# Nanny in the Pantry – Childhood Obesity and the Role of the State

LAWS490 Sarah Anderson (2011)

# Nanny in the Pantry – Childhood Obesity and the Role of the State[1]

## 1. Introduction

This dissertation will look at the problem of obesity in society, in particular with children. It will advocate taking a legal approach to the problem in order to engineer an environment which will make children less susceptible to developing obesity. This dissertation is concerned with the extreme of weight gain, not with the issues of overweight or underweight. While any intervention that reduces the risk of obesity is also like to reduce the risk of overweight, the focus remains on obesity as a problem that requires the law's attention.

## 2. Obesity and New Zealand

Obesity is something which is prevalent in society. It is estimated that 500 million adults worldwide are obese and that 43 million children under the age of five are overweight.[2] The global increase in obesity in the developed world seen over the last several decades is now emerging in developing nations as well.[3] It is claimed that more people globally suffer from overnutrition than undernutrition,[4] and that obesity rates are set to increase.[5]

---

[1] Title inspired by Hon. Tony Ryall who, in response to the proposed 'obesity bill', said *''This is Helen Clark getting into your pantry.''* see "Obesity Bill Slammed as 'Nanny State'" (2008) Otago Daily Times <http://www.odt.co.nz/news/politics/1883/obesity-bill-slammed-nanny-state039>.

[2] "Obesity and Overweight Fact Sheet" (2011) World Health Organisation <http://www.who.int/mediacentre/factsheets/fs311/en/index.html>.

[3] Ibid.

[4] Michael Pollan *The Omnivore's Dilemma* (Bloomsbury Publishing, London, 2006) at 102.

It seems to be accepted that obesity is bad. In terms of health it's not a good state to be in. The social disapproval that was once turned on smoking is now focussed firmly on the excessively overweight and scientific and medical data reinforces this unfavourable view.[6] The social stigma associated with obesity is said to be growing also. The 'Fat Acceptance Movement' reports widespread discrimination against overweight and obese people in employment, education and healthcare.[7]

The ethos of the movement is equality. The argument is that body size shouldn't be a cause for discrimination and that the distaste society harbours towards overweight people is based on ignorance and prejudice.[8] The motto of the society is 'healthy at every size'.[9] It seeks that people appreciate themselves and others irrespective of how heavy they are and aim to be active and medically fit. Social criticism has been lobbed at the movement via various blogs and internet media claiming it is accepting of a condition that is causative of many health problems;[10] it's not a social issue, it's a medical one, and acceptance of excessive body weight is tantamount to condoning it.

This tension is perhaps at the heart of why we shy away from discussing obesity too often. In everyday conversation we can talk about binge drinking, alcoholics and anorexics and still

---

[5] "Worldwide Obesity Set to Worsen" (2011) Stuff.co.nz <http://www.stuff.co.nz/life-style/5516166/Worldwide-obesity-set-to-worsen>.

[6] Michelle M. Mello, David M. Studdert and Troyen A. Brennan "Obesity – the New Frontier of Public Health" (2006) 354;24 N Engl J Med 2601 at 2601.

[7] "The Issues" (2011) NAAFA <http://www.naafaonline.com/dev2/the_issues/index.html>.

[8] "About Us" (2011) NAAFA <http://www.naafaonline.com/dev2/about/index.html> at "Why Should I Support Naafa?".

[9] "Healthy at Every Size (HAES)" (2011) Naafa <http://www.naafaonline.com/dev2/education/haes.html>.

[10] See eg Tammy Worth "Is the Fat Acceptance Movement Bad For Our Health" (2010) CNN <http://edition.cnn.com/2010/HEALTH/01/06/fat.acceptance/index.html>.

feel comfortable, but if someone turns the conversation towards really fat people we look over our shoulders and make sure no one will overhear and judge us. The problem is it's not just a medical issue, the preoccupation with using body mass as a determinant of bad health necessarily imputes a social problem with obese people. It's not politically correct because on some level we sense that despite the medical harms associated, you shouldn't judge a person based on their size.

Recently, Otago University Professor Jim Mann said that obesity was a boring issue in New Zealand.[11] He says it's become so normalised that there's no impetus to discuss or do anything about it. Looking at the number of reality TV shows screened in New Zealand, it's hard to agree that people don't discuss obesity because it's boring. The Biggest Loser,[12] a show that takes a group of obese people and pits them off against each other in a weight loss competition is in its twelfth season in the US alone. Australia and UK also have versions of the show which have been screened in New Zealand. 'Supersize versus Superskinny'[13] takes one underweight and one overweight person and makes them swap diets for a fortnight in an attempt to shock them into lifestyle changes. 'Lorraine Kelly's Big Fat Challenge'[14] tracks the life of one obese family, the Chawners, 'Britain's fattest and laziest family',[15] and a final example, 'Embarrassing Fat Bodies'[16] is as blunt a description as possible of the fascination society seems to have with obesity.

---

[11] Mark Wright "A Heavy Burden" (2011) Issue 29, University of Otago Magazine 23 at 24.

[12] "The Biggest Loser" (2011) NBC< http://www.nbc.com/the-biggest-loser/>.

[13] "Supersize Versus Superskinny" (2011) Channel4 <http://www.channel4.com/programmes/supersize-vs-superskinny>.

[14] "Lorraine Kelly's Big Fat Challenge" Sky <http://go.sky.com/vod/content/SKYENTERTAINMENT/content/seriesId/6e5d510681b39210VgnVCM1000002c04170a_____/content/default/promoPage.do>.

[15] Amelia Wade "'Big Fat' Father Slams TVNZ Promotion" (2011) NZ Herald <http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10724523>.

In our private lives at least there seems to be an obsession with weight loss and the extremes of obesity. Whatever the reason, it seems hard to accept that obesity is a boring issue that we just don't care about. This is especially so when it comes to children. For some reason with children we seem more able to talk about it. At different times in the last few months I've visited a popular news website to see the following headlines: 'Is Junk Food Child Abuse?',[17] 'Why Don't Kids Walk to School'[18] and 'should Parents Lose Custody of Super Obese Kids?'[19]

Society recognises that children don't have the same faculties as adults to exercise judgment, evaluate consequences and make decisions. As a result there are a number of areas in society where children are restricted or protected by the law.

This dissertation will consider whether childhood obesity should become one of those areas; whether it is a proper focus for legal intervention. This dissertation advocates that any intervention should be focussed at a holistic and environmental level. Approaching obesity as a condition caused by the environment that society operates in avoids apportioning blame or targeting individuals and their choices. This approach instead sees individuals as products of a highly influential environment, which the law perhaps ought to regulate.

**What is obesity?**

---

[16] "Embarrassing Fat Bodies" (2011) Channel4 <http://www.channel4.com/programmes/embarrassing-fat-bodies>.

[17] Michelle Bridges "Is Junk Food Child Abuse" (2011) <http://www.stuff.co.nz/life-style/wellbeing/4980826/Is-junk-food-child-abuse>.

[18] Katie Chapman "Why Don't Kids Walk to School?" (2011) <http://www.stuff.co.nz/national/health/5694725/Why-don-t-kids-walk-to-school>.

[19] Paloma Migone and Lindsey Tanner "Should Parents Lose Custody of Super Obese Kids?" 2011 <http://www.stuff.co.nz/life-style/wellbeing/5277018/Should-parents-lose-custody-of-super-obese-kids>.

Obesity is usually defined with reference to the Body Mass Index. This index is a scale that generates a figure that expresses body mass proportionate to height. The calculation is simple to use, being, kg/height in metres squared. The BMI is used globally as a tool for comparing populations, however, the biggest criticisms make it unworkable as the sole determinant of health related to body size.

In short, a BMI level below 18.5 is deemed underweight, from 18.5 to 24.9 is normal, above 24.9 is overweight and above 29.9 is obese.[20] These classifications are used in New Zealand.[21]

The BMI makes an estimate of body fat based on body mass. No allowances are made for differences in bone density, percentage of muscle mass or water retention across individuals although in recent years allowances have been made for variances in muscle and bone features across ethnic groups.[22] Nor does it measure where fat is stored which can make a difference in the effects of overweight. Basal metabolic rate may be high in an individual, allowing a weight range that is normal, while failing to assess potential height in blood pressure and cholesterol.

Athletes are difficult to assess. Aerobic athletes tend to have lean muscle mass and little fat which may put them towards the underweight level. Conversely anaerobic athletes like rugby players and sprinters tend to have high muscle concentration, low fat and can have a

---

[20] "BMI Classification" (2011) World Health Organisation <http://apps.who.int/bmi/index.jsp?introPage=intro_3.html>.

[21] *Healthy Eating – Healthy Action Oranga Kai -Oranga Pumau - a Background 2003* (Ministry of Health 2003) at 40.

[22] Ibid. and for example Singapore which rates a BMI 23 and overweight, "Know Your BMI" (2009) Health Promotion Board Singapore <http://www.knowyourbmi.sg/knowyourbmi.aspx>.

BMI categorisation tending towards overweight or obese.[23] In both situations body fat may be overestimated.

It is hard to see how the prevalence of persons who may have been miscategorised individually, could not influence BMI generalisations for populations. However, across the board, higher BMI levels do statistically correspond with greater occurrence of cardiovascular problems.[24] The scale is not ideal. The argument has been made that because of this, obesity and overweight are all arbitrary figures which may not be accurate. This global problem may be an issue of miscategorisation.[25]

There are a significant number of deaths a year associated with persons who are classified as obese.[26] On an individual level, it is a medically accepted notion that the more fat tissue a person carries past a certain proportion, the more likely they are to be unhealthy due to the increased stress on vital organs, and the higher insulin tolerance developed.[27] Both of these presumptions are not absolute. A person who carries more fat may exercise often and be healthier than someone of normal weight who doesn't.[28]

In order to assess whether a person's BMI classification is an accurate indication of health, an individual assessment of factors including exercise and food choices is necessary. Other

---

[23] e.g. All Blacks Captain Richie McCaw has a BMI of 30, putting him in the obese category.

[24]See William B Kannel, Ralph B D'Agostino and Janet L Cobb "Effect of Weight on Cardiovascular Disease" (1996) 63;3 Am J Clin Nutr 419s.

[25] KJ Rothman "BMI-Related Errors in the Measurement of Obesity" (2008) 32 Int J Obes S56 at S56.

[26] WHO estimates 2.8million people globally each year die from overweight or obesity, see: World Health Organisation "Obesity and Overweight Fact Sheet", above n2.

[27] Keith N. Frayn "Adipose Tissue and The Insulin Resistance Syndrome" (2001) 60 P Nutr Soc 375 at 375.

[28]See Xumei Sui and others "Cardiorespiratory Fitness and Adiposity as Mortality Predictors in Older Adults" (2007) 298;21 J Am Med Assoc 2507 at 2507.

anthropometric techniques for assessing size and health are claimed to be more accurate indicators of body fat and health than the BMI. Skin calliper tests estimate the percentage of fat on a body based on the corresponding proportion that a person carries on certain areas of their body. The Saggital Abdominal Diameter test estimates the amount of mass carried in the abdominal area, which is considered a risk area.

