. Taken together, these aspects indicated the degree to which food and body image have become woven into the fabric of daily life.

6.1.1 Culture

Visual images representing the Canadian cultural environment were presented in a commercial for Molson™ Canadian beer. Involved were both historic and patriotic images. When deconstructed the multiple images of this commercial appeared somewhat disjointed. The patriotic theme seemed based on freedoms and rights experienced by Canadians. Several shots with a military theme presented images of VE day-like celebrations, uniformed aviators and a war cemetery. A peace and harmony theme was evident from views of the Peace tower and the clasped hands of a black and a white child. Other scenes of national pride included a human figure dancing in a deciduous forest, locomotive wheels, hockey players, rugged coast line, a male hand holding a handful of moist soil, Canada geese, a West coast aboriginal dancer and a downhill racing skier. This commercial aimed to catch the attention of Canadians of all ages and could have been broadcast as a tribute to the 50th Anniversary of VE Day or Remembrance Day which was a week after the taping of the sample.

These visual cues were used to create a referent system for viewers from different age groups and cultural backgrounds. The commercial aimed to create feelings

of national pride in viewers and strongly linked these feelings with the promoted product. Here, advertisers recognized the power of the emotions associated with national patriotism and the pride of cultural sub-groups.

In many other FRIs, food was presented as a defining point for different ethnic sub-cultures within society. In a 60-second commercial for the Taj Mahal restaurant, the voiceover and visual strived to demystify the cuisine of the Indian sub-continent.

> VO: (male) [the chef] is determined to overcome the myth that curry means hot food. Curry is actually a flavour and [the chef's] first concern is to flavour every dish in a unique way.
> Cut to woman chef in kitchen taking flat bread (naan) from overhead oven and placing it on serving plate.
> Cut to close of curry sauce with fresh shrimp being added by woman.
> Cut to med of woman sprinkling spices into pan with sauce.
> Cut to close on two prepared dishes as parsley is sprinkled on with utensil.

This commercial also noted the value of food to teach about a non-dominant sub-culture.

> ▪ VO: (male) The atmosphere displays model Indian culture. The wall-hangings are creative. The music is authentic. The food — magnificent.

Throughout this commercial visual images of food items, owners in traditional dress and traditional artworks from the dining room interior were shown. As well, the background music was traditional.

Italian cuisine appeared in two programs. In *Chicago Hope* (Kelley, Levin & Tinker, 1995), a restaurant was discussed by Drs. Shutt and Austin.

> SHUTT: Salvatore's?
> AUSTIN: 'Scuse me?
> SHUTT: Dinner tonight? Remember? Northern Italian?
> .
> .
> .
> AUSTIN: You know, I asked someone about this place? They said the red sauce is unbelievable.

In *Caroline in the City* (Barron & Pennette, 1995), Remo's Restaurant was a meeting place for the characters. The owner and the waiters spoke with Italian accents. Each dining table held a bottle of olive oil. Caroline was shown in the kitchen as a cook explained preparation of a specialty dish.

The prime time sample from this study contained FRIs which emphasized the importance of food within sub-cultures of society. Particular types of food were portrayed with a major defining role for other sub-cultures and a commonality, or self-definition, within the sub-culture presented. In this way, food acted as a demarcation or boundary between sub-cultural groups, yet was shown also as a foundation for communication between these different groups.

6.1.2 Customs and Rituals

Food as the centre of ritualized behaviour was evident in the sampled prime time broadcasts. Highly specialized food items were integral parts of social celebrations. Walmart™ commercials portrayed sales staff decorating store aisles with balloons for the company's first anniversary in Canada. Seen in several camera shots was a large decorated slab cake with a big number "1" in the centre. Shots included a close-up of the cake alone and a long shot of a group of sales people gathered around the cake. The cake was also partially visible in several shots of the staff decorating the store. Staff members were seen smiling and laughing which gave an air of excitement to the scenes.

A more family-centred celebration was portrayed on a commercial for Sony™. Three generations were shown giving the impression of a nuclear family. A young girl was shown as she was woken up by an adult male and female. An older female adult entered the bedroom with a birthday cake complete with lit candles. The girl blew out the candles and opened presents. In another intimate child-caregiver relationship, a large chocolate chip cookie was decorated with icing. In this Pillsbury™ commercial, icing was piped onto the cookie to spell "Happy Birthday" by a pre-adolescent female. The girl then gave the cookie to a smiling adult male.

In the prime time programming, Caroline, from *Caroline in the City* (Barron & Pennette, 1995), planned to take Richard, her employee, out for a drink to celebrate his

30th birthday. She also prepared an informal birthday lunch for him.

An engagement was celebrated with a dinner in *Hudson Street* (Kass & Singer, 1995). The dining room table was set with china, stemware, candles and a lace tablecloth. As well, the meal was formally served from the head of the table.

Each of these situations suggested the cultural importance of sharing food in times of celebration. Specific foods, such as decorated baked goods, figured prominently in these celebrations. Such foods are not daily food choices, but generally are found at most ceremonial feasting. The showy dessert foods and formal meals portrayed illustrated the extravagant indulgence associated with celebrations — a centuries-old custom (Visser, 1991).

Alcohol appeared in many FRIs where social custom found this acceptable. The pre-dinner drink ritual was seen in *Chicago Hope* (Kelley, Levin & Tinker, 1995) and *Hudson Street* (Kass & Singer, 1995). Here, alcohol was shared between friends and acquaintances.

The use of alcohol to show respect, give a complement or give best wishes by means of a toast was apparent in many FRIs. A table of four adults was shown raising their glasses to each other in the commercial for the Taj Mahal restaurant. In *Hudson Street* (Kass & Singer, 1995), a female dinner guest toasted the engaged couple while the man involved complimented his fiancée. Acquaintances toasted each other when sharing a drink both in *Caroline in the City* (Barron & Pennette, 1995) and *Single Guy* (Kohan & Mutchnick, 1995).

- Johnnie clinks glasses with Ross and then takes a drink. (*Single Guy*, Kohan & Mutchnick, 1995)

- The group clinks glasses and wishes Johnnie good luck. (*Single Guy*, Kohan & Mutchnick, 1995)

- Annie salutes Richard with her glass. Throughout the scene the two characters hold glasses with wine. Annie salutes again and takes a drink. (*Caroline in the City*, Barron & Pennette, 1995)

Wine was the beverage of choice for toasts in the sample, with beer and cocktails used to a lesser extent.

As with celebratory feasts, toasting is an ages-old custom (Visser, 1991). A more recently developed social convention is that of the "coffee break." This was present in many portrayed work site scenes. Associated with the ubiquitous coffee makers was a variety of higher fat pastries such as doughnuts and danishes. The observance of this ritualized consumption ran through programs, genres and genders. Alternative food choices often were available in offices with a larger space devoted to the coffee station or those work sites with refrigerators on site. In *Hudson Street* (Kass & Singer, 1995), for example, a small bar fridge held bottled iced tea and fresh apples. A variety of bottled fruit drinks was available for hospital staff in *Chicago Hope* (Kelley, Levin & Tinker, 1995).

Foods from the coffee stations often were used as props as they were carried by the actors throughout a scene. In other scenes, the coffee stations were stage settings only, adding an air of authenticity to the set. Consumption of beverages was seen more often than consumption of pastries. This likely is due to the confinements of television production. While an actor can easily take a drink and carry on a conversation, the same is not true for foods which must be chewed before being swallowed. Thus, solid foods would be consumed less often and used more often as props or stage settings in television programming.

The stereotyped role of host/hostess was common across programs. Individuals prepared and shared foods with selected others. Again, alcohol played a major role in this ritualized sharing. Offering food to others occurred in many commercials and programs in the sample. Generally, the offer was for a beverage.

- ROBERT: <removing his apron> Can I get you something? Beer? Wine? Soda? Chocolate energy drink? <laugh track>
  TONY: No I'm fine for right now, I think. (*Hudson Street*, Kass & Singer, 1995)

- JOHNNIE: (off camera) Hey, uh, that cabinet there is a fridge. Help yourself to a drink inside if you're thirsty. (*Single Guy*, Kohan & Mutchnick, 1995)

▪ Open on Scrooge entering serving area where niece is pouring beverage.
Cut to medium shot of two. She offers him a beverage in a pewter mug.
NIECE: Christmas spirit?
He starts at the word spirit and refuses the drink.
SCROOGE: No, spirits keep me up at night. (Canadian Tire™)

Serving food to others was present in scenes in the home and in restaurants. As well, the formality of the occasions differed. Again, this custom is steeped in tradition (Visser, 1991).

▪ Waiter takes cocktail to female customer seated with male companion. (*Caroline in the City*, Barron & Pennette, 1995)

▪ Mike returns carrying a large bag of microwave popcorn. He sits on the couch between Jeff and Johnnie. Mike passes bag to Johnnie who takes a handful. Both Mike and Jeff appear to be chewing. (*Single Guy*, Kohan & Mutchnick, 1995)

▪ LUCY: Gentlemen? Dinner is served. Please sit.
As Tony and Melanie are opening napkins, a hand comes into the scene holding a bottle of red wine and pours some into Melanie's glass. Camera pulls back to see whole table and Robert pouring wine into Tony's glass. Robert pours wine for Lucy and himself. Lucy brings the meat in from off camera and sets it at head of table where Robert is standing. Lucy brings utensils for serving. She takes Melanie's plate and below shot is serving meat. <Shot of Tony and Melanie as Tony passes Melanie a plate with meat on it.>
All are seated except Lucy who remains standing at the head of the table serving. (*Hudson Street*, Kass & Singer, 1995)

To appeal to the largest audience possible, prime time programming plays to the lowest common denominator (Black & Bryant, 1992). In this study, the use of ritualized behaviour in commercials and programs drew heavily on accepted customs and rules of etiquette from the dominant culture. The imagery used often portrayed stereotypes of sub-cultures and celebrations. Similar stereotypes were found in a study of print media (Alexander, 1994). Such reliance on stereotypical ritualized expressions can lead to "hyper-ritualization" (Coltrane & Allan, 1994). Thus, in an attempt to strike a common understanding amongst the largest possible audience, the televised world narrows the

view of the non-mediated world.

6.1.3 Economic

Food as the centre of a commercial endeavour was shown in many commercials and programs. The food service industry appeared as a socially accepted means of earning a living. Restaurants and customers were portrayed in commercials for Red Lobster™, Tim Hortons™ and the Taj Mahal restaurant as well as in *Caroline in the City* (Barron & Pennette, 1995). A take-out soup stand was the crux of a *Seinfeld* (Feresten, 1995) episode, while a coffee bar appeared in *Friends* (Borns, 1995) and a lunch wagon in *Home Improvement* (Sims & Schoenman, 1995). As well, fruit bins of a local grocery store were seen in the background in *Seinfeld* (Feresten, 1995) and an outdoor market was seen in the commercial for Chef Boyardee™. Employed food service workers appeared in all of the restaurants noted. As well, an adult male was shown making pizza crust and cleaning the kitchen in the Bank of Montreal™ commercial.

The importance of sanitation in food service operations was noted in *Home Improvement* (Sims & Schoenman, 1995).

> TIM: (whistles) Boy, Nick. This place is immaculate.
> NICK: Thank you, Tim. I take great pride in my sanitary skills. (wiping wooden serving shelf in front of steam tables)

Food clearly appeared as a desired commodity in several FRIs as characters ordered food items.

- TIM: <medium of Tim and Rosie> Two stacks of pancakes. Eggs over medium. Home fries smothered in chili. (*Home Improvement*, Sims & Schoenman, 1995)

- GEORGE: Good afternoon. One large crab bisque to go. (*Seinfeld*, Feresten, 1995)

The *Seinfeld* (Feresten, 1995) episode contained several FRIs involving food purchase, such as:

- POSTMAN: Oh, large jambalaya, please. (He moves to cashier and pays. He receives his bag.) Thank you.

- Jerry moves to cashier to pay for his soup.

- George and Susan are seated at a booth in a restaurant with dirty dishes in front of them. George is looking at the bill and figuring the tip.

Food service operators marketed their products through the use of menu boards in *Home Improvement* (Sims & Schoenman, 1995), *Friends* (Borns, 1995) and *Seinfeld* (Feresten, 1995). Printed menus were seen in *Seinfeld* (Feresten, 1995) and the commercial for the Taj Mahal restaurant.

Technological advances in food preparation appliances were noted in commercials. The Brick™ advertised a large frost-free refrigerator and Canadian Tire™ highlighted an electric wok, coffee maker, bread maker and toaster oven.

This sample of prime time broadcasts showed the economic importance of food. The development of many types of food service operations and supporting industries was evident. In turn, the importance of food to society and to individuals was clear. Food not only fuels bodies but an entire economic system within society.

6.1.4 Interpersonal

Many shared food experiences were portrayed between friends and acquaintances as an activity of companionship. People in commercials were shown sharing a cup of coffee (e.g., Glade™) or enjoying a mealtime together (e.g., Taj Mahal restaurant). Food preparation tasks were shared amongst a group of friends in the Labatt™ Lite commercial discussed in a previous chapter. Gathering together to share food was also seen in the televised prime time programs. For example, in *Single Guy* (Kohan & Mutchnick, 1995), the five main characters met in the home of one couple for a take-out deli lunch. In another scene, Johnnie was at his neighbour's apartment one evening.

- MIKE: Hey. We were just going to watch the game, have some pizza. You want to join us?

The group of friends on *Seinfeld* (Feresten, 1995) were seen several times going together to a soup stand for take-out food. These outings included both planned and impromptu visits to the soup vendor. Consumption of the soup occurred either on the street or in the apartment of one of the characters. As noted earlier, sharing of alcohol also occurred many times in interpersonal situations.

An extended form of food sharing for companionship was seen in interpersonal settings with romantic or sexual overtones. These experiences were evidenced in the sample through invitations to dinner or a drink —

> ▪ JOEY: <close on Joey and Chandler> Hey look. Since we're neighbours and all - whatdaya say we get together for a drink? <close on two women> (*Friends*, Borns, 1995)

and flattery for culinary skills.

> ▪ Robert picks up glass of wine and flatters Lucy as she continues to serve. They kiss. (*Hudson Street*, Kass & Singer, 1995)

Intimate dining images were portrayed in commercials, as well.

> ▪ Steam tendrils rise and form a heart and then a male and female outline seated at a table <we hear female laughter.> (General Foods International Coffee™ Italian Cappuccino)

> ▪Music: soft, slow, strings . . .
> Dissolve to med shot of male and female on couch. <shot taken from behind with only head and shoulders visible> Camera zooms out and we see male holding a glass of red wine with a wine bottle on the table in front of the couch. Zoom out further as male puts his arm around female, to reveal a white Persian cat sitting on the back of the couch on the other side of the female. (Fancy Feast™)

Food was used to denote caring in friend and family relationships, as well. In *Friends* (Borns, 1995), one female character had lost a job. A second female character offered a hot beverage to denote her caring and wish to offer comfort to a friend.

> ▪ Rachel exits the coffee shop and gives Phoebe a cup of hot beverage.
> RACHEL: Here. I thought you might be cold.
> PHOEBE: Thank you. (sets coffee cup on sidewalk beside her)

As noted in Chapter 5, the theme of using food to signify caring for another person appeared in the Quaker™ Instant Oatmeal commercial. The voiceover stated to child caregivers that an oatmeal breakfast was "as much as you can do." This implied that food could replace the caregiver's absence throughout the child's day and thus, could assuage adult guilt over placing child care in the hands of others.

Obligations to family and friends surrounded shared food experiences in some FRIs.

> JOHNNIE: So, what time are you going to Janine's for dinner tonight?
> SAMMY: I'm not going.
> JOHNNIE: What? But Matt is making that really awful chicken and they want to introduce us to that really neat paleontologist they know. (*Single Guy*, Kohan & Mutchnick, 1995)

In *Hudson Street* (Kass & Singer, 1995), Tony's ex-wife pleaded with him to meet her new fiancé over dinner.

> LUCY: Come on Tony. You know it's the right thing to do. Come over to the house for dinner Friday night. Micky's going to be at my mother's (Clasps her hands and begs)

A similar situation arose in *Caroline in the City* (Barron & Pennette, 1995) when Del's parents expected to meet his girlfriend over dinner.

> DEL: It seems her [his mother] and my Dad are coming into town this evening and they want us to meet them for dinner.
> CAROLINE: (lets balloon go that she is blowing up) <laugh track> Oh. Dinner. Well, I already had dinner.
> DEL: That was last night. Try again. <laugh track>

In each of these cases, the invited characters reluctantly agreed to attend the meals and meet those important to their friends or family.

As found in previous research (Calnan, 1990), FRIs in this study also indicated that meals were shared most often with friends and family, while with those more distant socially, drinks more commonly were shared. In the vast majority of cases, alcohol was the beverage of choice. Breed and DeFoe (1984) found that alcohol was the most commonly consumed beverage on television — a situation which does not seem to

have changed over the past decade.

Social interaction while eating plays an important role in socialization. These experiences teach and reaffirm the rituals of eating and sharing meals (Crockett & Sims, 1995). Lévi-Strauss, a French anthropologist, noted that once weaned, humans must learn the cultural conventions of what constitutes a food and which foods are accepted in specific cultural situations (Murcott, 1988). The cultural meanings of food, then, are shared along with the food.

6.1.5 Gender Issues

Portrayed food preparation skill levels differed with gender. An extreme example occurred in *Home Improvement* (Sims & Schoenman, 1995), where Tim and Al were introduced to Rosie, a female cook in a male-operated lunch wagon. The owner claimed Rosie was the fastest short order cook. Tim ordered a large breakfast which was quickly and efficiently prepared by the female cook. Tim, then, attempted to break her time record. In so doing, he showed his culinary incompetence with the creation of an inedible meal and the excessive disarray of the cooking area. A similar lack of culinary skills was portrayed in an understated example of a single adult male who prepared an evening meal of canned Campbell's™ Chunky Soup. When choosing the can from the cupboard, the only other foods visible were two other cans of soup and a box of instant macaroni and cheese dinner. A humorous example of culinary ineptness appeared in the Labatt™ Lite commercial with a young adult male over-spicing a pot of chili. In the program FRIs, an example of male incompetence in the home kitchen was the "awful chicken" dinner presented by a male cook in the episode of *Single Guy* (Kohan & Mutchnick, 1995).

With the two exceptions of Rosie, an employee, and the female chef and co-owner of the Taj Mahal restaurant, all references to food service operators or cooks involved males. Food preparation in the home, for the most part, was completed by women. Goody, a British anthropologist, explored the gender division of food labour. He found that hierarchical societies tended to give food preparation tasks to servants and male professionals when the product was intended for the social elite (Murcott, 1988).

It was also noted that commercial food enterprises were dominated by males while women tended to cook in the home — roles which were echoed in this study. These roles likely originate in several outdated male archetypes which are still strongly entrenched in North American society (Mishkind et al., 1986). The roles of "breadwinner" and "expert" may explain the male predominance in the food service industry, while the male role of "lord" likely accounts for the female servant role in the home.

While not seen across FRIs, disturbing images of male dominance were used in one commercial for Molson™ Canadian beer.

> ▪ Cut to close on hip and waist of an apparently male figure wearing a black leather jacket raising right arm as it walks towards a bent over female figure dressed in red.
>
> ▪ Cut to close on female face half in shadow looking down and then up slowly in a submissive manner.
>
> ▪ Cut to close on bottle label. Pull back to see a hand holding the neck of a bottle more like weapon than to drink.

These predation images signified male dominance or "power over" issues. Women were portrayed as prey — something to be conquered and dominated. This gender role possibly stems from the two remaining outdated male archetypes put forth by Mishkind et al. (1986) — "soldier" and "frontiersman." Both of these roles encompass an obsession with domination of and differentiation from the female (Frith, 1995).

The overall image of this commercial was incongruous as it also contained images of a lake, sunset, the woods and falling maple leaves with characters seen backpacking and lying in the leaves on the ground. However, Budgeon and Currie (1995) noted that advertisers recognized the potential of products to tell the story of rebellious youth, a theme that this commercial strongly exhibited.

Based on cultivation analysis theory, the sampled programs and commercials used imagery which "(re)presents" common perceptions of gender identities and also

"(re)constructs" the meaning of gender for the viewer (Coltrane & Allan, 1994. p. 60). However, critical theorists contend that men insist on clearly defined gender roles more than women and tend to protect the current hegemonic masculinity. Coltrane and Allan (1994) noted that "men's domestic incompetence . . . (both feigned and real) can act as resources which men use to protect their privileged status."

6.1.6 Socio-Political Issues

Food was used as a political statement in *Hudson Street* (Kass & Singer, 1995). One scene, containing several incidents, involved a young adult female who refused to eat veal based on her socio-political convictions.

> TONY: (to Melanie) It's, uh, it's veal.
> Upon hearing this Melanie immediately chokes and spits her mouthful of food into her napkin. <Camera shot moves from close on her to long shot of full table and everyone watching her.>
> MELANIE: (speaking into her napkin) I'm sorry. I can't eat this. The things people do to these poor animals.
> <Shot of Tony and Melanie> She makes a choking noise and picks food out of her mouth with her fingers.
> MELANIE: I'm sorry. I can't eat veal.

Molson™ Canadian beer advertisers used a political referent system to sell their product. In the commercial dealing with a strong patriotic theme, one image was of a protest sign stating, "Recognize native rights. The world is watching."

In a humorous imitation of political correctness, a parody of a former children's entertainer was presented on *Hudson Street* (Kass & Singer, 1995). One young adult present reminisced and repeated the former pledge — "to fight for what's right, to protect the innocent and to eat all my vegetables." Thus, food was not only portrayed as a statement of political beliefs, but as one of virtuous behaviour, as well.

6.1.7 Power Issues

Food was used as a method for more powerful characters to wield that power. On *Murphy Brown* (Bragin, Saltzman & Diamond, 1995), food was withheld as a punishment for an employee who had inadvertently insulted his boss.

RICK: I like carrot cake. (Slight up angle to shot of Rick and slight down angle to shot of Frank) Do you like carrot cake, Frank?
FRANK: Yeah.
RICK: (with glee) Your commissary will never serve carrot cake again.

In an incident in *Home Improvement* (Sims & Schoenman, 1995), food was used as a bribe to incur Tim's favour to share his Detroit Piston's season tickets with his friends.

HARRY: <long shot of whole group and counter> Get him a cup of coffee and a bearclaw.
Benny picks a bearclaw out of the box.
AL: He takes sugar in his coffee.
BENNY: With pleasure. It would be an honour to serve my best friend. (hands the pastry to Tim.)
Marty picks up mug and hands it to Benny who pours coffee into it.
.
.
.
TIM: <med shot of Benny, Tim and Harry> (Tim is still holding coffee and pastry) Well, maybe none of you are going, 'cause maybe, maybe I'm not keeping the tickets.
(Upon hearing this Benny takes the bearclaw back and takes a bite while Harry takes the coffee and walks back towards his work counter.)

A middle adult male chef exercised his power over customers in *Seinfeld* (Feresten, 1995).

JERRY: The guy who runs the place is a little temperamental, especially about the ordering procedure. He's secretly referred to as the soup Nazi. <light laugh track>
ELAINE: Why? What happens if you don't order right?
JERRY: He yells and you don't get your soup.
ELAINE: What?
JERRY: Just follow the ordering procedure and you'll be fine.

Later in the program, knowledge of the soup recipes gave a young adult female character power over the male chef.

ELAINE: . . . His secret's out don't you see? I could give these recipes to every restaurant in town. I could have them published. I could drop flyers from a plane above the city.

ELAINE: You're through, soup Nazi. No more soup for you. NEXT!
<freeze frame close on Elaine> (credits and theme music come up)

Food was even used as a humorous threat in one FRI in *Friends* (Borns, 1995). When Ross approached Joey and Chandler in a menacing manner, Chandler threatened Ross with a kiwi-lime cream pie. Kiwi was a life-threatening allergen for Ross.

These incidents showed the integral nature of food in daily life. That it can be used as a bribe, punishment or as a threat invokes the image of food as a powerful commodity and tool for communications.

6.1.8 Social Status

Several FRIs depicted a social class distinction. Certain foods were equated with privilege and financial means. Kraft™ Macaroni and Cheese was paired with a t-bone steak in a commercial which attempted to elevate the social standing of the product in the mind of the viewer. Other devices used in this commercial included a silk satin-like material which was pulled away to reveal the product package, an animated mouse character dressed in a tuxedo, classical background music and a British accent voiceover. Another example of this affluence theme was seen in a commercial for The Brick™ which portrayed an 18-cubic foot frost-free refrigerator filled with food. In *Murphy Brown* (Bragin, Saltzman & Diamond, 1995), a cocktail signified the ability to holiday in Europe.

