

**The Children-Nutrition-Marketing Ethics Conundrum:
Identifying the Issues**

**Working Paper 02.16 rev
August 2002**

Authors

Lynne Eagle, Senior Lecturer, Department of Commerce, Massey University (Auckland), Private Bag 102 – 904 North Shore Mail Centre, New Zealand.

Anne de Bruin, Associate Professor of Economics, Department of Commerce, Massey University (Auckland), Private Bag 102 – 904 North Shore Mail Centre, New Zealand.

Sandy Bulmer, Lecturer, Department of Commerce, Massey University (Auckland), Private Bag 102 – 904 North Shore Mail Centre, New Zealand.

Telephone: 64-9-443-9799 ext. 9455

Facsimile: 64-9-441-8177

Email: l.eagle@massey.ac.nz

a.m.debruin@massey.ac.nz

s.l.Bulmer@massey.ac.nz

Abstract

Marketing communication practices directed at children are increasingly being blamed for contributing to growing levels of obesity in the population. This paper reviews the current debate regarding the causes of growing obesity rates, particularly among children. Marketing communication practices directed at children are examined, as are various proposed social engineering solutions aimed at combating obesity. While obesity is a major problem for which policy makers are seeking answers, assumptions of direct cause and effect linkages between the problem and marketing communication exposure are questionable. Solutions proposed to date could therefore be both inequitable and ineffective. We conclude with a discussion of alternative courses of action.

Introduction

Obesity is a widespread problem. Reports of the exact magnitude of the problem vary, largely due to different reporting methods, but there is no questioning that obesity is a serious concern. Danner and Molony (2002) suggest that nearly 55% of the American population are overweight, while Sibbald (2002) quotes American Surgeon General's figures setting the percentage of the American population who are overweight or obese at 60% of the population and notes that obesity in children more than doubled between 1981 and 1996. In New Zealand, Ministry of Health (1999) data suggests that 52% of the population are overweight (17% obese). Ahmad (1997) claims that obesity across adults and children accounts for \$40 billion of total treatment costs for heart disease, diabetes, high blood pressure, gallbladder problems and some types of cancers in the USA alone. In relation to children specifically, Cristol (2002) suggests obesity is now an epidemic worldwide, with 25% of American children, 16% of Russian children and 7% of Chinese children aged 6 – 18 either overweight or obese. Further, Cristol asserts that obese children are putting themselves in real danger of heart disease and strokes by the time they are 30.

Just as obesity among children is on the rise, advertising targeting children is also a high growth area relative to other age group targets (Dobrow, 2002). It is fuelled by the significant and increasing buying power of this group and their influence on a wide range of products and services purchased for the wider household (e.g. Ahuja et al., 2001). Dobrow (2002) asserts that considerable effort goes into planting the seeds of brand loyalty with this group. Hunter (2002) suggests that children influence as much as 80% of a family's food budget. High exposure of children to advertisements for foods high in fat and sugar is perceived as a major contributor to the obesity problem.

Regulation of television advertising directed at children came to the fore in the 1970's. Since then, the spectre of more severe forms of restriction on advertising to children has hovered over advertisers for over twenty years (Kaufman, 1980). It continues to haunt marketers worldwide (see Eagle and de Bruin, 2001). A parallel apparition is the imposition of some sort of 'sin tax' on foods deemed to be unhealthy (see Ahmad, 1997). This paper reviews the literature particularly relating to the children-nutrition-marketing ethics debate. It analyses the evidence put forward to support the social engineering remedies such as restrictions on advertising or punitive taxes proposed by policy makers, to address concerns in this arena. Admittedly when the rise in obesity and attendant costs are considered together with children's vulnerability in terms of limited emotional and cognitive capacity to make fully rational decisions (e.g. Ahuja et al., 2001), calls to give children special protection from marketing communications are understandable. Existing evidence however appears to point to the currently suggested remedies, while well intentioned, being misguided and destined to be ineffectual in dealing with what is a very real and major potential health problem amongst children. We conclude with recommendations for positive actions to deal with the problem.

Advertising and Poor Dietary Habits: The Mistaken Correlation?

The perceived social ill effects of advertising usually underpin calls for advertising restrictions. One of the main arguments relates to perceived harmful health effects of advertising and the debate has recently centred on the advertising of food products and the assumption that exposure to this advertising is a major direct cause of unhealthy dietary habits, obesity and nutrition problems.

Proponents of restrictions on food advertising cite studies such as "eight in ten adults agree that business marketing and advertising exploit children by convincing them to buy things that are bad for them or that they don't need" (Heubusch, 1997), with concerns highest in relation to food / nutrition issues (e.g. Dibbs, 1993 representing the UK National Food Alliance and Marquis, 1994 citing the National Forum on Coronary Heart Disease).

It is commonly noted that the majority of foods advertised to children such as crisps, sweets, ice creams, and fizzy drinks are highly processed, high in fat and / or sugar and low in nutrients – providing so-called 'empty calories' (Gatenby, 1997). The preponderance of these foods is seen as not only undermining parents' dietary preferences but also contributing to increasing weight and associated health problems among children (Hill and Radimer, 1997; Story and Faulkner, 1990). Of greater concern is that more than 80% of obese adolescents remain obese as adults (Craypo et al., 2002), primarily because dietary habits developed when young can persist over considerable time. While a direct cause and effect relationship in these criticisms - that advertising of these products is the direct cause of the weight and health problems, appears to be widely accepted by critics and by some policy makers (McGovern, 2002), the causal factors behind these problems may however be complex.

While the obesity problem can be accepted as very real and in need of remedial action, the causes and hence potentially effective solutions are not straightforward. Thorough analysis of the complex factors driving obesity is not helped by simplistic assessments, over-emotive debates and clumsy social marketing campaigns. Fast food has been demonised as the sole cause of obesity and its related health problems according to McGovern (2002), who quotes Ralph Nader as declaring McDonalds double cheeseburgers to be a weapon of mass destruction. Similarly, Simontacchi's (2000) book titled "The Crazy Makers: How the Food Industry is Destroying Our Brains and Harming Our Children" adds to the rhetoric. Furthermore, neither does it help the debate when critics deride industry group activities such as the American Fast Food Industry move to demonstrate social responsibility by warning of the dangers of eating too much fast food (WARC, 2002) as maladroit and self-serving attempts to deflect criticism. Unfortunately, in fact, many members of this industry instigate initiatives and place resources such as road safety education programmes in schools. Such activity goes well beyond their legal obligations and benefits society at large (Brønn and Vrioni, 2001) but also go largely unrecognised.

It is alleged that television provides unhealthy messages about food, nutrition and weight (Avery et. al, 1997) and several studies have confirmed that advertisements in children's programmes promote foods that are high in fat and sugars and relatively low in nutritional value (Brown, 1996; Tara and Gage, 1995; Kotz and Story, 1994). Critics therefore state that television directly influences children's health and dietary behaviours (Byrd-Bredbenner and Grasso, 2000). Uncritical acceptance of findings of empirical studies with limited generalizability is, however, imprudent. For example, Donohue (1975) reported that children who were heavy television viewers believed that, to maintain good health, they should take advertised medicines and vitamins, drink soft drinks and eat fast foods. The sample Donohue used was extremely limited and not representative of the population as a whole and the methodology used could have introduced considerable bias in the children's responses. In addition, this study is now rather dated, although still frequently cited in support of those claiming direct negative influences of advertising on children. It could be interesting to replicate this study with the current generation of children, who, research suggests are considerably more media literate than the cohort who would have taken part in the 1975 study. Today's children are the children of Generation Xers, a generation known for being consumer savvy and for teaching their children these skills (Cioletti, 2001).

Proponents of a direct link between exposures to food related imagery and obesity have distorted the debate by focussing on the impact of advertising without taking into account the impact of the programming environment itself. Kaufman (1980) provides a more balanced approach with her content analysis of American television advertising within the programme context. She found that commercial references to fruit and vegetables outweighed programme references to these food types by more than 3 to 1. Further, she found that 64% of non-nutritious foods (which today might be classified as empty calorie foods) were represented in programme content rather than in commercials, while 62% of nutritious foods were represented in commercials. In addition, she highlights that television characters rarely ate balanced meals but rather snacked between meals, portraying both food choice and eating behaviour associated in real life with problems of weight control and nutrition – yet television characters are rarely depicted as obese. There may well be some validity in this observation as Irving and Berel (2001) suggest that exposure to media that promote a thin ideal of beauty may be associated not with overeating and obesity, but with the opposite extreme – eating disorders. It should be noted that the Kaufman study is now over two decades old and a replication / extension of the study could prove invaluable.