To summarise, saying who is obese and who is not, isn't always as simple as referring to the BMI scale, rather the BMI should be used as a guide or starting point in determining health risks.[29] Alternative measures are available and provide the individual with a more accurate assessment. The main proponents of unhealth associated with body size are fat tissue carried and lack of cardiovascular exercise which is associated with visceral fat. These factors are often linked to people with a higher body mass which seems to where the BMI gains some of its statistical accuracy.

For the purposes of the dissertation I would want to define obesity in the same way as the World Health Organisation, as the point at which excessive fat tissue carried becomes a health complication.[30] Most of the statistics used in this dissertation are based on BMI definitions of obesity so there is a logical gap in substantiating some of the conclusions reached. The statistical data that shows higher BMI is a valid predictor of adverse health effects is relied on, as is the notion that higher BMI is associated with higher fat tissue carried. This dissertation largely focuses on whether the law should regulate childhood obesity from a theoretical perspective.

**What are the health effects of obesity?**

We talk of obesity as being dangerous to health but in order to try to classify it as something children should be protected from, it is necessary to consider what those health effects are

[29] "BMI Calculator (Adults ONLY)" (2009) National Obesity Forum UK <http://www.nationalobesityforum.org.uk/families/adults-check-your-bmi/464.html>.

[30] "Obesity" (2011) World Health Organisation <http://www.who.int/topics/obesity/en/>.

and whether they are comparable to other ills and dangers that children are currently protected from by the law.

Cardiovascular Disease

Obesity is comorbid with cardiovascular disease, with obesity being a risk factor for cardiovascular disease.[31] Overweight and obesity impact on the cardiovascular system and predispose the individual to coronary heart disease and heart failure.[32] The World Heart Foundation claims that 21% of ischemic heart failure is attributable to having a BMI over 21.[33]

In the New Zealand health bulletin, 'Nutrition and the Burden of Disease', a reduction in BMI by one point is associated with a 12%-4% reduction in ischemic heart disease depending on age.[34] The risk for ischemic stroke has a linear correlation with increasing BMI. Reducing BMI by one point is associated with a 13%-4% drop in the risk of ischemic stroke, depending on age.[35]

Diabetes Type Two

---

[31] "Obesity" (2011) World Heart Federation <[31] http://www.world-heart-federation.org/cardiovascular-health/cardiovascular-disease-risk-factors/obesity/> at "Why obesity causes cardiovascular disease".

[32] Poirier and others "Obesity and Cardiovascular Disease: Pathophysiology, Evaluation, and Effect of Weight Loss" (2006) Circulation (American Heart Association) 898 at 898.

[33] "Obesity", above n 31 at "Why obesity causes cardiovascular disease".

[34] *Nutrition and the Burden of Disease: New Zealand 1997-2011* (Ministry of Health and the University of Auckland. 2003) at 117.

[35] Ibid, at 118.

Regular consumption of high energy foods, usually containing a high sugar level increases the body's tolerance of insulin.[36] In the normal metabolic process, when carbohydrates are processed the body produces insulin in order to regulate the rise in blood sugar; the more exposure to high concentrations of sugar, the more insulin tolerant a body becomes. The more tolerant, the less insulin produced.[37]

Type two diabetes progresses in stages from 'normal' to 'insulin resistant' to 'type two diabetes'.[38] This intermediary stage has been shown to be reversible in studies. If exercise is conducted and a healthy diet is maintained there is a turnaround over three years.[39]

Other

Other effects of obesity are hypertension or high blood pressure,[40] sleep Apnoea (abnormal pauses or abnormally shallow breathing during sleep),[41],[42] and abnormal bone growth in children.[43]

---

[36] Ibid.

[37] Tamara S. Hannon, Goutham Rao and Silva A. Arslanian "Childhood Obesity and Type 2 Diabetes Mellitus" (2005) 116;2 Paediatrics 473 at 474.

[38] Ibid.

[39] Ibid, at 475-476.

[40] "Obesity and Overweight Fact Sheet" World Health Organisation, above n 2.

[41] "What is Sleep Apnea?" (2010) National Heart Lung and Blood Institute <http://www.nhlbi.nih.gov/health/health-topics/topics/sleepapnea/>.

[42] William H. Dietz "Health Consequences of Obesity in Youth" (1998) 101 supplement 2 Paediatrics 518 at 522.

[43] Ibid.

There is 'sufficient' evidence for a causal connection between obesity and several cancers; colon, breast, oesophagus and kidney.[44]

Apart from the physical medical effects, obesity has a positive correlation with depression.[45] Obesity is linked with low self esteem,[46] and one study placed the standard of living of an obese child at that of a child living with cancer.[47]

**What are the causes of obesity?**

The causes of obesity at first seem pretty common sense. Primarily the cause of obesity is excessive weight gain in the form of fat tissue. The cause of this is a chronic positive energy balance. Fat gain is caused by usually consuming more calories in food, than is expended by a combination of three energy output factors: basal metabolic rate (the amount of energy it costs for a body to exist), thermogenesis (the amount of energy a body spends on digesting food and converting it into more energy) and physical activity.[48] Excess energy is converted into stored energy in the form of fat tissue.

---

[44] Eugenia E Calle and Michael J Thun "Obesity and Cancer" (2004) 23 Oncogene 6365 at 6365.

[45] Albert J Stunkard, Myles S Faith and Kelly C Allison "Depression and Obesity" (2003) 54;3 Biol Psychiat 330 at 330.

[46] J. Michael Wieting "Cause and Effect in Childhood Obesity: Solutions for a National Epidemic" (2008) 108 J Am Osteopath Assoc 545 at 545.

[47] JB Schwimmer, Tm Burwinkle and JW Varni "Health-related quality of life of severely obese children and adolescents" (2003) 289 J Am Med Assoc 1851 at 1851-1853 cited in Wieting, above n 46 at 522.

[48] Patricia M. Anderson and Kristin F. Butcher "Childhood Obesity: Trends and Potential Causes" (2006) 16;1 Future Child 19 at 33.

The fact that there is an epidemic of obesity seems to require more than just describing what leads to weight gain. People seeking to explain the sudden explosion of obesity rates refer to an 'obesogenic' environment to explain why weight gain has become so common and excessive throughout the world.[49] Essentially it's more than just eating and not exercising, plans to reduce obesity rates have to consider why eating and non-exercise has become so common.

**Availability of food**

A study by Guerrieri et al in 2008 tried to find a link between variety and obesity.[50] The focus of their study was in determining why some people are still lean if we live in an obesogenic environment. Guerrieri and co looked at character traits as a determinant of caloric intake, focussing on impulsivity. Their study was focussed on children. They found that when the children that were determined to be 'reward sensitive' were offered a variety (colour, shape etc) in the sample food, the caloric intake was higher than when little variety was offered in the same sample food.[51]

The children were determined to be reward sensitive if they were more susceptible to the possibility of gain in spite of increasing likelihood of punishment.[52] A variation of the Matthys door test was used where children gained points by opening doors in a computer game with a smiley face behind it. The more doors that were opened the lower the chance of the next door concealing a smiley face. The reward sensitive children were the ones that continued to open doors to find the smiley face, rather than cut their losses and retain their points.

---

[49]See eg Mary-Ann Carter and Boyd Swinburn "Measuring the Obesogenic Environment in New Zealand" (2004) 19;1 Health Promot Int 15.

[50] R Guerrieri, C Nederkoorn and A Jansen "The Interaction Between Impulsivity and a Varied Food Environment: its Influence on Food Intake and Overweight" (2008) 32 Int J Obesity 708.

[51] Ibid. at 712.

[52] Ibid. at 710.

This indicates that for some people, the fact of having a variety of foods available will lead to overconsumption.

**Energy dense foods**

It seems to go without saying that if you consume high energy food, a high amount of energy will be stored on the body. However, this is only one side of the energy equation. A person can eat high energy foods and exercise to keep up with it.

However, a lot of high sugar energy dense foods contain high fructose corn syrup (HFCS). HFCS is a glucose-fructose substance that has been manufactured through hydrolysis of glucose. It is cheaper and often more convenient to use than sucrose. It is used in a lot of packaged and food industry foods in the US, including soft drinks as HFCS works well in acidic conditions.[53] There is ongoing debate as to the safety of HFCS. Critics argue that it has led to the rise in obesity statistics. Those in favour of HFCS say that it has comparable effects to table sugar.[54]

The alleged problem with HFCS is the way that it is processed by the body. Explained to a layperson, ordinary glucose has a variety of ways of being processed in the body but HFCS has fewer avenues for metabolising;[55] consumption of HFCS beyond a small amount will lead to an increase in triacylglycerols which are mechanisms for storing fat.[56] This is debated. White says that when a proportionate amount of glucose is consumed, a high level

---

[53] John S White "Straight Talk About High Fructose Corn Syrup: What it is and What it Ain't" (2008) 88 Am J Clin Nutr 1716S at 1716S.

[54]Ibid, at 1717S.

[55]Josh M. Clark and Charles W. Bryant "Is High Fructose Corn Syrup Bad For You?" (Podcast for howstuffworks.com, delivered on 24 April 2009).

[56] George A Bray, Samara Joy Nielsen and Barry M Popkin "Consumption of High-Fructose Corn Syrup in Beverages May Play a Role in the Epidemic of Obesity" (2004) 79 Am J Clin Nutr 537 at 538.

of fructose isn't a problem. The only problem would occur in metabolism of a high concentration of fructose without glucose.[57]

Some studies allege that HFCS induces overeating. It is argued to be sweeter than glucose and because fructose metabolism doesn't stimulate insulin or leptin production, both of which are key appetite controllers, overeating may be more likely.[58] It seems that there is inconclusive evidence on the hypothesis that high fructose corn syrup is the cause of the obesity problem.

**Fast Foods**

Fast foods are high in salt and fat, some fast foods are relatively inexpensive, and they're fast. All of these traits add to their desirability. The consumption of salted foods may work on the opiate and dopamine receptors in the brain.[59] Opiate withdrawal through restriction of salt intake has been linked with cravings for salted foods and increased calorie consumption.[60] Earlier this year a study on mice concluded that salt appetite is an example of an instinctual behavioural pattern developed through natural selection.[61]

Moreover, among young people fast food is a part of culture. In New Zealand, most malls have a food court, most of the time it's full of high school students. If teenagers get food

---

[57] White, above n 53 at 1719S.

[58] Bray, above n 56 at 538.

[59]James A. Cocores and Mark S. Golda "The Salted Food Addiction Hypothesis May Explain Overeating and the Obesity Epidemic" (2009) 73;6 Med Hypotheses 892 at 892.

[60] Ibid.

[61] Wolfgang B. Liedtke and others "Relation of addiction genes to hypothalamic gene changes subserving genesis and gratification of a classic instinct, sodium appetite" (2011) P Natl Acad Sci USA <http://www.pnas.org/content/early/2011/07/06/1109199108.full.pdf+html>.

before going to a movie for example, chances are it's from a fast food joint because it's what teenagers can afford.