- FRANK:(standing) I will bet you he's in Switzerland right now sipping piña coladas.

Similarly, exotic cocktails provided a decadence theme in two other programs. In the opening to *Friends* (Borns, 1995), Joey was shown floating in a pool drinking a tropical cocktail, while a group of characters in *Single Guy* (Kohan & Mutchnick, 1995) consumed similar cocktails while sitting in a large hot tub.

Food set some characters apart from others. For example, in *Chicago Hope* (Kelley, Levin & Tinker, 1995), characters were shown with commercial bottled water. This pairing made the characters appear to be trend-setters. Another example of

advantage over others occurred in a commercial for the movie *The American President.*

> ▪ FEMALE: I'm having dinner at the White House.
> MALE CO-WORKER: (facetiously) I'm having lunch at the Kremlin.

Valued food preparation skills were highlighted in several FRIs. In *Home Improvement* (Sims & Schoenman, 1995), Rosie had been referred to as "the fastest short order cook in the business." Also, an older male was shown tossing pizza dough in the Bank of Montreal™ commercial. These skills were elevated to the level of valued art in two program FRIs. In *Seinfeld* (Feresten, 1995), the soup chef discussed his craft with Krammer.

> KRAMMER: You suffer for your soup.
> COOK: Yes. That is right.
> KRAMMER: You demand perfection from yourself, from your soup.
> COOK: How can I tolerate any less from my customers?

In much the same manner, a cook in *Caroline in the City* (Barron & Pennette, 1995) explained a special skill to Caroline.

> CAROLINE: Wow. That must take you a long time.
> COOK: Aah, cara mia that is the secret. When you're dealing with home made angel hair, you have to be very delicate. (The cook is placing the pasta in the cooking pot, one strand at a time.) Place one strand of pasta inna the water one at a time.

It appeared from the FRIs noted here that individuals possessing prized food preparation skills may be able to elevate themselves in the social hierarchy. Other individuals may use foods associated with higher social classes and privileged social positions to give the impression that they are of a higher social station.

Social class distinctions were highlighted in several FRIs. In a program promotion for *High Society*, one female character insulted a second female character whom she perceived to be of lower social status.

> GUEST: (In restaurant, she walks to booth with other two women and seats herself) I feel so out of place. (wearing plain grey dress)
> JEAN: Well, don't let the absence of a salad bar disorient you. (dressed in faux leopard hat and suit with faux leopard shawl collar and large gold

hoop earrings)

A middle adult female character in *Hudson Street* (Kass & Singer, 1995) was used to accentuate the higher education and social awareness of a second female character. The lack of understanding of the hostess was clearly apparent.

> ▪ MELANIE: Lucy, would you like me to put out the crudité?
> LUCY: Thanks. That would be great. <Looks puzzled> Where is it?
> Melanie picks up the plate of vegetables and goes through the door into the dining room.
> LUCY: I love crude in the day. Don't you?
>
> ▪ MELANIE: (speaking into her napkin) I'm sorry. I can't eat this. The things people do to these poor animals.
> LUCY: (unbelieving) I just breaded it with a little garlic.

In this case, the program production chose to use this ignorance as a source of humour, thus denigrating the less educated female character.

Two male characters imparted knowledge about unfamiliar food items to other characters. In *Home Improvement* (Sims & Schoenman, 1995), Tim's neighbour detailed a meat dish,

> ▪ TIM: What are you doing?
> WILSON: I'm barbecuing some jerk.
> TIM: Anyone I know?
> WILSON: Actually, jerk is a very spicy dish native to the islands of Jamaica.

while in *Seinfeld* (Feresten, 1995), Krammer explained a soup.

> ▪ ELAINE: Mulligatawny?
> KRAMMER: Yeah. It's an Indian soup.

Goody, a British social anthropologist, explored the emergence of "peasant" and "elite" cuisines which occurred in some societies but not others. He felt the difference was due to varying social structures. In hierarchical societies vast differences between social classes existed while in hieratic societies these differences were not as extreme (Murcott, 1988). The two types of cuisine tended to appear only in hierarchical

societies such as that of present day North America. Thus, it is not surprising that these distinctions were evident on the sampled television broadcasts.

Based on the concept that societal differences are founded in a class structure, televised messages may create or perpetuate such distinctions (Williamson, 1978). This fits well with the concepts of cultivation analysis theory.

6.1.9 Summary

From this discussion, it can be seen that food communicates many different social messages. As a communication device, food symbolizes social status and social role. It defines an individual and their sub-cultural groups. Food can be used as a tool to initiate social contact, punish a subordinate or protect individual status. Thus, in a social context, food means much more than something to eat.

6.2 Health and Physiological Issues

In this study, FRIs included foods from all groups of *Canada's Food Guide to Healthy Eating* (Health & Welfare Canada, 1992), though the group portrayed most often was the "Other Foods" category. The proportion of FRIs from the four food groups were not represented as on the arcs of *Canada's Food Guide to Healthy Eating* (Health & Welfare Canada, 1992). If a rainbow was reconstructed from the categorized FRIs, "Grain Products" would remain the outer arc, but would be followed by "Meat and Alternatives", "Vegetables and Fruit" and "Milk Products," though the latter two would be almost identical in size. It must be noted, however, that the "Grain Products" portrayed on prime time television sampled tended to be higher fat choices such as pastries, cakes and cookies. As well, the other directional statements of *Canada's Food Guide to Healthy Eating* (Health and Welfare Canada, 1992), which emphasize foods to choose most often, were not well supported by the FRIs of this study.

FRIs which involved actual food consumption constituted 13.3% of all FRIs. These actions dealt mainly with alcohol or caffeine containing beverages and energy dense food products. However, the context of most other portrayals implied food consumption even when the action itself was not shown.

Past research has indicated that television viewing not only promotes inactivity (Tucker, 1986), but increases caloric intake, as well (Signorielli & Lears, 1992; Taras et al., 1989). These findings have led other researchers to uncover links between chronic disease risk and television viewing behaviours (Gortmaker et al., 1990; Klesges et al., 1993; Tucker & Bagwell, 1991). As well, studies have shown that the viewing public has only a general understanding of the connections between healthy lifestyle behaviours and chronic disease risk (Reid et al., 1996; Reeder, Khatchatourians, Liu, Horlick & Saskatchewan Heart Health Advisory Committee, 1996).

Hayes and Ross (1987) suggested there are two concerns which motivate healthy eating behaviours — health and appearance. While the latter aspect will be dealt with in a later section, the portrayal of the link between health status and food intake will be presented here.

6.2.1 Health Outcomes

Several negative relationships between food and health were portrayed in the sampled programs. The association between higher fat foods and mortality was noted twice in *Home Improvement* (Sims & Schoenman, 1995).

> ▪ TIM: (reading menu board with camera shot close on the board> Chili and onions. Chili cheese dog. Three cheese chili omelets. <long shot of 3 men and side of van> (Tim addresses the camera and whistles) I think I've died and gone to heaven.
> AL: <medium shot of Al and Tim> I think I know what killed ya. <laugh track>
>
> ▪ HARRY: Well, I'm working, too. (takes a bite of bearclaw and holds coffee cup)
> DELORES: (looking at pastry) Yeah, right. Looks like you're killing yourself.

Consumption of pizza, a traditionally higher fat and sodium food choice, was linked to behavioral difficulties in *Grace Under Fire* (Raley, 1995).

> ▪ SERGEANT: <medium shot on Grace and sergeant from behind Grace> It's his diet. <laugh track>
> GRACE: <medium shot on 2 from behind officer> What?
> SERGEANT: <medium shot on 2 from behind Grace> You know what

these college kids eat? Pizzas. Pizza. Pizza. Pizza. Nothing but pizza. It makes them crazy. <laugh track>
GRACE: <medium shot on two from behind officer> (affected Brooklyn accent) Tell me about it. You ever been to Brooklyn? They're nuts over there. <laugh track> (Officer smiles.)

Other negative health outcomes portrayed involved foods as potentially potent allergens in *Friends* (Borns, 1995) and the effects of excessive alcohol consumption in *Home Improvement* (Sims & Schoenman, 1995).

- ROSS: <close on Ross> (alarmed) Kiwi? Kiwi? You said it was a key lime pie.
MONICA: <close on Monica> No I didn't. I said kiwi lime. That's what makes it so special.
ROSS: <close on Ross> That's what's going to kill me. <laugh track> I'm allergic to kiwi.
MONICA: <close on Monica> No you're not. You're allergic to lobster and peanuts and . . . (looks surprised) (*Friends*, Borns, 1995).

- WILSON: In fact, "the look" was the reason brides started wearing veils. It was long believed that the penetrating stare of a bride could weaken her husband and render him impotent. <laugh track>
TIM: <close on Tim> I thought that was caused by all the brown liquor at the reception. <light laugh track> WILSON: Well, that could do it too, Tim. <light laugh track> (*Home Improvement*, Sims & Schoenman, 1995).

These program FRIs stressed possible harms over the health benefits of food consumption and often focussed on fat consumption as the source of the adverse health outcome. Lichter and Amundson (1996) reported similar findings from a content analysis of televised news programming. Signorielli (1990a) noted that programs often dealt with mortality rather than morbidity — the disease finality rather than coping strategies for those with the disease or preventive tactics other than total avoidance. Similar issues were presented in this study. This may be due, in part, to the nature of a television program where story lines do not always extend beyond a single episode. Yet, such portrayals emphasized the perceived dichotomy of "good" and "bad" foods without presenting adequate information on the risks for chronic disease development or

the more complete determinants of health.

Televised advertising took a different approach to the link between food and chronic disease. In several commercials for breakfast cereals, the rider clause "as part of a healthy diet" occurred. In this way, the concept of diet rather than single foods was introduced. A positive frame was given to several products due to their lack of certain constituents. A lack or reduction in fat, energy or sodium was seen with Redenbudders™ Lite popcorn and Special K™ cereal. The lack of artificial ingredients or preservatives became a selling point for other products, (e.g., Crispix™, Kokanee™). This positive framing relied on the selection of certain aspects of a perceived reality, in this case the "healthy/unhealthy" dichotomy, and made these aspects more salient than other product features. That is, viewers were left to infer that the lack of certain ingredients constituted a healthier product.

Most commercials which focussed on fat looked specifically at fat intake — not body fat. A glaring exception was the commercial for Special K™ cereal which used visual images of a slim female body while the voiceover spoke of a low fat food product. This framing technique could leave viewers with the impression that the low fat message referred specifically to body fat, since this was the visual image presented. The slick interchangeability of the images of a low fat food and a slim body used in this commercial could augment the current consumer food fat phobia as well as body image concerns. In commercials of this nature, portion sizes were not discussed which left the viewer with the impression that the product was a healthy choice. Such advertising strategies give only part of the whole picture. Again, this would exacerbate the dilemma of the dichotomy of "healthy/good" foods and "unhealthy/bad" foods subscribed to by the general public. While the concept of total diet rather than a single food item often was introduced in cereal commercials, this concept was never fully developed for viewers. From a health education standpoint, this left a large information gap for consumers — a gap too large to be filled with the available information. Yet, this technique likely works well as a marketing strategy. Also of concern, as noted by Dubois (1996), is that dichotomized health behaviours can be presented as moral

behaviours in televised messages.

6.2.2 Active Living

An active living referent was used to place several food products in a positive light in commercials. The Special K™ commercials used the written statement, "Enjoy a balanced diet and regular exercise," while commercials for beef, milk, Quaker™ Instant Oatmeal and Crispix™ cereal used visual images of active pursuits. Included were formal competitive athletics (cycling, sailing, rowing, hurdles) and leisure activities (walking, skating, Tai Chi, fishing, canoeing, scuba diving). In this way, advertised products were closely linked to active living for viewers. The inclusion of both athletics and leisure activities in the milk commercials also may have served to inspire armchair athletes to change their attitude towards the product. These milk commercials also were the only ones to link nutrient content through the printed information on the screen with the activity images. This would further strengthen the concept of milk as a "healthy" food. While the small print in the commercials did note that nutrient information was for a 250 mL glass of 2% milk, it did not present information concerning the frequency of consumption or refer to the fat content of the product.

Milk was the only source of sustenance referred to for a baby in *Friends* (Borns, 1995). This was the only program FRI which involved fluid milk. It is interesting to note that this FRI may perpetuate the stereotypical attitude that milk is a food for children. This FRI was in direct contrast to the images in the commercial promoting fluid milk consumption which included adults only. These commercials were designed specifically to promote milk consumption by adults and thus, counter a common misconception that milk is only for children.

A review of food consumption actions found in this study indicated food was used to replenish energy needs or to stave hunger with a meal or a snack. For example, in *Hudson Street* (Kass & Singer, 1995), a "chocolate energy drink" was referred to as a possible solution to energy needs in the midst of major exertion.

▪ YOUNG OFFICER: If you think about it it makes perfect sense. If you get tired, you can just reach for one of those chocolate energy drinks. <laugh track>

The use of food as a refreshment was evident through the use of beverage consumption during a break from daily events. While most beverages contained alcohol or caffeine, a smaller proportion of FRIs involved fruit drinks, milk or sodas. This latter group would be better choices for rehydration.

Many meals were portrayed though not all contained an actual food consumption action. Breakfast cereal commercials showed cereal, toast, milk and juice — a breakfast containing servings from three of the four food groups (Health and Welfare Canada, 1992). Other breakfasts included either a banana, pancakes or peanut butter on bread. Lunches portrayed included a hamburger with french fries or sandwiches with either soup and coffee or potato chips and fruit drinks. Meals which were not clearly lunch or dinner included spaghetti with meatballs and tomato sauce, pizza, and beefsteak with potatoes and peppers. According to *Canada's Food Guide to Healthy Eating* (Health and Welfare Canada, 1992), Grain Products and Vegetables & Fruit choices should be included in most meals and snacks in order that the number of daily servings will fall within the recommended ranges. The total diet concept advocates that it is the average of what a person eats over time, or the overall eating pattern, that defines a healthy diet (Health and Welfare Canada, 1992). However, the lack of variety and choices from the two food groups noted in the meals portrayed in this sample do not promote adequate intake of essential nutrients.

Portrayed snacks included cookies, sweet rolls, pie, cereal with milk, popcorn, caramel coated popcorn with nuts, cold cut sandwiches, soups, crackers and an apple. As noted in Chapter 4, the majority of these food items generally are calorically dense, often due to a higher fat content. Lank et al. (1992) noted that commercials for foods during weekday afternoon television broadcasts were placed to persuade viewers to choose the advertised products for the evening meal preparation. In that same light, from the data gathered in this study, it is expected that prime time television food

commercials are meant to influence evening snacking behaviours and food choices for the upcoming morning meal.

6.2.3 Summary

Commercial and program FRIs portrayed foods as either "healthy" or "unhealthy," yet rarely made reference to the total diet concept. They failed to note the frequency of consumption or the size of a serving. A lack of context was evident when either the health benefits or risks of a food were presented. This was especially true for information pertaining to high risk groups or possible long term morbidity. As found in a recent analysis of television news programs (Lichter & Amundson, 1996), an oversimplification of scientific principles occurred perpetuating the "good/bad" food dichotomy. As well, higher fat food items received greater attention than did other nutritional risk factors such as energy or fibre intakes. Both programs and commercials stressed the harmful effects of food or its constituents over the health benefits.

From this analysis, the lack of health related context appearing in FRIs could interfere with current nutrition education and health promotion efforts espousing the concepts of healthy lifestyles and the total diet approach.

6.3 Psychological and Emotive Factors

6.3.1 Desire and Enjoyment

Discussions and actions which involved food brought declarations of various personal sentiments regarding a food item such as desire, enjoyment or dislike. Strong desire for a particular food item occurred in program and commercial FRIs. For example, a middle adult female physician in *er* (Woodward, 1995) stated, "I sure could use a coffee." A strong desire for cheese was evident with the male young adult office worker in the cheese commercial who stated, "I gotta have cheese." After this statement, the character began a journey through the city during which he imagined many foods which contained cheese. An unusual scenario portrayed an extreme desire for a food product in the commercial for Kellogg™ Raisin Bran cereal. In the midst of a prison break, one of the four escaping male inmates spotted a box of the advertised

cereal in the guard tower. His desire for this food foiled the escape attempt of all four men.

Several FRIs contained actual or imagined food enjoyment. As noted in the previous chapter, characters were portrayed as happy or joyful in the presence of advertised food products. Actions which involved consumption, service, ordering and preparation of foods showed characters with large smiles. These portrayals left the impression that the food brought enjoyment and satisfaction.

Humour was used extensively in commercials and programs. In situation comedies, food and humour were commonly used devices for plot and character development. In commercials, humour was used to invoke a positive emotive state in the viewer and thus positive feeling towards the advertised product. These strategies also provided common reference points for the heterogenous viewing audience — everyone eats and people like to laugh.

Characters in sampled programs also generally appeared to be happy wherever food was involved. Imagined food enjoyment was expressed by Dr. Kate Austin in *Chicago Hope* (Kelley, Levin & Tinker, 1995).

> ▪ AUSTIN: You know, I asked someone about this place. They said the red sauce is unbelievable (accentuated each syllable of final word).

Similarly, upon reviewing the lunch wagon menu on *Home Improvement* (Sims & Schoenman, 1995), Tim expressed his imagined enjoyment by stating, "I think I've died and gone to heaven."

The major plot line of the sampled episode of *Seinfeld* (Feresten, 1995) was a satire of the human passion for foods. Early in the episode Elaine stated, "Boy! I'm in the mood for a cheeseburger." Jerry, then, explained his perception of the soups made at a local soup stand.

> ▪ JERRY: <med on Jerry> I finally got a chance to go the other day and I tell you this, " you will be stunned."
> ELAINE: <med on E and G> Stunned by soup?
> JERRY: <med on Jerry> You can't eat this soup standing up -- your knees buckle.

After a later visit to the soup stand, George shared his enjoyment of the soup with Elaine.

> ▪ (Exterior Day) Elaine and George are walking down the sidewalk. George is eating soup from the styrofoam container with a plastic spoon.
> GEORGE: Oh, this is fabulous. Elaine, you gotta taste this. (gives Elaine a spoonful of soup)
> ELAINE: Hmmm. Oh my god. I've gotta sit down. (George takes another spoonful)

The letter carrier character in the program indicated his anticipated enjoyment of the purchased soup.

> ▪ Letter Carrier exits shop. He opens the paper bag just outside the door and takes deep breath.
> LETTER CARRIER: Jambalaya! (He grins widely and runs down sidewalk and out of camera shot)

Two incidents of overt dislike of a food item occurred in the sample.

> ▪ <medium shot on Sammy and Trudy.> Sammy takes a bite of sandwich.
> SAMMY: This isn't salami.
> <long shot of apt.> Janine is in the dining room with baby. Johnnie is at the dining room table serving himself food.
> JANINE: Oh, sorry. I thought you said beef tongue. <laugh track>
> SAMMY: How did you get beef tongue out of salami? <med on Sammy and Trudy> They don't even share a vowel. (*Single Guy*, Kohan & Mutchnick, 1995).

> ▪ ELAINE: And what's that there? Lima bean?
> COOK: Yes.
> ELAINE: I've never been a big fan. (makes coughing/gagging noise and makes a face) (*Seinfeld*, Feresten, 1995).

6.3.2 Food and Negative Emotions

In the sample, food was used as a comfort and in response to negative emotions such as social discomfort, anger and fear. The Tim Horton's™ commercial showed dark, shadowy images of people running through the rain to the bright, inviting shelter of a Tim Horton's™ establishment. The comforting aspects of a hot bowl of soup were

emphasized with visual images of stocking feet under the lunch table. The voiceover indicated that eating soup could warm cold toes.

Female characters in program FRIs used food to soothe conflicting emotions. In *Grace Under Fire* (Raley, 1995), the title character was shown in the kitchen with her older adolescent son.

> ▪ Grace enters kitchen. Matthew is there. She is upset with him. She walks to the counter and pours a glass of water from a pitcher. She picks up the glass and drinks the water. Then she begins talking to Matthew.

A glass of water intended for a patient was consumed by a nurse in *er* (Woodward, 1995), in response to her fear and trepidation at signing escrow papers.

> ▪ NOTARY: <med on Notary> Can I have a glass of water?
> HATHAWAY: <close on Hathaway; pull back to long on both and ward> She pours Notary a glass of water from the bedside carafe. He puts out his hand for it and she drinks it.

In a commercial for the box office movie *Home for the Holidays*, one scene portrayed an adolescent female viciously eating celery as a young adult female tried to comfort her.

> ▪ Cut to medium shot of adolescent girl chomping a stick of celery.
> YOUNG ADULT FEMALE: We'll all be OK if we just stuff ourselves.

This encounter highlighted food as a means of coping with negative stressors in the environment, in this case, the family conflicts surrounding the traditional holiday visit. The proposed solution implied that food could be used to escape the reality of the tense situations.

In *Hudson Street* (Kass & Singer, 1995), a young adult female ate in response to an uncomfortable social situation. She was a guest at an engagement dinner for the ex-wife of her date.

> Tony is having difficulty accepting the change in his ex-wife's life.
> Melanie reacts by eating furiously throughout his tirade.
> Throughout Melanie has been shown taking a drink of wine, cutting her meat, and taking a bite of meat x3.
> MELANIE: (In a nervous/frantic voice) Oh! Excellent tater tots. <laugh

track> (She holds one on the end of her fork and then puts it in her mouth.)
Melanie is shown with her cheeks puffed out from the food she's stuffing in.
MELANIE: (Aside) Tony, let's just relax and try to enjoy our dinner.

In the sample, male characters consumed alcohol in socially uncomfortable predicaments. For example, this occurred in *Hudson Street* (Kass & Singer, 1995) with two middle adult males, the ex-husband and the fiancé of the same woman.

- Tony and Robert are awkwardly trying to converse. Robert is shown taking another drink of red wine.

Beer was the beverage used to fill awkward conversational pauses in *Single Guy* (Kohan & Mutchnick, 1995).

- Ross tells Johnnie about his ex-wife being a lesbian and then is silent. They each reach for their bottles of beer. Ross takes a drink.

This occurred several times as Ross and Johnnie conversed. The basis of their discomfort seemed to be due to an uncertainty felt by each character concerning the sexual orientation of the other. From these two examples, it may be possible that the custom of sharing beverages with more socially distant individuals has a function — it gives those involved something legitimate to do when not conversing.

6.3.3 Summary

From these examples, television portrayed the strong personal relationships people have with food. Similarly to the cultural context, food items and food habits helped to define an individual. Foods also were associated with positive emotions, yet often these were idealized fantasies created by advertisers. As well, food was portrayed as a means of psychological escape from difficult social encounters — acting either as a diversion or a control strategy. In this way, programming and commercials offered food items as solutions to common life difficulties such as frustration, loneliness, anger, social discomfort and self identity.

6.4 Food Utility

A less prominent, though interesting, emergent theme was the utility of food for non-consumptive purposes. This discussion has been divided into social, pragmatic and negative food utility aspects.

6.4.1 Social Utility

Visser (1991) contends that in affluent society food has become a recreational activity. Towards this end, "[the] primetime schedule remains the royal road to [viewer's] fantasy life" (Lichter et al., 1994; p. 7). The sampled broadcasts contained many indications of food as an integral part of leisure activities, often in idealized fantasies. In the commercials sampled, foods were portrayed as major parts of relaxation, leisure and fun. The Labatt™ Lite commercial detailed a group of friends exploring "the joy of cooking" a meal together. In the commercial for Signature Vacations™, choosing a time to leave the beach to go for dinner was humorously portrayed as a major decision when on vacation. As well, the French Vanilla Cafe™ commercial briefly showed a couple relaxing and laughing at a cafe table. In the sampled fictional programming, two FRIs indicated similar attitudes. These were the scenes in *Friends* (Borns, 1995) and *Single Guy* (Kohan & Mutchnick, 1995) which involved consumption of tropical cocktails while floating in an outdoor pool and soaking in a hot tub, respectively.