The underlying assumption appears to be that a range of societal problems will be removed through the imposition of stringent restrictions or bans on advertising - the most visible and accessible form of external influence, (see, e.g. Higham, 1999). Governments are under pressure to be seen to act on constituents' concerns. Therefore, either restricting or banning advertising to a group seen as particularly vulnerable to marketing manipulation or imposing punitive taxes as a direct social engineering attempt to change behaviour, may seem an easy way to show that the government takes such issues seriously. The factual evidence for, and the efficacy of, such actions are dubious and form the main focus of the balance of this paper.

There is a considerable amount of evidence to suggest that poor diet (14% of children do not eat enough fruit and vegetables) and a sedentary lifestyle (only 50% of children exercise regularly) together contribute to potential health problems (Cristol, 2002; Baxter and Thompson, 2002; Ulrich, 2002). Changed and continually changing lifestyles may also contribute to problems. Cowell (2001a) asserts that children now lead more independent lifestyles than did their parents and are no longer shielded from the realities of life. Today's children make more independent lifestyle choices including opting for their own preferred food and drink rather than acquiescing to parental preferences. Hunter (2002) reports on a 1999 study in which 26% of 6 – 17 year olds were involved in meal preparation for the family. This study made an interesting observation on today's

lifestyles: when asked where they had learned to cook, many of the children surveyed indicated that they had followed the directions on the box.

It should not automatically be inferred that the rising incidence of overweight people is solely to do with food intake. Lifestyles, exercise, stress and factors related to the socialisation of children all contribute. Matorin (2001: 50) observes “we, multi-task, we eat while we work, we power-lunch, we eat while we drive, fly, walk and run. Ergo: we demand convenience ... we have no idea what we are eating. We inhale our food. Thirty seven percent of all quick service occasions occur at the drive-thru - who has time to stop and eat?”

It is argued that lifestyle, particularly exercise choices, and dietary choices are likely to be influenced primarily by parents (Lord, 2000). In terms of the latter, maternal influences appear to be the strongest (Anon, 2002), with maternal feeding practices, such as pressuring a child to eat everything on their plate, more strongly predicting a child’s adiposity levels than the child’s energy and fat intake rather than allowing children to self-regulate their energy intakes. Given this, the strongly criticized promotion by fast food chains of large portions (Kucharsky, 2002) would appear to be contributing to excessive calorie intake in some children. An aspect usually neglected in this debate is the influence of peer pressure on children. Cioletti (2001) points to the importance of social interaction and peer approval for children. However, while purchase may be heavily influenced by the need for peer approval, what foods they actually consume are more likely to be driven by idiosyncratic preferences and appetite.

Increasing weight reflects an excess of calories consumed over those required by the body. Diet is a factor in this, as is lack of exercise. Daily (2002) stresses that society is both sedentary, getting too little exercise, and highly mobile at the same time, but also highly reliant on cars for mobility. UK government research (see, for example, The Advertising Association, 2000) shows in fact that children are healthier than ever before in nutritional terms, and that obesity is more directly linked to a lack of exercise than to over-eating. The report suggests that a dramatic decrease in physical exercise has occurred as children turn to solitary, physically static electronic games / computer based activity rather than traditional team sports. This is supported by American research (Lord, 2000) that finds that children are far less involved in physical activities and spend considerably more time sitting before a TV screen (the classic ‘couch potato’ syndrome) or in front of a computer screen (‘mouse potatoes’).

However, it should in no way be inferred that ‘traditional’ home prepared family meals are in any way superior. Lino et al. (2002) clearly stress that the quality of children’s diets vary by socio-demographic status. Further, Escobar (1999) notes that the more hours women work outside the home, the fewer hours spent preparing meals, and the more meals their children eat away from home but with often positive effects on children’s overall nutrition intake. In the light of the observations of researchers such as Cowell and Hunter, it becomes even more crucial to undertake empirical research on the range of variables that influence children’s food preference functions. Perhaps Donohue’s 1975 study could be used as a starting point for informing such a study, but with a considerably improved methodology as a prerequisite for a modified replication.

Schools have taken initiatives such as controlling the range of foods available at schools (Craypo et al., 2002) and run programmes on advertising literacy skills, diet, dietary practice and nutrition (Lord, 2000). Lack of awareness of healthy alternatives is not likely to be the issue. Hitchings and Moynihan (1998) assert that most children know what constitutes a healthy diet – but that this knowledge is not reflected in the foods they actually eat. Martin (2002:26) states that “educators are on record as saying that so-called junk food and soda are often sold on campuses largely to keep students from leaving schools to get the snacks they demand”. Johnson (2002: S91) stresses that the “liking for sweet taste is innate and has been noted even in utero”.

Mills (2001) posits that children (and perhaps also adults) like unhealthy food *because* it is unhealthy, perhaps linking to the ‘forbidden fruit’ hypothesis (Cantor and Nathanson, 1997), which is based on the theory of psychological reactance (Rummel et al., 2000). This theory states that people become motivated to assert their freedom by performing behaviour when it appears that their freedom might be threatened or restricted. Thus, parental disapproval of particular television shows or foodstuffs can be interpreted by children as threatening their freedom of choice – and may motivate them to consume more of the product disapproved of – precisely because of the disapproval.

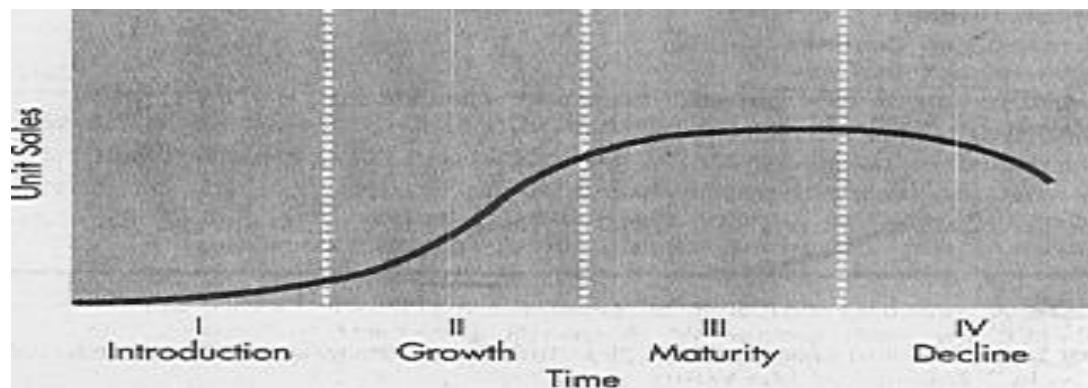
It is claimed (Anon, 2001) that when children aged 7 – 17 eat in restaurants, they consume an average of 55% more calories than when they eat at home. But are such statistics meaningful to the current debate on the correlation between obesity and its presumed causes? Would not most people eat differently in non-everyday

occasions and in differing situations? To read more into such findings demonstrates a lack of recognition of the myriad influences on the patterns of eating behaviours.

USDA (1998) data shows that adult Americans have lowered the percentage of calorie intake from fat from 45% in 1965 to 34% in 1995, stressing that increases in calories have come proportionally from increased carbohydrate consumption. This raises a new controversy – recent medical evidence suggests that, similar to good and bad fats, there are good and bad carbohydrates and overloading on carbohydrates, or the wrong ones, can contribute to obesity and the risk of heart disease (Eller, 2002).

What do you mean – all that advertising doesn't affect sales?