**Advertising**

Children under the age of eight have been found to be incapable of understanding the persuasive intent behind advertisements,[62] often not differentiating advertisements from the television program they are watching.[63]

**Loss of food as a cultural event**

Food journalist Michael Pollan claims that the loss of food and eating as a cultural event has led to the confusion about what we should and shouldn't be eating.[64] He says that diet used to be passed down through generations. Diets that worked were carried on. However, with the rise of industry and 9-5 work days, food has become something that we need, not something that we do. He says that it would be rare for a person today to be eating the same foods that their grandparents ate and this rapid change in food lifestyle is a cause of obesity and food confusion. Add to that the obsession with nutritionism and compartmentalising the diet into needs for x amount of vitamins and minerals, and the dietary advice given is based on science, which is increasingly changing. Whether saturated fats are better or worse than trans-fats for example, whether folic acid should be added to bread, these are questions that we are basing on current scientific data instead of generations of practice.[65]

---

[62]Mello, above n 6 at 2601.

[63]David Darwin "Advertising Obesity: Can the US Follow the Lead of the UK in Limiting Television Marketing of Unhealthy Foods to Children?" (2009) 42;317 Vand J Transnat'l L 317 at 338-339.

[64] Michael Pollan *In Defence of Food* (Penguin Books Ltd, London, 2008) at 19-52

[65]Ibid.

**Sedentary lifestyles – parks, recreational areas, safety**

Some obesity articles cite the lack of safe recreational areas as a cause of obesity.[66] The more urban we get, the less space there is to exercise. Moreover, with the need to work, exercise becomes a leisure activity rather than one that's necessary, and may come second place to other duties, for example caring for children. The time constraints, or perceived time constraints, may also favour packaged and processed foods over making everything from scratch.

## 3. Why target children

After looking at obesity in general, the next step is to consider why children should be the focus of a change in legislation. What is the benefit of making children the focus of a change in law and how is obesity particularly bad for children?

**Early Habit Formation**

The first consideration is that children form habits. Childhood is recognised as a period of development. In terms of habits that affect the onset of obesity, diet and preference for certain foods is established in the first few years of life.[67] Genetic predispositions towards certain foods work in conjunction with the food environment to shape preferences.[68] The

[66] Wieting, above n 46 at 546, and Adam Larson "The American Childhood Obesity Epidemic: Probable Causes and the Legislative and Judicial Responses" (2008) 28;1 Children's Legal Rights Journal 1 at 2.

[67] Leann L. Birch "Development of Food Preferences" (1999) 19 Annu Rev Nutr 41 at 41.

[68] Ibid. at 42

variety and availability of energy dense foods work on young children to encourage preferences that are out of step with nutritional guidelines.[69]

Forming habits of exercise is different. Many children will cease to exercise when they become adolescents.[70] Aarts et al advocate programmes that promote exercise at an early age in order to keep exercise habits in later life.[71] The decision to exercise is initially based on rational cost-benefit pressures and the perception of difficulty and reward. This decision quickly becomes heuristic. Regular exercise with positive experiences can result in habit formation.[72]

The implication of this is that if children and adolescents learn about the need for exercise and are influenced or pressured to exercise, they are more likely to. The more often they engage in it with positive experiences, the more likely exercise will become something that is done without evaluative thought, but done as a behavioural habit. [73]

**Susceptibility to the Obesogenic Environment**

Children are also more susceptible to advertising than adults. Advertising, print media and television is considered highly influential, especially for children. Using a 'mathematical simulation model', Veerman et al estimated that one in three, to one in seven obese children between the ages of 6 and 12 in the United States, would not be obese if it were

---

[69] Ibid.

[70] Henk Aarts, Theo Paulussen and Herman Schaalma "Physical Exercise Habit: On the Conceptualization and Formation of Habitual Health Behaviours" (1997) 12;3 Health Educ Res 363 at 363.

[71] Ibid, at 364.

[72] Ibid, at 367-369.

[73] Ibid.

not for food advertising.[74] Moreover, children become loyal to brands at a young age and often retain this loyalty throughout their life.[75]

Moreover, owing to their ever developing faculties, children at a young age may have more difficulty making rational decisions than adults as their cognitive faculties are not fully developed. While different aspects of a child's ability to make decisions (both cognitive and psychosocial) eventuate at different stages,[76],[77] children are more susceptible to external influences such as peer pressure and advertising, than adults are. Moreover children base much decision making on heuristics without analysing their efficacy.

**Health**

8.3% of children between the ages of 2 and 14 were obese in New Zealand in 2007. 20.9% of children were overweight according to BMI.[78] This is a problem because the likelihood of carrying overweight and obesity from childhood to adulthood is high; an overweight child is

---

[74] J. Lennert Veerman and others "By How Much Would Limiting TV Food Advertising Reduce Childhood Obesity?" (220() 19;4 Eur J Public Health 365 at 367.

[75] Edward L. Palmer and Courtney F. Carpenter "Food and Beverage Marketing to Children and Youth: Trends and Issues" (2006) 8 Media Psychology 165 at 167 cited in Larson, above n 67 at 2.

[76] Janis E. Jacobs and Paul A. Klaczynski "Development of Judgment and Decision Making During Childhood and Adolescence" (2002) 11;4 Curr Dir Psychol Sci 145 at 145-149.

[77] Laurence Steinberg and Elizabeth Cauffman "Maturity of Judgment in Adolescence: Psychosocial Factors in Adolescent Decision Making" (1996) 20;30 Law Human Behav 249 at 265.

[78] "Obesity in New Zealand" Ministry of Health <http://www.moh.govt.nz/moh.nsf/indexmh/obesity-key-facts>.

up to 80% more likely to be overweight in adulthood than a normal weight child.[79] One reason to target children is that there is a significant group of children who would benefit from intervention.

Children don't just suffer from the adverse health effects of obesity when they become adults. Type two diabetes, sleep apnoea and abnormal bone growth due to the stress from excess weight can all occur in childhood.

Another reason for intervening early is that weight loss is difficult. The adage of prevention is better than cure is true for obesity. Weight may be unfixed but it's not something that can be easily added and taken away without any effect on the body.[80] Childhood, where behavioural trends are developed, may be the best time to start the prevention process.

**Principle**

It seems unfair in principle that children are burdened with the difficulties of obesity. If we accept that obesity results in poor health, that obesity is caused by the overall food and exercise environment, and if we also accept that children are particularly dependent on others in society because they can't make their own good decisions or even purchase their own healthy food, then not doing something about childhood obesity is essentially allowing individuals to be burdened with potential life time problems that they have little control over assuming.

New Zealand likes the idea of child protection. We're signatories on the United Nations Convention on the Rights of the Child and we have a different system of criminal justice for children, presumably because we accept they're not in the same position as adults. We have

---

[79] Wieting, above n 46 at 545.

[80] see eg. risk of cardiovascular disease is still high even after weight loss. Aviva Must and others "Long Term Morbidity and Mortality of Overweight Adolescents" (1992) 327 N Engl J Med 1350, and Richard J. Deckelbaum and Christine L. Williams "Childhood Obesity: The Health Issue" (2001) 9 supplement 4 Obes Res 239S.

domestic legislation that professes to make the welfare and best interests of children paramount considerations in dealings with children.[81] Surely obesity is directly linked to a child's welfare and best interests.

**Practice**

There are practical reasons for targeting children. They can't vote. That may be a totally uncouth reason for advocating more control over their lives, but the reality is legislation that doesn't affect the voting public is probably less likely to be voted out. We have no compunction with coercing children to do what's right for them; that fact can be established because they don't have a say in government.

From a utilitarian point of view, less obese children will mean less obese adults. Less obese adults will mean less health costs to society. Targeting children by, for example, making exercise mandatory at school, won't cut into their productivity because they don't produce labour. Targeting children will have the least cost and possibly bring about the greatest utility. If you targeted adults, the utility in eating delicious high fat food may be equivalent to the utility of going for an endorphin inducing run; encouraging adults to exercise may reduce healthcare spending, but may also reduce labour output.

**4. Is it right to target children and the obesogenic environment with the law?**

The main argument against intervention is that it is a restriction on freedom concerning a lifestyle issue which is not properly within the state's function.

**FREEDOM**

[81] Eg. Care of Children Act, 2004 s 4.

Freedom is usually defined as a negative concept; it is marked by the absence of restraint rather than the presence of an action.[82] Hobbes defined freedom as the absence of opposition from an external force acting on the body. Only when a person is chained, for example, and cannot exercise their will are they unfree.[83] As long as there was a choice to be exercised, even if it was compelled or influenced by forces that didn't act on the physical body, a person was free. Using a Hobbesian definition of freedom, the argument for legislation or state regulations is unopposed. No one is forced to follow the law just as no one with a gun to their head is forced to do what the gun holder wants them to do. Regulation that changes the obesogenic environment may influence the will of the person but it does not take away their opportunity to exercise it.

This definition seems out of step with modern conceptions of freedom and as philosophy historian Quentin Skinner explains, has undergone many revisions.[84] Locke altered the application of force to apply to the will rather than the body, envisioning bribes, promises, coercions and compulsions to constitute a restriction and so a loss of freedom.[85] If this definition is used, then in the modern society the question becomes 'is interference with freedom justified?' JS Mill questioned that restraints only come from the state and pointed out that society often exerts a degree of control over the individual.[86] Taking that idea further, Marxist and Freudian thought question whether restraint always comes from external forces and cite the self as a restraint on freedom; that sometimes the will of the self can be thwarted by internal deviances which Skinner refers to as 'passions'.[87] If it can be

---

[82] Peter Millican, Professor of Philosophy Hertford College "Different Concepts of Freedom" (speech to University of Oxford, Oxford, 2 December 2010).

[83] Quentin Skinner "What is Freedom?" (Speech to University of Cambridge, Cambridge, 7 August 2008).

[84] Ibid.

[85] Ibid.

[86] Ibid.

[87] Ibid.

accepted that either of these definitions of freedom are correct, then it is arguable that the obesogenic environment is already an example of an external restraint on freedom, or that an individual's continued response to the obesogenic environment is an internal restraint on freedom. Then the issue isn't so much whether it is right to take away freedom but whether the unfreedom that currently exists should be altered to a different state of unfreedom.

If Locke's definition of freedom is used then it seems that every state regulation is an intrusion on freedom. All laws threaten retribution if they are broken and so influence the will of the citizen. It is untenable to argue that any obesity regulation would create a situation of unfreedom and so shouldn't be used. The corollary is that all regulations that bring about a state of unfreedom should be eradicated. Society would be ridiculous if this were the case. The issue is whether regulation is a justified intrusion on freedom.

**THE HARM PRINCIPLE**

There is a minimum need for state intervention through regulations and laws in order to keep society working. Government is largely concerned with protecting individual freedoms while at the same time safeguarding the freedom of others. Legislation that strikes a balance between these principles seems to be accepted. This is John Stuart Mill's 'harm principle' in action.[88] The principle is that the state should only restrict freedom when actions pose a significant risk of harm to others.[89] Speed limits and requirements that a car has a warrant of fitness fall inside this harm principle and are properly within the legislatures grasp. An example is the law against assault. My freedom to beat someone out of anger is restricted by the laws relating to assault (although Hobbes would say that I am still free to beat someone). Most in society probably accept that this is a justified limitation on my freedom.