The concept of relaxation was coupled with an attitude of self-reward in other FRIs. The McDonald's™ restaurant commercial used the tagline — "Have you had your break today?" As well, the four commercials for General Foods International Coffees™ each carried the tagline — "A getaway from the everyday." These incidents stressed the use of food as a reward or a way to relax. With this type of visual and verbal reinforcement, viewers with childcare responsibilities are likely to carry these attitudes into the lives of children. The use of food as a bribe or reward for positive behaviours of children and as a punishment for perceived negative behaviours could be ingrained in viewers of these televised attitudes. The developed dependence on food as a "cure" or escape from daily life is an inappropriate coping mechanism. An extreme case of this

behaviour is present in disordered eating behaviours of anorexia nervosa and bulimia nervosa. Current thinking in the nutrition education field is that the use of food as reward or punishment with children can develop lifelong unhealthy relationships with food (Satter, 1991). Thus, the televised support of such attitudes and behaviours may be working in opposition to current nutrition professional advice.

6.4.2 Pragmatic Utility

In the sample, food had many practical non-consumptive uses. A product that would fit into a fast paced lifestyle was highlighted by many FRIs. This convenience factor emphasized the ease of preparation and the convenience of certain food products. As discussed in Chapter 5, many commercials used these aspects as selling points for the advertised products, including Chunky Soup™, Quaker™ Instant Oatmeal and Redenbudders™ Lite popcorn. On *Single Guy* (Kohan & Mutchnick, 1995), take-out pizza and microwave popcorn appeared. Ready-to-eat sandwich meats were presented as quick and easily prepared foods on *Single Guy* (Kohan & Mutchnick, 1995) and *Home Improvement* (Sims & Schoenman, 1995). As well, *Caroline in the City* (Barron & Pennette, 1995) depicted a convenience popcorn product which required no further cooking utensils for stove top preparation.

Food service facilities were often noted for their convenience, quick service and ease of food acquisition. This occurred in the commercial for Tim Horton's™, with the lunch wagon in *Home Improvement* (Sims & Schoenman, 1995) and the soup stand in *Seinfeld* (Feresten, 1995).

An interesting non-consumptive food use appeared in *Caroline in the City* (Barron & Pennette, 1995) when a female restaurant customer requested club soda to remove a clothing stain from another food product.

Yet another aspect of pragmatic food utility related to the television production environment. Here, food was used as either a prop or a set decoration. Props gave characters something recognizable to do while speaking their lines. Examples included carrying or holding bottled water, canned soda, beer, wine or a coffee mug. Other instances occurred such as chopping vegetables or fruit for salads (*Hudson Street*, Kass

& Singer, 1995; *Grace Under Fire*, Raley, 1995), tossing salad (*Caroline in the City*, Barron & Pennette, 1995), carrying pastries (*Murphy Brown*, Bragin, Saltzman & Diamond, 1995), or carrying pizza boxes (*Single Guy*, Kohan & Mutchnick, 1995).

Incidents of set decoration served aesthetic and authenticity purposes. Fresh salad greens, coloured bell peppers, tomatoes, garlic cloves and rolls artistically added colour to several kitchen sets including those in *Caroline in the City* (Barron & Pennette, 1995), *Hudson Street* (Kass & Singer, 1995) and the Chef Boyardee™ commercial. Colourful outdoor markets provided a touch of reality as well as decor in *Seinfeld* (Feresten, 1995) and the Chef Boyardee™ commercial. As well, the coffee and pastries at the many worksite coffee stations and the bottles of olive oil atop the tables in an Italian restaurant (*Caroline in the City*, Barron & Pennette, 1995) provided an air of authenticity to the sets.

6.4.3 Negative Utility

Negative aspects of food and food preparation were noted in several situations. The clothing stain presented in *Caroline in the City* (Barron & Pennette, 1995) was one such incident. The need to clean food preparation areas and utensils was clearly portrayed in *Home Improvement* (Sims & Schoenman, 1995) when Tim created a mess while attempting to break a short-order cook's speed record. A similar situation arose in a commercial for Windex™ in which a young child threw spaghetti with tomato sauce at several kitchen targets. The advertised product was presented as a quick and easy cleaning solution to deal with the messes. Yet another negative side of food was alluded to in the commercial for Glad Plug-Ins™. This showed a female hand replacing the scented insert of the Plug-Ins™ in the kitchen, thus suggesting that food odours linger and may be unpleasant. From an economic standpoint, it is interesting to note that entire industries have developed to deal with these perceived negative aspects of food. Household and institutional cleaning products abound as do products to mask unwanted food odours.

6.4.4 Summary

From these incidents, the non-consumptive utility of foods became apparent. Thus, food can mean relaxation, reward and fun. As well, the negative aspects of food such as messy preparation and unpleasant cooking odours was not ignored.

6.5 Summary of Context of Food Related Incident

The FRIs of the sampled prime time broadcasts indicated the multiple meanings and uses of foods. Food was shown to have strong social meanings. It was portrayed as the centre of a viable part of the economy, a power source and an indicator of social status. Food was shown as an integral part of interpersonal relationships and ritualized celebrations. Gender identity was related to food and food activities as was cultural identity. As well, food was used to express cultural and sociopolitical beliefs. On an individual level, food was associated with intense emotions as with the passions expressed for particular food items. Food also became a refuge from the pressures of everyday life. From a television production stand point, food was used as a source of humour and as either props or set decoration. Finally, food was integrated into relaxation and leisure activities and was presented as a deserved reward or as boredom relief for television viewers.

6.6 Context of Body Image Attitudes

In North American society, there is a growing "normative discontent" (Rodin, Silberstein & Striegel-Moore, 1984) of body size and shape by females. Such attitudes have fuelled the acceptance and growth of industries surrounding food and weight loss diets. Advertisers have not been blind to this mainly female body dissatisfaction and have developed advertising strategies which take advantage of these ingrained beliefs. Choices made by message producers regarding which physical images to use to promote product sales and which social contexts to use for programming result in the promotion of certain lifestyles and the dissuasion of others (Elliot, 1996). Thus, through the use of repeated stereotypes, value systems of television viewers may be affected.

The eight categories which emerged from the 15 BIAIs in the sampled broadcasts fell into the larger social and psychological themes. Each theme and sub-

theme will be discussed here.

6.6.1 Social Aspects of Body Image Attitude Incidents

6.6.1.1 Social Status

Emphasis on the negative effects of larger body size was closely linked to social status. The two program promotions for *The Simpsons* portrayed the difficulties encountered in clothing larger bodies. Homer Simpson was shown at a men's clothing store. A close-up shot at abdomen level, which accentuated his obesity, showed his abdomen protruding below his shirt. His final clothing choice was the stereotypical tent dress.

> ▪ HOMER: I don't want to look like a weirdo. I'll just go with a muu-muu.
> Cut to close on Homer's head with peaked hat. Zoom out to show he is wearing a muu-muu -- bright blue with red flowers -- and his peaked cap. A woman and child on the sidewalk stop and stare after him.

The voiceover used a play on words to draw attention to Homer's large body size.

> ▪ VO: It's Homer's biggest episode ever.

Another scene expressed the possible problems people with larger body sizes may have with furniture designed for smaller body sizes.

> ▪ Cut to long shot of Homer sitting on his bed. Marge is lying on bed reading. Homer lies down and the mattress gives way below him. Marge is rolled onto Homer.

Each of these scenes was designed to elicit a humorous response from the viewer. This use of humour served to establish that larger body sizes were not something for which to strive. Yet, Homer Simpson's "quest to be the world's heaviest man" countered this concept by suggesting that social recognition could be obtained if body size were extreme. This goal was portrayed by close-ups of a bathroom scale registering in excess of 300 lbs. followed by a close-up of Homer cheering. He was also depicted eating his way through a huge pile of wrapped candies. Adulation for this desired achievement was also evident.

▪ Cut to medium shot of Bart and his sister. Zoom in on Bart's face looking dreamy.
BART: When I grow up, I want to be a lardo just like Dad.

While this animated series intended to show a satire of life achievements, it also manipulated social mores regarding acceptable body shapes and sizes. In this episode, Homer's role as the antithesis of the "real man" was most evident. Homer's quest illustrated the role of the human body as a social commodity. Traditionally in North American society men have viewed their bodies as tools which needed to be in shape and ready to use (Rodin, Silberstein & Striegel-Moore, 1984). Larger male bodies were perceived to be powerful and thus, were closely tied to the cultural expectations of masculinity — "strong, powerful, domineering and destructive" (Mishkind et al., 1986). There is, however, a point beyond which male largeness likely will be equated with weakness and femininity. This lack of masculine characteristics was punctuated by the choice of tent dress as clothing. Homer's thesis was that there was yet another body size boundary that, if crossed, would bring some sort of positive social recognition. His obsession with achieving an unrealistic ideal is not unlike that of many North Americn women who desire to be unrealistically slim.

An incident in *Grace Under Fire* (Raley, 1995) was of a sociopolitical nature. Grace, who grew up during the 1960s, spoke to her son about social activism.

▪ GRACE: Hey, I didn't stop there. I protested the war. I marched for civil rights and just last year I voted for the fat Elvis stamp. <laugh track>

These actions by Grace could be termed non-conformist. Again, this BIAI emphasized the lower social status of larger body sizes, even when the larger and smaller bodies belong to the same individual. This incident also had a slightly positive undertone as the female character felt that her actions indicated a certain degree of social conscience and protest.

The irreverence of youth was indicated by an insult aimed at an obese young adult male by a slim teenage male. The older male was renting videos from the younger male cashier.

- CASHIER: Buns of Steel, Abs of Steel, Quads of Steel. What -- do you like watch these and eat bacon? <hysterical laugh track> (customer looks upset, takes videos and leaves.)

This BIAI from *Caroline in the City* (Barron & Pennette, 1995) pointed to the lack of social power held by larger individuals. In this case, a younger person insulted an elder in a public arena. It was obvious from the submissive way in which the insult was received, that people with larger bodies wield very little power within society. As well, not being above a healthy weight range became an implied virtue.

The personal and private nature of body size was highlighted in a BIAI from *Grace Under Fire* (Raley, 1995).

> FATHER: Well I could guess people's weight. Check it out.
> (He approaches an middle adult, obese, female customer)
> FATHER: What are you about 400 pounds? <laugh track> (woman looks indignant and leaves. Father looks puzzled.)
> RUSSELL: Well, thank you very much Dad. Mrs. Thick is one of my best customers.
> FATHER: Hey! It's not a skill that makes you popular. What are you? (puts hands on front and back of son) about 200 . . . Russell shrugs off the hands and stalks away.)

The sensitivity of individuals to others knowing or thinking about their weight was presented in this incident. The social ineptness of the father character, who was himself above a healthy weight range, became evident in this scene, thus, emphasizing the intimate nature of body shape and size.

Each of these BIAIs was accompanied by laugh tracks, which indicated that program producers recognized the lower social status accorded larger bodies by society. As well, the laugh tracks served to reinforce prevailing social values and stereotypes.

6.6.1.2 Psychological Aspects of Body Image Attitude

Several FRIs dealt with issues of import to body image attitudes. Emotional eating by females as discussed earlier in this chapter can be part of low self-esteem and poor body image. Simone de Beauvoir believed that during adolescence girls realize that females have little social power and "that their only power comes from becoming

submissive adored objects" (Pipher, 1994; p. 21). In short, "girls stop being and start seeming" (Pipher, 1994; p.21). Pipher (1994) hypothesized that the cultural gap between the true selves of females and the cultural expectations of females could result in many emotional difficulties including disordered eating. The scene from *Hudson Street* (Kass & Singer, 1995) which showed a young adult women stuffing food into her mouth during an uncomfortable social situation, indicated an instance of possible swallowing of emotions — where food became a metaphor for negative emotions.

Women tend to view their bodies as commodities or interpersonal currency (Rodin et al., 1984), and thus, control of that body could assist them to gain social status. In this way, televised portrayals of emotional responses which involve food can substantiate this behaviour as being the norm.

In this sample, eating for body aesthetics was stressed over eating for health reasons. In the productions, the body was revealed in two ways — the absence of clothing and the tightness of clothing (White, 1995). Visual images from *Friends* (Borns, 1995), for example, were of slim young adult females dressed in snug-fitting skirts and sweaters which were often of abbreviated length — mini skirts and cropped tops. Such images support the traditional concept that women have depended on their appearance for social power. This is a referent system which has proved lucrative for advertisers of a vast array of image and beauty related products (Hayes & Ross, 1987). For example, the Special K™ commercial was constructed to include several camera shots of a slim woman in a one-piece bathing suit, yet also used isolated close-ups of thighs, waist, upper arm and neck — body parts which may create anxiety over size and shape. These images were combined with printed and spoken messages about low fat. In this manner, advertisers made use of body image insecurity among women to sell a product.

Given that 17% (93 of 547) of characters with discernable body types involved in incidents of interest were deemed above a healthy weight range, the televised media view of body size distribution was not in accordance with the true picture of the non-mediated world. (Health and Welfare Canada, 1988; Reeder et al., 1996). Again, this portrayal of a lesser proportion of characters outside a healthy weight range than

actually exists can result in viewer attitudes that few individuals in society actually are overweight or that few televised images match what viewers see in the mirror each day. Such attitudes can affect perception of self worth as well as body image of self and others.

6.6.1.3 Summary

BIAIs presented a negative image of larger body types. Slimness was equated with beauty, virtue and higher social status. The concept of healthy body weight ranges was not apparent, though that of aesthetic body size and shape clearly was found. Such depictions served to widen the perception gap between viewers and the characters in television broadcasts. Without an acceptance of healthy body weights by the television industry and viewers, television will continue to propagate the cultural slim ideal body and the complex cultural bias against larger body sizes. As stated by Rodin, Silberstein & Striegel-Moore (1984), "Weight is the lens through which experience is viewed" (p.29).

6.7 Synopsis

The discussion in this chapter has indicated the massive doses of televised messages regarding food and body image attitudes available to prime time viewers. Meanings of food and body image attitudes were found to be strongly social in nature. Emotional aspects of life were shown to be closely tied to food and body image attitude, as well. Health issues arose in relation to FRIs only in this sample. In terms of body image attitudes, eating for aesthetics rather than health was prominent. Larger bodies were ridiculed, vilified and scorned in BIAIs.

In the next chapter, the possible implications of these findings will be discussed in terms of their significance to nutrition practice and future research.

7. SUMMARY, IMPLICATIONS AND FUTURE DIRECTIONS

7.1 Summary

The ubiquity of televised media and information disseminated has "profoundly altered the phenomenological experience of living in modernity, as well as networks of social power" (Stevenson, 1995). The use of ritualized behaviours in commercials and programs has served to guide the viewer in interpretation of mediated messages. This is often done through the use of stereotypes (Alexander, 1994).

This study was designed to identify and describe the major recurrent themes in food related messages and body image attitudes broadcast on prime time television both during commercials and programs. Methods combined qualitative and quantitative analyses of textual data from video recordings of ten top-rated prime time programs with the surrounding commercial breaks. Frequency content analysis provided information regarding rates of the incidents of interest in the prime time sample and deconstruction techniques were used to examine context and meaning of food related incidents and body image attitude incidents. Thus, symbolism and ideology provided insight into social expectations and perceptions.

Findings of this study are relevant to health professionals who seek to attune themselves to environmental influences on food behaviours and attitudes and body image attitudes, to understand media functioning for use in health promotion contexts and to better understand the social world and its influence processes. For those who strive to understand the complexities of human health beliefs, attitudes and behaviours, their success depends upon a knowledge of contexts within which these phenomena occur. The purposeful use of context in this study allowed meaning to be uncovered in an attempt to understand such processes.

An analysis of FRIs found that items with use-value such as foods, were transformed into items with symbolic exchange-value. Meaning was created at the

point between the material item and the non-material thing it had been made to represent (Williamson, 1978). Food served as an agent of socialization, including cultural, personal and gender identities. Food became a ritualized method for celebration, wielding social power and escaping negative emotions. In health terms, food was related to mortality while the morbidity of chronic disease was absent. The total diet approach to eating was also missing as food items were portrayed in an isolated fashion. With this singular approach to eating came the dichotomy of "good/bad" foods. Portrayals did not support *Canada's Food Guide to Healthy Eating* (Health and Welfare Canada, 1992) or *Canada's Guidelines for Healthy Eating* (Health and Welfare Canada, 1990a).

BIAI analyses showed that larger bodies were stigmatized in the sample studied — a reflection of current socially accepted ideals (Marchessault, 1993; Myers & Biocca, 1992; Schwartz, 1986). Again, context and meaning determined the gender identity and social status aspects of body size and shape in North American society.

Advertisers used a variety of identifiable advertising techniques when constructing commercials. All commercials had components which garnered viewer attention, built their confidence and stimulated their desire or promised a benefit for the product. Some commercials also contained aspects which stressed urgency or requested a specific consumer response. Many products offered magical solutions to life situations which had been framed as "problems." In the words of a recently recorded song, "Realities are crushed beneath the ads your copy sells" (Nesmith, 1996, track 6).

Commercial interests are the basis of television advertisements as well as programs. Researchers have long pointed to the possible negative health impacts of television content and the passivity of television viewing. In a critical appraisal of the mass media industries, Nesmith (1996, track 6) stated that, "You're killing me. You're killing us. Because you're only 'only selling ads.'" While McAllister (1996) noted that the economic existence of the television medium does not depend on educating or informing the viewer, partnerships to improve television content have proved somewhat successful (Weinberg, 1993). Thus, the television broadcasts functioned as entertainers with humour and storytelling and informers or educators with ideas which may conflict

with viewer health beliefs and current health professional advice.

7.1.1 Study Limitations

This study was based on analyses performed on media texts to describe the nutrition related content of those texts. In this way, the findings cannot be used to prove possible media effects, but only to postulate possible associations based on current accepted theories of viewer behaviour.

The use of purposive sampling negated the use of statistical operations for tests of significance. Hence, frequency statistics were used only to triangulate content analysis with context analysis. The purposive sample was chosen from English-language Canadian network broadcasts available to the Saskatoon market. It is possible that differences in findings would have occurred had the sample been drawn from a different geographical area or from French-language broadcasts due to possible differences in cultural norms and ideals. As well, the sampled broadcasts were derived from a non-sweeps broadcast period and avoided broadcasts closer to Thanksgiving (Canadian and American) or Christmas. These choices were based on the assumption that the quantity and quality of the incidents of interest might change during a network ratings sweep period or in holiday productions of commercials and episodic television. For these reasons, these data are not generalizable to the larger universe of all prime time broadcasts.

The data set chosen yielded only 15 BIAIs. While fewer BIAIs than FRIs were expected, a larger block of data would be needed to produce a greater number of these incidents. As well, 11 of the 15 BIAIs came from two program promotions for an episode of *The Simpsons*, which in turn, provided a sample skewed towards the values and attitudes of the producers of a single program.

Finally, the semiotic analysis was based on the interpretations of one researcher. However, steps to maximize the adequacy of the interpretation had been implemented as described in Chapter 3.

7.2 Conclusions and Possible Health Impacts

7.2.1 Methods

This study showed that nutritional health media analysis can be approached empirically as a set of quantifiable texts **and** defined ideologically in terms of a series of narratives to be analyzed naturalistically to elicit context and meaning. In the content analysis, the use of gender specific body image silhouettes reduced the subjectivity of coding character body type and virtually eliminated bias due to socially held ideals. This method proved to be robust in terms of inter-coder and intra-coder reliability. These methodological issues provide grounding from which future studies may arise.

7.2.2 Food Related Incidents

Food related incidents in this study did not support current health promotion and nutrition education recommendations. Portrayals of food would produce a vastly different rainbow than the one presented by *Canada's Food Guide to Healthy Eating* (Health and Welfare Canada, 1992). Emphasis was given to the "Other Foods" category with the "Meat and Alternatives" interchanged with "Vegetables and Fruit." Portrayed foods also stressed higher fat food choices, gave little attention to higher fibre foods or dark green, orange or deep yellow vegetables and fruit, and over-emphasized alcohol and caffeine-containing beverages. All of these are in opposition to the directional statements of *Canada's Food Guide to Healthy Eating* (Health and Welfare Canada, 1992) and *Canada's Guidelines for Healthy Eating* (Health and Welfare Canada, 1990a). Viewers also were regularly persuaded to indulge in higher fat foods as snacks. Advertisers appeared to place commercials in prime time to influence evening snack food choices and the menu for the upcoming morning meal. Food was presented as a singular panacea rather than as a component of a total diet conducive to good health. The lack of reference to the total diet approach to eating and adequate contextual information regarding portion size and frequency of consumption, promoted the "good/bad" food dichotomy. Again, this contradicted current thinking in the nutrition education field which holds that all foods can fit into a healthy diet (Health and Welfare Canada, 1992). As noted in a study by Dubois (1996), the goals of the television and

advertising industries are not the same as those of health promotion professionals and the respective goals are not always in harmony. This concept applies equally well to this study.

Such televised encouragement could lead to over-consumption of energy and contribute to the current rise in obesity rates. With the constant repetition of the noted televised food and nutrition messages, viewers may develop the belief and attitude that the lower nutrient dense foods portrayed constitute the means to a happier, fun-filled life. Without context information the role of such foods in negative health outcomes may not be clearly understood. As well, such persuasive messages could undermine any attempt at health-promoting self care by the viewer. In terms of social learning theory and cultivation analysis, heavy television viewers may develop increased reliance on television as the source of nutrition and health information (Signorielli, 1990a). Thus, the validity of nutrition messages in commercials becomes paramount as most viewers will be unable to read the small print of disclaimers over the brief time in which they are shown. As the population ages, avoidable chronic disease incidence could continue to be high due to less healthy food and lifestyle choices which, in turn, could overburden the illness care system. This is of major concern due to the combined effect of an aging population with chronic disease and a system with costs that have outpaced inflation (Turow & Coe, 1985).

The normative portrayal of alcohol consumption — the most commonly portrayed beverage in this study — is of concern to health professionals (Breed & De Foe, 1984). Grube and Wallack (1994) found that exposure to alcohol advertising in grade-school children resulted in more favourable attitudes towards alcohol. In effect, such advertisements socialized children to see alcohol consumption as an acceptable and desired behaviour. Of further concern are laboratory-setting research results which indicated that adult alcohol-dependent viewers reported greater urges to drink after viewing a prime time television program with alcohol scenes (Sobell, Sobell, Toneatto & Leo, 1993). It is possible, then, that alcohol portrayals in prime time television programs and commercials could precipitate development of positive attitudes towards

alcohol and perhaps stimulate alcohol consumption behaviours in some viewers.

Televised food portrayals indicated the larger social meanings of food. It was clear that North Americans are socialized to treasure food as it was associated with nurturance, affection and warmth. As well, these portrayals and those which used food to cope with social discomfort, linked emotional nourishment to physical nourishment. In extreme cases, food was used like a drug — "like dull narcotics, numbing pain" (Tennyson, 1982, p. 41). Constant exposure to messages of this type could validate inappropriate coping strategies of viewers and present such behaviours as normative to all viewers. This could both promote and perpetuate disordered eating behaviours. As noted previously, the use of food to denote love and comfort or reward and punishment by child caregivers could result in the development of unhealthy relationships with food in coming generations, thus creating a never-ending cycle.

7.2.3 Body Image Attitudes

Body image attitude incidents in this study showed that obesity was not a valued lifestyle in North American society. As well, slimness was equated with moral goodness or virtue. Repetitive messages such as these visual images, could result in enhanced female concern with food and body shape and size (Pliner, Chaiken & Flett, 1990), and perpetuate the chronic weight loss dieting behaviours of females of all ages.

The proportion of different body sizes found in the non-mediated world was not accurately reflected in this mediated sample. A lesser proportion of individuals outside a healthy weight range were portrayed in this sample than actually occurs in North American society. This unrealistic portrayal caused an asynchrony between cultural ideals and reality. Based on cultivation analysis and social learning theory, prolonged exposure to this televised divergence could lead to further confusion about body shape and size in some viewers and obsession with achieving unrealistic ideals in other viewers.

It is possible that the meanings attributed to BIAIs in this study are part of North American society's commodified youth culture. From critical analysis this has been stated as the "decadence of [viewers] obsessed with the manufactured trivia of the youth

industry" (Rowe, 1995, p. 4). Thus, it also is possible that such televised images will result in a continued abhorrence of aging and all it entails — an attitude which over-values physical appearance.

As found in previous research (Byrd-Bredbenner, 1994), this study elucidated the paradoxical message presented to prime time television viewers. While energy dense snacking is stressed, there is an absence of weight gain and chronic disease development portrayed. Thus, viewers receive conflicting messages.

According to social expectation theory, youth or those with less life experience are most vulnerable to the influence of media presented behaviour and attitude models. This susceptibility leads to acceptance of stereotyped ideas of behaviour patterns of societal sub-groups (White, 1995). Thus, developing children, adolescents and the socially isolated are at greatest risk of the possible effects presented.