Industry suggestions that advertising has no effect on overall sales levels (e.g. Bang, 1998) are usually met with derision or, as Cowell (2001b, p.474) puts it “an interesting point which all those companies who spend millions on advertising and marketing to children might like to consider”. Ambler (1996) highlights a concept, which appears to present legislators with difficulty - total advertising does not affect total market size in a mature market. Taking classic product life cycle theory to illustrate this, patterns of sales of a product form or class (as opposed to a single brand within it) typically follow an 'S' shaped pattern over time. This is broken into four stages as illustrated by the following:



Source: Guiltinan et al. 1997: Figure 7-2

At the introduction stage, the product is new to the market, there are few competitors - buyers must be educated about what the product does, how it is to be used, whom it is for and where to buy it. At the growth stage, the product is more widely known and sales grow rapidly with new buyers entering the market. Competitors are attracted to enter the growing market. At maturity, sales growth stabilizes. Repeat buying makes up the bulk of sales. Survival of the strongest competitors characterizes this stage. At the product decline phase, there is a gradual falling-off in sales with changing buyer needs or due to competition from new products (Guiltinan et al., 1997, p. 183).

In relation to children and food products specifically, a major 1996 British study undertaken for the Ministry of Agriculture, Fisheries and Food (Young and Webley, 1996) counters many of the direct advertising / food linkages assumptions, suggesting that there is no evidence that advertising is the principal influence on children's eating behaviours. In addition, the study stresses that there is no serious and methodologically sound evidence that shows that food advertising leads to an increase in the consumption by children of whole categories of food.

It is interesting to note that, while ACNielsen reports substantial advertising expenditure by major fast food chains (see Table 1), in New Zealand at least, fish and chips (unadvertised) accounts for considerably more sales (see Table 2).

Table 1 Reported Rate Card Expenditure (i.e. does not incorporate negotiated volume discounts): 2001 Calendar Year. Source: AC Nielsen.

Advertiser	Reported Rate Card Expenditure NZ\$
KFC	11,710,859
McDonalds	21,182,526
Pizza Hut	4,556,770
Burger King	5,472,135

Table 2 Top Selling Ready-to-Eat Foods, 2001. Source: Statistics New Zealand / Restaurant Association

Description	Annual Purchases (\$ Million)	% Market Share
Combinations of ready to eat foods	226.2	20.8
Soups, hot drinks, milkshakes etc	93.3	8.6
Fish – fried, with or without chips	91.7	8.4
Pizza, quiche pieces	69.5	6.3
Chinese food	63.7	5.9
Fried chicken (with or without accompaniments)	62.6	5.6
Pies	59.7	5.5
Sandwiches (fresh)	58.1	5.3
Burgers	50.6	4.7
Biscuits, buns and cakes	48.9	4.5
Other ethnic food	45.5	4.2
Bread rolls (filled, hot etc.)	37.5	3.5
Fried chips, purchased separately	24.5	2.2
All other ready-to-eat items	154.9	14.3
TOTAL	1,086.3	100.0

Added restrictions on advertising for products that have entered the maturity phase of the product life cycle, such as the major fast food types, are unlikely to have significant impact on demand.

Bans on advertising in one / some media segment(s) usually leads marketers to reposition their advertising to the other non-regulated media. Drastic intervention such as bans can have a perverse effect. Illustrative is an interesting study from the 1970s on the impact of cigarette advertising bans. This study inferred that a US ban on cigarette advertising in the broadcast media had led the tobacco companies to sharply increase their print media advertising, accounting for an increase in the percentage of smokers over the period of the study (Teel et al., 1979).

Smith (2002) cites recent industry research that indicates that price and consumer wealth do have an impact on overall category sales for fast foods, whereas advertising's primary influence is on market share within the category. He also notes industry warnings that a ban on advertising would result in an investment of the 'savings' in price (i.e. price reductions) – which would be likely to drive category volume sales up further.

The Overall Context of Poor Nutrition

In the developed world, a parallel concern to obesity is that of food poverty which relates to “the difficulty of securing access to an adequate diet on a low income ... and in its modern form most commonly consists of nutritional rather than calorific inadequacy” (Hitchman et al., 2002: 9). A complex interaction of factors affects food poverty and includes inadequacy of income, family structure, time constraints, lack of education and low awareness of available options and food supply chain shortcomings such as ‘food deserts’ arising from a paucity of food stores. A recent UK report makes several policy recommendations to deal with food poverty including government consideration of “setting up a national Health Promotion Agency, which could be funded by a levy on the advertising of fatty highly processed and fast foods, with the revenues to be spent on promoting fruit and vegetables” (Hitchman et al., 2002: 11). This latter recommendation constitutes a monumental leap between a limited study using only qualitative data and recommendations that merely speculate that a major change in dietary practice could be achieved. Other recommendations however do have merit for considering mitigation of food poverty, for example, subsidising nutritional food (NZPA, 2002).

Potential Solutions:

a. Will restrictions or bans on advertising food products to children work?

Advertising revenue plays an important role in funding television programme production. A total ban on television advertising during children's programmes would mean the loss of money to support these programmes that potentially affects programme quality and the volume of ‘local’ as opposed to programmes produced overseas.

Dignam (1999: 27) argues that the "intellectual argument for banning TV ads to children is in itself infantile". He notes that such bans will not prevent children from seeing ads in other media, nor on television outside children's programme slots. In addition, he asserts that it will not prevent pester power which has been around long before advertising, nor will it prevent children from being swayed by other elements in the marketing mix - such as branding, point of sale and packaging.

The standard economics arguments on the social value of advertising centres on reduced search and information costs to consumers arising from advertising; higher sales of advertised products leading to economies of scale and lower prices (if the advertiser's monopoly power does not operate to the contrary (see e.g. Comanor and Wilson, 1974); advertising resulting in a increased price elasticity of demand for the advertised products in contrast to the price inelasticity of demand exhibited by lesser advertised products and the level of advertising acting as a signal for quality (Telser, 1964; Nelson, 1974). A well-known example is the case of spectacles where some states in the US banned advertising of prices by sellers. In states where there was no ban on advertising the average price of spectacles was lower (Benham, 1972). More particularly in relation to this paper, the toy industry states that television-advertised toys are sold at lower prices than toys not advertised on television as high demand volumes created by advertising allows for volume component purchasing. TV-promoted toys are also used as loss leaders to build general store traffic (see, e.g. Toy Industry, 2000). Furthermore, bans may lessen competition, thus raising prices and potentially reducing dollars invested in research and development (Abernethy and Frank, 1998). These authors also note that advertising can have a major influence on the types and features of products marketed, such as high-fiber breakfast cereals, reduced fat and low cholesterol foods – all of which showed substantial share gains after their product attributes were advertised.

To estimate the impact of bans, it is necessary to draw on the experiences of bans on other products. This presents a problem, as bans on other product areas such as tobacco products do not offer an exact parallel. The experiences in these areas do, however, offer some insights into the complexity behind what appears to be perceived as a simple problem for which a simplistic solution is proposed.

The impact of anti-smoking policies and advertising bans on tobacco products have been extensively examined (e.g. Bardsley and Olekalns, 1999; Calfee and Scheraga, 1994). These studies conclude that advertising does not have a substantial effect on tobacco sales. Far stronger effects come from social factors such as the attitudes and behaviours of parents and peers - and the addictive nature of tobacco products per se. Tremblay and Tremblay (1999) acknowledge that advertising bans generally have had no significant effect on market demand. These authors propose a theoretical model that shows that advertising bans may reduce cigarette consumption but this would be accomplished by hampering competition and thus producing higher profits for major cigarette producers. They conclude that such bans do not represent 'optimal policy'.

Ambler (1996) discusses whether banning advertising can reduce alcohol misuse. He reviews a number of studies and concludes that such bans would not achieve either a significant reduction in alcohol consumption or in its misuse. Ambler notes the impact of entrenched cultural, dietary and social rituals as being more strongly correlated with alcohol consumption than advertising alone. It is extremely likely that the factors identified by Ambler are also considerably stronger influences on dietary practices than advertising.

b. Would sales / excise tax on food be better?

The philosophy behind a direct tax on high fat / low nutrient foods is simply to gain a mechanism whereby revenue can be raised to fund health care and / or public education programmes while at the same time being seen to be actively attempting to discourage consumption of these foods. Sales taxes on soft drinks and foods high in fat are already in place in some states in America and California is currently considering a 'fat tax' (Siudzinski, 2001; Tyre, 2002), yet there appears to be no report on success (or otherwise) in reducing obesity as a result of the taxes already in place. Greenberg (2002) notes that those who call for such measures as sales taxes expect to raise significant revenues, but publicly expect little or no direct effect on sales of affected foods – yet there are suggestions that taxes should be extended to wider ranges of foods.