[88] L.O. Gostin and K.G. Gostin "A Broader Liberty: J.S. Mill, Paternalism and the Public's Health" (2009) 123 Public Health 214 at 214.

[89] Ibid.

The difference with obesity is that the fact of a person being obese doesn't seem to have any relatable harm to other people. It may be possible to argue that a person being obese does pose a risk of harm to other people but the harms don't seem to be as tangible as those harms associated for example with passive smoking. Saul Levmore points out that there may be inconveniences for other people who sit next to an obese person on a plane or at a cinema.[90] There is also the argument that persons rarely live isolated lives where they do not have parents or friends or children who care for their wellbeing.[91] There is an argument that obesity in society may generate more obesity. Through market principles, increased demand for or use of products and services that promote obesity will lead to an increased supply. The stronger the obesity promoting providers get, the more they will be able to promote obesity to other groups in society. There is also the vague connection between smaller groups in society that tend to mirror the actions and qualities of those they live with.

These harms to others seem to be fairly remote and arguably don't pass the significant risk aspect of Mill's principle. State actions that interfere with lifestyle choices where the main harm is to the self are described as paternalist. This sort of action seeks to step into the shoes of the individual and make their choices for them because the individual will inevitably choose wrongly if left to their own devices.

**PATERNALISM**

Those who argue against paternalistic intervention often use the term 'nanny state'. Perhaps it's convenient to point out again that this dissertation is concerned with children. Some articles over the last decade have advocated for a return to paternalism, something

[90] Saul Levmore, Dean of Law Chicago University "The Future of Obesity Regulation" (Speech to Chicago University, Chicago, 20 November 2005).

[91] David L. Shapiro "Courts, Legislatures and Paternalism" (1988) 74 Virginia Law Review 519 at 531.

that has come to be a dirty word in the political sphere.[92] It is pointed out often that merely using the term 'nanny-state' is an ad hominem attack that hides the actual issue.[93]

The libertarian idea underpinning the disapproval of paternalism is that no one can know the individual's needs and wants and goals better than the individual itself. In other words, the individual knows the best way to maximise its own utility. If utility is the goal of laws, the utility a person gets from enjoying a cheeseburger can't be compared with the utility the state thinks the individual would get from being a few kilograms lighter. Paternalism is an attack on freedom because freedom must come with the freedom to make what might be seen as the wrong decision, or as Dworkin puts it, the right to make mistakes.[94] While this may be something that most of us agree upon for adults, it does not appear to hold true for children. We support a number of laws and regulations that prevent children from making bad choices, alcohol and tobacco consumption are two obvious examples.

Perhaps paternalism is sometimes OK, depending on the individual. We are also comfortable with the prohibition on various drugs. Perhaps paternalism is OK if the damage to the individual is high enough.

Using Mill's idea about restraints on freedom coming from society as well as the state, it may be possible to argue that paternalist interventions are not aimed at taking away an individual's freedom but at reinstating it[95]. We live in an obesogenic environment where it is

---

[92] Gostin, above n 89 at 215.

[93] J. Hoek "Public Health, Regulation and the Nanny State Fallacy" (Partnerships, Proof and Practice - International Nonprofit and Social Marketing Conference 2008, University of Wollongong, 15-16 July 2008).

[94] Michael Freeman "The Limits of Children's Rights" in Michael Freeman *The Moral Status of Children; Essays on the Rights of the Child* (Kluwer Law International, Cambridge MA, 1997).

[95] See Quentin Skinner "The Paradoxes of Political Liberty" (The Tanner Lectures on Human Values, Farvard University, 24 and 25 October, 1984).

easier to become obese than it was forty years ago for example. Because a person uses their time to go to work in order to get paid, they may not have time to exercise. We would still say they have the freedom to choose whether to exercise or go to work but it is possible that their choice is being influenced or even compelled by the promise of payment and the ability to afford necessities in order to survive. This is an example with serious flaws but if we accept that the environment we live in makes it easier to neglect to exercise, easier to eat fast foods and easier to sell chocolate bars at school canteens than sushi, then something must be making that choice easier. Some force is acting on an individual's decisions with promises of increased profit, for example, or increased amount of disposable income. I would argue that these environmental forces should be considered as much a restriction on individual freedom as any government initiatives to correct them.

The same is arguably true for internal restraints. It has been mentioned earlier that salt is potentially linked with evolutionary drives that make its consumption akin to an addiction. Whether or not the sugar/salt addiction hypothesis is believed, the consumption of high energy food is rewarding and arguably habit forming. It is something we like doing even if we know it's bad for us. Surely the overconsumption of such food is an indicator that individuals don't, maybe are incapable, of making rational decisions about obesogenic choices. Of course the rational decision may be that there is greater benefit in consuming delicious energy dense foods and not exercising than there are long term health costs and side effects. But such a rational cost benefit analysis doesn't explain the extreme preoccupation our society seems to have with dieting.

Saul Levmore uses an internality model to predict government regulation.[96] He explains seemingly paternalist regulations as regulations brought about by an exercise of freedom. The idea is that there are some areas in our lives where if we could go forward in time we would evaluate our lives and wish we had acted differently. One example he uses if of retirement savings. Most people wish that they had saved more for retirement. Levmore posits that where we have these areas of potential regret that are common to most of the population and where there are interest groups in favour of legislation, there will be regulations. He doesn't give a normative account of whether regulations should be put in

[96] Saul Levmore "Taxing Obesity or Perhaps the Opposite" (2005) 53 Clev St L Rev 575.

place but it is interesting that his model envisions the citizen hypothetically asking the government to help it with self control through regulation.

In summary, paternalist interventions may be an attack on freedom, or we may want to accept that freedom is not an absolute concept and that usually some forces are always acting on our decisions, perhaps environmental, perhaps internal. The question with paternalist interventions should perhaps instead be, would the intervention make us less free than we already are and if not, i.e. if there are no repercussions for individual freedom, would the intervention bring about a better net situation for society.

Gostin posits a new way of looking at what are traditionally considered paternalist interventions when it comes to health care.[97] Health care is a communal issue. This is especially so with communicable diseases but is still true for conditions like type two diabetes and the ills associated with obesity. The government considers and is responsible for the health of the population, not the individual. It measures health on a population level and negative health becomes a real problem when concerning enough people that it becomes a population issue.[98] Gostin's argument is that paternalistic regulation is not in fact paternalist at all but part of a government's stewardship role.

Quentin Skinner also makes an argument out of what he considers are the paradoxes of freedom. Skinner concentrates on the seeming paradox that a positive concept of freedom creates; that sometimes we need to have limitations in order to be free.[99] In order to understand what freedom is we have to consider what freedom is used for.[100] Charles Taylor puts it that freedom is more than an opportunity concept.[101] The paradox is that freedom

---

[97] Gostin, above n 89.

[98] Ibid, at 217-219.

[99] Skinner "The Paradoxes of Political Liberty", above n 96.

[100] Skinner "What is Freedom?", above n 84.

[101] ibid.

consists in public participation or service to the community;[102] in order to be free there is a necessity to act. This necessity, from a negative concept of freedom, is a restraint.

Skinner resolves this paradox from the point of view of negative freedom by explaining that the requirement of public participation and putting the good of the community over the good of the individual is in fact a freedom promoting exercise.[103] The reasons are similar to those advanced by Gostin. We get the most freedom from having the most options available. This comes from having the most wealth in the community.[104] It is therefore in the interests of individual liberty to promote the interests of the community ahead of our own when it corresponds to an increase in wealth.

In terms of public health, as has been mentioned, the productivity of the community, its utility and creativity and skills cannot be maximised or exercised when it is sicker than it needs to be. [105]

**IN DEPENDENCE**

There is another aspect of freedom that may preclude considering any of these questions. Skinner points out that Hobbes was responding to the classical idea that freedom cannot be had in a monarchy.[106] There is a historical distinction between slaves and freemen and it was the contention of writers like Harrington and Milton that those who live under a monarchy are slaves.[107] This conclusion is reached through the argument that a person can

[102]Skinner "The Paradoxes of Political Liberty", above n 96 at 229.

[103] Ibid, at 246-249.

[104] Ibid, at 239.

[105] see generally Skinner "The Paradoxes of Political Liberty", above n 96 and Gostin, above n 89.

[106] Skinner "What is Freedom?", above n 84.

[107] Ibid.

never be free if they live in dependence on the will of another.[108] A slave can never be considered free, even if it is never given an instruction by its master because the slave lives in dependence on its master's will not to give it an instruction.[109] In a monarchy, prerogative powers are always retained.[110] The subjects live in dependence on the exercise of those powers rather than the rule of law. In a republic, true freedom can be had because the citizenry do not live in dependence on the arbitrary exercise of power, but of its own government.[111]

Children, though, do not participate in government. Children, in practical terms seem to live in complete dependence. Children are told when to go to bed, where to go to school, are provided with food to eat and a place to live and leisure activities at the discretion of their parents. Children cannot go out into the world and obtain work because there are labour laws preventing this. With no financial means of directing their own lives, children seem to be entirely at the mercy of the will of their parents or caregivers. There is the argument that parents are required by law to provide minimum standards of maintenance for their children, e.g. food and healthcare, so perhaps children are not in complete dependence on their parents. However, they are then in dependence on the state to create and uphold these laws. It is not as if children can exercise their right to vote if the state ignores those among their group who are starving or physically abused.

If unfreedom consists in living in dependence on the will of another then children are unfree already. The focus of obesity regulation for children should not be on whether freedom should be taken away, but on which situation of dependence is the best for children. It may be that there is an obligation on the state to protect children simply because they live in dependence and especially because they are denied the right to vote.

---

[108] Ibid.

[109] Ibid.

[110] Ibid.

[111] Ibid.

**PROTECTION**

The United Nations Convention on the Rights of the Child (CRC) and the fact that New Zealand is a ratified signatory backs up the idea of the commitment to protecting children. While the CRC doesn't mention obesity, several of its provisions can be interpreted to cover preventable ills and advocate protection of children from them.

Most relevant is Article 24 which recognises the child's right to the highest attainable standard of health. In describing action to be taken by the state, nutrition and providing information about nutrition is mentioned expressly.

Article 17 encourages media guidelines that protect children from material that is injurious to their health. If advertising is a cause of obesity, then the CRC arguably encourages advertising regulation.

Article 6, clause 2 recognises the right of the child of survival and development to the maximum extent possible. While including obesity in this may be a stretch; allowing children to bear the burden of obesity related diseases that reduce life expectancy is literally not encouraging survival to the maximum extent possible.