7.3 Implications for Practice

Health promotion and nutrition education professionals must understand the attitudinal and behavioral consequences of television content and viewing behaviours. Only then can they develop the strategies needed for effective health promotion programs which take into account the larger environmental contexts within which health behaviours occur. Any attempt to change food attitudes and behaviours and body image attitudes must be based on the social rules governing these behaviours and attitudes. Curricula of health professional schools should include course work which presents the socio-cultural basis of health attitudes and behaviours **and** the role the mass media play in developing such attitudes and behaviours. As well, learning to critically appraise television broadcasts could inform health professional practice regarding sociocultural values and accepted norms, thus providing possible insights into health promotion strategies for different societal sub-groups. Also, similar content could be made available to current health professionals through continuing professional development programs.

There is a need to further develop educational and partnership programs to initiate cognitive and value changes within the television industry in order to promote

more healthy lifestyle choices through fictional and information programming for prime time broadcast. Information carried within such programming has been shown to counter effects of commercial messages surrounding the program on viewer food choice behaviour over the short term (Coleman, 1990; Chapman et al., 1990; Goldberg et al., 1978; Puska et al., 1987). Incentives provided to television production companies might be one possible way of increasing the portrayal of healthy choices. Lobbying television award shows for inclusion of a social and health issues category could lead to a change in value systems throughout the industry and the viewing public. The Emmy awards currently have such a category. As well, nutrition professionals could work with the food industry to ensure communication to consumers of reliable balanced nutrition information in commercials and PSAs and possibly increased recognition for such portrayals with awards categories, too.

7.3.1 Partnership and Advocacy

Health promotion and nutrition education professionals can explore the funding partnerships needed to develop mediated nutrition messages in specialized programming and PSAs. Crockett and Sims (1995) termed this a "fertile" area for partnership formation with the goal of positively influencing food and body image related behaviours in the viewing public. Coalitions of health related organizations can work to promote increased portrayals of positive food and body image messages which are in harmony with current professional recommendations. Mass media "provide a means by which contending social groups can 'lengthen their networks' (Layour, 1987) by recruiting new allies and appropriating further resources" (Stahl, 1995, p.237). Such advocacy efforts provide the power to stimulate and frame discussions — a power worth working towards (Wallack, 1993).

Partnerships, or coalitions, of health promotion professionals, media industry, advertising industry, communication professionals and child welfare agencies could form to advocate for media literacy content as a core area of kindergarten through grade 12 school curricula. Such content would assist children and youth with the development of media skills to assist with the critical thinking needed "to discern, criticize, enjoy and

make meaning from media texts" (Literacy Sub-Committee, 1994). In the current media-filled world, these have become core skills for living, thus, their development in children and youth should be nurtured. Currently in Saskatchewan schools, a comprehensive, integrated media literacy curriculum does not exist. While the topic may be presented in some English Language Arts classes at the discretion of the teacher, it is not a core curriculum component. As an interim measure, the Saskatoon Board of Education developed a resource guide for classroom educators (Literacy Sub-Committee, 1994). Advocacy, though, remains as a critical strategy for inclusion of media literacy in the core curriculum.

Social marketing provides a strategy to promote both the total diet and healthy body weight concepts. This approach could deal with behaviours such as energy dense snacking and values such as body image attitudes and the social convention of weight loss diets. While value changes are the most difficult to achieve (Boyle & Morris, 1994), without social and political will television content will not change. Social marketing can help to create the social will to drive this change.

There is also a need to adopt a health promotion programming approach which combines societal institutions and therapeutic frameworks to encourage and support increased acceptance of a variety of body shapes and sizes. In this way, social change can be promoted by linking the prevailing culture, values, beliefs, ideologies and economic policies with the dominant and less dominant treatment and prevention modalities and the prevailing values, beliefs and policies of the health professionals. As with any challenge to prevailing values or beliefs, the early days of such a campaign will create discomfort on both sides. Yet, with repetition the message can become as ingrained as the one it is countering. As well, advocacy efforts with the television industry can express the need for a more realistic portrayal of body shapes and sizes in order to reduce the impact viewing may have on the psychological and physiological health status of individuals, families and communities.

7.3.2 Media Literacy

McLuhan visualized electronic equipment surrounded by "electronic skim" (Solomon, 1996). Surfing the white water of this "skim" requires media literacy. It is, in effect, a necessary skill for healthy living. Nutrition and health promotion professionals can integrate media literacy concepts into both existing and future programming for all age groups. It is necessary that the focus not be on children to the exclusion of adults due to the documented health effects of television viewing in all ages. To improve media literacy skills, there is a need to provide insight into methods used in commercials and programs to create imagery and substantiate assertions. Consumers need information on how meanings are produced. The goal of such program components would be to demystify messages with critical thinking skills. Health professionals could emphasize the social messages and value implications that can be derived from televised food and body image attitude content. Media literacy components of educational programs could focus on the methods used by media to control form, distribution and direction of information and thus affect the attitudes, beliefs, behaviours and 'knowledge' held by viewers (Willis, 1995). While it is likely that such components do exist for some nutrition and health education programs in North America, there has not been a wide adoption of the importance of facilitating such skills development within client groups by health professionals.

Specifically, media literacy components based on the developmental stages of the clients, could:

- educate viewers about persuasive power of commercial messages
- inform viewers that mass media products are commodities and that both marketing activities and popular culture can influence content and tone of these media texts (Literacy Sub-Committee, 1994)
- assist viewers to identify the different audience uses of television (e.g., entertain, inform, pleasure, diversion) and how these uses may affect viewer perception of food and body image attitude message content

• discuss with clients the different portrayals of food and body image attitude in fantasy and reality programming (e.g., sitcom vs. news magazine)

• assist viewers to identify foods and body types often portrayed on television and those that aren't often seen and explore the possible health impacts of any biases found

• inform viewers that televised nutrition messages are not simple reflections of daily life but constructed images meant to represent/re-present the world (Literacy Sub-Committee, 1994)

• assist younger viewers to develop skills to distinguish between commercials and programs and later to recognize persuasive techniques used in commercials.

• assist viewers to understand the economic basis of television content

• assist viewers to understand the social influences of nutrition related messages and advertising techniques

• empower viewers through development of critical skills needed to interpret food and body image attitude messages portrayed on television

• practice deconstructing food and body image attitude messages and commercials with viewers to hone their critical thinking abilities regarding realism, stereotypes, dominant ideologies and values portrayed. Persuasive messages could be analyzed with the framework used in Chapter 5 (Rank, 1988).

7.4 Recommendations for Future Research

In this study qualitative and quantitative methods were combined. These could be used as a possible starting point to monitor FRIs and BIAIs over time, through seasons of the year, geographical locales and different networks. A comparison of Canadian content English language programming and commercials which adhere to Canadian regulations could be made with television content produced in the USA, Britain and French language Quebec to identify possible geographic and cultural differences.

The need to monitor televised messages regarding health and nutrition in terms of trends in health attitudes and behaviours within society could provide insights into

whether television content acted more to reflect or to shape social mores. Addressing the entire viewing experience and the multitude of messages broadcast is important for a study of media effects at this macro level. Trends in social beliefs and attitudes must be included and should yield greater understanding of possible impacts of televised media on social and health attitude changes (Hertog & Fan, 1995).

Diffusion of innovations theory could serve as a framework from which to study the impact on viewer beliefs, attitudes and behaviours of the many televised food and body image attitude messages. Within this framework, ideodynamics, a two-part mathematical model of the evolution of ideas (Fan, 1985), could prove useful. This model states that ideas are "structured as mutually exclusive states within issues" and that the emphasis is placed on the message itself not the transmitter of the message (Fan, 1985, p. 1). This model, then, allows prediction about the rate of change of ideas in a society with only the information available to that society. Thus, for future research, this model and framework could assist investigation of the diffusion of televised health related concepts through a society.

This study simply measured what could be seen in television broadcasts. It did not measure impact. There is a need to integrate issues of media impact power and issues of media content with the possible effects each has on the formation of human identity, especially of body image attitudes and food related behaviours. Future research could elucidate possible shared meanings and cognitive effects of specific incidents on individuals from selected target groups. For instance, it would be interesting to study possible differences in perceived effects between individuals at high and low risk for development of an eating disorder. Through the use of focus groups, in-depth interviews and impact analysis, such a study could derive a subjective sense of television impact and viewer interpretation of televised health messages.

The attitudes and beliefs of communications professionals regarding television as a cause of behaviour, attitude and value changes in viewers have been reported (Comstock & Paik, 1987). Similar attitude, belief and knowledge data from health professionals are needed. This information would serve as an assessment of the

readiness of the professional groups expected to adopt media literacy components in health promotion programs. This preliminary data could be gathered by surveys, focus groups and future impact analyses. As well, once media literacy components are added to nutrition education and health promotion programs, there will be a need to evaluate their effectiveness.

It is recommended that future studies be multi-faceted and use combined qualitative and quantitative methodologies. This would avoid the difficulties encountered by compartmentalized studies which "cannot provide the kind of relational analysis necessary for a productive movement towards a desirable combination of 'thick description' (Geertz, 1973), empirical generalization and theoretical explanation" (Rowe, 1995, p. 8). This study provides a foundation on which such future investigations could build.

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9. APPENDICES

Appendix A

Definitions of Common
Television Production Forms

Definitions of Common Television Production Forms

Cut -- the act of abruptly switching from one camera to another (Smith, 1992)

Cutaway -- a separate shot placed in the midst of an action sequence to interrupt the continuity (Smith, 1992)

De-colourize -- a digital video effect which transforms a colour image to a black and white image (Smith, 1992)

Depth of Field -- visual field in which all objects appear in focus; dependent on focal length of camera lens, f-stop and distance between object(s) and camera (Smith, 1992)

Drama -- fiction programming which involves programs falling into a number of different genre (Smith, 1992)

Establishing Shot -- a camera shot used to orient action which follows; usually a long shot

Fade -- up/down or in/out; to increase or decrease volume or the gradual appearance/disappearance of a picture from/to a black or white screen (Smith, 1992)

Freeze -- "a single frame held to arrest motion" (Smith, 1992, p.59)

High Angle Shot -- camera shot taken from a high viewpoint (Smith, 1992)

Long Shot -- "camera shot taken from a distance to include the total height of a person or entire view of a landscape" (Smith, 1992, p.60)

Low Angle -- Camera shot taken from a low viewpoint (Smith, 1992)

Medium Shot -- "Camera shot between a close-up and a long shot" (Smith, 1992, p.61)

Motif -- the central theme of a dramatic production (Smith, 1992)

Pacing -- the frequency of switching from one setting to another which creates a sense of forward movement or pace (Adams, 1978b)

Pan -- horizontal movement of camera (Smith, 1992)

Plot -- "the main story of a dramatic production" (Smith, 992, p. 61)

Props -- any object which is used or touched by actors in a television production.

Series -- several dramatic units complete in and of themselves, yet, connected in some way (Smith, 1992)

Set -- arrangement of props and scenery in which action occurs (Smith, 1992)

Set Decoration -- any objects which are used for background decoration purposes and are not used by the actors in a television production.

Set Time Entropy -- "the length of time each setting stays on the screen" (Adams, 1978b, p. 167)

Set Incidence Entropy -- "the number of different settings which appear, regardless of the length of their appearance" (Adams, 1978b, p. 167)

Shaky-cam -- "technique of using a hand-held camera" (Smith, 1992, p.62)

Shot -- an image taken by a camera from a specific viewpoint

Slow Motion -- a clip of film that is dubbed at a slower speed during the post production process (Smith, 1992)

Squeeze Back -- "a digital video effect which decreases the size of a visual image on the screen" (Smith, 1992, p. 62)

Still -- a motionless visual image, e.g. a photograph (Smith, 1992)

Superimpose -- two or more video images transmitted simultaneously (Smith, 1992)

Tilt -- up and down movement of the camera (Smith, 1992)

Voiceover -- "off-camera narration in a television production" (Smith, 1992, p. 63)

Zoom -- "gradual changing of the focal length of the [camera] lens" (Smith, 1992, p. 63) to bring object closer or to move further away from object

Appendix B

Preliminary Content Analysis
Forms and Instructions
as used in the Pilot Test
with Corresponding
Reliability Coefficients

Commercials ID#_____

Televised Food and Body Image Related Messages
Coding Sheet

I. **General**

Network: ____CBC ____CTV ____ITV ____YTV
Product advertised:_____
Presented by: ____Marketing Board ____Company ____NGO
____Government ____Other ____Unknown
Air Time of Day:_____
Location used:_____

II. **Characters**

Number of Characters in ad: ____

Types of characters: 1.
Human ____
Animal ____
Cartoon ____
Mech/Cmpt ____
Other (specify): _____

2.
"Ordinary" people ____
Experts/authorities ____
Famous figure(s) ____
(Specify_____)
Other (Specify):_____

Gender(s): Male ___ Female ___ Unknown ___

Age(s):
Infant (0-1) ____
Child (2-12) ____
Teen (13-19) ____
Young Adult (20-29) ____
Middle Adult(30-59) ____
Older Adult (60+) ____
Unknown ____

Body Type:
Thin ____
Average ____
Overweight ____
Obese ____

III. **Message(s) expressed or implied** about advertized product (note all that apply using 'E' for explicit messages and 'I' for implied messages)

A. General Health
___Good for health
___Recommended by health professional/organization
___Prevent illness
___Treats illness
___Gives energy
___Provides variety/balance
___Nutritious

B. Specific Nutrients/substances
___Contains vitamins (Specify:_____)
___Contains minerals (Specify:_____)
___Contains protein
___Contains fibre/bran
___Contains complex CHO
___Contains specific type of fat
Other (Specify):_____

C. Minimizes/eliminates specific constituents
___Natural/pure/no additives/no preservatives
___Low in calories
___Low in fat(non-specific)
___Low in specific fat (Specify:_____)
___Low in cholesterol
___Low in sugar
___Low in sodium
___Low in caffeine
___Low in alcohol
___"light/lite"

D. Nutrition-Related Claims
___Image enhancing/ creates good feeling/mood
___Good taste/texture
___Convenient/quick/ easy
___Will please family/ guests/kids
___High quality/fresh
___Economical
___New/different/novel
___Fun/pleasurable
___Refreshing

E. Other nutrition-related claims (specify):_____
_____
Other general claims/offers (Specify):_____
_____
Associated with celebrity (Specify):_____
Associated with TV program/motion picture (Specify):_____

IV. Incident Information Form - Commercials

Incident #	Indiv/Gp	Incident Type	Location	Character Type	Gender	Age	Body Type	Foods Portrayed	Food Form	Action Involved	Meal	F.I. Reason	Body Image Incident	B.I.I. Reason

Instructions for Completing
Televised Food and Body Image Related
Messages Coding Sheet

Commercials
Definitions

Body Image -- a psychological construct, it is the view of body shape, size and physical ability, of self or of others, as compared to the perceived norm (Ikeda & Naworski, 1992). It is closely linked to self-esteem, physical changes in the body (puberty, pregnancy, menopause), socialization, prevailing social values and judgements or feedback from others (Rice, 1993). This is not a static concept, but changes throughout the life cycle and in response to changing environmental stimuli (Myers, Jr. & Biocca, 1992; Rice, 1993).

Food -- "includes any article manufactured, sold or represented for use as food or drink for man, chewing gum, and any ingredient that may be mixed with food for any purpose whatever" (Canada Food and Drugs Act, 1981).

Incident -- the action, thought or expressed attitude portrayed by a character regarding food or body image. More than one incident may be present in any given scene. Individual actions should be coded separately, i.e., a woman making cookies and a child eating cookie dough would be coded as two separate incidents. Group actions, where several characters are doing the same thing at the same time, such as a family eating a meal together, would be coded as one incident.

> **Body Image Attitude Incident** -- any portrayed scene with verbal or non-verbal responses to body shape or size of self or others by a character in a televised production, including indications by the producer, director or actor (i.e., exaggerated costume or behaviour, use of a laugh track) presented to be perceived positively or negatively by the viewing audience (Kurman, 1979).
> **Food-Related Incident** -- any portrayed scenes including food.
> **Consumptive behaviours** -- include food related behaviours which involve consumption of food.
> **Non-Consumptive behaviours** -- include food-related behaviours not involving food consumption, such as purchase, preparation, serving, speaking of, etc. This does not include spoken idioms, i.e., "That's a bunch of bologna" or "He's the top banana"

Scene -- consists of all action occurring in a single location. A scene ends when the camera shot changes to another location or time period, e.g. action opens in the kitchen (scene 1), moves to the dining room (scene 2), moves back to the

kitchen (scene 3), moves out to the patio (scene 4), etc.

I. General

Complete a form for each commercial containing a food or body image related incident. **NOTE:** ID# -- to be complete by researcher

A. Network: Indicate the correct network by checking the appropriate space.

B. Product Advertized: Record the advertized product name.

C. Presented by: Indicate the sponsor of the commercial by checking the appropriate space, i.e., an agricultural commodity marketing board, food industry corporation, government department, NGO (non-governmental organization) or unknown.

D. Air Time of Day: Enter the hour the program was aired using the 24-hour clock format, i.e., enter 1930 h not 7:30 p.m.

E. Location used: List the location(s) of the scene(s) in the commercial, i.e., living room, kitchen, grocery store, restaurant, outdoors, in a car, etc.

II. Characters

A. Number of Characters in Ad: Enter the number of characters present during the incident being coded. Include a count of all types of characters, i.e., humans, animals, cartoons, mechanical, computer-generated, etc.

B. Types of Characters: 1. Enter the number and gender (F, M, U) of characters of each type present during incident being coded. 'Human' and 'animal' categories refer to living beings. 'Cartoon' refers to animated artwork characters. 'Mech/cmpt' refers to mechanical or computer-generated characters. 2. Indicate the number of characters in each category that were present during the incident being coded. These categories refer to all characters types.

C. Gender(s): Indicate the number of characters of each gender present during the commercial being coded. If the gender is ambiguous, record this as "unknown".

D. Age(s): Indicate by number and gender the ages of all characters present during the incident being coded. Use 'F' for female, 'M' for male and 'U' for unknown.

E. Body Type(s): Indicate by number, gender and age the body type of each character present during the incident being coded. Use the first letter of each age category (I, C, T, Y, M, O), and M(ale), F(emale), U(known).

e.g. FT would refer to one female teen; 2MM would refer to two males middle adult.

To determine body type, refer to the silhouettes provided.

III. Message(s) Expressed or Implied

This section is divided into 5 subsections. For sections A, B, C and D, note all messages given about the advertized product using 'E' for those messages stated explicitly (e.g. "Tastes great!") and 'I' for those messages which are suggested or implied (e.g. character smiles and says "mmmm" implying good taste).

For subsection E, indicate any other nutrition-related claims explicitly made or implied and make note of any general claims and offers made. "Associated with a celebrity" refers to the actual product not who was in the commercial, e.g.Orville Reddenbacher (popcorn), Paul Newman (Newman's Own product line). "Associated with TV program/motion picture" refers to the product not the ad, e.g. Pebbles cereal, Flintstones vitamins, Teenage Mutant Ninja Turtle cereal.

IV. Incident Information

All incidents within one commercial will be coded using one sheet rather than separate sheets for each incident. The table provided allows for recording of multiple incidents.

A. Incident Number -- For each commercial, each incident is given a sequential number beginning with '1'.

B. Indiv/Gp -- Note if the incident involves the action of one individual(e.g. woman buying food) or a group action (e.g.family eating meal together).

C. Type of Incident -- Indicate if the incident being recorded is body image related (B) or food related (F) using the definitions provided. Note also whether the incident being recorded was verbal (V) (i.e., stated), non-verbal (N) (i.e., indicated by body movement, body language), background (P)(i.e., behaviour not directly involved in main point of program; gives character something to do; prop) or behavioral (B)(i.e., action involving food).

D. Location -- Record location of incident being recorded in one or two words, e.g. kitchen, grocery store, dining room, car, park, etc.

E. Character Type -- Record for character involved using H(uman), A(nimal), C(artoon), M/C (mechanical/computerized), or O(ther). If it is a group action, also record the number of each character type involved, e.g. 3H for 3 humans.

F. Gender -- Record as M(ale), F(emale) or U(known) with the number of each gender if it is a group action.

G. Age -- Record using I(nfant), C(hild), T(een), Y(oung adult), M(iddle adult), O(lder adult) or U(known). For group actions, record by number (i.e., 1,2,3. . .) and gender (M,F,U), e.g. 2FO for two female older adults.

H. Body Type -- Record as T(hin), A(verage), O(verweight) or B(obese). If it is a group action, record by gender, age and number, as above. To determine body

type, refer to the silhouettes provided.

I. Foods Portrayed -- List all foods involved in incident by generic name. Use brand-specific names only when clearly portrayed in scene.

J. Food Form -- Record form of food item portrayed, i.e., raw, fresh, frozen, canned, dehydrated, cooked, etc.

K. Action Involved -- Record any action portrayed involving the food item, i.e., purchase, preparation, cooking, serving, ordering, talking about, etc.

L. Meal at which food is portrayed: Indicate whether food is portrayed as part of a meal (**B**reakfast, **L**unch, **S**upper), between-meal **SN**ack or is not indicated (NI).

M. Apparent Reason for Eating/Presence/Mention of Food: Record apparent reason for food-related incidents, e.g. hospitality, celebration, hunger, emotional, mealtime. If none is apparent, record as NI (Not Indicated).

N. Body Image Action or Attitude Portrayed: Record the type of action or attitude portrayed in terms of its perceived intent.

1. Positive — (+) an action or portrayed attitude that serves to enhance the body image/self esteem of the perpetrator or another character (present or absent).
2. Negative — (-) an action or portrayed attitude that serves to diminish the body image/self esteem of the perpetrator or another character (present or absent).
3. Neutral — (N) an action or portrayed attitude that serves to neither enhance or diminish the body image/self esteem of the perpetrator or another character (present or absent).

O. Apparent Reason for Body Image Incident -- Record apparent reason for food-related incidents, e.g. jealousy, anger, kindness, loathing/hatred, to hurt another. Record as NI (Not Indicated) if no reason is apparent.

Program ID#_____

Televised Food and Body Image
Related Incident Coding Sheet

Program

I. **General**

Network: ____CBC ____CTV ____ITV ____YTV
Air Date/Day:_____
Air Time of Day:_____

II. **Environment**
Location of Scene:_____
Time of Day in Scene: ____Morning ____Mid-morning
____Noon ____Afternoon ____Supper ____Evening
____NI

III. **Characters**

Number of Characters involved: ____

Types of characters: 1.
Human ____
Animal ____
Cartoon ____
Mech/Cmpt ____
Other (specify): _____

2.
"Ordinary" people ____
Experts/authorities ____
Famous Figure ____
(Specify: _____)
Other (Specify):_____

Gender(s): Male ___ Female ___ Unknown ___

Age(s):
Infant (0-1) ____
Child (2-12) ____
Teen (13-19) ____
Young Adult (20-29) ____
Middle Adult(30-59) ____
Older Adult (60+) ____
Unknown ____

Body Type:
Thin ____
Average ____
Overweight ____
Obese ____

Instructions for Completing
Televised Food and Body Image
Related Incident Coding Sheets
Program

Definitions

Body Image -- a psychological construct, it is the view of body shape, size and physical ability, of self or of others, as compared to the perceived norm (Ikeda & Naworski, 1992). It is closely linked to self-esteem, physical changes in the body (puberty, pregnancy, menopause), socialization, prevailing social values and judgements or feedback from others (Rice, 1993). This is not a static concept, but changes throughout the life cycle and in response to changing environmental stimuli (Myers, Jr. & Biocca, 1992; Rice, 1993).

Food -- "includes any article manufactured, sold or represented for use as food or drink for man, chewing gum, and any ingredient that may be mixed with food for any purpose whatever" (Canada Food and Drugs Act, 1981).

Incident -- the action, thought or expressed attitude portrayed by a character regarding food or body image. More than one incident may be present in any given scene. Individual actions should be coded separately, i.e., a woman making cookies and a child eating cookie dough would be coded as two separate incidents. Group actions, where several characters are doing the same thing at the same time, such as a family eating a meal together, would be coded as one incident.

Body Image Attitude Incident -- any portrayed scene with verbal or non-verbal responses to body shape or size of self or others by a character in a televised production, including indications by the producer, director or actor (i.e., exaggerated costume or behaviour, use of a laugh track) presented to be perceived positively or negatively by the viewing audience (Kurman, 1979).

Food-Related Incident -- any portrayed scenes including food.

Consumptive behaviours -- include food related behaviours which involve consumption of food.