Ahmad (1997) notes that policy makers hope that taxing junk foods would have a similar correlation between price and consumption levels as has been achieved via price increases on tobacco and alcohol. There are some major assumptions regarding price elasticities in this, often justified by no more than blaming the fast food and restaurant industries for seducing consumers into a "diet that is high in fat, high in calories, delicious, widely available and low in cost" (Reiland, 1998, p.22). The rise in popularity of fast foods lies in its affordability, location and convenience – Schlosser (2001) appears to miss this point while acknowledging that the advent of

fast food chains meant that working class families could afford restaurant food for their families. Chui (2002) acknowledges that it is sometimes cheaper to eat at these types of restaurants than to prepare home cooked meals. Increasing the price of these foods is unlikely to force their replacement by foods perceived to be healthier and such a move may indeed have several unexpected consequences,

Supporters of a 'sin tax' argue that such taxes are justified because of externalities, in that the costs of consumption are borne by the community in indirect costs such as productivity loss and by the health service in treating problems such as heart disease. Marshall (2000) argues for this approach, acknowledging that such taxes are regressive, impacting mainly on those dependent on welfare benefits or on low incomes. He therefore argues for compensation via higher benefit payments to offset additional expenditure costs.

His views are challenged strongly by others in the medical profession. O'Rourke (2000) argues that restoring spending power to those on welfare will result in their buying exactly the same foodstuffs – while those on low wages would receive nothing. He cautions that there are multiple factors that contribute to health problems such as heart disease and therefore that it may be dangerous to concentrate on a single factor. Stanley (2000) expands on O'Rourke's proposition, taking issue with Marshall's identification of whole milk (proposed as taxable by Marshall) as one of the main sources of saturated fats in diet. He stresses that whole milk can actually lower blood cholesterol concentrations. Further, he asserts that whole milk contains several anticancer agents that are not present in skim milk (proposed as a non-taxable substitute by Marshall). Thus, in seeking to reduce the risks associated with obesity, the risks of developing other diseases could be increased.

We have been unable to locate any studies that indicate that punitive taxes or advertising bans have made any impact at all on dietary habits or obesity levels in the countries or states (of America) in which they have been implemented. Standard price elasticity considerations however must be considered with the impact of excise taxes are assessed. The extent to which the burden of the taxes can be shifted to the consumer is crucial to understanding the effectiveness of the tax. Tax incidence analysis is therefore necessary before any conclusion can be reached on any potential benefits of proposed taxes.

c) Subsidising Nutritional Food

The flip side of excise taxes on unhealthy products is subsidies on healthy foods. New research to be conducted by Otago University researchers in the Human Nutrition Department, aims to monitor the impact on school children in selected schools when healthy foods are subsidised and sports programmes are implemented (NZPA 2002). 'People say the cost of healthy food is a huge barrier, ... Lean cuts of meat are more expensive and Coke is cheaper than milk. We want to see if that really is the issue; if decreasing the cost [of healthy food] will influence people's choice' (NZPA 2002: A10). The same elasticity considerations apply as discussed in regard to taxes.

The Industry Rationale

The marketing communication stance is that it has a perfect right to go about its business, if it is done honestly and ethically. The popular industry response is that if it is legal to sell a product, it should be legal to advertise (Jenkins, 1988). Somewhat naively, a second argument proposes that advertising is a fact of life and the sooner children become familiar with it and learn to treat it with the scepticism it sometimes demands, the better equipped they will be to face adult life. More objectively, Stigler (1961) asserts that advertising reduces the costs to consumers of learning about alternatives while Calfee (1997) contends that advertising is an efficient means of providing information.

It may also be asserted that the New Zealand marketing communications industry is already subject to an extensive array of both legislation and regulation that is effective in protecting consumers. The industry is, of course governed by numerous laws that apply to all society. For a very comprehensive – but not exhaustive - overview of the principal legislation impacting on marketers, see Skinnon and McDermott (1997) *The Law of Marketing in New Zealand*. Below the 'layer' of broad legislation, the industry is self-regulating. For a comprehensive discussion of the arguments for and against self-regulation of advertising, see Morgan (1997). The various sectors have co-operated in drawing up codes of practice. The major regulatory body is the Advertising Standards Authority. The Code for Advertising to Children is summarised in Appendix A.

Joint industry bodies, such as the Television Commercials Approvals Bureau (TVCAB), maintain "proper and consistent advertising standards" across all television channels. They provide an advisory service, interpreting both relevant statutes (e.g. the Fair Trading Act) and industry codes (such as the ASA Codes) and applying them

to scripts of proposed commercials as well as “vetting” final completed commercials prior to their being screened for the first time. All commercials that are accepted for screening are given classifications that determine their time placements within programme schedules (e.g., a specific commercial may not be screened before 8.30pm).

An additional indirect restriction on advertising, which should also be considered in the context of any potential ban, is the quota of advertising on electronic media. The New Zealand industry self-regulates for a maximum of 12 minutes of advertising and programme promotion per hour on television. No advertising is permitted in programmes aimed at pre-school aged children; advertising in other children's programmes is restricted to 10 minutes per hour - a move some critics see as an arbitrary restriction on the right of commercial free speech and inconsistent with the total absence of quotas in print media.

Abernethy and Wicks (2001), in a review of previous research contend that self-regulation has been identified as the most efficient tool for curbing excesses and illegality in advertising. They stress that the media have considerable powers to determine the type of advertising that is carried through pre-approval systems such as the system outlined above. However, it should be stressed that programme content is not subject to the same level and type of regulation and, given the concerns noted regarding food portrayal in programmes versus commercials, this is an aspect that the media could very well address. This is problematic for a small country such as New Zealand that buys the bulk of television programmes from overseas resources.

Positive action: public action / Demarketing

The obesity problem requires effective and efficient means of both informing the public about the health dangers linked to increasing obesity AND bringing about an attitude change of sufficient magnitude and duration to motivate a considerable percentage of consumers to make the recommended dietary and lifestyle changes needed. Singling out fast food as the villain – and, often, the sole culprit, is incorrect and advertising restrictions or a tax on fast foods is unjustifiable, inequitable and also, importantly, likely to be ineffective.

Dietary modifications can help reduce the risk of major diseases such as diabetes and coronary problems (Avery et al., 1997). Lifestyle plays a key role in the development / prevention of such diseases according to these authors. While there appears to be a rise in lower fat type foods (Roberts, 2002) and health-oriented fast food restaurants are emerging, there would appear to be a need for positive action to attempt to influence all the factors that contribute to the obesity problem. This may include not only nutritional information on food labels, but also an education programme to increase awareness of the link between diet and disease and to attempt to change attitudes (Anderson and Coertze, 2001).

Demarketing, i.e. a deliberate attempt to induce consumers to buy less in product classes where negative impacts from consumption are most severe (Comm, 1997) has had varied success. The effectiveness of media appeals aimed at changing health related behaviours in particular has varied widely (Block and Keller, 1995). Successful healthy eating programmes are usually creative, engaging, inexpensive and widely disseminated (Di Sogra and Glanz, 2000). They may also be ineffective in view of the complexity of the factors involved in the choice of diet and lifestyle. For example, Teisl et al. (1999) conclude that there is a relationship between income / education and diet / disease issues. They review recent empirical research and conclude that health and nutrient claims are limited in their effects and that industry-supplied information is not trusted. They conclude that the news media is potentially the most effective vehicle for disseminating messages.

Underlying the obesity problem is widespread inertia amongst a population that fails to see a problem relating to themselves or their family. There is a lack of personal relevance and widespread apathy when long-term health problems and current changes to diet and lifestyle are linked. Jayanti and Burns (1998) highlight the difficulties in convincing consumers to change their lifestyles, given that unhealthy habits such as poor eating patterns and lack of exercise are firmly entrenched. They caution against the traditional wisdom of relying on the premise that behaviour is determined by purely rational beliefs and argue for the inclusion of emotional and perceptual factors in a model of health behaviour change. In addition to this, Rothman and Schwartz (1998) suggest that policy makers and those developing social marketing campaigns need to stress personal relevance by raising awareness and communicating individual risk. They note that this may be more difficult for young adults who are generally optimistic about their future. In another model of behaviour change Strecher et al. (1989) introduce not only expectations about outcomes but also capabilities of people to make the recommended changes. Maddux and Du Charmé (1997) provide a more sophisticated theory of planned behaviour that incorporates cues and habits as well as self-efficacy and perceived social norms. These models may be

particularly important given the amount of behavioural change that may be required to modify eating and exercise patterns and the need to sustain these changes over a long period of time. No single programme will provide a panacea or a 'quick fix' for the population as a whole.