Bruce Hafen, from a US perspective, criticises the CRC heavily and says that it was unsolicited and all of a sudden gives children autonomy rights rather than protective rights in some parts.[112] He criticises this as interfering with a fundamental tenet of the United States legal culture. Hafen considers the right of the parent to determine what is best for their child as fundamental as it antedates the state.[113] According to the CRC, those parental rights of determination are heavily restricted by State power or by an insistence on autonomy for children that they are not able to handle.[114]

---

[112] Bruce C. Hafen and Jonathan O. Hafen "Abandoning Children to Their Autonomy: The United Nations Convention on the Rights of the Child" (1996) 37;2 Harvard Int Law J 449.

[113] Ibid, at 462.

[114] Ibid at 449.

For example Article 14 gives parents the right to guide the child's religion but only in accordance with the child's developing capacities. Article 12 gives the child the right to express their view in matters concerning them and gives due weight to their age and maturity. Hafen criticises these provisions as unclear but also makes the point that children are not ready for autonomy rights as they will be unable to anchor themselves.[115]

This criticism maybe stems from the steadfast ideas of privacy and parental rights that are held by a portion of the United States population. There are historical cases that affirm this idea. Hafen mentions *Yoder v Wisconsin*,[116] decided in 1972 which affirms that parents have the right to home school their children if to send them to school would violate the parent's freedom of religion. In 2008 a proposed amendment to the United States Constitution sought to codify parent's rights to raise their children how they want.[117] This was in response to the CRC which has been signed, but not ratified by the United States.

Eekelaar in his article 'The Emergence of Children's Rights', looks at the history of the child in society from a legal perspective.[118] Originally children were seen as "agents for the devolution of property" of their father,[119] then as members of the family that were in the father's possession by nature.[120] The connection could be severed when the public cohesion would be disrupted, for example if the father was impious or the child was in danger of serious bodily harm.[121] Eekelaar points out that this was not a move made out of any distinct rights attaching to the child but out of concern for the social order. More recently

---

[115] Ibid, at 466 and 452.

[116] Ibid, at 470.

[117] CBSNews "Parental Rights: The New Wedge Issue" (2009) CBS News <http://www.cbsnews.com/stories/2009/04/08/politics/politico/main4930409.shtml>.

[118] John Eekelaar "The Emergence of Children's Rights" (1986) 6;2 Oxford J Legal Stud 161.

[119] Ibid, at 163.

[120] Ibid, at 168.

[121] Ibid, at 168.

children are viewed as individuals distinct from their parents. This notion that a child is its own person for its own sake is a recent one.[122]

It is arguable that the idea that parental rights to privacy and to determine what is best for children, can only take priority over children's rights to grow up at fullest health and happiness, if children are seen in the historical context as being subservient to the parents.

The idea that it is the parent's role or right to determine whether their child may watch advertising or eat what they want from the school canteen, or to deal with the issue of child obesity in general seems to promote parental rights of control instead of the child's right to health. Parents may exercise that control to promote health, but they might not. The current rates of childhood obesity and overweight suggest that perhaps leaving the issue to parents isn't viable or doing enough to ensure child health.

New Zealand doesn't have a concept of absolute parental rights. There are only rebuttable presumptions that a child's natural parents are should be its guardians.[123] While in practice, Courts are reluctant to intervene in the placement of a child that is well settled,[124] this reluctance to interfere doesn't always attach to biological parents over foster parents.[125] Even in cases of intended adoption, Courts have intervened with a parent's wishes on the grounds that the placement that the parent wants is not in the best interests of the child.[126]

The empowering legislation that enables a Court to do this mirrors the language of the CRC closely. What is paramount in New Zealand for cases concerning children is the welfare and best interests of the individual child.[127] The legislation doesn't explicitly say what the best

---

[122] See ibid, at 161-182.

[123] see Care of Children Act, 2004 s 17.

[124] see Ibid, s 5(b).

[125] *Whittle v Fagavao* [1990] NZFLR 305.

[126] *Re T (Custody and Guardianship)* [2000] NZFLR 594.

[127] Care of Children Act, 2004, s 4.

interests are; it doesn't give the child the right to determine this, although it does enable the child to have a voice;[128] importantly, it doesn't say that the parents have overriding or even persuasive power to determine this.

I argue that this suggests we are already in an environment where the child is seen as distinct from its parents. That the state has obligations to children and the framework of legislation that promotes the child's 'best interests' acknowledges that. Surely obesity regulation that makes it less likely for children to be influenced by the obesogenic environment is in the child's best interest.

**PRACTICE**

The final argument I wish to make in favour of state intervention on the obesogenic environment surrounding children, is that the 'mischief' of obesity has parallels with other ills that the state already intervenes with. Intervention to curb child obesity can be justified using several reasons that may explain why aspects of children's lives are already regulated.

It is difficult to know exactly why legislation is passed by Parliament or the exact reasons behind state endeavours. Looking at regulation that already limits children's choices and decisions, it is possible to discern underlying reasons that make sense and may help to explain the impetus behind intervention. I have isolated three reasons that perhaps underlie these interventions:

1. Some activities are uniquely dangerous for children and so children should be prevented from engaging in them.

2. Some activities will lead to long term, semi-permanent or undoable consequences for the child's future, so those activities should be put off until the child becomes an adult.

3. Some activities if done poorly will have negative aggregate effects for society, and a child is not capable of doing the activities well.

[128] Ibid, s 6.

Using examples from the categories attaching to each reason, obesity and its effects can be considered by analogy to determine whether these reasons also attach to the need to alter the obesogenic environment.

**Reason One**

The first reason may underlie legislation against children consuming alcohol and smoking. The legislature has determined that persons under eighteen cannot purchase alcohol by law and cannot smoke tobacco under the age of sixteen. These activities are detrimental to anyone's health but more so to the health of the developing brain.

Studies on rats show that the consumption of alcohol is uniquely dangerous to adolescents.[129] Alcohol consumption by children and adolescents is linked to brain damage and cognitive deficits.[130] Areas of the brain associated with memory are adversely affected and intellectual development is also implicated. These effects are carried through into adulthood.[131] Because the hippocampus is still developing in children and adolescents, the age of alcohol initiation and the duration of drinking have a correlative relationship with the size of the hippocampus.[132]

Tobacco consumption is the leading cause of preventable death worldwide. It is a highly addictive substance, estimated at 6 times the addictive quality of alcohol.[133] In the US, 40% of smokers try to quit each year; 3% succeed.[134] In New Zealand from 2003-2008, 59% of

---

[129] Donald w. Zeigler and others "The Neurocognitive Effects of Alcohol on Adolescents and College Students" (2005) 40 Prev Med 23 at 27.

[130] Ibid, at 23.

[131] Ibid.

[132] ibid, at 27.

[133] Donald W. Garner and Richard J. Whitney "Protecting Children From Joe Camel and His Friends: a New First Amendment and Federal Preemption Analysis of Tobacco Billboard Regulation" (1997) 46;2 Emory LJ 479 at 507.

[134] Ibid.

smokers attempted to quit and failed.[135] Beyond the addictive qualities, it may be that we consider children are more susceptible to making the wrong choices concerning tobacco use.

It may be difficult to insert obesity and its effects into this category. Type two diabetes has become common in obese children but it is also present in adults. Opinion is still uncertain over whether high sugar/salt food consumption is an addiction like smoking is. What can probably be said about poor diet and low exercise for children is that it is habit forming. In the formative years of a child's life, habits may take on an element of permanence. However, the situation of being obese probably poses no more danger for children than it does for adults. Mortality from obesity generally occurs later in life.

The unique danger for children with obesity is behavioural. It may not be enough of a justification to interfere. If learned behaviour that is detrimental to health is a reason to interfere, then the line could arguably be drawn anywhere around detrimental activities. Watching television and going to bed late are also learned behaviours that may result in health problems and unproductiveness. While the effects of tobacco consumption and obesity may be similar, the danger with tobacco is that once you indulge in it, you start to become addicted and damage is done immediately through the absorption or inhalation of chemicals. With many of the actions that lead to obesity, damage only occurs if the activities are chronically engaged in.

**Reason Two**

The second reason may be that children cannot properly evaluate the effects of activities due to their inexperience or developing faculties, and that certain activities that have long term consequences should be left to adulthood. This reason may underlie laws concerning the ability to marry, to engage in sexual activity and to withdraw from education. The

[135] 2008 New Zealand Tobacco Use Survey Quitting Results (Ministry of Health. 2009. *New Zealand Tobacco Use Survey 2008: Quitting results*. Wellington: Ministry of Health) at 8.

undertone of permanence or difficulty in changing the resulting situation warrants intervention.

Obesity in the individual arises from over consumption and under expenditure of energy. Both of these may be learned habits or behaviours for a child. These behaviours may be seen as long term and contributing to the ongoing increase in obesity in an individual throughout its life. However being obese as a child doesn't necessarily mean a permanent state of obesity as an adult. Many overweight and obese children become overweight and obese adults but others don't.

While weight is a figure that can be changed, there is a difficulty to weight loss. It is harder to lose weight than it is to prevent it being gained.[136] Changing developed habits and losing a significant amount of body mass may be comparable in difficulty to starting education at age 20. Going from obesity to a state of overweight isn't usually a matter of temporary dieting or starting an exercise programme; it's a complete lifestyle change. However, there are ways of losing weight that don't require the difficulty of behavioural change, for example, gastric bypass operations, liposuction or hypnosis.

Even if the excess weight is lost, one study shows that adults who were overweight as adolescents still face a higher risk for cardiovascular problems.[137] Another study confirmed that higher BMIs at childhood are linked to all cause and cardiovascular mortality.[138]

This category is essentially concerned with the effects on the adult that the child will become. But there are negative aspects of obesity suffered by children who are currently obese. Beyond medical ills, obesity in children is often faced with stigmatism that impedes social development.[139]

---

[136]See Jerome P Kassirer and Marcia Angell "Losing Weight – An Ill-Fated New Year's Resolution" (1998) 338;1 N Engl J Med 52.

[137] Deckelbaum, above n 80 at 241S.

[138] David J Gunnell and others "Childhood Obesity and Adult Cardiovascular Mortality: a 57-y Follow-Up Study Based on the Boyd Orr Cohort" (1998) 67 Am J Clin Nutr 1111 at 1111.

[139] Dietz, above n 42 at 510-511.

It is arguable that child obesity has similar permanent repercussions for the future life of that child as not getting an education. Not so much that children may be just as worse off, but that it is difficult to change the outcomes of both situations. It is arguably easier to get out of a marriage contract than it is to become not obese.

**Reason Three**

The third reason is that if children as a whole are not apt to performing certain activities, whether because of their physical statures or lack of life experience, society may be poorly affected if children are allowed to do certain activities. Activities in this category include voting and driving. It seems difficult to put obesity in this category. The argument may be made that if children are unable to resist the obesogenic environment through their susceptibility to advertising or inability to make rational decisions, then society will be adversely affected. This is especially so if obese children become obese adults.

A modest estimate put the direct healthcare costs of obesity at $135M per year in New Zealand.[140] The estimate did not include indirect and social costs. It is arguable that the more children are let alone in the obesogenic environment, the higher the corresponding costs of obesity will be.