Non-Consumptive behaviours -- include food-related behaviours not involving food consumption, such as purchase, preparation, serving, speaking of, etc. This does not include spoken idioms, i.e., "That's a bunch of bologna" or "He's the top banana"

Scene -- consists of all action occurring in a single location. A scene ends when the camera shot changes to another location or time period, e.g. action opens in the kitchen (scene 1), moves to the dining room (scene 2), moves back to the kitchen (scene 3), moves out to the patio (scene 4), etc.

I. General

Complete a coding sheet for each program scene containing a food or body image related reference.

A. Network: Indicate the correct network by checking the appropriate space.

B. Air Date/Day: Enter the date and day of the week the program was aired. Use the format DD-MM-YY and the first three letters of the day, e.g. 150995 FRI

C. Air Time of Day: Enter the hour the program was aired using the 24-hour clock format, i.e., enter 1930 h not 7:30 p.m.

II. Environment

A. Location of Scene -- Indicate where the incident took place, i.e., living room, kitchen, grocery store, restaurant, outdoors, in a car, etc.

B. Time of Day in Scene -- Indicate the time of day within the program of the portrayed incident.

II. Characters

A. Number of Characters Involved: Enter the number of characters present during the incident being coded.

B. Types of Characters: 1. Enter the number of characters of each type present during incident being coded. 'Human' and 'animal' categories refer to living beings. 'Cartoon' refers to animated artwork characters. 'Mech/cmpt' refers to mechanical or computer-generated characters.
2. Indicate the number of characters in each category that were present during the incident being coded. These categories refer to all characters present and to the role played by the character during the incident, i.e., if Rosanne is present in a scene from the show *Rosanne*, she would not be coded as a "famous figure". If the incident is from *Late Night* and Rosanne is present, she would be coded as a "famous figure" or possibly an "expert/authority". If Michael Jordon appeared on *Rosanne* as himself, he would be coded as "famous figure".

C. Gender(s): Indicate the number of characters of each gender present during the incident being coded. If the gender is ambiguous, record this as "unknown".

D. Age(s): Indicate by number and gender the ages of all characters present during the incident being coded. Use 'F' for female, 'M' for male and 'U' for unknown.

E. Body Type(s): Indicate by number, gender and age the body type of each character present during the incident being coded. Use the first letter of each age category (I, C, T, Y, M, O), and M(ale), F(emale), U(known).

e.g. FT would refer to one female teen; 2MM would refer to two males middle adult.

To determine body type, refer to the silhouettes provided.

Type of Reference: Note whether the incident being recorded was verbal (stated), non-verbal (indicated by body movement, body language), background (behaviour not directly involved in main point of program; gives character something to do; prop) or behavioral (action involving food).

IV. Incident Information

All incidents within one scene will be coded using one sheet rather than separate sheets for each incident. The table format provided allows for recording of multiple incidents.

A. Incident Number -- For each scene, each incident is given a sequential number beginning with '1'.
B. Indiv/Gp -- Note if the incident involves the action of one individual(e.g. woman buying food) or a group action (e.g. family eating meal together).
C. Type of Incident -- Indicate if the incident being recorded is body image related (B) or food related (F) using the definitions provided. Note also whether the incident being recorded was verbal (V) (i.e., stated), non-verbal (N) (i.e., indicated by body movement, body language), background (P)(i.e., behaviour not directly involved in main point of program; gives character something to do; prop) or behavioral (B)(i.e., action involving food).
D. Location -- Record location of incident being recorded in one or two words, e.g. kitchen, grocery store, dining room, car, park, etc.
E. Character Type -- Record for character involved using H(uman), A(nimal), C(artoon), M/C (mechanical/computerized), or O(ther). If it is a group action, also record the number of each character type involved, e.g. 3H for 3 humans.
F. Gender -- Record as M(ale), F(emale) or U(known) with the number of each gender if it is a group action.
G. Age -- Record using I(nfant), C(hild), T(een), Y(oung adult), M(iddle adult), O(lder adult) or U(known). For group actions, record by number (i.e., 1,2,3. . .) and gender (M,F,U), e.g. 2FO for two female older adults.
H. Body Type -- Record as T(hin), A(verage), O(verweight) or B(obese). If it is a group action, record by gender, age and number, as above. To determine body type, refer to the silhouettes provided.
I. Foods Portrayed -- List all foods involved in incident by generic name. Use brand-specific names only when clearly portrayed in scene.
J. Food Form -- Record form of food item portrayed, i.e., raw, fresh, frozen, canned, dehydrated, cooked, etc.

K. Action Involved -- Record the action portrayed in the incident involving the food item, i.e., purchase, preparation, cooking, serving, ordering, talking about, etc.

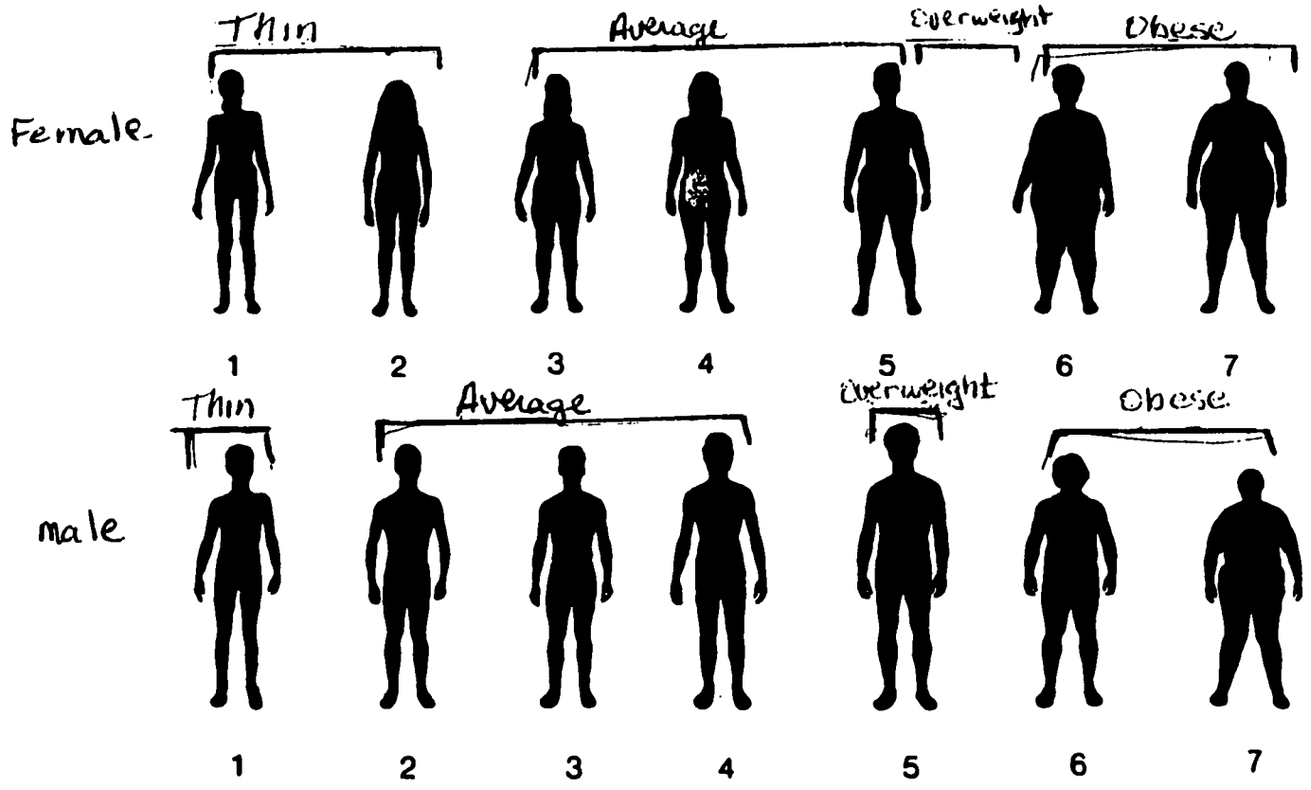
L. Meal at which food is portrayed: Indicate whether food is portrayed as part of a meal (**B**reakfast, **L**unch, **S**upper), between-meal **SN**ack or is not indicated (**NI**).

M. Apparent Reason for Eating/Presence/Mention of Food: Record apparent reason for food-related incidents, e.g. hospitality, celebration, hunger, emotional, mealtime. If none is apparent, record as NI (Not Indicated).

N. Body Image Action or Attitude Portrayed: Record the type of action or attitude portrayed in terms of its perceived intent.

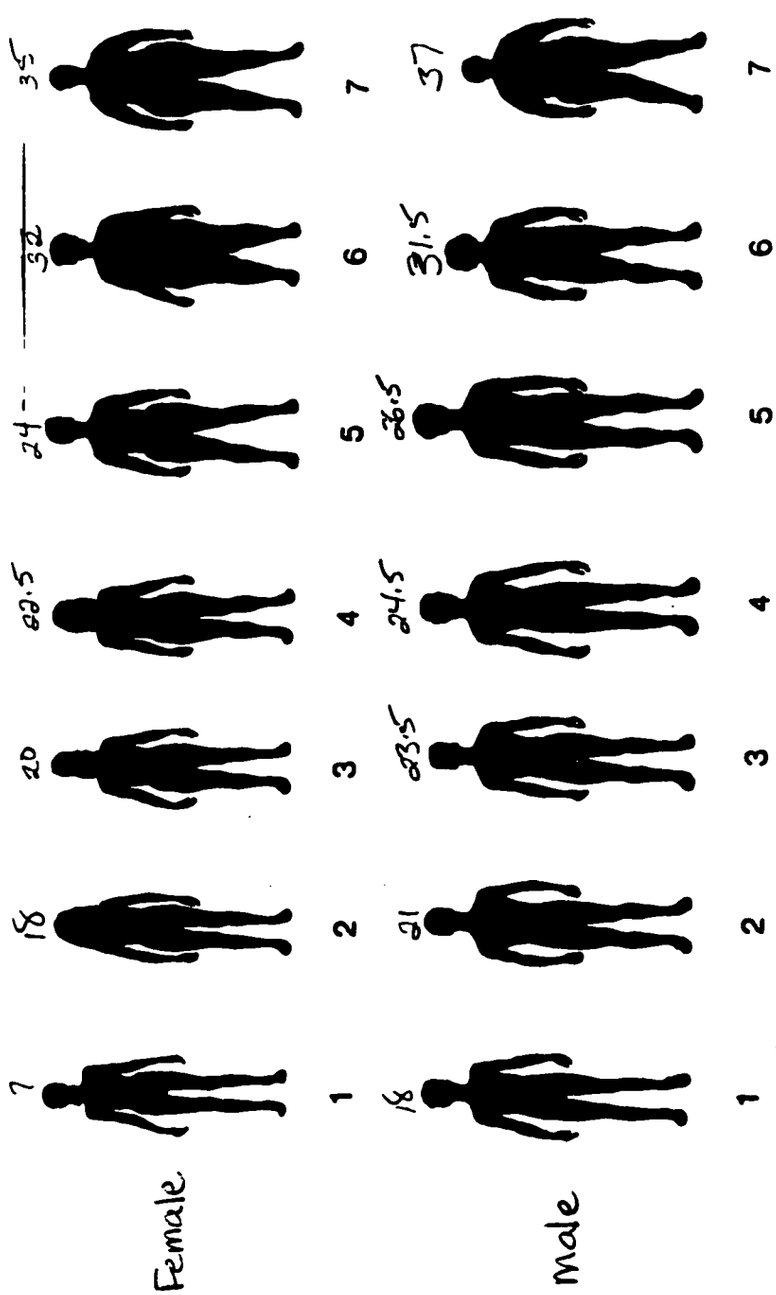
1. Positive — (+) an action or portrayed attitude that serves to enhance the body image/self esteem of the perpetrator or another character (present or absent).
2. Negative — (-) an action or portrayed attitude that serves to diminish the body image/self esteem of the perpetrator or another character (present or absent).
3. Neutral — (N) an action or portrayed attitude that serves to neither enhance or diminish the body image/self esteem of the perpetrator or another character (present or absent).

O. Apparent Reason for Body Image Incident -- Record apparent reason for food-related incidents, e.g. jealousy, anger, kindness, loathing/hatred, to hurt another. Record as NI (Not Indicated) if no reason is apparent.A.



(Canadian Dietetic Association, 1988)

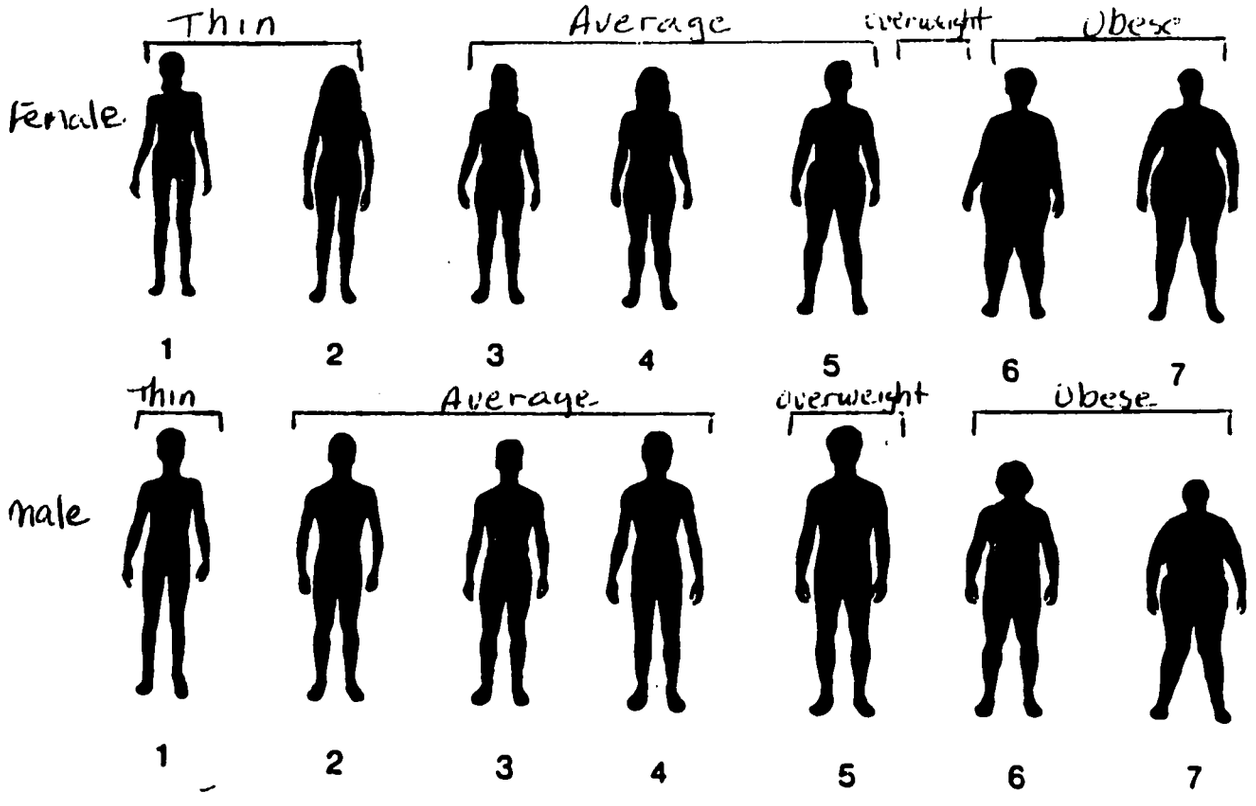
Actual BMI Values



(Canadian Dietetic Association, 1988)

IV. Incident Information Form - Programs

Incident #	Indiv/Gp	Incident Type	Location	Character Type	Gender	Age	Body Type	Foods Portrayed	Food Form	Action Involved	Meal	F.I. Reason	Body Image Incident	B.I.I. Reason



(Canadian Dietetic Association, 1988)

Table B1 Percentage Agreement Between Coder Pairs from Pilot Test

Coding Item	Coder Pair A1/A2	Coder Pair B/A2	Coder Pair C/A2	Coder Pair D/A2
Program Coding				
Number of Characters	100%	90%	76%	77%
Number of Scenes	93%	93%	73%	80%
Number of Incidents	71%	84%	38%	58%
Commercial Coding				
Number of Characters	87%	87%	74%	97%
Number of Commercials	100%	100%	67%[a]	100%
Number of Incidents	68%	34%[b]	58%[b]	53%

[a]Coder omitted coding last 2 commercials in videotaped segment.
[b]Coders chose group incidents to explain multiple individual incidents.

Comments

1. It is expected that with enhanced training and practice recognition of the number of incidents would improve. For the purposes of this study, the coded incidents can be cross-checked with the transcribed data to ensure completeness.

Table B2 Reliability Coefficients[a] of Coder Pairs from Pilot Test of Program Incident Information Forms

Characteristic Coded	Coder Pair A1/A2	Coder Pair B/A2	Coder Pair C/A2	Coder Pair D/A2
Incident Type	1.0*	0.85*	1.0*	0.66
Location	0.93*	0.76*	1.0*	0.65
Character Type	1.0*	1.0*	1.0*	1.0*
Gender	1.0*	0.80*	0.46[b]	0.72
Age	1.0*	0.80*	1.0*	1.0*
Body Type	0.80*	0.75*	---[c,d]	1.0*
Food(s) Portrayed	1.0*	1.0*	1.0*	0.74
Food Form	1.0*	1.0*	0.88*	0.56
Action Involved	1.0*	1.0*	0.88*	0.56
Meal	1.0*	0.44[e]	---[e]	---[e]
Food Incident Reason	1.0*	1.0*	0.43	0.32
Body Image Attitude Incident	1.0*	---	---	---
Body Image Attitude Reason	1.0*	---	---	---
Individual or Group Incident	1.0*	---	---	0.40

[a]Expressed as Scott's *pi* values
[b]Coder C coded many individual incidents as group incidents, and thus coded genders as "Mixed".
[c]--- Denotes insufficient data to compute Scott's *pi*
[d]Coding of many incidents as "Group" incidents resulted in mixed body types coded by Coder C.
[e]Coding of this characteristic was based on assumption rather than visual and verbal cues pertaining to meal type.
* Values of 0.75 and over are generally recognized as acceptable.

Comments and Suggested Revisions to Form

1. Clarify definition of "Group Incident" and "Individual Incident." To make the categories exhaustive, "Not Indicated" will be added to the coding choices. Training for recognition of this key characteristic should be enhanced.

NOTE: Much of the variation in coding between coders was due to conflicts with this characteristic. For example, coder C chose group incidents more often than did other coders. In turn, this affected the reliability of "Gender" and "Body Type" since for many incidents this characteristic had been coded as "Mixed."

2. The coding scheme for "Body Image Attitude Incident" should be changed. Most incidents were recognized by all coders but the task of coding the perception of the incident as positive, negative or neutral proved to be too subjective. In training sessions, it should be stressed that food does not have to be present for a Body Image Attitude Incident to occur.

3. To improve the reliability of the characteristic "Food Form", a list of possible categories will be added to the coding instructions.

4. Training for recognition of the "Meal" characteristic should be enhanced. Often, the coding of this characteristic was based on assumption rather than objective visual and verbal cues.

5. Enhanced training and practice sessions should improve the identification of relevant incidents and scenes.

6. The apparent reasons for Body image Attitude Incidents and Food Related Incidents proved to be too subjective and should be omitted from the coding sheets.

Table B3 Reliability Coefficients[a] of Coder Pairs from Pilot Test of Program Coding Sheets

Characteristic Coded	Coder Pair A1/A2	Coder Pair B/A2	Coder Pair C/A2	Coder Pair D/A2
Character Type 1	0.69 (0.98**)	---[b] (0.94**)	--- (0.86)	--- (0.87)
Character Type 2	0.69 (0.98**)	--- (0.94**)	--- (0.86)	--- (0.87)
Gender	0.84* (0.95**)	0.73 (0.92**)	0.55 (0.86)	0.60 (0.88)
Age	0.04 (0.88)	0.54 (0.92**)	--- (0.86)	--- (0.87)
Body Type	--- (0.37)	0.65 (0.90**)	0.45 (0.79)	0.55 (0.87)

[a]Expressed as Scott's *pi* values with Holsti's proportion in brackets.
[b]Inadequate data to calculate Scott's *pi* values.
*Values of Scott's *pi* of 0.75 and above are generally recognized as acceptable.
**Values of Holsti's proportion of 0.90 and above are generally recognized as acceptable.
NOTE: Holsti devised a formula for determination of intercoder reliability of nominal data using percentage of agreement. However, it does not account for coder agreement due tochance, a function of the number of categories in a characteristic, as does Scott's *pi*.

Comments and Suggested Revisions to Coding Sheet

1. Enhanced training and clarified definitions for "Group Incident" and "Individual Incident" should improve reliability of Gender and Body Type characteristics.

2. To reduce bias from personally held body type ideals, the descriptors for the different body types will be changed from the subjective definitions to objective descriptors. Use of 1, 2, 3, and 4 has been suggested.

3. There is a need to emphasize that body type determination requires that the majority of a body be clearly visible, i.e., medium or long shot, rather than head and shoulders camera shot.

Table B4 Reliability Coefficients[a] of Coder Pairs from Pilot Test of Commercial Incident Information Forms

Characteristic Coded	Coder Pair A1/A2	Coder Pair B/A2	Coder Pair C/A2	Coder Pair D/A2
Incident Type	1.0*	0.62	1.0*	0.37
Location	1.0*	0.35	0	0.37
Character Type	1.0*	0.47	0.35	1.0*
Gender	1.0*	0.88*	---[b]	0.76*
Age	1.0*	0.69	---	0.80*
Body Type	1.0*	0.43[b]	---[c]	---[c]
Food(s) Portrayed	1.0*	1.0*	---	1.0*
Food Form	1.0*	1.0*	0.35	---
Action Involved	1.0*	0.56	0.50	0.38
Meal Involved	1.0*	0.27	---	0.71
Food Incident Reason	0.89*	---	1.0*	---
Individual or Group Incident	1.0*	0.70	0.57	0.85*

[a]Expressed as Scott's *pi* values.
[b]Denotes inadequate data to calculate Scott's *pi*
[c]Body type data has low reliability due to use of "mixed" code by coders for "group" incidents.
*Values of 0.75 and above are generally recognized as acceptable.

Comments and Suggestions for Revisions to Form

1. Eliminate the overly subjective "Apparent Reason" for occurrence of a Food Related Incident or Body Image Attitude Incident due to lack of reliability.

2. Clarify instructions and enhance training for coding "Meal" characteristic. Generally, this was coded on assumption rather than actual visual or verbal information.

3. The coding for the "Food Form" was too subjective. Addition to the coding instructions of a list of food forms from which to choose should improve reliability of

this characteristic.

4. Clarification in the Coding Instructions of the difference between "Group Incidents" and "Individual Incidents" should improve reliability of not only this characteristic, but also reliability of "Gender" and "Body Type."

5. "Incident Type" coding needs to be separated into two different codes. The double code requested for this form created confusion in coders expecting only a single code and thus, reduced reliability.

6. "Location" characteristic codes were very subjective. Some coders provided very detailed locations while others provided general location information. This characteristic requires enhanced training to produce reliable results.

Table B5 Reliability Coefficients[a] of Coder Pairs from Pilot Test of Commercial Coding Sheet

Characteristic Coded	Coder Pair A1/A2	Coder Pair B/A2	Coder Pair C/A2	Coder Pair D/A2
Commercial Length	1.0[*]	---[b]	---	---
Character Type 1	0.48	0.65	0.21	0.89[*]
Character Type 2	0.45	0.81[*]	0.45	0.24[c]
Gender	0.77[*]	0.76[*]	0.55	0.91[*]
Age	0.81[*]	0.64	0.41	0.70
Body Type	0.23	0.03	---	0.25
Advertising Messages	0.64	0.49	0.62	0.55

[a]Expressed as Scott's *pi* values.
[b]Insufficient data to calculate Scott's *pi* value.
[c]Coder failed to recognize 5 famous figures in one commercial.
[*]Values of 0.75 and over are generally recognized as acceptable.

Comments and Suggestions for Revision of Coding Sheet

1. Enhanced instructions for measuring of "Length of Commercial" need to be added to the Coding Instructions. The use of a stopwatch will provide more accurate measurements of the varying commercial lengths used.

2. Not all famous characters were recognized by all coders. This may be best left to the transcriptions of incidents.

3. The Messages used by advertisers could not be consistently coded as "explicit" or "implicit" by coders. This aspect of the coding requires enhanced training or elimination of the instructions from the coding procedure.