There is no clear blueprint for how such a marketing communication programme to change eating and exercise behaviour might be accomplished. Research on effective communication strategies is in fact sparse and sometimes contradictory – often because of varying methodology or measurements. Block and Keller (1995) analyze the differences in persuasion between advertisements arousing negative and positive emotions. For example, in certain circumstances, describing negative consequences - “*if you don't do x, you are at risk of...*” - undermines persuasion as opposed to positively framed messages stressing the benefits of performing a recommended activity – “*if you do x, you minimize the risk of...*”. They found that, in situations where people are not motivated (such as being without serious health problems) to pay attention or to process the messages, negatively framed messages are less effective. However, when people are motivated to attend to the messages or when there is no guarantee that the recommended lifestyle change will lead to the desired outcome of not developing significant health problems ('low efficacy'), negatively framed advertisements appear to be more effective as they generate more detailed processing of the information and greater intention to follow the recommendations.

Strategies must focus on

- health care behaviours that have 'value' to the individual
- assurance / reinforcement that people can modify their behaviours
- the efficacy of the recommended behaviours as a path to good health
- documentation of successful case studies or the opportunity for vicarious experience through observing others

This may very well be an area in which industry and policy makers can cooperate in developing and implementing programmes that will assist in addressing the very real problems that exist within society.

Outstanding Issues: Setting the Agenda for Future Research

It should be noted that there is empirical evidence that parents of primary school aged children do not support an advertising ban within children's television programmes (Eagle and de Bruin, 2002). These parents also expressed no major concerns regarding the influence of advertising on their children's diets. They did, however, express serious disquiet with regard to the impact on their children of some elements of television programming (Eagle et al., 2002). The principal findings of this study are summarized in Appendix B.

It is clear that, in order to inform the debate and future policy direction, further empirical work is required. The following research programme to extend the work completed to date is proposed:

1. A cross-country literature review / investigation to examine whether there has been any change in children's eating habits and/or health problems in countries where a total ban or partial restrictions on advertising to children have been imposed.
2. An extension of the existing study of primary school aged children regarding perceptions of television advertising to incorporate a wider range of socio-economic schools than has been completed so far (Bulmer, 2001). Children will be divided into several age cohorts and their actual abilities to understand the commercial intention of advertisements will be investigated. In addition, children's perceptions regarding healthy versus unhealthy dietary practice and the influence of television on their food preferences will also be investigated, using a modified replication of the Donohue (1975) study as a base.
3. To date limited content analysis of New Zealand television advertising has been undertaken (Hammond et al. 1999, Wilson et al. 1999). None of these studies has examined both the portrayal of food within commercials and the programmes in which they appear in the rigorous manner used by Kaufman (1980). A replication and extension of the Kaufman study is therefore proposed. This would include an examination of the products advertised, their nutritional value, the manner in which information was presented and if it was comprehensible to children, the level of disclosure / disclaimers made and the incidence of premiums / prizes. The content analysis would identify whether there was any contravention of either the 'letter' or

the 'spirit' of the existing self-regulatory environment. In tandem with this would be an analysis of the presentation of food / eating occasions within the programmes themselves and their nutritional value.

4. Tax incidence analysis should be undertaken to investigate the impact of any proposed sales / excise / punitive taxes. Failure to do so may result in measures that are not only inequitable but also ineffective.

Research such as that outlined above would enable public policy decisions to be made on sound empirical foundations. Recommendations for amending or strengthening legislation, regulation or any other appropriate provisions could then be developed.

References

- Abernethy, A. M. & Wicks, J.L. (2001). "Self-Regulation And Television Advertising: A Replication And Extension." *Journal of Advertising Research*, May / June, pp. 31 – 37.
- Abernethy, A.M. & Frank, G.R. (1998). "FTC Regulatory Activity And The Information Content Of Advertising." *Journal of Public Policy & Marketing*, Vol. 17 (2), Pp. 239 – 256.
- ACNielsen (2002). Estimated Advertising Expenditure, Calendar Year 2001. ACNielsen, Auckland.
- The Advertising Association (2000). "Food Advertising To Children". <http://www.adassoc.org.uk/position/foodkids.html>. Accessed 21/1/2000.
- Advertising Standards Authority (2001). *Advertising Codes Of Practice*. Advertising Standards Authority, Wellington, New Zealand. <http://www.asa.co.nz> Accessed 10/7/2002.
- Ahmad, S. (1997). "Time For A Twinkie Tax?" *U.S. News & World Report*, Vol. 123 (25), p. 62.
- Ahuja, R.D., Walker, M. & Tadepalli, R. (2001). "Paternalism, Limited Paternalism And The Pontius Pilate Plight When Researching Children." *Journal of Business Ethics*, Vol. 32, pp. 81 – 92.
- Ambler, T. (1996). "Can Alcohol Misuse Be Reduced By Banning Advertising?" *International Journal of Advertising*, Vol. 15 (2), pp.167 - 174.
- Anderson, D.J. & Coertze, D.J. (2001). "Recommendations For An Educational Programme To Improve Consumer Knowledge Of And Attitudes Towards Nutritional Information On Food Labels." *SA Journal Of Clinical Nutrition*, Vol. 14 (1), pp. 28 – 35.
- Anonymous. (2001). "Getting A Handle On Obesity." *The Lancet*, Vol. 359, p. 1955.
- Anonymous. (2002). Maternal Feeding Practices Are Linked To Childhood Obesity." *Obesity, Fitness & Wellness Week*, April 6, p. 3.
- Anonymous. (2000). "Anti-Smoking Campaign Upsets US Tobacco Giant." *N.Z. Herald*, February 13, 2000, p. A15.
- Avery, R. J., Mathios, A. Shanahan, J. & Bisogni, C. (1997). "Food And Nutrition Messages Communicated Through Prime-Time Television." *Journal of Public Policy & Marketing*, Vol. 16 (2), pp. 217 – 227.
- Bang, H-K. (1998). "Analyzing The Impact Of The Liquor Industry's Lifting Of The Ban On Broadcast Advertising." *Journal of Public Policy & Marketing*, Vol. 17 (1), pp. 132-138.
- Bardsley, P. & Olekalns, N. (1999). "Cigarette And Tobacco Consumption: Have Anti-Smoking Policies Made A Difference?" *The Economic Review*, Vol. 75 (230), pp. 225 - 240.
- Baxter, S.D. & Thompson, W.O. 2002). "Fourth Grade Children's Consumption Of Fruit And Vegetable Items Available As Part Of School Lunches Is Closely Related To Preferences." *Journal Of Nutrition Education And Behaviour*, Vol. 34 (3), pp. 166 – 171.
- Benham, L. (1972). "The Effect Of Advertising On The Price Of Eyeglasses." *The Journal of Law and Economics*, 15 (October), pp.337-352.
- Block, L.G. & Keller, P.A. (1995). "When To Accentuate The Negative: The Effects Of Perceived Efficacy And Message Framing On Intentions To Perform A Health-Related Behaviour." *Journal of Marketing Research*, Vol. XXXII (May), pp. 192 – 203.
- Brønn, P.S. & Vrioni, A.B. (2001). "Corporate Social Responsibility And Cause-Related Marketing: An Overview." *International Journal of Advertising*, Vol. 20 (2), pp. 207 –222.