## 5. Changing the obesogenic environment – what does NZ do already?

In order to change the obesogenic environment surrounding children, it is necessary to consider what measures New Zealand has already taken to alter it, or regulations that already target the environment.

### Advertising

[140] B Swinburn and others "Health Care Costs of Obesity in New Zealand" (1997) 21;10 Int J Obesity 891 at 895.

New Zealand has a food advertising code concerning children. The Advertising Standards Authority published a code in 2010 which is self-administered. Public complaints about breaches are reviewed and considered by the advertising standards board and members of the agency are bound to comply with recommendations made.[141] The Code makes use of the UN CRC phrase of promoting the best interests of children and casts an overall consideration on advertisers to observe a high standard of social responsibility.[142]

The guidelines prohibit advertisers from encouraging children to ask their parents to purchase particular items,[143] require serving sizes shown in advertising to be appropriate to the age of the person shown eating,[144] and require that health information and claims not mislead the viewer.[145] High sugar foods can't be advertised as low fat or fat free and well known characters or person shouldn't be used to promote poor nutritional food. [146, 147]

**Schools**

[141] "Advertising Standards Authority Inc" Advertising Standards Authority New Zealand <http://www.asa.co.nz/asainc.php>.

[142] "Children's Code For Advertising Food" (2010) Advertising Standards Authority New Zealand <http://www.asa.co.nz/code_children_food.php> at Guideline 1.

[143]Ibid, at Guideline 1(b).

[144] Ibid, at Guideline 1(f).

[145] Ibid, at Guidelines 1(h) and 2(c).

[146] Ibid, at Guideline 2 (g).

[147] Ibid, at Guideline 3(b).

In 2006 the government budget allocated $76M to fighting the 'obesity epidemic'.[148] The initiative became the 'Mission On' strategy.

The goals of this programme were to raise awareness about unhealthy lifestyles and intended to use a variety of techniques for changing the obesogenic environment, with particular emphasis on children, including web based activities and high profile personalities coming into schools to talk about nutrition and lifestyle.[149]

As part of this programme National Education Guidelines were amended to require schools to only sell healthy food and beverages, and SPARC's 'push play' campaign was encouraged and promoted (an advertising campaign running from 2005-2008 that encouraged New Zealanders to 'push play' for thirty minutes a day).[150]

In January 2009 the Education Review Office reported that 95% of schools were complying with the obligation to only sell healthy food and beverages in canteens, although the data gathered was self reported. It is possible that even with the reversion to 'promote healthy eating' that some schools have retained the policies of only selling healthful foods at canteens. There hasn't been an ERO report on the amended Administrative Guideline yet.

The government also started the Fruit in Schools Programme, a $12M programme which had a focus on providing student at qualifying low decile schools with one piece of free fruit a day.[151] This was in response to the 2004 Child Nutrition Report that showed children were

---

[148] Pete Hodgson "Budget 06: $76 million campaign to fight the obesity epidemic" (2006) behive.govt.nz <http://www.beehive.govt.nz/?q=node/25801>.

[149]Rt Hon Helen Clark "Mission-On Package Launch" (2006) behive.govt.nz <http://www.beehive.govt.nz/?q=node/27182>.

[150] "Push Play" (2011) SPARC <http://www.sparc.org.nz/en-nz/communities-and-clubs/Push-Play/>.

[151] "Fruit in Schools" (2009) Ministry of Health <http://www.moh.govt.nz/fruitinschools>.

eating far less than five pieces of fruit and vegetables a day.[152] The programme had a focus on promoting healthy eating, increasing physical activity, raising sunsmart awareness and promoting the smokefree message.[153]

In 2007 a review of the programme was done with the data largely coming from surveys completed by year 4 students who had been involved with the programme.[154] The review decided that the programme was a success, although expensive, with less sedentary behaviour and more fruit consumption seen in students.[155] The programme does not give much detail as to how the aspects of the programme were implemented.

In October 2009 after several months of the programme being in jeopardy, the government announced that it would continue the programme but cut the budget from $12M to $8M. The programme is no longer supervised by District Health Boards and teachers are no longer paid release time to attend professional development for the programme.[156]

---

[152] Two in five children were eating two pieces of fruit a day, and three in five were eating three pieces of vegetables. See *NZ Food NZ Children, Key Results of the 2002 National Children's Nutrition Survey* (Ministry of Health. 2003. *NZ Food NZ Children: Key Results of the 2002 National Children's Nutrition Survey*. Wellington: Ministry of Health) at xxii.

[153] "Fruit in Schools Goals and Objectives" (2009) Ministry of Health <http://www.moh.govt.nz/moh.nsf/indexmh/fruitinschools-goalsobjectives> at "objectives".

[154] Sally Boyd and others *Taking a Bite of the Apple: The implementation of Fruit in Schools (Healthy Futures evaluation report to the Ministry of Health)* (New Zealand Council for Educational Research, Wellington, 2007) at 2.

[155] Ibid, at 127-130.

[156] Hon Tony Ryall MP "Fruit in Schools Future Confirmed" (press release, 29 October 2009) <http://www.scoop.co.nz/stories/PA0910/S00466.htm>.

The National Administrative Guidelines are guidelines for school boards, issued by the Ministry of Education. They set out 'desirable principles of conduct'.[157] The Education Review Office comments on how well schools are complying with the administrative guidelines but there are no policing provisions if school boards don't comply. National Administrative Guideline 5 requires the Board of Trustees of every school to promote healthy food and nutrition. In February 2009 it was amended from the previous requirement that schools only sell healthy food and beverages at canteens, something that New Zealand nutritionists have called a 'giant leap backwards'.[158]

National Education Goals are statements of desirable achievements for schools. National Education Goal number 5 places Physical Education as one of the five key areas that schools should aim to develop in their students.[159] There are no National Standards for physical education, which only exist for literacy and numeracy. [160] The National Education Curriculum for physical education focuses on four areas: relationships, communities, movement and

---

[157] "The National Administrative Guidelines" (2010) Ministry of Education <http://www.minedu.govt.nz/NZEducation/EducationPolicies/Schools/PolicyAndStrategy/PlanningReportingRelevantLegislationNEGSAndNAGS/TheNationalAdministrationGuidelinesNAGs.aspx>.

[158] Delvina Gorton and others "Removal of the requirement for schools to only sell healthy food a giant leap backwards" (2009) 122 New Zeal Med J no 1290.

[159] "The National Education Goals (NEGs)" (2009) Ministry of Education <http://www.minedu.govt.nz/NZEducation/EducationPolicies/Schools/PolicyAndStrategy/PlanningReportingRelevantLegislationNEGSAndNAGS/TheNationalEducationGoalsNEGs.aspx> at "NEG 5".

[160] "National Standards" (2009) Ministry of Education <http://www.minedu.govt.nz/theMinistry/EducationInitiatives/NationalStandards.aspx>.

personal health. Regular physical activity is an aim of the 'movement' area, but even at the highest level, the objectives are arguably vague, for example:[161]

> Critically examine commercial products and programmes that promote physical activity and relate this to personal participation in programmes intended to meet their current well-being needs.

While physical activity is a goal of the curriculum, there is no uniform standard off implementation or minimum number of minutes of exercise expected, for example.

**Public Health Bill**

In 2007 the Public Health Bill was introduced to Parliament and created a steady furore amongst the food and advertising industries. The Bill would have given more powers to the Governor General in Council to make regulations concerning non-communicable diseases like Type 2 Diabetes and cardiovascular problems. The headlines at the time were critical, with Minister Tony Ryall throwing about terms like 'nanny state'.[162] There were claims that the government would tell supermarkets where it could place its energy dense foods,[163] and would restrict advertisers in what they could put on television.[164] The food industry claimed that self-regulation in advertising was already successful.[165]

Since the Bill was introduced, the advertising code mentioned above was constructed. The Bill went to Select Committee in 2008 and went through the committee which

---

[161] "Health and Physical Education Curriculum Achievement Objectives" (2007) Ministry of Education <http://nzcurriculum.tki.org.nz/Curriculum-documents/The-New-Zealand-Curriculum/Learning-areas/Health-and-physical-education/Health-and-physical-education-curriculum-achievement-objectives#level208> at "Level 8".

[162] "Obesity Bill Slammed as 'Nanny State'", above n 1.

[163] Ibid.

[164] Ibid.

[165] Ibid.

recommended a few changes but retained the ability to make regulations about non-communicable diseases.[166]

The Bill has been waiting for its second reading since.

**Summary**

The Mission On Strategy which started in 2006 was scrapped in the 2009 budget.[167]

While some of the initiatives of the Mission On strategy have been back-tracked, it is unknown how other aspects of the intended plan were implemented or with what success. The NAG has been amended, the FIS programme has been downsized, teachers are no longer funded for release time, the SPARC push play campaign has ended and the proposed Public Health legislation has been ignored in the middle of its passage through the House.

However the Fruit in Schools programme is still running, even if at a lower funding level and schools still have a duty to promote healthy eating, although that could be covered by stopping at a thousand different points along the intensity scale.

There is also the Green Prescription programme which is still running. Green Prescriptions (GRx) and the GRx Active Families programme are referrals by doctors given to inactive children with a BMI over 25. The programme runs for twelve months and encourages them to exercise and learn about nutrition. The programme helped 877 children over the 2008-

[166]Public Health Bill 2007 (177-2) (select committee report) at Part 8.

[167]Martin Johnston "Budget 09: Mission off as youth anti-obesity programme scrapped" (2009) New Zealand Herald <http://www.nzherald.co.nz/obesity/news/article.cfm?c_id=271&objectid=10575170>.

2009 period, although it is not available in every region.[168] The literature that prompted the programme shows that Green Prescriptions are inexpensive and effective.[169]

It seems that New Zealand has gone from an intensive intervention phase starting in 2006, to a more relaxed intervention attitude to obesity intervention in 2009.

## 6. Changing the obesogenic environment; what more could be done?

### Education and School based intervention

There have been many small scale studies looking at school wide interventions to change obesity. Some projects have produced results that indicate school targeted intervention may not work.[170] However, these studies have been short term, small scale and often have lacked follow up measures.[171] It is inconclusive how effective a school based approach would be. However, theoretically as children spend a lot of time inside the school environment, it seems like an obvious area to target.

The interventions that have been experimented with include making exercise programs more available, encouraging activity, reducing sedentary activity and creating school policies

---

[168] "Green Prescriptions GRx Active Families" (2011) New Zealand Ministry of Health <http://www.moh.govt.nz/moh.nsf/indexmh/greenprescription-activefamilies>.

[169] "Green Prescriptions" (2011) New Zealand Ministry of Health <http://www.moh.govt.nz/moh.nsf/indexmh/greenprescription>.

[170] see Pinki Sahota and others "Randomised Controlled Trial Of Primary School Based Intervention To Reduce Risk Factors For Obesity" (2001) 323 Brit Med J 1. and J. Buttriss and others "Successful Ways to Modify Food Choice: Lessons From the Literature" (2004) 29 British Nutrition Foundation Nutrition Bulletin 333 at 338.