Appendix C

Revised Content Analysis Forms
and Instructions with
Reliability Coefficients from
Second Testing

Commercials ID#_____

Televised Food and Body Image Related Messages
Coding Sheet

I. **General**

Network: ____CBC ____CTV ____ITV ____YTV
Product advertised:_____
Presented by: ____Marketing Board ____Company ____NGO
____Government ____Other ____Unknown
Air Time of Day:_____
Location used:_____
Length:_____

II. **Characters**

Number of Characters in ad: ____

Types of characters: 1.
Human ____
Animal ____
Cartoon ____
Mech/Cmpt ____
Other (specify): _____

2.
"Ordinary" people ____
Experts/authorities ____
Famous figure(s) ____
(Specify_____)
Other (Specify):_____

Gender(s): Male ___ Female ___ Unknown ___

Age(s):
Infant (0-1) ____
Child (2-12) ____
Teen (13-19) ____
Young Adult (20-29) ____
Middle Adult(30-59) ____
Older Adult (60+) ____
Unknown ____

Body Type:
A ____
B ____
C ____
D ____
NI ____

III. **Message(s) expressed or implied** about advertised product (note all that apply)

A. General Health
___Good for health
___Recommended by health professional/organization
___Prevent illness
___Treats illness
___Gives energy
___Provides variety/balance
___Nutritious

B. Specific Nutrients/substances
___Contains vitamins (Specify:_____)
___Contains minerals (Specify:_____)
___Contains protein
___Contains fibre/bran
___Contains complex CHO
___Contains specific type of fat
Other (Specify):_____

C. Minimizes/eliminates specific constituents
___Natural/pure/no additives/no preservatives
___Low in calories
___Low in fat(non-specific)
___Low in specific fat (Specify:_____)
___Low in cholesterol
___Low in sugar
___Low in sodium
___Low in caffeine
___Low in alcohol
___"light/lite"

D. Nutrition-Related Claims
___Image enhancing/ creates good feeling/mood
___Good taste/texture
___Convenient/quick/ easy
___Will please family/ guests/kids
___High quality/fresh
___Economical
___New/different/novel
___Fun/pleasurable
___Refreshing

E. Other nutrition-related claims (specify):_____
_____

Other general claims/offers (Specify):_____
_____

Associated with celebrity (Specify):_____
Associated with TV program/motion picture (Specify):_____

Instructions for Completing
Televised Food and Body Image Related
Messages Coding Sheet

Commercials

Definitions

Body Image -- a psychological construct, it is the view of body shape, size and physical ability, of self or of others, as compared to the perceived norm (Ikeda & Naworski, 1992). It is closely linked to self-esteem, physical changes in the body (puberty, pregnancy, menopause), socialization, prevailing social values and judgements or feedback from others (Rice, 1993). This is not a static concept, but changes throughout the life cycle and in response to changing environmental stimuli (Myers, Jr. & Biocca, 1992; Rice, 1993).

Food -- "includes any article manufactured, sold or represented for use as food or drink for man, chewing gum, and any ingredient that may be mixed with food for any purpose whatever" (Canada Food and Drugs Act, 1981).

Incident -- the action, thought or expressed attitude portrayed by a character regarding food or body image. More than one incident may be present in any given scene. Individual actions should be coded separately, i.e., a woman making cookies and a child eating cookie dough would be coded as two separate incidents. Group actions, where several characters are doing the same thing at the same time, such as a family eating a meal together, would be coded as one incident.

Body Image Attitude Incident -- any portrayed scene with verbal or non-verbal responses to body shape or size of self or others by a character in a televised production, including indications by the producer, director or actor (i.e., exaggerated costume or behaviour, use of a laugh track) presented to be perceived positively or negatively by the viewing audience (Kurman, 1979).

Food-Related Incident -- any portrayed scenes including food.

Consumptive behaviours -- include food related behaviours which involve consumption of food.

Non-Consumptive behaviours -- include food-related behaviours not involving food consumption, such as purchase, preparation, serving, speaking of, etc. This does not include spoken idioms, i.e., "That's a bunch of bologna" or "He's the top banana"

Scene -- consists of all action occurring in a single location. A scene ends when the camera shot changes to another location or time period, e.g. action opens in

the kitchen (scene 1), moves to the dining room (scene 2), moves back to the kitchen (scene 3), moves out to the patio (scene 4), etc.

I. General

Complete a form for each commercial containing a food or body image related incident.

NOTE: ID# -- to be complete by researcher

A. Network: Indicate the correct network by checking the appropriate space.

B. Product Advertized: Record the advertized product name.

C. Presented by: Indicate the sponsor of the commercial by checking the appropriate space, i.e., an agricultural commodity marketing board, food industry corporation, government department, NGO (non-governmental organization) or unknown.

D. Air Time of Day: Enter the hour the program was aired using the 24-hour clock format, i.e., enter 1930 h not 7:30 p.m.

E. Location used: List the location(s) of the scene(s) in the commercial, i.e., living room, kitchen, grocery store, restaurant, outdoors, in a car, etc.

F. Length of Commercial: Note the length of the commercial in seconds. Use a stopwatch to measure this attribute.

II. Characters

A. Number of Characters in Ad: Enter the number of characters present during the incident being coded. Include a count of all types of characters, i.e., humans, animals, cartoons, mechanical, computer-generated, etc.

B. Types of Characters: 1. Enter the number and gender (F, M, U) of characters of each type present during incident being coded. 'Human' and 'animal' categories refer to living beings. 'Cartoon' refers to animated artwork characters. 'Mech/cmpt' refers to mechanical or computer-generated characters. 2. Indicate the number of characters in each category that were present during the incident being coded. These categories refer to all characters types.

C. Gender(s): Indicate the number of characters of each gender present during the commercial being coded. If the gender is ambiguous, record this as "unknown".

D. Age(s): Indicate by number and gender the ages of all characters present

during the incident being coded. Use 'F' for female, 'M' for male and 'U' for unknown.

E. Body Type(s): Indicate by number, gender and age along with the body type (A, B, C, D) of each character present during the incident being coded. Use the first letter of each age category (I, C, T, Y, M, O), and M(ale), F(emale), U(known).

e.g. FT would refer to one female teen; 2MM would refer to two males middle adult.

To determine body type, refer to the letter codes of the silhouettes provided.

III. Advertising Message(s)

This section is divided into 5 subsections. For sections A, B, C and D, note all messages given about the advertized product (e.g. "Tastes great!", character smiles and says "mmmm" implying good taste).

For subsection E, indicate any other nutrition-related claims explicitly made or implied and make note of any general claims and offers made. "Associated with a celebrity" refers to the actual product not who was in the commercial, e.g.Orville Reddenbacher (popcorn), Paul Newman (Newman's Own product line). "Associated with TV program/motion picture" refers to the product not the ad, e.g. Pebbles cereal, Flintstones vitamins, Teenage Mutant Ninja Turtle cereal.

IV. Incident Information

All incidents within one commercial will be coded using one sheet rather than separate sheets for each incident. The table provided allows for recording of multiple incidents.

Begin by noting the product advertised in the first column.

A. Incident Number -- For each commercial, each incident is given a sequential number beginning with '1'.

B. Indiv/Gp -- Note if the incident involves the action of one individual(e.g. woman buying food) or a group action (e.g., family eating meal together).

C. Type of Incident -- 1. Indicate if the incident being recorded is body image related (B) or food related (F) using the definitions provided.

2. Note also whether the incident being recorded was verbal (V) (i.e., stated), non-verbal (N) (i.e., indicated by body movement, body language), background (P)(i.e., behaviour not directly involved in main point of program; gives character something to do; prop) or behavioral (B)(i.e., action involving food). This will require a two letter code for this column, e.g., FV for verbal refernce to food, FB for a portrayal of food consumption.

D. Location -- Record location of incident being recorded in one or two words, e.g. kitchen, grocery store, dining room, car, park, etc.

E. Character Type -- Record for character involved using H(uman), A(nimal),

C(artoon), M/C (mechanical/computerized), or O(ther). If it is a group action, also record the number of each character type involved, e.g. 3H for 3 humans.
F. Gender -- Record as M(ale), F(emale) or U(known) with the number of each gender if it is a group action.
G. Age -- Record using I(nfant), C(hild), T(een), Y(oung adult), M(iddle adult), O(lder adult) or U(known). For group actions, record by number (i.e., 1,2,3. . .) and gender (M,F,U), e.g. 2FO for two female older adults.
H. Body Type -- Record as A, B, C, or D as per silhouette sheet attached. If it is a group action, record by gender, age and number, as above. To determine body type, refer to the silhouettes provided. If an adequate proportion of a body is not visible and a determination of body type cannot be made, enter the code NI.
NOTE: If the body type is very muscular, note this in the table.
I. Foods Portrayed -- List all foods involved in incident by generic name. Use brand-specific names only when clearly portrayed in scene.
J. Food Form -- Record form of food item portrayed. Record one form from the following list using the numbers 1 to 8. If 8 (Other) is chosen, specify the form in writing, too.

1. Fresh/Raw (no modifications needed; usually reqires refrigeration.)
2. Canned/Jar
3. Bottled
4. Frozen
5. Dried/Powdered (usually requires reconsitution)
6. Packaged/Ready-to-eat (usually with long shelf life, e.g., cereal)
7. Packaged but requires preparation, e.g., macaroni and cheese dinner.
8. Other, e.g., boil-in-bag, tetrabrick, etc.

K. Action Involved -- Record any action portrayed involving the food item, i.e., purchase, preparation, cooking, serving, ordering, talking about, etc.
L. Meal at which food is portrayed: Indicate whether food is portrayed as part of a meal (Breakfast, Lunch, Supper), between-meal SNack or is not indicated (NI). Use the not indicated code when there are no specific references to the meal involved. Do not assume which meal is being portrayed.

Program ID#_____

Televised Food and Body Image
Related Incident Coding Sheet

Program

I. **General**

Network: ____CBC ____CTV ____ITV ____YTV
Air Date/Day:_____
Air Time of Day:_____
Scene Number:_____

II. **Environment**

Location of Scene:_____
Time of Day in Scene: ____Morning ____Mid-morning
____Noon ____Afternoon ____Supper ____Evening
____NI

III. **Characters**

Number of Characters involved: ____

Types of characters: 1. Human ____
Animal ____
Cartoon ____
Mech/Cmpt ____
Other (specify): _____

2. "Ordinary" people ____
Experts/authorities ____
Famous Figure ____
(Specify: _____)
Other (Specify):_____

Gender(s): Male ___ Female ___ Unknown ___

Age(s): Infant (0-1) ____
Child (2-12) ____
Teen (13-19) ____
Young Adult (20-29) ____
Middle Adult(30-59) ____
Older Adult (60+) ____
Unknown ____

Body Type: A ____
B ____
C ____
D ____
NI ____

Instructions for Completing
Televised Food and Body Image
Related Incident Coding Sheets
Program

Definitions

Body Image -- a psychological construct, it is the view of body shape, size and physical ability, of self or of others, as compared to the perceived norm (Ikeda & Naworski, 1992). It is closely linked to self-esteem, physical changes in the body (puberty, pregnancy, menopause), socialization, prevailing social values and judgements or feedback from others (Rice, 1993). This is not a static concept, but changes throughout the life cycle and in response to changing environmental stimuli (Myers, Jr. & Biocca, 1992; Rice, 1993).

Food -- "includes any article manufactured, sold or represented for use as food or drink for man, chewing gum, and any ingredient that may be mixed with food for any purpose whatever" (Canada Food and Drugs Act, 1981).

Incident -- the action, thought or expressed attitude portrayed by a character regarding food or body image. More than one incident may be present in any given scene. Individual actions should be coded separately, i.e., a woman making cookies and a child eating cookie dough would be coded as two separate incidents. Group actions, where several characters are doing the same thing at the same time, such as a family eating a meal together, would be coded as one incident.

Body Image Attitude Incident -- any portrayed scene with verbal or non-verbal responses to body shape or size of self or others by a character in a televised production, including indications by the producer, director or actor (i.e., exaggerated costume or behaviour, use of a laugh track) presented to be perceived positively or negatively by the viewing audience (Kurman, 1979).

Food-Related Incident -- any portrayed scenes including food.

Consumptive behaviours -- include food related behaviours which involve consumption of food.

Non-Consumptive behaviours -- include food-related behaviours not involving food consumption, such as purchase, preparation, serving, speaking of, etc. This does not include spoken idioms, i.e., "That's a bunch of bologna" or "He's the top banana"

Scene -- consists of all action occurring in a single location. A scene ends when the camera shot changes to another location or time period, e.g. action opens in the kitchen (scene 1), moves to the dining room (scene 2), moves back to the kitchen (scene 3), moves out to the patio (scene 4), etc.

I. General

Complete a coding sheet for each program scene containing a food or body image related reference.

A. Network: Indicate the correct network by checking the appropriate space.

B. Air Date/Day: Enter the date and day of the week the program was aired. Use the format DD-MM-YY and the first three letters of the day, e.g. 150995 FRI

C. Air Time of Day: Enter the hour the program was aired using the 24-hour clock format, i.e., enter 1930 h not 7:30 p.m.

D. Scene Number: Make a notation of the chronological scene number using only scenes with a FRI or BIAI.

II. Environment

A. Location of Scene -- Indicate where the incident took place, i.e., living room, kitchen, grocery store, restaurant, outdoors, in a car, etc.

B. Time of Day in Scene -- Indicate the time of day within the program of the portrayed incident.

II. Characters

A. Number of Characters Involved: Enter the number of characters present during the incident being coded.

B. Types of Characters: 1. Enter the number of characters of each type present during incident being coded. 'Human' and 'animal' categories refer to living beings. 'Cartoon' refers to animated artwork characters. 'Mech/cmpt' refers to mechanical or computer-generated characters.
2. Indicate the number of characters in each category that were present during the incident being coded. These categories refer to all characters present and to the role played by the character during the incident, i.e., if Rosanne is present in a scene from the show *Rosanne*, she would not be coded as a "famous figure". If the incident is from *Late Night* and Rosanne is present, she would be coded as a "famous figure" or possibly an "expert/authority". If Michael Jordon appeared on *Rosanne* as himself, he would be coded as "famous figure".

C. Gender(s): Indicate the number of characters of each gender present during the incident being coded. If the gender is ambiguous, record this as "unknown".

D. Age(s): Indicate by number and gender the ages of all characters present

during the incident being coded. Use 'F' for female, 'M' for male and 'U' for unknown.

E. Body Type(s): Indicate by number, gender and age, along with the body type (A, B, C, D) of each character present during the incident being coded. Use the first letter of each age category (I, C, T, Y, M, O), and M(ale), F(emale), U(known).

e.g. FT would refer to one female teen; 2MM would refer to two males middle adult.

To determine body type, refer to the silhouettes provided. If an adequate proportion of the body is not visible and a determination cannot be made, use the 'NI' code.

Type of Reference: Note whether the incident being recorded was verbal (stated), non-verbal (indicated by body movement, body language), background (behaviour not directly involved in main point of program; gives character something to do; prop) or behavioral (action involving food).

IV. Incident Information

All incidents within one scene will be coded using one sheet rather than separate sheets for each incident. The table format provided allows for recording of multiple incidents.

Begin by recording the scene number in the first column. This refers to the chronological sequence of only those scenes which contain a FRI or BIAI.

A. Incident Number -- For each scene, each incident is given a sequential number beginning with '1'.

B. Indiv/Gp -- Note if the incident involves the action of one individual(e.g. woman buying food) or a group action (e.g. family eating meal together).

C. Type of Incident -- 1. Indicate if the incident being recorded is body image related (B) or food related (F) using the definitions provided.

2. Note also whether the incident being recorded was verbal (V) (i.e., stated), non-verbal (N) (i.e., indicated by body movement, body language), background (P)(i.e., behaviour not directly involved in main point of program; gives character something to do; prop) or behavioral (B)(i.e., action involving food). NOTE: This will yield a two letter code for this characteristic.

D. Location -- Record location of incident being recorded in one or two words, e.g. kitchen, grocery store, dining room, car, park, etc.

E. Character Type -- Record for character involved using H(uman), A(nimal), C(artoon), M/C (mechanical/computerized), or O(ther). If it is a group action, also record the number of each character type involved, e.g. 3H for 3 humans.

F. Gender -- Record as M(ale), F(emale) or U(known) with the number of each gender if it is a group action.

G. Age -- Record using I(nfant), C(hild), T(een), Y(oung adult), M(iddle adult),

O(lder adult) or U(known). For group actions, record by number (i.e., 1,2,3. . .) and gender (M,F,U), e.g. 2FO for two female older adults.

H. Body Type -- Record as A, B, C, or D as per silhouettes provided. If it is a group action, record by gender, age and number, as above. To determine body type, refer to the silhouettes provided. If an adequate proportion of the body is not visible, enter 'NI.'

NOTE: If the body type is very muscular, note this in the table.

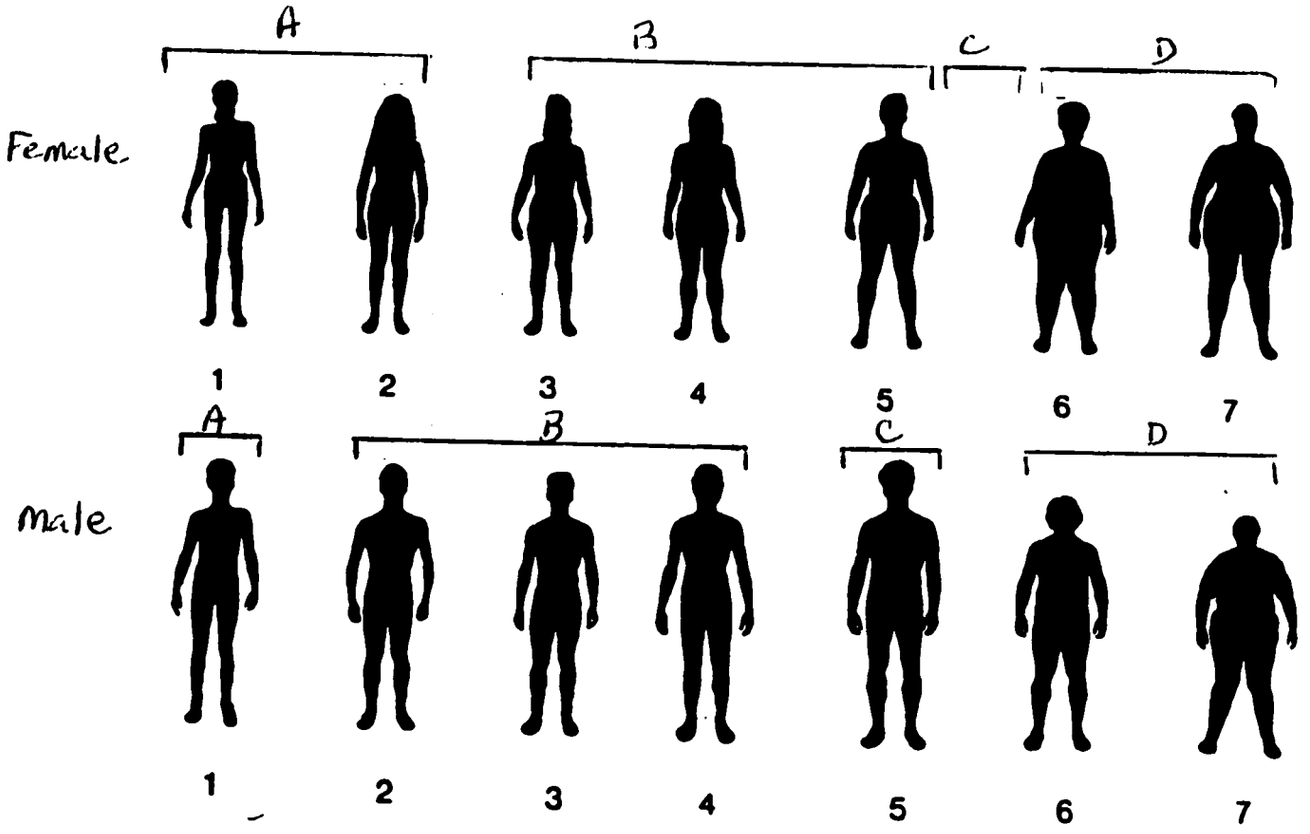
I. Foods Portrayed -- List all foods involved in incident by generic name. Use brand-specific names only when clearly portrayed in scene.

J. Food Form -- Record form of food item portrayed. Record one form from the following list using the numbers 1 to 8. If 8 (Other) is chosen, specify the form in writing, too.

1. Fresh/Raw (no modifications needed; usually reqires refrigeration.)
2. Canned/Jar
3. Bottled
4. Frozen
5. Dried/Powdered (usually requires reconsitution)
6. Packaged/Ready-to-eat (usually with long shelf life, e.g., cereal)
7. Packaged but requires preparation, e.g., macaroni and cheese dinner.
8. Other, e.g., boil-in-bag, tetrabrick, etc.

K. Action Involved -- Record the action portrayed in the incident involving the food item, i.e., purchase, preparation, cooking, serving, ordering, talking about, etc.

L. Meal at which food is portrayed: Indicate whether food is portrayed as part of a meal (**B**reakfast, **L**unch, **S**upper), between-meal **SN**ack or is not indicated (**NI**).Do not assume which meal is being portrayed. Rely on verbal and visual cues to determine the meal. If it is not clearly noted in the production, use the NI code.



(Canadian Dietetic Association, 1988)

Incident Information Form - Programs

Scene #	Incident #	Indiv/Gp	Incident Type	Location	Character Type	Gender	Age	Body Type	Foods Portrayed	Food Form	Action Involved	Meal

Incident Information Form - Commercials

Product Advert.	Incident #	Indiv/Gp	Incident Type	Location	Character Type	Gender	Age	Body Type	Foods Portrayed	Food Form	Action Involved	Meal

Table C1 Percentage Agreement Between Coders on Test of Revised Instruments

Characteristic Coded	Coder Pair A1/B	Coder Pair A1/A2
Programs		
Number of Characters	94%	82%
Number of Scenes	100%	80%[a]
Number of Incidents	94%	71%[b]
Commercials		
Number of Characters	44%[c]	82%
Number of Commercials	83%	100%
Number of Incidents	86%	78%

[a]One further scene was identified by A1.
[b]Reduced agreement was due to the identification of one more scene by A1.
[c]Coder B missed coding for one character only.

Table C2 Reliability Coefficients[a] of Coder Pairs for the Test of the Revised Program Coding Sheet

Characteristic Coded	Coder Pair A1/B	Coder Pair A1/A2
Character Type 1	0.54 (0.91**)	0.33 (0.90**)
Character Type 2	0.62 (0.80)	0.21 (0.64)
Gender	0.71 (0.86)	0.70 (0.90**)
Age	0.63 (0.86)	0.39 (0.77)
Body Type	0.66 (0.73)	0.55 (0.77)

[a]Expressed as Scott's *pi* values and in brackets as Holsti's proportion.
*Values of 0.75 are generally recognized as acceptable for Scott's *pi*.
**Values of 0.90 are generally recognized as acceptable for Holsti's proportion.

Comments and Suggestions for Revisions to Coding Sheet

1. "Character Type 2" lower reliability values were due to coding of one character as an expert by one coder and not the other.

2. These characteristics failed to produce reliable results upon re-testing. They will be eliminated from the "Program Coding Sheet", leaving the only general information regarding network, program name, time of broadcast, etc. The eliminated information will not be lost as this will be gathered either by the Coding Form or the transcription of data.

Table C3 Reliability Coefficients[a] of Coder Pairs from Test of Revised Program Incident Form

Characteristic Coded	Coder Pair A1/B	Coder Pair A1/A2
Individual or Group Incident	1.0*	1.0*
Incident Type 1	1.0*	1.0*
Incident Type 2	0.73	0.74
Location	1.0*	1.0*
Character Type	1.0*	1.0*
Gender	1.0*	1.0*
Age	1.0*	1.0*
Body Type	0.14[b]	1.0*
Food(s) Portrayed	0.90*	1.0*
Food Form	0.88*	1.0*
Action Involved	0.89*	1.0*
Meal Involved	---[c]	1.0*

[a]Expressed as Scott's *pi* values.
[b]The lower reliability rating was due to differences with coding of one character.
[c]Insufficient data to calculate Scott's *pi* value.
Note: No body image attitude incidents were present in this 30 minute sample.

Comments and Suggestions for Revisions to Incident Form

1. Confusion existed for coders regarding the Incident Type 2 choices of "Background" and "Portrayal." This needs to be clarified during training sessions and in the coding

instructions.