- Brown, E.W. (1996). "Sex And Violence Are Not The Only Things Kids Should Avoid On TV." *Medical Update*, Vol. 19 (8), p. 4
- Bulmer, S.L. (2001). "Children's Perceptions Of Advertising." Massey University, College Of Business, Department Of Commerce Working Paper No. 01.05, May.
- Byrd-Bredbenner, C & Grasso, D. (2000). "Health, Medicine, And Food Messages In Television Commercials During 1992 And 1998." *Journal of School Health*, Vol. 70 (2), pp. 61 – 65.
- Calfee, J.E. (1997). *Fear Of Persuasion: A New Perspective On Advertising And Regulation*, AEI Press Of American Enterprise Institute.
- Calfee, J.E. & Scheraga, C. (1994). "The Influence Of Advertising On Alcohol Consumption: A Literature Review And An Econometric Analysis For European Countries." *International Journal of Advertising*, Vol.13 (4), pp. 287 - 310.
- Cantor, J. & Nathanson, A. (1997). "Predictors Of Children's Interest In Violent Television Programmes." *Journal of Broadcasting & Electronic Media*, Spring, pp. 155 – 167.
- Chui, P. (2002). "You Want Fries With That?" *The Nation*. On Line Edition www.thenation.com. Accessed 20/6/2002.
- Cioletti, J. (2001). "Kid-Venience." *Supermarket Business*, May 15, pp. 31 – 32.
- Comanor, W. & Wilson, T. (1974). *Advertising And Monopoly Power*. Cambridge Mass.: Harvard University Press.
- Comm, C. L. (1997). "Demarketing Products Which May Pose Health Risks: An Example Of The Tobacco Industry." *Health Marketing Quarterly*, Vol. 15 (1), pp. 95 – 102.
- Cowell, P. (2001a). "Marketing To Children: A Guide For Students And Practitioners – Part 2." *The Marketing Review*, Vol. 2, pp. 71 – 87.
- Cowell, P. (2001b). "Marketing To Children: A Guide For Students And Practitioners – Part 1." *The Marketing Review*, Vol. 1, pp. 473 - 485.
- Craypo, L., Purcell, A, Samuels, S.E., Agron, P., Bell, E. & Takada, E. (2002). "Fast Food Sales On High School Campuses: Results From The 2000 California High School Fast Food Survey." *Journal Of School Health*, Vol. 72 (2), pp. 78 – 82.
- Cristol, H. (2002). "Trends In Global Obesity." *The Futurist*, May – June, p. 10.
- Daily, P.B. (2002). "Weight Of Blame." *Restaurants And Institutions*, June 1, p. 14.
- Danner, V. & Molony, T. (2002). "Obesity Eclipses Smoking, Alcohol In Health Care Costs., *The Journal Of Dental Hygiene*, Vol. 76 (II), p. 111.
- Dibbs, S. (1993). *Children: Advertisers' Dream, Nutrition Nightmare*. National Food Alliance, England.
- Dignam, C. (1999). "Ethics Will Be Key In Battling EU-Led Children's Ad Ban." *Marketing*, 22 April 1999, p. 27.
- Di Sogra, L. & Glanz, K. (2000). "The 5 A Day Virtual Classroom: An On-Line Strategy To Promote Healthful Eating." *Journal Of The American Dietetic Association*, Vol.100 (3), pp. 349 - 352.
- Dobrow, L. (2002). "How Old Is Enough?" *Advertising Age*, Vol. 73 (5), p. 4.
- Donohue, T.R. (1975). "Effects Of Commercials On Black Children." *Journal Of Advertising Research*, Vol. 15 (6), pp. 41 – 47.

- De Bruin, A.M. & Eagle, L.C. (2002). "Regulating The Medium And The Message. Parental Perceptions Of Television Advertising Directed At Children." Paper Presented At The 7th International Conference on Marketing and Corporate Communication, Antwerp, 29 – 30 April.
- Eagle, L.C., De Bruin, A.M. & Bulmer, S.L. (2002). "Violence, Values And The Electronic Media Environment." *Corporate Communications International Journal* Vol 7 (1), pp. 25 – 33.
- Eagle, L.C. & De Bruin, A.M. (2001). "Advertising Restrictions: Protection Of The Young And The Vulnerable?" *International Journal of Advertising and Marketing to Children*. December 2000 / January 2001, pp. 259 – 271.
- Escobar, A. (1999). "Factors Influencing Children's Dietary Practices: A Review." *Family Economics and Nutrition Review*, Vol. 12 (3/4), pp. 45 –55.
- Eller, D. (2002). The Carbohydrate Controversy." *Better Nutrition*, Vol. 64 (2), p. 8.
- Gatenby, S.J. (1997). "Eating Frequency: Methodological And Dietary Aspects." *British Journal of Nutrition*, Vol.77 (1), pp. S7-S20.
- Greenberg, E. (2002). "Today's Joke Might Be Tomorrow's Law." *Packaging Digest*, May, p. 28.
- Grossbart, S., Sanford, L. & Crosby, L. (1984). "Understanding The Bases Of Parental Concern And Reaction To Children's Food." *Journal of Marketing*, Vol. 48(3), pp.79-93.
- Guiltinan, J.P., Paul, G.W. & Madden, T.J. (1997). *Marketing Management Strategies and Programs*. 6th Ed. New York: McGraw Hill.
- Hammond, K.M., Wylie, A. & Casswell, S. (1999). "The Extent And Nature Of Television Food Advertising To New Zealand Children And Adolescents." *Australian and New Zealand Journal of Public Health*, Vol. 23 (1), pp. 49 - 55.
- Heubusch, K. (1997). "Is It OK To Sell To Kids?" *American Demographic*, January, p. 55.
- Higham, N. (1999). "Industry Divided Over Prospect of Ban on Children's Advertising." *Marketing Week*, July 8, 1999, p. 17.
- Hill, J.M. & Radimer, K.L. (1997). "A Content Analysis Of Food Advertisements In Television For Australian Children." *Australian Journal Of Nutrition & Dietetics*, Vol. 54(4), pp.174 – 192.
- Hitchings, E. & Moynihan, P.J. (1998). "The Relationship Between Television Food Advertisements Recalled And Actual Foods Consumed By Children." *Journal Of Human Nutrition And Dietetics*, Vol. 11, pp. 511 – 517.
- Hitchman, C., Christie, I., Harrison, M. & Lang, T. (2002). *Inconvenience Food: The Struggle To Eat Well On A Low Income*, London: Demos.
- Hunter, B.T. (2002). "Marketing Foods To Kids: Using Fun To Sell." *Consumers' Research*, March, pp. 16 – 19.
- Irving, L.M. & Berel, S.R. (2001). "Comparison Of Media-Literacy Programs To Strengthen College Women's Resistance To Media Images." *Psychology of Women Quarterly*, Vol. 25, pp. 103 – 111.
- Jayanti, R.K. & Burns, A.C. (1998). "The Antecedents Of Preventive Health Care Behaviour: An Empirical Study." *Journal of The Academy of Marketing Science*, Vol. 26 (1), pp. 6 – 15.
- Jenkins, J. (1988). "Tobacco Advertising And Children: Some Canadian Findings." *International Journal of Advertising*, Vol. 7, pp.357-367.
- Johnson, S.L. (2002). "Children's Food Acceptance Patterns: The Interface Of Ontogeny And Nutrition Needs." *Nutrition Reviews*, Vol. 60 (5), pp S91 – S94.