[171] Buttriss, above n 171 at 335.

for healthy eating.[172] Some of the studies noted an increase in the consumption of fruit and vegetables.[173] The studies have used what can arguably be called weak intervention.

**Compulsory Physical Activity**

As New Zealand already claims to make physical education an important educational goal, why not put the muscle behind that claim? It is conceivable that physical education could be viewed in the same manner as mathematics or English, with participation being the test of aptitude. Why not make physical education mandatory up to a certain age in high school? Make it difficult for children to not exercise by simply failing to bring their PE kit or bringing a note from a sympathetic parent, by placing a terms requirement on the curriculum. If a certain number of PE sessions aren't participated in, the child would not pass PE that year. If a child doesn't pass English or mathematics, they would be held back or given remedial lessons. If children can be compelled to learn either of those subjects as they are invaluable for most dealings in an adult life, why not compel them to exercise which is invaluable for lifelong health.

The school based interventions mentioned above have made promoting and facilitating exercise a priority, however, the results have not been tremendously positive. It is arguable that in order to get the behavioural change of making exercise a regular and habitual activity, that more than encouragement is needed.

State regulations in California have already been implemented to create this obligation on schools. Elementary school children must participate in 200 minutes of physical education each ten days, and high school students must participate in 400 minutes each ten days. High school students have to complete two years of physical education before they can graduate high school.[174]

---

[172] See Sahota above n 171.

[173] Buttriss, above n 171 at 338, and Sahota, above n 171 at 1.

[174] Cal Educ Code §§ 51210, 51222 and 51225.3 (a)(1)(F).

The counter argument is usually the lack of time in the school day. There are a lot of subjects to teach and it may be the case that schools should educate on matters that children can't learn about in their own lives. However, the fact that child overweight and obesity is an issue in New Zealand may indicate that children aren't able to develop positive attitudes to physical exercise on their own. Increasingly teachers and learning institutions tell us that they are teaching us to learn,[175] not necessarily teaching content, if this is true then losing twenty minutes a day to physical exercise would be teaching children that their physical health and wellbeing is just as important as learning the curriculum of a science course which may change by the time they reach the outside world.

Moreover, the physical education curriculum is incredibly vague. While in practice schools may be very good at turning vague phrases into actionable goals and directives, it may be more effective to have a uniform action strategy that proscribed certain concrete requirements and goals for physical education.

The Chief Review Officer for ERO explained that "*The New Zealand Curriculum* allows schools the flexibility to design their learning programmes based on what their own students need..."[176] but in physical education the argument can be made that all students need the same things: a requirement that they exercise, cardiovascular health and a minimum standard of fitness that will enable them to lead healthy lives. It is doubtful that decile level, private or public, mean IQ or whatever else that requires a flexible approach to English and social science for example, would require a difference in approach to physical activity.

---

[175] One of the eight principles in the New Zealand curriculum. "Principles" (2007) Te Kete Ipurangi New Zealand Ministry of Education <http://nzcurriculum.tki.org.nz/Curriculum-documents/The-New-Zealand-Curriculum/Principles>.

[176] "Media Release: Directions for Learning the New Zealand Curriculum" (2011) Education Review Office <http://www.ero.govt.nz/About-ERO/News-Media-Releases/Directions-for-Learning>.

Putting a time requirement on physical activity would be a positive start for New Zealand. However, without clearer physical education programmes or goals, the 400 required minutes could be spent playing golf or doing aerobics or learning about biomechanics from a book. These activities have differing levels of benefit to the cardiovascular system. The California Regulations use the term 'physical education' and it is argued that using the term 'physical activity' would be more helpful in achieving a higher standard of fitness and health.

However, given the resistance to government interference with choices, regulation that attempts to force physical activity would probably be ill-received by the voting public. There is a difference between restricting food choices of a child and compelling them to exercise, although, arguably there is no difference between compelling a child to learn mathematics and compelling them to learn to play badminton.

The other practical issue with having a mandatory physical education programme is the enforcement aspect. If schools fail to enforce the programme, it may be noted by the Education Review Office, however this may not have much of a practical effect unless there are policing provisions. An alternative to enforcement could be a reward scheme for schools with the highest physical activity levels or that display the fullest participation in exercise programmes. Awarding schools with 'gold stars' would be an inexpensive way of encouraging compliance.

**Reduction in Sedentary Activity**

The flipside of promoting active exercise is reducing sedentary behaviour. Habits are more likely to be formed if they are part of everyday life. For example, walking to school or work is associated with habit formation, more than going for a walk in leisure time.[177] Small bouts of activity that are part of everyday school life may therefore be an effective option.

Some schools have 'walking school buses' where children who live close enough are walked to school as a group by teachers or parents. When schools are designed it could be possible to construct them in a way that promotes a walk across campus between classes. The

[177] Aarts, above n 71 at 367.

placement of bathroom facilities away from school classrooms would necessitate a small walk and reduce sedentary activity.

Non-invasive options like this seem more palatable than coercing physical activity and may be something which is cost effective in terms of the layout of new schools. If a non-sedentary layout could be encouraged in the design of new school buildings then reducing sedentary behaviour would be inevitable.

**BMI monitoring programmes**

Tennessee has enacted legislation that creates a BMI monitoring programme in school. BMI of children is recorded and sent home to parents on a report card. Information is provided to parents on what BMI means and what can be done about it.[178]

West Virginia has also enacted legislation that requires a BMI monitoring programme to be a marker of the efficacy of physical activity requirements.[179]

The regulations keep parents informed of their child's BMI but there are no follow up requirements. If New Zealand were to adopt this policy, parents may be more aware of the state of their children's health. However, in practice, it is arguable that knowing a BMI number suddenly alert parents and caregivers to a problem they hadn't noticed. As has been mentioned, BMI isn't a tremendously reliable marker of health and this may be a response to knowing a child's BMI. However, having children be aware of their own mass and seeing scales and tape measures as a tool of being self aware may empower them to have control over their own fitness. Buttriss et al suggested that children are more responsive to interventions that are 'hands on'.[180] Perhaps a BMI monitoring programme could be attached to education about physical activity and healthy eating as a 'hands on' experiment for children, rather than their parents.

---

[178] Tn Code Ann, § 49-6-1402.

[179] WV Code §18-2-6a.

[180] Buttriss, above n 171.

**Restricting food at canteens**

As was mentioned above, New Zealand had guidelines in 2008 that encouraged healthy canteens. Foods were classified into one of three categories. Toasted sandwiches and filled rolls for example were the everyday foods that canteens could sell.[181] Flavoured milk was an occasional food that could be sold in limited quantities and pies could be sold once a term.[182] There was no policing system but the Education Review Office reported that 95% of schools had implemented the guideline.[183]

The United Kingdom also has regulations that were introduced in 2008. School meals must meet a minimum standard of nutrition, deep fried foods can be served up to two times a week and processed foods can only be served once a fortnight.[184]

This year the United States Department of Agriculture proposed new guidelines for US schools, to bring school meals into line with nutrition guidelines.[185] Many states in the US

---

[181]"Healthy Eating - Healthy Action Oranga Pumai - Oranga Kau, The Food and Beverage Classification System" Ministry of Health <http://www.moh.govt.nz/moh.nsf/indexmh/heha-foodclassification-faqmedia>.

[182] ibid.

[183] "Schools' Progress Towards Meeting National Administration Guideline 5 on Food and Nutrition: Part 2 (January 2009) : 01/01/2009" (2009) Education Review Office <http://www.ero.govt.nz/National-Reports/Schools-Progress-Towards-Meeting-National-Administration-Guideline-5-on-Food-and-Nutrition-Part-2-January-2009>.

[184] The Education (Nutritional Standards and Requirements for School Food)(England) Regulations 2007, regs 5(4), 4(1)-(3) and 8.

[185] Federal Register vol. 76 no.9 January 13 2011, Department of Agriculture, available at "School Meals" (2011) United States Department of Agriculture <http://www.fns.usda.gov/cnd/governance/regulations.htm>.

have introduced legislation concerning canteens and vending machines.[186] Indiana for example requires 50% of the food offered for sale at schools to be healthy, however this excludes items that are part of the school lunch program.[187]

The regulations concerning school lunches apply to lunches provided or subsidised by the governments as part of the school lunch programmes. New Zealand doesn't have a school lunch programme so using regulations such as this to promote fruit and vegetable consumption may not be effective. It should also be noted that in the United States, alternatives to school lunch programmes can still provide unhealthy food. There is an obligation on state school boards to make regulations restricting this if the independent providers are competing too much with the school lunch programme but only if it is necessary.[188] In New Zealand, regulation would be focused completely at the independent food providers which creates a different hurdle to jump. In this sense, the regulations in the UK, France, and the proposed regulations in the United States are not so parallel to the advocated position for New Zealand. There, the regulations create an obligation on governments to provide food of a good standard, here, the position would be restricting independent business from providing unhealthy food to children.

Arguably it is a matter of what should take precedence. I would advocate that children's interest in being healthy shouldn't be subservient to industry's interests in making a profit, but if we put that under the label of 'free choice', there may be strong opposition to regulations.

---

[186] "Childhood Obesity – 2008 Update of Legislative Policy Options" (2008) National Conference of State Legislatures <http://www.ncsl.org/Default.aspx?TabId=13883#School_Nutrition> at "School Nutrition Legislation".

[187] Ind. Code §20-26-9-19.

[188] National School Lunch Program CFR §210.11(b).

In 2004 a study by Carter surveyed New Zealand primary schools to discern whether they had food policies and what sort of food was sold in canteens.[189] Filled rolls were found to be the most expensive item on the menu and fruit was the least purchased item.[190] It is not known what the state of school canteens are after the 2008 regulations were retracted.

The study by Guerrieri et al has already been mentioned. A certain group of children, those that are reward sensitive will consume more calories when there is more variety.[191] It is arguable that at least a proportion of students would be benefitted nutritionally by having fewer food options, and making the few options healthy.

The common counter argument is that schools can sell healthy food but if children can access unhealthy food at the dairy before, after or during school then they will do that. However, even if regulations would be of limited effectiveness, what is the harm in having it? If it's at all effective why not implement it. The regulations would only target children, only for certain hours of the day. Poor nutrition contributes to poor academic performance so why would schools promote it? Moreover, having school canteens that only sell healthful foods adds to the overall healthy environment that our education providers should be aiming to promote (according to national administration guideline 5).

At the moment schools have the obligation to promote healthy eating. There are no specifications on how this has to happen, but it is arguable that having a class on nutrition will have a lesser effect if the message isn't incorporated into the rest of school life.

The example of American Idol, Ford and Coca Cola is relevant. In 2002 American Idol was sponsored by both Ford Motor Company and Coca Cola. Ford lost millions but Coca Cola made profit; the reason? Ford advertised during the breaks, Coca Cola was present throughout the main programme; the judges all had cups of coca cola and were seen

[189] Carter above n 49.

[190] Ibid, at 17.