2. Inter-coder reliability was low for the "Meal" characteristic due to coder B choosing "Snack" when coder A1 chose "Not Indicated." Again, training must stress the importance of not assuming a particular meal without the actual data to indicate meal.

3. The "Body Type" characteristic performed well here. There was only controversy with one character. (Scott's *pi* may create some difficulty when most of the codes fall into only one category.)

Table C4 Reliability Coefficients[a] of Coder Pairs from Test of the Revised Commercial Coding Sheet

Characteristic Coded	Coder Pair A1/B	Coder Pair A1/A2
Commercial Length	1.0*	1.0*
Character Type 1	---[b] (0.60)	--- (0.90**)
Character Type 2	--- (0.64)	--- (0.87)
Gender	--- (0.64)	--- (0.92**)
Age	0.23 (0.65)	0.76* (0.87)
Body Type	0.19 (0.84)	0.49 (0.74)
Advertising Messages	0.69 (0.84)	0.70 (0.77)

[a]Expressed as Scott's *pi* values with Holsti's proportion in brackets.
[b]Insufficient data to calculate Scott's *pi*.
*Values of 0.75 and above are generally recognized as acceptable for Scott's *pi*.
**Values of 0.90 and above are generally recognized as acceptable for Holsti's proportion.

Comments and Suggestions for Revisions to Sheet

1. "Commercial Length" characteristic improved with more specific instructions for measurement.

2. The remaining characteristics in Table C4 failed to produce reliable results for either

inter-coder or intra-coder reliability scores. Therefore, these characteristics will be removed from the final Commercial Coding Sheet. The information provided by these characteristics will be present in either the Commercial Incident Form or the transcriptions of incidents. The Commercial Coding Sheet will retain the general information regarding product advertised, advertiser, network, commercial length, etc.

Table C5 Reliability Coefficients[a] of Coder Pairs for Test of Revised Commercial Incident Form

Characteristic Coded	Coder Pair A1/B	Coder Pair A1/A2
Individual or Group Incident	1.0*	1.0*
Incident Type 1	1.0*	1.0*
Incident Type 2	0.77*	1.0*
Location	1.0*	1.0*
Character Type	1.0*	1.0*
Gender	1.0*	1.0*
Age	1.0*	1.0*
Body Type	1.0*	1.0*
Food(s) Portrayed	1.0*	1.0*
Food Form	0.88*	1.0*
Action Involved	0.71	1.0*
Meal Involved	1.0*	1.0*

[a]Expressed as Scott's *pi* values.
*Values of 0.75 and above are generally recognized as accepted for Scott's *pi*.

Comments and Suggestions for Revisions

1. With improved instructions and enhanced training this instrument seems to be functioning well.

2. The characteristic "Action Involved" had a reduced reliability due to coder discrepancies between "Portrayal" and "Behaviour" choices for two incidents.

3. It is interesting to note that the characteristics Character Type, Gender, Age and Body Type were reliably coded for this tabular format but were not for the checklist

format of the Commercial Coding Sheet.

Appendix D

Final Content Analysis Form
and Instructions with
Intra-Rater Reliability Coefficients

Commercials ID#_____

Televised Food and Body Image Related Messages
Coding Sheet

I. **General**

Network: ____
Product advertized:_____
Presented by: ____Marketing Board ____Company ____NGO
____Government ____Other ____Unknown
Air Time of Day:_____
Location used:_____
Length:_____

Commercials ID#_____

Televised Food and Body Image Related Messages
Coding Sheet

I. **General**

Network: ____
Product advertized:_____
Presented by: ____Marketing Board ____Company ____NGO
____Government ____Other ____Unknown
Air Time of Day:_____
Location used:_____
Length:_____

Commercials ID#_____

Televised Food and Body Image Related Messages
Coding Sheet

I. **General**

Network: ____
Product advertized:_____
Presented by: ____Marketing Board ____Company ____NGO
____Government ____Other ____Unknown
Air Time of Day:_____
Location used:_____
Length:_____

Instructions for Completing
Televised Food and Body Image Related
Messages Coding Sheet

Commercials

Definitions

Body Image -- a psychological construct, it is the view of body shape, size and physical ability, of self or of others, as compared to the perceived norm (Ikeda & Naworski, 1992). It is closely linked to self-esteem, physical changes in the body (puberty, pregnancy, menopause), socialization, prevailing social values and judgements or feedback from others (Rice, 1993). This is not a static concept, but changes throughout the life cycle and in response to changing environmental stimuli (Myers, Jr. & Biocca, 1992; Rice, 1993).

Food -- "includes any article manufactured, sold or represented for use as food or drink for man, chewing gum, and any ingredient that may be mixed with food for any purpose whatever" (Canada Food and Drugs Act, 1981).

Incident -- the action, thought or expressed attitude portrayed by a character regarding food or body image. More than one incident may be present in any given scene. Individual actions should be coded separately, i.e., a woman making cookies and a child eating cookie dough would be coded as two separate incidents. Group actions, where several characters are doing the same thing at the same time, such as a family eating a meal together, would be coded as one incident.

Body Image Attitude Incident -- any portrayed scene with verbal or non-verbal responses to body shape or size of self or others by a character in a televised production, including indications by the producer, director or actor (i.e., exaggerated costume or behaviour, use of a laugh track) presented to be perceived positively or negatively by the viewing audience (Kurman, 1979).

Food-Related Incident -- any portrayed scenes including food.

Consumptive portrayals -- include food related behaviours which involve consumption of food.

Non-Consumptive portrayals -- include food portrayals not involving food consumption, such as purchase, preparation, serving, speaking of, etc. This does not include spoken idioms, i.e., "That's a bunch of bologna" or "He's the top banana." It does include visual portrayals of

food both with and without characters present.

Scene -- consists of all action occurring in a single location. A scene ends when the camera shot changes to another location or time period, e.g. action opens in the kitchen (scene 1), moves to the dining room (scene 2), moves back to the kitchen (scene 3), moves out to the patio (scene 4), etc.

I. General

Complete a form for each commercial containing a food or body image related incident.

NOTE: ID# -- to be complete by researcher

A. Network: Record the network on which the program aired.

B. Product Advertized: Record the advertized product name.

C. Presented by: Indicate the sponsor of the commercial by checking the appropriate space, i.e., an agricultural commodity marketing board, food industry corporation, government department, NGO (non-governmental organization) or unknown.

D. Air Time of Day: Enter the hour the program was aired using the 24-hour clock format, i.e., enter 1930 h not 7:30 p.m.

E. Location used: List the location(s) of the scene(s) in the commercial, i.e., living room, kitchen, grocery store, restaurant, outdoors, in a car, etc.

F. Length: Enter the commercial length in seconds, i.e., 15 s, 30 s, 60 s. Check this using a stopwatch to ensure accuracy.

II. Characters

A. Number of Characters in Ad: Enter the number of characters appearing during the commercial being coded. Include a count of all types of characters, i.e., humans, animals, cartoons, mechanical, computer-generated, etc.

B. Types of Characters: 1. Enter the number and gender (F, M, U) of characters of each type present during commercial being coded. 'Human' and 'animal' categories refer to living beings. 'Cartoon' refers to animated artwork characters. 'Mech/cmpt' refers to mechanical or computer-generated characters.

2. Indicate the number of characters in each category that were present during

the commercial being coded. These categories refer to all characters types.

C. Gender(s): Indicate the number of characters of each gender present during the commercial being coded. If the gender is ambiguous, record this as "unknown".

D. Age(s): Indicate by number and gender the ages of all characters present during the commercial being coded. Use 'F' for female, 'M' for male and 'U' for unknown.

E. Body Type(s): Indicate by number, gender and age the body type of each character present during the commercial being coded. Use the first letter of each age category (I, , T, Y, M, O), and **M**(ale), **F**(emale), **U**(known).

e.g. FT would refer to one female teen; 2MM would refer to two males middle adult.

To determine body type, refer to the silhouettes provided.

IV. Incident Information Form

All incidents within one commercial will be coded using one sheet rather than separate sheets for each incident. The table provided allows for recording of multiple incidents and commercials.

A. Product Name -- Record the product being advertised in the commercial.

B. Incident Number -- For each commercial, each incident is given a sequential number beginning with '1'.

C. Indiv/Gp -- Note if the incident involves the action of one individual(e.g. woman buying food) or a group action (e.g., family eating meal together).

NOTE: If a character is eating an orange with other characters present who are not eating oranges, the incident would be coded as "Individual." If all characters present are eating oranges, it would be coded as "Group."

D. Type of Incident -- Indicate if the incident being recorded is body image related (B) or food related (F) using the definitions provided.
Each incident should have one other definition code. Note also whether the incident being recorded was verbal (**V**) (i.e., stated), non-verbal (**N**) (i.e., indicated by body movement, body language, facial expression), background (**P**) (i.e., food present in background of the scene; a prop; portrayed alone) or behavioral (**B**) (i.e., action involving food).

E. Location -- Record location of incident being recorded in one or two words,

e.g. kitchen, grocery store, dining room, car, park, etc.

F. Character Type -- Record for character involved using **H**(uman), **A**(nimal), **C**(artoon), **M/C** (mechanical/computerized), or O(ther). If it is a group action, also record the number of each character type involved, e.g., 3H for 3 humans.

G. Gender -- Record as **M**(ale), **F**(emale) or **U**(known). If recording a Group incident, also record the number of each gender participating, e.g., 2M,3F for 2 male and 3 female characters.

H. Age -- Record using **I**(nfant), **C**(hild), **T**(een), **Y**(oung adult), **M**(iddle adult), **O**(lder adult) or **U**(known). For group actions, record by number (i.e., 1,2,3. . .) and gender (M,F,U), e.g., 2FO for two female older adults.

I. Body Type -- Record as A, B, C, or D as per silhouette sheet provided. If it is a group action, record by gender, age and number, as above. To determine body type, refer to the silhouettes provided. For group incidents, record number and gender with body type, e.g., 2MA,1FT for two average male and one thin female character. Make a notation if the body is very muscular.

If the body of a character is not sufficiently revealed to assess body type, record as NI (not indicated).

J. Foods Portrayed -- List all foods involved in incident by generic name. Use brand-specific names only when clearly portrayed in scene.

K. Food Form -- Record form of food item portrayed. Record one form from the following list using the numbers 1 to 8. If 8 (Other) is chosen, specify the form in writing, too.

1. Fresh/Raw (no modifications needed; usually requires refrigeration.
2. Canned/Jar
3. Bottled
4. Frozen
5. Dried/powdered (usually requires reconstitution)
6. Packaged/Ready-to-eat (usually with long shelf life; e.g., cereal)
7. Packaged but requires preparation (e.g., macaroni and cheese dinner)
8. Other (e.g., boil-in-bag, tetrabrick, etc.)
9. Prepared/Cooked

L. Action Involved -- Record any action portrayed involving the food item(s) portrayed. Record the number of the action involved using the following list. If 8 (Other) is chosen, specify action in writing, too.

1. Purchase
2. Order
3. Preparation
4. Cooking
5. Serving
6. Speaking about
7. Consumption
8. Other

M. Meal at which food is portrayed: Indicate whether food is portrayed as part of a meal (**B**reakfast, **L**unch, **S**upper), between-meal **SN**ack or is not indicated (**NI**). If it is not clearly apparent which meal is involved, code as NI. Do not assume anything beyond what is presented on the commercial.

Program ID#_____

Televised Food and Body Image
Related Incident Coding Sheet

Program

I. **General**

Network: ____
Air Date/Day:_____
Air Time of Day:_____
Scene Number:_____

II. **Environment**

Location of Scene:_____
Time of Day in Scene: ____Morning ____Mid-morning
____Noon ____Afternoon ____Supper ____Evening
____NI

Televised Food and Body Image
Related Incident Coding Sheet

Program

I. **General**

Network: ____
Air Date/Day:_____
Air Time of Day:_____
Scene Number:_____

II. **Environment**

Location of Scene:_____
Time of Day in Scene: ____Morning ____Mid-morning
____Noon ____Afternoon ____Supper ____Evening
____NI

Instructions for Completing
Televised Food and Body Image
Related Incident Coding Sheets
Program

Definitions

Body Image -- a psychological construct, it is the view of body shape, size and physical ability, of self or of others, as compared to the perceived norm (Ikeda & Naworski, 1992). It is closely linked to self-esteem, physical changes in the body (puberty, pregnancy, menopause), socialization, prevailing social values and judgements or feedback from others (Rice, 1993). This is not a static concept, but changes throughout the life cycle and in response to changing environmental stimuli (Myers, Jr. & Biocca, 1992; Rice, 1993).

Food -- "includes any article manufactured, sold or represented for use as food or drink for man, chewing gum, and any ingredient that may be mixed with food for any purpose whatever" (Canada Food and Drugs Act, 1981).

Incident -- the action, thought or expressed attitude portrayed by a character regarding food or body image. More than one incident may be present in any given scene. Individual actions should be coded separately, i.e., a woman making cookies and a child eating cookie dough would be coded as two separate incidents. Group actions, where several characters are doing the same thing at the same time, such as a family eating a meal together, would be coded as one incident.

Body Image Attitude Incident -- any portrayed scene with verbal or non-verbal responses to body shape or size of self or others by a character in a televised production, including indications by the producer, director or actor (i.e., exaggerated costume or behaviour, use of a laugh track) presented to be perceived positively or negatively by the viewing audience (Kurman, 1979).

Food-Related Incident -- any portrayed scenes including food.

Consumptive portrayal -- includes food related behaviours which involve consumption of food.

Non-Consumptive portrayal -- includes food-related portrayals not involving food consumption, such as purchase, preparation, serving, speaking of, etc. This does not include spoken idioms, i.e., "That's a bunch of bologna" or "He's the top banana."

Scene -- consists of all action occurring in a single location. A scene ends when the camera shot changes to another location or time period, e.g. action opens in the kitchen (scene 1), moves to the dining room (scene 2), moves back to the kitchen (scene 3), moves out to the patio (scene 4), etc.

I. General

Complete a coding sheet for each program scene containing a food or body image incident.

A. Network: Record the network on which the program aired.

B. Air Date/Day: Enter the date and day of the week the program was aired. Use the format DD-MM-YY and the first three letters of the day, e.g. 150995 FRI

C. Air Time of Day: Enter the hour the program was aired using the 24-hour clock format, i.e., enter 1930 h not 7:30 p.m.

D. Scene Number: Within each program, each scene containing a food or body image attitude incident is given a sequential number beginning with '1'.

II. Environment

A. Location of Scene -- Indicate where the incident took place, i.e., living room, kitchen, grocery store, restaurant, outdoors, in a car, etc.

B. Time of Day in Scene -- Indicate the time of day within the program of the portrayed incident.

IV. Incident Information Form

All incidents within one scene will be coded using one sheet rather than separate sheets for each incident. The table format provided allows for recording of multiple incidents.

A. Scene Number -- Record the scene number within which the incident occurs.

B. Incident Number -- Within each scene, each incident is given a sequential number beginning with '1'.

C. Indiv/Gp -- Note if the incident involves the action of one individual(e.g., woman buying food) or a group action (e.g., family eating meal together).

NOTE: If a character is eating an orange with other characters present

who are not eating oranges, the incident would be coded as "Individual." If all characters present are eating oranges, it would be coded as "Group."

D. Type of Incident -- Indicate if the incident being recorded is body image related (**B**) or food related (**F**) using the definitions provided. Provide a second one letter code by noting whether the incident being recorded was verbal (**V**) (i.e., stated), non-verbal (**N**) (i.e., indicated by body movement, body language, facial expression), background (**P**)(i.e., food appearing in the background of the scene; a prop; food portrayed alone) or behavioral (**B**) (i.e., action involving food).

E. Location -- Record location of incident being recorded in one or two words, e.g. kitchen, grocery store, dining room, car, park, etc.

F. Character Type -- Record for character involved using **H**(uman), **A**(nimal), **C**(artoon), **M/C** (mechanical/computerized), or **O**(ther). If it is a group action, also record the number of each character type involved, e.g., 3H for 3 humans.

G. Gender -- Record as **M**(ale), **F**(emale) or **U**(known). If it is a group action, record the number of each gender present during the incident.

H. Age -- Record using **I**(nfant), **C**(hild), **T**(een), **Y**(oung adult), **M**(iddle adult), **O**(lder adult) or **U**(known). For group actions, record by number (i.e., 1,2,3. . .) and gender (**M,F,U**), e.g., 2FO for two female older adults.

I. Body Type -- To determine body type, refer to the silhouettes provided. Record as **A**, **B**, **C**, or **D** as per silhouette form. If it is a group action, record by gender, age and number. Make note on the form if the body is very muscular. If the body of a character is not adequately revealed to make an assessment, record as NI (not indicated).

J. Foods Portrayed -- List all foods involved in incident by generic name. Use brand-specific names only when clearly portrayed in scene.

K. Food Form -- Record form of food item portrayed. Record one form from the following list using the numbers 1 to 8. If 8 (Other) is chosen, specify the form in writing, too.

1. Fresh/Raw (no modifications needed; usually requires refrigeration.
2. Canned
3. Bottled

4. Frozen
5. Dried/powdered (usually requires reconstitution)
6. Packaged/Ready-to-eat (usually with long shelf life; e.g., cereal)
7. Packaged but requires preparation (e.g., macaroni and cheese dinner)
8. Other (e.g., boil-in-bag, tetrabrick, etc.).
9. Prepared/Cooked

L. Action Involved -- Record any action portrayed involving the food item(s) portrayed. Record the number (1 to 8) of the action involved using the following list. If 8 (Other) is chosen, specify action in writing, too.

1. Purchase
2. Order
3. Preparation
4. Cooking
5. Serving
6. Speaking about
7. Consumption
8. Other

M. Meal at which food is portrayed: Indicate whether food is portrayed as part of a meal (**B**reakfast, **L**unch, **S**upper), between-meal **SN**ack or is not indicated (**NI**). If it is not clearly apparent which meal is involved, code as NI. Do not assume anything beyond what is presented in the scene.

Incident Information Form - Programs

Scene #	Incident #	Indiv/Gp	Incident Type	Location	Character Type	Gender	Age	Body Type	Foods Portrayed	Food Form	Action Involved	Meal

Incident Information Form - Commercials

Product Advert.	Incident #	Indiv/Gp	Incident Type	Location	Character Type	Gender	Age	Body Type	Foods Portrayed	Food Form	Action Involved	Meal

Table D1 Reliability Coefficients[a] for Intra-Coder Reliability Test of Final Study Instrument

Characteristic Coded	Coder Pair A1/A2
Individual or Group Incident	0.94*
Incident Type 1	1.0*
Incident Type 2	0.98*
Location	1.0*
Character Type	1.0*
Gender	1.0*
Age	0.86*
Body Type	0.95*
Food(s) Portrayed	1.0*
Food Form	1.0*
Action Involved	1.0*
Meal Involved	1.0*

[a]Expressed as Scott's *pi* values.
*Values of 0.75 and above are generally recognized as accepted.

Table D2 Percentage Agreement Within Coder A for Final Coding Instrument[a]

Characteristic Coded	Coder Pair A1/A2
Number of Incidents	90%
Number of Scenes	100%
Number of Commercials	100%

[a]Includes combined Commercial and Program Incidents.

Appendix E

Sample Contextual Transcript
from the Pilot Test

Sample
Contextual Information

Transcription and Descriptive Data

Scene 1

Scene takes place in a coffee shop and opens on young female character waiting on young male customer unknown to waitress.

Waitress: OK. OK. I checked. We have Earl Grey, English Breakfast, cinnamon stick, chamomile, mint medley, blackberry, and, uh, oh wait. There's one more. Um. Lemon soother. <giggle> <Male customer looks slightly puzzled.> You're not the guy who asked for the tea are you? <laugh track> OK.

Medium shots of both characters. No music in background. Both characters are attractive.

Commercial 1 Snackwells Cereal Bars

Scene opens on a man in white lab coat, white shirt, and black tie. Shorter, balding with glasses. He has a serving tray in front of him which has a strap around his neck. On the tray are 3 boxes of product, a pile of wrapped bars and a plate with unwrapped bars. A woman customer is in close proximity. She is wearing a red knitted sweater, wedding band and has reddish hair. She appears not to have any make up on. Her voice has a nasal quality to it and she speaks in a breathless manner. The man has a quiet, unassuming manner. They are in a grocery store aisle. The voiceover is a strong male announcer's voice.

Man: Would you like to try new Snackwells Cereal Bars?
Customer: Snackwells for breakfast? <Close up on her hand as she takes bar. Close up on her face as she takes a bite and chews.> MMM. Say, this is delicious.
Man: And there the only cereal bar that's fat free.
Customer: Can I have another?
Man: Sorry. We only have so <customer slides all bars off of sample tray into her shopping basket.> many. <Man looks shocked as customer walks away>
Voiceover: <view of 3 bars on plate each a different flavour.>New fat free Snackwells Cereal Bars.<longer shot with plate of 3 bars and 3 boxes -- one of each flavour> So good can we ever make enough?

Commercial 2 Burger King

<Scene opens on movie marquis of 'Pocahantas'. Camera zooms into crowd below marquis> Male Voiceover: Kid's aren't the only ones in love with Pocahantas.

<Close up of a couple (late 20s or early 30s) through a ticket window from the viewpoint of the ticket seller.>
Ticket seller (not shown on screen): How many sir?
Man: Two please. (in excited tone)

Voiceover: <scene changes to animated John Smith helping Pocahantas out of a canoe> It's in theatres everywhere.

Man 2: <scene change to couple in late 20s; medium shot; still outside theatre; one other man in the background> Its our second time. <woman 2 holds up 3 fingers and mouths the words 'third time'> Third time. (proudly stated)

Voiceover: <scene changes to Burger King sign with moving floodlights reminiscent of Hollywood premieres> Burger King's in love with Pocahantas, too. <Scene changes to animated character in movie -- large white male holding a bulldog and then dissolves to a close up of a glass with a picture of the man and dog on it.>They've got these great new glasses straight out of Disney's new <cut to segment from movie showing a racoon and bird acting surprised/shocked> Pocahantas movie. <dissolve to shot of 4 different character glasses with notes "Collect all 4 shatter-resistant acrylic" in white san serif print and "99C" in yellow on red flag> They're only 99 cents with any value meal. <cut to close up of burger, fries and a beverage> And they're only at Burger King.

Woman 3: <Cut to scene of woman reading a newspaper, seated in kitchen of home. She looks over the newspaper and says...> Meeko and Flick go on the top shelf dear. (in a parental/condescending tone).

Voiceover: <Cut to man 3 putting glasses away on shelves. There are 2 wall cupboards each with 3 shelves filled with the glasses. He nods and moves the glass from the middle shelf to the top shelf.> Kids aren't the only ones that collect them. Cut to woman 3 still reading paper. She laughs and nods. Cut to man 3 who turns with a smile of accomplishment.>

Voiceover: <Cut to close up of burger, large fries, beverage in paper cup and an empty plastic glass> Burger King. Get your burger's worth. <Logo and phrase appear on screen as stated.>

Scene 2 Coffee Shop

<Monica enters carrying the mail and gives it to Rachel.>
Rachel: Oh, cool. A free sample of coffee. <holds sample from mail>
Monica: Oh, good. 'cause where else would we get any? <sarcastic tone>
<laugh track>
Rachel: <looks around> oh, stt. Right. <Picks up another piece of mail>
Oh great.
Monica: What is it?
Rachel: Country Club newsletter. My mother sends me the engagement notices for inspiration. <laugh track> <Takes a latte mug from under the counter and gives it to Monica> <Monica pours herself some coffee while Rachel reads the announcements>

Both women are in their mid-20s, attractive, slim and wearing tight-fitting clothing. Shots are medium. Monica never touches mug after pouring coffee.

Scene 3 Kitchen Ross and Rachel are sitting around the table with open packages of take-out Chines food, plates of food and chopsticks.