- Kaufman, L. (1980). "Prime Time Nutrition." *Journal of Communication*, Vol. 30 (3), pp. 37 – 46.
- Kirkpatrick, J. (1986) "A Philosophic Defence of Advertising". *The Journal of Advertising*, Vol.15 (2), pp. 42-50.
- Kotz, K. & Story, M. (1994). "Food Advertisements During Children's Saturday Morning Television Programming." *Journal of The American Dietetic Association*, Vol. 94 (11), pp. 1296 – 1300.
- Kucharsky, D. (2002). "Fast Food Survives 'Media Assaults.'" *Marketing Magazine*, Vol. 107 (11), p.2.
- Lino, M., Basiotis, P.P., Gerrier, S.A. & Carlson, A. (2002). "The Quality Of Young Children's Diets." *Family Economics And Nutrition Review*, Vo. 14 (1), pp. 52 – 60.
- Lord, M. (2000). "Schools Fight Fat By Teaching Kids To Eat Their Greens", *U.S. News & World Report*, Vol. 128 (17), p. 60.
- Maddux, J.E. & Du Charmé, K.A (1997). "Behaviour Intentions In Theories Of Health Behaviour." In Gochman, D.S. (Eds) *Handbook Of Health Behaviour Research 1: Personal And Social Determinants*. New York: Plenum Press, pp. 133-151.
- Marquis, S. (1994). "The Young Ones." *Marketing*, March 10, pp. 22 - 23.
- Marshall, T. (2000). "Exploring A Fiscal Food Policy: The Case Of Diet And Ishaemic Heart Disease." *British Medical Journal*, 29 January, pp. 301 – 304.
- Martin, R. (2002). "Soda Pop Tax Won't Quench Lawmakers' Thirst For Levies On Sweet, Fatty Foods." *Nation's Restaurant News*, April 29, p. 26.
- Matorin, J. (2001). "Obesity Awareness Campaign Needed, But Regulators Won't Curb Fast-Food Appetite." *Nation's Restaurant News*, August 27, p. 32.
- McGovern, C. (2002). "Brave New World. A Clear And Present Danger." *The Report*, July 8, p. 56.
- Mills, L. (2001). "The Fat Of The Land." *Marketing (Canada)*, April 2, p. 9.
- Ministry of Health (1999). *NZ Food: NZ People. Key Results Of The 1997 National Nutrition Survey*. Ministry Of Health, Wellington.
- Morgan, O.J. (1997). "Self-Regulation Of Advertising." In Skinnon, J, & McDermott, J. (Eds.) (1997). *The Law Of Marketing In New Zealand*. Wellington: TOPNZ.
- Nelson, P. (1974) "Advertising As Information." *Journal of Political Economy*. Vol. 82 (July-August), pp.729-754.
- NZPA (2002) "Schools To Fight Fat." *NZ Herald*, August 1, p.A10.
- O'Rourke, A. (2000). "VAT And Fat." *British Medical Journal*, Vol. 27 (May), p. 1469.
- Reiland, R. (1998). "What's Next? A Fat Tax On Junk Food." *Restaurant Hospitality*, Vol. 82 (8), p. 22.
- Roberts, W. A. (2002). "Healthy Fast Food: No Longer An Oxymoron." *Prepared Foods*, April, p. 76.
- Rothman, A.J. & Schwartz, N. (1998). "Constructing Perceptions Of Vulnerability: Personal Relevance And The Use Of Experiential Information In Health Judgment." *Personality And Social Psychology Bulletin*, Vol. 24 (10), pp. 1053 – 1064.
- Rummel, A., Howard, J. Swinton, J.M. & Seymour, D.B. (2000). "You Can't Have That! A Study Of Reactance Effects & Children's Consumer Behaviour." *Journal Of Marketing Theory & Practice*, pp. 38 – 45.

- Schlosser, E. (2001). *Fast Food Nation: The Dark Side Of The All-American Meal*. Boston: Houghton Mifflin Company.
- Sibbald, B. (2002). "Obesity May Soon Be Leading Cause Of Preventable Deaths In US." *JAMC*, Vol. 166 (5), p. 642.
- Simontacchi, C. (2000). *The Crazy Makers: How The Food Industry Is Destroying Our Brains And Harming Our Children*. Tarcher / Putnam Publishers.
- Siudzinski, P. "Trimmer Portions", *Restaurant Business*, Vol. 100 (4), p.20.
- Skinnon, J, & McDermott, J. (Eds.) (1997). *The Law of Marketing in New Zealand*. Wellington: TOPNZ.
- Smith, C. (2002). "Snack Attack: The Next Ad Ban?" *Marketing UK*, July, p. 13.
- Stanley, J.C. (2000). Taxing Single Nutrient Is Dangerous". *British Medical Journal*, 27 May, P. 1469.
- Statistics New Zealand / Restaurant Association (2002) *Top Selling Ready-To-Eat Foods*, 2001. Wellington: Statistics New Zealand.
- Stigler, G.J. (1961). "The Economics Of Information", *The Journal of Political Economy*, Vol. LXIX (3), Pp. 213 – 225.
- Story, M. & Faulkner, P. (1990). "The Prime Time Diet: A Content Analysis Of Eating Behaviour And Food Messages In Television Programmes And Commercials." *American Journal Of Public Health*, Vol. 80 (6) pp. 738 – 740.
- Strecher, V.J., McEvoy, B.D., Becker, M. & Rosenstock, I.M. (1986). "The Role Of Self-Efficacy In Achieving Health Behavior Change." *Health Education Quarterly*, Vol. 13 (1), Pp. 73 – 91.
- Taras, H.L. And Gage, M. (1995). "Advertised Foods On Children's Television." *Archives Of Pediatric & Adolescent Medicine*, Vol. 144, pp. 649 –652.
- Teel, S., Teel, J. And Bearden, W. (1979). "Lessons Learned From The Broadcast Cigarette Advertising Ban." *Journal Of Advertising*, Vol.13, pp. 333-346.
- Telser, L. (1964). "Advertising And Competition." *Journal Of Political Economy*, Vol. 72 (December), pp. 547-551.
- Teisl, M.F., Levy, A.S. & Derby, B.M. (1999). "The Effects Of Education And Information Source On Consumer Awareness And Diet-Disease Relationships." *Journal Of Public Policy & Marketing*, Vol. 18 (2), pp. 197 – 207.
- Toy Industry (2000). Toy Industry Factbook. <http://www.toy-tma.com>. Accessed 21/1/2000.
- Tremblay, C.H. & Tremblay, V.J. (1999). "Re-Interpreting The Effect Of An Advertising Ban On Cigarette Smoking." *International Journal Of Advertising*, Vol. 18 (1), pp. 41 - 49.
- Tyre, P. (2002). "Drink Up – And Pay Up". *Newsweek*, Vol. 139 (17), 29 April, pp. 649 – 652.
- Ulrich, M. (2002). "Why Stop At Taxing Fat?" *The Report*, June 24, p. 50
- USDA (1998). "Is Total Fat Consumption Really Decreasing?" *Nutrition Insights, No. 5, USDA Centre For Nutrition Policy And Promotion*.
- Walsh, A.D. Lacznia, R. & Carlson, L (1998). "Mothers' Preferences For Regulating Children's Television." *Journal Of Advertising*, Fall Vol. 27 (3), pp. 23 - 36.
- WARC (2002). "America's Fast Food Industry Fights Back With Ad Campaign." WARC Online World Advertising And Marketing News, 18 June. www.warc.com, Accessed 19 June 2002.

Wilson, N., Quigley, R. & Mansoor, O. (1999). "Food Ads On TV: A Health Hazard For Children". *Australian And New Zealand Journal Of Public Health*, Vol. 23 (6), pp. 647 -650.

Young, B. & Webley, P. (1996). *The Role Of Television Advertising In Children's Food Choice*. Ministry Of Agriculture, Fisheries and Food (MAFF), U.K.

Appendix A: Code for Advertising to Children

The principal provisions of the Advertising Standards Authority's Code for Advertising to Children, in place since 1989, and revised in 2001 are:

1. Separation of Advertisements:

Advertisements must be clearly recognisable as such by children and separated from editorials or programmes. If there is any likelihood of advertisements being confused with editorial or programme content, they should be clearly labelled "advertisement" or identified in an equally clear manner.

2. Content:

i. Advertising should not clearly portray violence or aggression

ii. Advertising should not contain menacing or horrific elements likely to disturb children

iii. Advertisements should not encourage anti-social behaviour or depict children behaving in an anti-social manner. Vindictiveness, bullying and certain facial expressions and body movements can all be defined as anti-social.

iv. Children in advertisements should be reasonably well-mannered and well-behaved.

v. Children should not be urged in advertisements to ask their parents to buy particular products for them.

vi. No advertisement should suggest to a child that he / she will be in any way inferior through not owning the advertised product pp.:33-34).

In addition, there are provisions prohibiting portrayal of unsafe situations and unsafe product use, together with provisions relating to the prevention of ambiguity, including competitions and premium offers and clear disclosure of any assembly, skill needed or additional items needed (e.g. batteries). This code is currently under review and an additional code for advertising food was introduced in 2001.

The principal provision relating to advertising of food products to children include (from Principle Three):

"Advertisements directed at children should observe a high standard of social responsibility.

- (a) Advertisements for treat foods directed at children should not actively encourage children to eat or drink them near bedtime, to eat or drink them frequently throughout the day or to replace main meals with them.*
- (b) Advertisements for nutritional foods essential for a healthy balanced diet are encouraged to advocate the benefits of such foods, particularly when directed at children. A large and liberal but commonsense interpretation is allowed. However, benefits should not be exaggerated and should not imply that a single food should replace a balanced and varied diet.*
- (c) Advertisements should not encourage excessive consumption of any particular food.*

Appendix B: Extracts from De Bruin, A.M. & Eagle, L.C. 'Regulating the Medium and the Message. Parental Perceptions of Television Advertising Directed at Children'. Paper presented at the 7th International Conference on Marketing and Corporate Communication, Antwerp, 29 – 30 April 2002.