[191] see Guerrieri, above n 51.

actively drinking the product.[192] The overall message is that users will switch off if the message isn't part of the main event. Viewers are more likely to engage with the advertising, when it's directly relevant to the show.[193] Having an assembly about the benefits of healthy eating is the addbreak before the lunch time show actually starts.

**Food and Soft drink taxes**

Food taxes are often brought up as a way of addressing the cost difference between high fat foods and healthy foods. The idea would be to tax fast foods and soft drinks and with the revenue generated, subsidise healthy initiatives like making fruit and vegetables more affordable.

It was recently suggested that a 1% soft drink tax should be added in New Zealand with claims that the most purchased item in New Zealand supermarkets was a 2.25 litre bottle of Coca Cola.[194]

In the United States, 17 states have a 'fat tax' on fast food items and soft drinks, as well as the District of Colombia.[195] Denmark just announced that a nationwide tax on fat would be

---

[192]Martin Lindstrom *Buyology: Truth and Lies About Why We Buy* (Doubleday, New York, 2008) at 39-41.

[193]Ibid, at Chapter 2.

[194] Georgina Stylianou "Anderton Calls For Levy on Fizzy" (2011) stuff.co.nz <http://www.stuff.co.nz/national/health/5180046/Anderton-calls-for-levy-on-fizzy>.

[195] James G Hodge Jr, Andrea M Garcia and Supriyah Shah "Legal Themes Concerning Obesity Regulation In The United States: Theory And Practice" (2008) 5 Australia and New Zealand Health Policy 14 at 15.

introduced immediately, with any item containing more than 2.3% saturated fats to be taxed.[196]

Saul Levmore's idea of the state imposing taxes to help the individual properly assess the cost of acting may support a tax on energy dense foods. However, as Levmore points out, taxing food isn't the same as taxing cigarettes.[197] Cigarettes have proven to be a very elastic good, with small increases in price resulting in a corresponding drop in consumption.[198] With food however, there isn't an option to stop purchasing and consuming it.[199] This casts doubt on how effective food taxes would be.

Applying a tax across the board would not only target children but adults. While this may be beneficial, the focus of this dissertation is using the law to combat the obesogenic environment surrounding children. One school in the United States increased the price of energy dense foods sold on its premises and used the revenue to subsidise the healthy food.[200] It may be an idea for New Zealand to localise a fat tax to schools and perhaps even convenience stores operating in the vicinity of schools.

This may be a cost-effective middle ground between banning poor foods in school canteens or letting children choose 'freely'. A study by Epstein et al shows that taxes on poor nutritional food work to reduce consumption and that subsidising healthy foods increases

---

[196] "Denmark Introduces Food Fat Tax" (2011) ABC News <http://www.abc.net.au/news/2011-10-02/denmark-introduces-food-fat-tax/3205392?section=business>.

[197] Levmore "The Future of Obesity Regulation", above n 91.

[198] Karen Jochelson "Nanny or Steward? The Role of Government in Public Health" (2006) 120 Public Health 1149 at 1150.

[199] Levmore "The Future of Obesity Regulation", above n 91.

[200] Buttriss, above n 171 at 337.

consumption.[201] However this study was carried out with a group of mothers, the tax being on 68 commonly purchased foods. This perhaps simulates a grocery shopping experience where food is purchased in anticipation of consumption at a later time. It is possible that purchases made at a dairy or canteen will be influenced by the promise of immediate consumption. As was pointed out by Buttriss at all,[202] point of sale messages may be ineffective. Moreover children's appreciation of disposable income is not shaped by considerations such as cost of living which might convince them to opt for the less expensive option.

**Making obesity a parental neglect issue**

In cases of extreme childhood obesity, several United States states have removed obese children from parental custody or expanded their definition of medical neglect to include morbid childhood obesity.[203] While this isn't strictly a legislative measure attaching to children, it may help change the culture surrounding childhood obesity. If parents are aware that having seriously obese children may warrant child intervention services, perhaps parents may be more likely to be involved in promoting a healthful environment for children.

---

[201]Leonard H. Epstein "The Influence of Taxes and Subsidies on Energy Purchased in an Experimental Purchasing Study" (2010) 21;3 Psychol Sci 406 at 406.

[202]Buttriss, above n 171 at 336.

[203] including California, Iowa, Indiana, New Mexico, Pennsylvania, Texas and South Carolina, see Jenna T. Hayes and Lorie L. Sicafuse "Is Childhood Obesity a Form of Child Abuse?" (2010) 94;1 Judicature 20, and Stephanie Sciarani "Morbid Childhood Obesity: The Pressing Need to Expand Statutory Definitions of Child Neglect" (2010) 33 T Jefferson L Rev 313.

In the states children have only been removed from their parents in cases of imminent morbidity,[204] making the parental intervention more akin to failure to provide necessities of life. The seeming absurdity has been pointed out by Sciarani that a child who weighs 555 pounds (kilograms) may be removed from his parent's home in an effort to save his life, but a child who is 350 pounds (kilograms), who faces a lot of the medical problems associated with obesity; who may lose life expectancy, but who won't die straight away, won't receive the same intervention.[205]

New Zealand has legislation that in issues of child placement puts the best interests and welfare of the child first. However, whether removing an unhealthy child from its stable environment is in its best interests may lead to a similar impasse in New Zealand, with intervention only possible when obesity becomes really morbid.

Section 14 of the Children, Young Persons and Their Families Act,[206] could be interpreted to make a child who is morbidly obese, a child who is in need of care and protection. Subsections (1)(b) and (1)(d) may be relevant. Subsection 1(b) refers to a child's physical wellbeing being impaired or neglected and the impairment being serious and avoidable. Morbid obesity is clearly impairment to physical wellbeing and the health consequences and morbidity would show that it is serious and avoidable. Subsection (1)(d) refers to the behaviour of the child causing harm to the physical wellbeing of the child and the parents being unable or unwilling to control the behaviour. In a literal sense morbid obesity would fit within this.

However, in order for this to get to a Court, social workers would have to believe the child was in need of care and protection and refer the child onwards.[207] Perhaps social workers might bring the child to the attention of the Court, but they would have to know about the

---

[204]Sciarani, above n 200 at 314.

[205] Ibid, at 313-314.

[206]Children Young Persons and Their Families Act, 1989.

[207] Ibid, at ss 18-19.

child. Paediatricians or schools might bring the child to the attention of social workers, but they might not.

While it could be argued that New Zealand has the legislative framework to direct that obese children be removed from their parent's care, it is unlikely that the surrounding culture of pointing the finger at the fat kid's parents is profound enough for anyone to intervene; it's just not "PC".

Beyond political correctness, though, perhaps making having a seriously obese child a neglect issue, is avoiding the point. The issue becomes more about blame and responsibility, and if we accept that obesity is an environmental issue rather than a direct personal choice issue, the fact that morbidly obese children exist and that their parents don't (know how to?) do anything about it surely just illustrates the need for the state to step in and do something about it.

**Food Industry Obligations**

It may be possible to put responsibility on food industries to do more to put children in an obesity-demoting environment. There have been calls for better labelling of fast food products for example, however, it is unknown whether having explicit knowledge about the caloric and nutrient content of fast food would have much persuasive effect.

A UK literature review of food labelling suggested that informing customers at the point of sale is ineffective; however, informing customers via visual media when they're making their choices may be more effective.[208]

Asking McDonald's to promote moderation to its customers while they're standing in line making choices, is probably not going to be well received by the corporation, in fact, any corporation that makes money off the market of overindulging. The reality is that these corporations promote and make profit off the obesogenic environment. Why then should they not have a responsibility to counter the problem? We make tobacco manufacturers put

[208] Buttriss, above n 171 at 336-337.

warnings and photographs on their products; the gambling contributes a proportion of profits to the communities it perhaps destroys,[209] why should the food industry be treated differently?

The perfect way of taking this message home to the industry is through litigation. One case dubbed 'The McLawsuit' put forward the idea of making McDonald's liable in tort for not warning adequately of the dangers of consuming its products.[210] The case didn't get far. The Federal Court Judge recommended amending the plea and when it was re-filed, lamented the fact that the grounds of not adequately warning were removed.[211] Commentators have suggested the case may have gone further had this been retained.[212]

Since the case, 21 states have enacted personal responsibility laws,[213] familiarly dubbed 'Cheeseburger Bills', which create a bar to bringing actions based on the food industry causing negative health. There is no parallel legislation in New Zealand.

It may be possible to promote corporate responsibility codes that encourage food industries to sacrifice some profit for the public good. Incidentally, in the United States, McDonald's has announced that the portion size of fries in happy meals will be halved this year and a

---

[209] Gambling Act 2003, Part 3, subpart 3.

[210] Michelle M. Mello, Eric B. Rimm and David M. Studdert "The McLawsuit: The Fast-Food Industry and Legal Accountability for Obesity" (2003) 22;6 Health Affairs 207.

[211] ibid, at 208.

[212] See ibid.

[213] Mello "Obesity – The New Frontier of Public Health" above n 5 at 2603.

serving of apple slices (with caramel dipping sauce) added.[214] This policy won't be transferred to New Zealand branches according to the New Zealand head office.[215]

**Summary**

Arguably the most cost-effective solution at present is to re-introduce the previous National Administrative Guideline that restricted the type of food sold at canteens. As there is already a model in place, the cost of drafting would be low. Moreover, many schools reported complying with the guideline so readjusting back to the old guideline is likely to be cheaper and easier for schools to comply with.

The most expensive and probably controversial regulation suggested is that of introducing a mandatory exercise programme for primary school and high schools. Constructing a physical education programme would require input from trained fitness professionals, the healthcare sector, and would probably face a lot of opposition before ever being established. Nevertheless it is argued that the unavoidable requirement for fitness that would result, is the best example of putting words into actions, and may be the most beneficial action to combat the obesogenic environment that the state could take.

**7. Conclusion**

Obesity is largely caused by environmental factors that operate on individual's choices. This environment can be argued to create unfreedom in the same way that regulations aimed at obesity might, however, regulations should be adopted if they would bring about a greater

[214] "McDonald's US to Cut Fries in Happy Meals" (2011) stuff.co.nz <http://www.stuff.co.nz/life-style/food-wine/5344985/McDonalds-US-to-cut-fries-in-Happy-Meals>.

[215] ibid.

net benefit to society by reducing obesity. Children in particular, occupy a special place in society that warrants protection and a greater state interest in their wellbeing, because they cannot vote to safeguard their own. Children ought to have the benefit of regulation that modifies the obesogenic environment to give back freedom and encourage rational choices concerning the energy balance. If regulation is targeted at children and the environment that they are exposed to everyday, then a corresponding drop in adult rates of obesity is more likely to occur.

Equipping children with positive habits and outlooks and tools for resisting obesity through, for example, only selling healthful foods at canteens, requiring physical exercise until it becomes habit, using taxes to demonstrate a more accurate cost of high energy food, should have more weight than the term ‘nanny-state’ and the industry groups that make money of obesogenic products.

New Zealand has comparatively few regulations concerning children and obesity. More could be done and if New Zealand’s high rate of obesity is to fall, more should be.

Sarah Anderson