Ross: Marcel. Bring me the rice. Come on. Bring me the rice. Come on. <Marcel the monkey picks up the unopened package of rice which is by the couch and takes it to Ross at the table.> Good boy. Good boy. Come here. Give me the rice. Thank you. Good boy. <Marcel hands the rice to Ross> Well I see he's finally mastered the difference between "bring me the" and "Pee in the" <laugh track>. <Ross looks to Rachel for a reaction and she is lost in thought, picking at her rice with her chopsticks> "Bring me the" and ... Rach? <laugh track>
Rachel: <turning to look at Ross> What?
Ross: Hi!
Rachel: Oh, I'm sorry. Oh. This is so stupid. <indicating the newsletter after stabbing the rice with her chopsticks as she put them down> I mean I gave Barry up, right?
Ross: Mmm. <nodding agreement. Wiping his mouth with a napkin.>
Rachel: I should be happy for them. I am. I'm happy for them.
Ross: Really?
Rachel: No. <laugh track> Oh. Oh, I guess it would be different if I were with somebody.
Ross: Oh. What happened to- uh - "forget relationships", "I'm done with men"; the whole penis embargo? <laugh track> <Ross has been playing with his food and straightening his chopsticks throughout his question>
Rachel: Oh, I don't know. Its not about no guys; its about the right guy, you know?
Ross: Huh. <nodding agreement; taking a mouthful of rice with the

chopsticks>
Rachel: You see With Barry it was safe and it was easy, but there was no heat. You know? And with Paulo all there was was heat. Raw, animal, sexual . . .
Ross: <interrupting> Wait. Wait. I got it.<laugh track> I was there. <laugh track>

Scene continues to explore nature of relationships before being interrupted by the return of the other 4 main characters.

Scene 4 Joe-G Pizza

<Scene opens with a pizza in the middle of a small table, three male hands each taking a slice and 2 styrofoam cups>
Male 1: You know, I cannot even believe we are having this discussion.
Joey: I agree. I'm, like, in disbelief.<Male 1 takes a bite and chews>
Male 1: Don't you think if things were going to happen with Rachel, they would have happened already?
Ross: I'm telling you. She said she was looking for a relationship with someone exactly like me.
Joey: She really said that? <wiping his hands on a napkin>
Ross: Well, I added the exactly like me part, but . . .<laugh track> But she is looking for someone and someone is going to be there tonight. <Male 1 takes a drink from his cup. Ross is picking up styrofoam cup and moving it towards his mouth while speaking. Cut to Joey>
Joey: Tonight tonight? <cut to Ross>
Ross: Well, I think its going to be perfect, you know. It's just going to be the two of us. She's spent all day taking care of my monkey. <laugh track>
Male 1: <heavy sigh> I don't remember the last time I got a girl to take care of my monkey. <laugh track> <Cut to Joey laughing> You know, I thought after work I'd go pick up a bottle of wine <Joey takes a bit of pizza while Ross talks>, go over there and, uh, try to woo her. <Joey nods approval while chewing>
Male 1: <snaps fingers> Hey, you know what you should do?
Ross: What?
Male 1: You should take her back to the 1890s when that phrase was last used. <Ross takes a drink and takes a bite of pizza as scene ends.>

Scene 5 Living Room with male 1, Joey, Phoebe, Monica and Rachel discussing the missing monkey. Rachel is wearing a short plaid kilt, tight cropped sweater and knee highs. Monica is wearing an open necked shirt and tight jeans; Phoebe is wearing a form-fitting tunic and pants. Joey is wearing a sweatshirt and jeans. Male 1 is wearing a sports jacket, shirt and pants. All characters are attractive and have thin or average body

types. It is evening. Shots are long and medium.

Rachel: Come on you guys. What are we going to do? What're we going to do?
Joey: All right. All right. You're a monkey. You're loose in the city. Where do you go?
Male 1: Ok. Its his first time out, so he'll probably want to do some of the touristy things. <laugh track> I'll go to CATS. You go to the Russian Tea Room.
Rachel: <as she hits Male 1 with a throw cushion> Oh, my, god. Come on you guys. He's going to be home any minute. He's going to kill me.

Scene 6 Hallway. Monica and Phoebe knock on a door and a middle-aged man answers. He is wearing a bath robe. He is tall and of average body size.

Mr. Heckle: Wha'da ya want?
Monica: Mr. Heckle, Our friend lost a monkey. Have you seen it?
Mr. Heckle: <looking on the floor by the door> I left a Belgian waffle out here. Did you take it?
Monica: No.
Phoebe: Why would you leave your Belgian waffle in the hall?
Mr. Heckle: I wasn't ready for it.
Monica: <exasperated tone> A monkey. Have you seen a monkey?
Mr. Heckle: I saw Regis Philben once.
Phoebe: OK. Thank you, Mr. Heckle. <as Monica and Phoebe exit into the camera>
Mr. Heckle: You owe me a waffle. <looking after them as they leave>

Scene 7 Living Room Rachel is on the phone reporting the missing monkey. As Ross enters she covers up her conversation by pretending to order take-out.

Rachel: He's a black Capuchin monkey with a white face . . .with Russian dressing and pickles on the side. Ok. Thanks. <hangs up phone> Hi!
Ross: Hi. How'd, uh, how'd it go today?
Rachel: Oh, great. It went great. Really great. <Ross puts the wine on the table> Hey, is that wine?
Ross: Yeah. You,uh, you want some?
Rachel: Oh, I'd love some. But you know what, you know what? Let's not drink it here. I'm feeling kinda crazy. You want to go to Newark? <laugh track>
Ross: Uh, OK. Yeah, we could do that. But before we head off for the murder capital of the northeast, I was, uh, kinda wanted to run something by you. You know how we were, uh, you know, talking before about, uh, relationships and stuff, well <uncorks the wine>
Rachel: Oh god, Ross. I can't do this.

Ross: OK. Quick and painful. <laugh track> <Ross recorks the wine>

Scene 8 Balcony Marcel is sitting on the balcony eating what appears to be a waffle. Ross and Rachel can be seen through the window arguing in the background where she has just told him that she has lost Marcel. <sounds of the city rise as the camera pulls back to show us Marcel changing the focus of attention from Ross and Rachel> <Laugh track>

Commercial 3 Red Lobster Scene opens with 3 men in white chefs garb and hats looking down into the camera as if it were the plate of food they are working on.

Chef 1: We could move the grilled shrimp over.

Voiceover: <cut to deep fried shrimp falling> How did Red Lobster fit <cut to plate with 30 shrimp and veggies> 30 shrimp on one plate for $9.99? It wasn't easy <cut to 3 chefs> Crispy fried shrimp <cut to hand dipping a deep fried shrimp in cocktail sauce>, grilled shrimp<cut to kebab of shrimp and zucchini> and savory scampi <cut to plate of 30 shrimp with sauteed shrimp in centre; overlay of 30 shrimp $9.99>Thirty shrimp -- just 9.99. <cut to pan of sauteeing shrimp being tossed and overlay of company logo>. Hurry to Red Lobster. <Cut to 3 chefs>

Chef 1: Where're we going to put the lemon <holding lemon wedge>.

Chefs are shown only in close up and in up-shot. Food shots are well lit and in close up only on white background. The location is only assumed as there is no shot of the kitchen or the restaurant.

Commercial 4 Chilis

This is a fast paced commercial with many cuts and scenes. People are fairly hidden due to being seated or standing behind seated people, so body size is not readily apparent. Everyone is smiling and seems to be having a good time.

Jingle: <sung by perky female voice>If you're wondrin' what's cookin' at Chilis <scenes include wall clock at 7:15 with service tray passing in front of it; a plate of ?chili rellenos with jalapeno slices, and red pepper garnish is slid in front of viewer in extreme closeup; and a waitress delivers a tray of food to a table -- medium shot; food not seen> Well, we're cookin' up a table of fun. <a plate of ribs and fires is slid in front of viewer in close up; a male had sprinkles yellow cheese offer a beef fajita; a waitress delivers food to a table of two women with the one facing the camera looking very surprised in a delighted way>. We've got a menu that'll bring you to Chilis -- a little something for everyone <pan of the menu; male and female conferring over the menu; hand dipping drumettes into sauce; grilled boneless chicken breast topped with grilled pineapple slice is placed on a bed of rice; fade to pasta topped with spinach, tomatoes and grated parmesan -- shot closing on the plate; fade to grilled chicken breast, sliced crosswise and topped with diced bell

peppers has sauce poured over it (?cheese sauce)> You got it flame grilled <fade to strip loin being turned on grill> barbequed <cut to brushing of rib steaks with bbq sauce> to make it a date <cut to female looking coyly at male>. And if your sweet tooth's ?speaking we can shake it away <cut to carrot cake; cut to oreo pie being dished up; cut to cheese cake with strawberry topping on plate; cut to vanilla ice cream with chocolate sauce and walnut being poured over it> Let your appetite bring you to Chilis, 'cause we're cooking up a table of fun <cut to female customer looking pleased as server brings food; happy server bringing a pizza to a table of 4; server cuts in front of camera; plate of grilled chicken salad is slid in front of viewer; cut to table of 4 who are having a laugh together; cut to chilis logo on computer screen at restaurant; server passes in front of screen carrying a tray>

Voiceover: <male voice> Chilis. Like no place else.

Scene 8 Kitchen

Scene contains Rachel, Monica, Phoebe, Ross and Louisa from animal control. The 4 major characters are thin or average body size and wear stylish, form-fitting clothes. Louisa is obese. She is dressed in a uniform that is dull khaki brown reminiscent of a military uniform. She wears slacks and a shirt with a darker brown bomber style jacket over top. Her hair is pulled back in a severe french-braided style with a braid in the back and she carries a loop to catch animals. She also has a tranquillizer gun in a hip holster. The pants are belted at the waist and accentuate her shape. Monica, Rachel and Louisa are seated at the table. Ross and Phoebe are standing and moving around the kitchen. On the table are a cereal bowl with a spoon resting in it, a glass with about an inch of orange "juice" and a mug. Phoebe carries a bottle of water and plays with the cap during the scene.

Louise: You have no idea who I am, do you?
Monica: No. Rachel: No
Louisa: <getting up and walking around holding the loop like a riding crop in her left hand hitting it into her right palm> Well, maybe that's because you spent 4 years ignoring me. I mean, would it have been so hard to say "Morning Louisa" or "Nice overalls"? <laugh track>
Monica: Oh, I'm. I'm so sorry.
Louisa: Well, its not so much you. You were fat. You had your own problems. <laugh track> But you. What a bitch!
Rachel: What!!
Monica: All right. Be that as it may . . .

Scene 9 Hallway/Doorway

Joey and Male 1 are speaking to a young blonde woman at her doorway. She is dressed in short shorts and a snug, cropped, lowcut t-shirt. Her radiator is broken and she is sweating. Her roommate comes to the door with a pitcher of fluid dressed in an

oversized man's shirt.

Woman 2: Taste this daiquiri. Is there too much rum in here? <cut to two men who looked interested and desperate>

Woman 1: Hope you find your monkey.

Scene 10 Hallway

Marcel the monkey enters the hallway. There is a half-peeled banana in the middle of the hallway floor. He approaches it and begins to eat. Two human hands reach down and pick up both him and the banana. <Background music is rock style>.

Scene 11 Sidewalk

Ross and Rachel are outside the apartment building on the sidewalk calling for Marcel. Other people are passing by. Traffic sounds in background and a flashing light off camera. Characters are arguing. A man in orange overalls and a longshoreman's toque walks by carrying an open case of bananas.

Ross: Banana Man. Rachel: Hey! <they run after him>

Scene 12 Hallway/Doorway

In the hallway of the apartment building, the 6 main characters are gathered outside Mr. Heckle's door. Ross is holding the case of bananas and knocks on the door.

Ross: Hi! Did you order some bananas?

Mr. Heckle: What about it?

Ross: Give me my monkey back.

Mr. Heckle: I don't have a monkey.

Rachel: Then what's with all the bananas?

Mr. Heckle: Potassium. <laugh track>

Scene 13 Doorway

Ross and Rachel are in Mr. Heckle's apartment and Louisa is outside with Marcel. Louisa is still her uniform, Rachel in her kilt, cropped sweater and a short over-jacket and Ross is wearing a suit, tie and long overcoat.

Ross: Alright. I want my monkey. <tries to take the cage from Louisa>

Louisa: No!!

Rachel: Oh, come on Louisa.

Louisa: Sorry prom queen.

Ross: You had to be a bitch in high school. You couldn't have been fat. <laugh track> <Louisa gives Ross a dirty look> <renewed laugh track>

Scene 14 Living Room

Ross and Rachel relax together after the monkey has been recovered.

Ross: Hey we, uh, still have that, uh, that bottle of wine. You in the mood for, uh, something great? <shows her the wine bottle>

Rachel: Sure. That'll be good.

Ross: Alright. <going to open wine and picks up glasses. Dims the lights>
Rachel: Oh!
Ross: <looks puzzled> <Laugh track> The neighbours must be vacuuming. <laugh track> <Ross sits down on couch beside Rachel. Hands her a glass and sets his on the coffee table> <uncorking wine and pouring her a glass, he says> As long as we're, uh, here and, uh, not on the subject <pours himself a glass of wine> I was thinking how mad we got at each other before <she rubs his thigh> and, uh, I was thinking maybe it was partially because of how we, uh, . . . <they are interrupted when Rachel's former boyfriend enters>

Commercial 5 Jello Yogurt with Jigglers Bits

Scene opens with Bill Cosby medium shot.
Bill: This is no ordinary yogurt. <shot lengthens to include 5 kids around a round table> This is new Jello Yogurt with Jigglers Bits. <Close shot of product in front of child; cut to close up of boy with product in his hands> Now listen. Never mix yogurt and the jigglers bits together. <close shot of girl whispering to next child; close on hands of a boy separating the two package parts>You can eat the jigglers bits first <cut to close on girl adding bits to yogurt> and then the wholesome yogurt <close on yogurt with bits falling into it> or vice versa. <close on boy dumping bits into yogurt> But never together. <Bill holding two package parts> Mixing the jigglers bits and yogurt<girl stirring bits into yogurt; boy eating yogurt; two girls holding product and laughing; another boy eating yogurt>could cause a highly explosive reaction. <long shot> <girl spooning yogurt towards mouth><kids all laugh>
Voice over (Bill): <shot of 5 containers of product> New. Jello Jigglers Bits and Yogurt. Have your fun and yogurt, too. <overlay of the last phrase on screen above product in relaxed lettering style> <cut to Bill looking exasperated> <kids still laughing>

Commercial 6 Pizza Hut

Ringo: <standing in field with Holstein cow -- long shot>I'd do it in a second. <rowing in a boat - top shot> The fans'll dig it. <seated in theatre -- pan diagonally down> They've waited long enough. <seated behind drums with guitars and amps in front on either side -- long shot> I've just got to get the other lads to agree <zoom in on him playing drums> <background music -- intro voices to a Beatle tune -- uh, uh, uh, uh chord progression> <cut to him seated beside a fisherman running his nets on shore -- long shot, zoom to close on Ringo> I think I can convince them. <cut to Ringo on rooftop of older European-style building> I'll say, lads the time has come. <cut to Ringo waving in time to the music> <cut to Ringo with pizza slice in his hands> to eat our

pizza <turns pizza around> crust first. <lengthen shot to show Ringo is seated at drums and 3 Monkees walk in> <music changes to Monkees Theme>
David: Good idea Ringo. Peter: Cool. <Micky takes a bite>
Voice over: <Male> <close shot of pizza> Stuffed crust pizza from pizza hut with cheese baked into <hand removes a slice from the pizza to reveal the melted white cheese inside the crust>a new thinner crust.<hand holds slice sideways to show thin crust and rotates the slice so the crust comes into the camera> You'll want to eat it crust first. <hand dips corner of back crust into yellow dipping sauce> <overlay of words "free dipping sauce" in all caps, white letters at bottom of screen> Now with free garlic dipping sauce.
Ringo: <cut to 4 men in 4-square pattern each in close up> Wrong lads! <Micky shrugs and continues to chew;David nods; Peter takes a bite and smiles>
Voiceover: <cut to graphic of logo and "stuffed Crust Pizza Large $9.99> Large. Just 9.99.

Scene 15 Coffee Shop Couch

Joey, Male 2, Pheobe are gathered around Monica who has a photo album. <credits rolling>

Monica: This is me in The Sound of Music. See the von Trapp kids?
Phoebe: Nya.
Monica: That's because I'm in front of them. <laugh track>
Male 2: I thought that was an alp. <laugh track>
Monica: Well, high school was not my favourite time.

Appendix F

Food Group and Sub-Group
Categories and Codes for
Data Entry

01	Milk Products
01	Milk
02	Cheese
03	Processed Cheese
04	Yogurt
05	Ice Cream
06	Other
07	Pudding
08	Flavoured Milk

02	Meat and Alternatives
01	Meat
02	Fish and Seafood
03	Poultry
04	Processed Meat
05	Processed Fish
06	Processed Poultry
07	Nuts and Seeds
08	Legumes
09	Eggs
10	Peanut Butter
11	Sandwich/Burger

03	Grain Products
01	Breads and Rolls
02	Ready-to-Eat Cereals
03	Sweetened Dry Cereals
04	Cooked Cereals
05	Crackers
06	Pasta
07	Rice
08	Starch
09	Pancakes, Waffles, French Toast
10	Flours

04	Vegetables and Fruit
01	Fruit
02	Vegetable
03	Fruit Juice
04	Vegetable Juice

05	Higher Fat Foods
01	Solid Cooking Fat
02	Cooking Oil
03	Butter
04	Margarine
05	Salad Dressing and Mayonnaise
06	Snack Foods (Chips, Cheese Corn)
07	Cream Soup

06	Sugary Foods
01	Sweet Spreads and Syrups
02	Candy and Chocolate
03	Sugar
04	Sugar Substitute
05	Other

07	Desserts
01	Cake
02	Pie
03	Gelatin Desserts
04	Cookies
05	Other
06	Pie Filling
07	Pastry - sweet rolls, doughnuts, muffins

08	Condiments
01	Cooking Sauce
02	Condiments (Mustard, Ketchup)
03	Pickles and Relishes
04	Seasoning Mix, Herbs, Spices
05	Food Ingredient

09	Beverages
01	Coffee
02	Tea
03	Alcohol
04	Soft Drinks
05	Sport Drinks
06	Others - higher fat & sugar
07	Fruit 'Drinks'
08	Clear Soup
09	Water

10	Miscellaneous
01	Baby Food
02	Supplements
03	Complete Meals
04	Combination Dish - Stew, Chunky Soup, Chili, etc.
05	Other - Gum
06	Restaurant
07	Lower Fat, Salty Snacks - air-popped popcorn, pretzels
08	Non-Stick Cooking Spray

Appendix G

Lists of Themes and Categories
from Thematic Analysis

Advertising Techniques

Aesthetics
Change
Class
Choice
Contest
Convenience
Devoted Company/Trustworthy
Easy to Use
Exotic Locale
Familiarity/Friendship
Famous Characters
Fantasy
Fun
Health claim
Health Professional Approved/Recommended
Humour
Limited Offer
Mother Approved/Family enjoys
Music
Natural/Basic food/Fresh
Nostalgia
Novelty/Uniqueness
New/Novel
Nutrition Claim
Pleasing/Satisfying
Quality/Wholesome
Real
Taste/Texture
Value
Versatility

Ad Technique Themes

(based on Rank, H. (1988). *Persuasion analysis: A companion to composition.* Park Forest, IL: The Counter-Propaganda Press.)

Attention-Getting

Humour
Music

Confidence-Building

Devoted Company/Trustworthy
Familiarity/Friendship (figures)
Famous Characters
Health Professional Approved/Recommended
Mother Approved/Family Enjoys
Natural/Basic Food/Fresh
Quality/Wholesome
Real

Desire-Stimulating

Aesthetics
Class
Convenience
Easy to use
Exotic Locale
Fantasy
Fun
Nostalgia
Novelty/Uniqueness
New/Novel
Pleasing/Satisfying
Taste/Texture
Versatility

Urgency

Contest
Limited Offer

Benefit Promise

Aesthetics (body - implied benefit)
Convenience
Easy to Use
Health Claim
Nutrition Claim
Taste/Texture
Value

Response-Seeking

Change
Choice
Value

TV Form Categories in Advertising Technique Themes

Desire-Stimulating
Close Ups
Dramatic Effects

Attention-Getting
Close Ups
Dramatic Effects
Down Shot
Energy/Action (pacing)
Informal Angles
Long Shot/Orienting Shot
Handheld Camera
Up Angle

Ad Categories

Achievement
Boredom Relief
Celebration
Class/Knowledge Distinction
Comfort
Companionship
Convenience/Quick
Coping with Negative Emotions
Custom
Desire/Enjoyment
Employment
Everyday people/Middle Class/Average People
Gender Issues
Habits
Healthy/Active Living
Humour
Negative Effects of Body Size
Negative Side Effects of Food
Ordering/Desire
Patriotic/Historic
Premium
Preparation
Refreshment/Snack
Relaxation/Leisure/Fun (Margaret Visser "Eating becomes recreational for the rich")
Replenishment/Sustenance
Restaurant/Foodservice
Reward
Romance
Sensory Experience (non-taste)
Service/Host/Hostess/Hospitality
Skill/Art
Social Conscience
Technology
Trendy/Status/Unique (sets one apart)

Ad Categories into Themes

Social

Social Status

Achievement
Negative Effects of Body Size
Skill/Art
Trendy/Status/Unique (sets one apart)
Technology
Clas/Knowledge Distinction

Interpersonal

Companionship
Everyday People/Middle Class/Average People
Romance
Service/Host/Hostess/Hospitality

Cultural

Patriotic/Historic
Preparation Techniques

Economic

Employment
Ordering/Desire (commodity)
Premium/Commodity
Restaurant/Foodservice
Technology

Gender

Gender Issues

Socio-Political

Social Conscience

Custom

Celebration
Custom
Habits
Service/Host/Hostess/Hospitality

Health/Physiological

Healthy/Active Living
Replenishment/Sustenance

Psychological/Emotive

Comfort
Coping with Negative Emotions
Desire/Enjoyment
Humour
Ordering/Desire
Sensory Experience (non-taste)

Utility

Boredom Relief
Convenience/Quick
Negative Side of Food
Refreshment/Snack
Relaxation/Leisure/Fun
Reward

Program Categories

Bribe
Caregiving
Celebration
Class/Knowledge Distinction
Commodity/Valuable
Companionship
Coping with Negative Emotions
Custom
Diversion
Enjoyment/Likes/Dislikes/Desires
Friend/Family Obligation
Flattery
Gender
Habit
Health
Humour
Insult
Manners/Social Niceties/Expectations/Favour
Marketing
Ordering/Desire/Choice/Decision
Power/Greed
Privilege/Upper Class
Preparation (compare with quant. freq.)
Props (compare with quant. freq.)
Quality
Relaxation
Refreshment/Snack
Replenishment/Sustenance
Respect
Restaurant/Foodservice
Romance/Social Overtones
Sanitation
Serving/Host/Hostess
Skill (valued)/Art
Social Conscience/Non-conformism
Social Ineptness/Low Social Skills
Technology
Trendy/Status
Uniques/Not Usable
Utility
Virtuous Behaviour

Program Categories into Themes

Social

Social Status

Class/Knowledge Distinction
Insult
Valued Skill/Art
Privilege/Upper Class
Trendy/Status
Virtuous Behaviour

Interpersonal

Caregiving
Companionship
Flattery
Friends/Family Obligations
Romance/Social Overtones

Cultural

Preparation Techniques

Economic

Commodity/Valuable
Marketing
Ordering (commodity)
Restaurant/Foodservice
Sanitation
Technology

Gender

Gender Differences
Social Ineptness/Low Social Skills

Socio-Political

Social Conscience/Non-conformism

Power

Bribe
Manners/Social Niceties/Expectations/Favours
Power/Greed
Privilege/Upper Class
Respect

Custom

Celebration
Custom
Habit
Manners/Social Niceties/Expectations/Favours
Preparation
Serving/Host/Hostess

Health/Physiological

Health/Illness
Replenishment/Sustenance

Psychological/Emotive

Coping with Negative Emotions
Enjoyment/Likes/Dislikes/Desires
Humour
Ordering/Desire/Choice/Decision
Relaxation

Utility

Diversion
Props/Set Decoration
Refreshment/Snack
Utility

Appendix H

Non-Food Company Sponsors
of Sampled Commercials
Containing FRIs

Non-Food-Related Companies Sponsoring Sampled Commercials with FRIs

Company	Food Involved
Bank of Montreal	Pizza dough preparation Waitress serving in cafe
The Brick	Refrigerator/Freezer with food
Canadian Tire	Food Preparation Appliances Beverges served and consumed
Eagle Vision	Beer and Dinner noted
Fancy Feast	Wine
Glade Plug-Ins	Beverage consumption
Movie Promo - The American President	Doughnut, Breakfast, Lunch and Dinner noted
Movie Promo - Home for the Holidays	Thanksgiving dinner Eating celery
Program Promo - High Society	Restaurant setting Salad bar noted
Signature Vacations	Dinner plans
Sony Handy Cam	Birthday cake
Walmart	Anniversary cake
Windex	Spaghetti with tomato sauce