A survey of parents/primary caregivers from a range of primary schools across Metropolitan Auckland was undertaken. Schools were selected from a list provided by the Ministry of Education, which classifies New Zealand schools from deciles 1-10, with decile 1 associated with the lowest socio-economic group and 10, the highest. We chose a stratified sample of schools to represent state, private ('elite') and religious (Catholic) state school sectors. The latter are those schools combining a special Christian character with the standard educational role common to all other schools. Where a school declined to participate, a replacement with a similar socio-economic profile was selected as a replacement. With the agreement of the school's Trust Board and the support of each Principal, a questionnaire together with a reply paid envelope, was enclosed with the school newsletter to parents. A covering letter from the school Principal explaining the origin, purpose and intention of the survey was also attached. Questionnaires were sent out to each household. The questions used were developed from a range of sources, particularly frequently voiced criticisms identified in the literature relating to advertising directed at children, whether based on empirical or emotive foundations. Questions were also drawn from a number of individual studies (e.g. Grossbart et al. 1984, and Walsh et al. 1998) to allow comparison with international data on electronic media use. 514 usable responses were obtained.

Table 3: Agreement / Disagreement (on a five point scale where 1 = totally disagree and 5 = totally agree and 3 = neutral) with Opinions/ Statements on Television Advertising Directed at Children

Statement	Decile 10 Private		Decile 10 Religious		Decile 10 State		Decile 7 State		Decile 5 State		Decile 3 State		Decile 1 State		Decile 1 Religious	
	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev
a. advertised foods on television is an important cause of unhealthy eating habits	3.7*	1.1	3.7*	1.1	3.6*	1.1	3.2	1.2	3.5*	1.1	3.4*	1.2	3.5*	1.4	3.5*	1.4
b. television advertising is an important cause of my children pestering me for advertised products	3.7*	1.2	3.9*	1.1	3.8*	1.1	3.7*	1.2	3.7*	1.3	3.7*	1.3	3.5*	1.4	3.4*	1.4
c. television advertising encourages my children to want products they don't need	3.9*	1.1	4.4*	0.8	4.2*	0.8	4.3*	1.0	3.8*	1.1	4.0*	1.2	3.9*	1.2	3.9*	1.2
d. television advertising to children leads to family conflict	2.6*	1.3	2.9	1.2	3.0	1.0	2.8	1.4	2.7	1.3	2.7	1.3	3.1	1.4	2.5	1.3
e. television advertising to children uses tricks and gimmicks	3.8*	1.0	4.1	0.7	4.1*	0.8	4.0*	0.9	3.7*	1.2	3.8*	1.0	3.9*	1.1	3.5*	1.3
f. there are too many ads in television programmes directed at children	4.1*	1.0	4.0*	1.1	4.0*	0.8	4.1*	0.9	3.8*	1.2	4.0*	1.0	3.7*	1.1	3.6*	1.2
g. there is too much sugar and fat in food products advertised in television programmes directed at children	4.1*	1.0	4.2*	0.9	4.0*	0.9	3.9*	1.0	3.6*	1.2	3.8*	1.1	4.4*	0.8	3.8*	1.2
h. there are too many additives in food products advertised in television programmes directed at children	4.1*	1.0	4.2*	0.9	4.0*	0.9	3.7*	1.0	3.6*	1.1	3.8*	1.1	4.2*	1.2	3.6*	1.1
i. children are able to distinguish between programmes and advertising	3.8*	1.3	4.1*	1.0	3.7*	1.3	3.9*	1.2	4.1*	1.3	3.9*	1.2	3.8*	1.4	3.3	1.4
j. children understand the commercial intent of advertisements	2.9	1.4	2.8	1.4	2.7	1.3	2.8	1.4	3.4*	1.3	2.9	1.3	2.8	1.3	2.8	1.4
k. advertisements provide information regarding available products	3.7*	0.8	3.6*	1.0	3.6*	1.0	3.8*	0.9	3.6*	1.1	3.5*	1.1	3.5*	1.2	3.5*	1.2
l. advertisements encourages discussion of products within the family	3.1	1.1	3.1	1.0	3.1	1.1	3.2	1.1	3.0	1.1	3.0	1.2	4.3*	0.8	3.1	1.3

*denotes that the null hypothesis of 3 (neutral) can be rejected at the 0.025 (2-tail) level of significance)

Table 4: Agreement / Disagreement (on a five point scale where 1 = totally disagree and 5 = totally agree and 3 = neutral) with Opinions/ Statements on Control of Television Programming and Advertising Directed at Children

	Decile 10 Private		Decile 10 Religious		Decile 10 State		Decile 7 State		Decile 5 State		Decile 3 State		Decile 1 State		Decile 1 Religious	
	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev
a. new laws should be enacted to create a better television environment for children	3.9*	1.1	4.1*	1.0	4.3*	0.8	4.3*	1.1	4.0*	1.1	4.2*	1.0	4.1*	1.6	4.3*	1.0
b. further government regulation is needed to improve television programmes directed toward children	3.7*	1.2	4.2*	1.0	4.3*	0.8	4.3*	0.9	4.1*	1.0	4.1*	1.2	4.2*	1.2	4.3*	0.9
c. laws should be passed to provide more hours of educational viewing for children	3.8*	1.2	4.1*	1.2	4.3*	0.9	4.1	1.0	4.0*	1.2	4.1*	1.1	4.6*	0.9	4.4*	0.9
d. television advertising directed at children should be banned	3.1	1.3	3.4*	1.2	3.3*	1.1	3.3	1.2	3.3	1.2	3.4*	1.3	3.6	1.4	3.5*	1.3
e. lack of adequate government control of television allows advertisers to take advantage of kids	3.4*	1.2	3.6*	1.1	3.7*	1.1	3.8*	1.0	3.8*	1.0	3.8*	1.1	4.1*	1.0	4.0*	1.1
f. commercials that use popular programme characters to sell products to kids should be banned	3.1	1.2	3.6*	1.2	3.3*	1.1	3.5*	1.2	3.4*	1.1	3.4*	1.3	3.9*	1.3	3.6*	1.4
g. Government's regulation of television programming for children is in the best interests of kids	3.0	1.2	3.5*	1.1	3.0	1.1	3.2	1.3	3.2	1.1	3.1	1.2	3.0	1.4	3.8*	1.2
h. legal regulations need to be imposed upon broadcasters to improve children's television	3.5*	1.2	3.9*	0.9	4.1*	0.9	4.1*	0.8	3.9*	1.0	4.0*	1.0	3.9*	1.3	4.0*	1.2
i. the Government should impose limits on the time devoted to commercials during children's viewing times	3.9*	1.3	4.1*	0.9	4.2*	0.9	4.3*	0.8	4.0*	1.1	4.2*	1.0	3.8*	1.5	4.2*	1.1
j. an independent organisation is needed to monitor the education level of children's television programmes	3.9*	1.2	4.1*	0.9	4.3*	0.8	4.1*	1.1	3.9*	1.2	4.1*	1.1	4.3*	1.1	4.0*	1.2
k. an independent organisation of parents, educators and broadcasters should be formed to control children's television	3.5*	1.3	4.2*	0.8	4.1*	0.9	3.9*	1.2	3.8*	1.2	4.0*	1.1	4.2*	1.2	4.0*	1.1
l. parent groups should be formed to improve children's television programmes	3.4*	1.1	3.7*	1.1	3.7*	1.1	3.4	1.3	3.6*	1.1	3.8*	1.1	4.2*	1.1	3.9*	1.2
m. television advertising directed at children needs to be regulated by people who are NOT directly involved with the selling of products to children	4.0*	1.0	4.4*	0.8	4.3*	1.0	4.1*	0.9	3.9*	1.1	4.1*	1.0	3.9*	1.2	3.9*	1.3
n. Schools should play a more active role in educating children on the pros and cons of advertising	3.6*	1.1	3.8*	1.0	3.6*	1.1	3.4	1.1	3.6*	1.2	3.3	1.2	3.9*	1.2	4.0*	1.0

*denotes the null hypothesis f 3 (neutral) can be rejected at the 0.025 (2 tail) level of significance