

**PREVENTION OF OBESITY
WEIGHING ETHICAL ARGUMENTS
MARIEKE TEN HAVE**

Colofon

Prevention of Obesity: Weighing Ethical Arguments

Ten Have, M.

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Prevention of Obesity

Weighing Ethical Arguments

Preventie van obesitas

Het gewicht van ethische argumenten

Proefschrift

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Chapter 1

General introduction

Introduction

Taxes on unhealthy food, limits to commercial advertising, a ban on chocolate drink at schools, or compulsory physical exercise for obese employees: efforts to counter the rise in overweight and obesity sometimes raise questions about what is ethically acceptable. This thesis examines how a structured debate can be facilitated about the ethical issues that are involved in the prevention of overweight and obesity.

In the first part of this introduction I explain why this question is relevant, by providing some background information about the prevention of overweight and obesity and the ethical debate about it. In the second part of this introduction I outline how this question is addressed in this thesis.

Ethical debate on the prevention of overweight and obesity

Overweight and obesity

According to the World Health Organization (WHO) overweight is among this century's major health threats(1). The number of people with serious overweight or obesity is increasing steadily: in 1960-1962 an estimated 31.6% of US adults were pre-obese (BMI between 25.0 and 29.9) and 13.4% were obese (BMI>30)(2). In 2007-2008, 68.0% of US adults were overweight, of whom 33,8% were obese(3). The prevalences of overweight and obesity among children and adolescents have increased in parallel: in 2007-2008 almost 17% of school-aged US children and adolescents were obese(4). The prevalence of overweight widely varies in different subgroups of the population: in developed countries it is notoriously high among persons with a low educational level and a low income(3).

Obesity can have severe physical, social and psychological consequences. It is a major risk factor for potentially life-threatening non-communicable diseases, which can be divided into four areas: (a) cardiovascular problems, including hypertension, stroke and coronary heart disease; (b) conditions associated with insulin resistance, such as diabetes mellitus type 2; (c) certain types of cancers, especially the hormone-related and large-bowel cancers; and (d) gallbladder disease. Furthermore obesity causes several non-fatal but debilitating complaints with adverse effects on quality of life, such as respiratory difficulties, chronic musculoskeletal problems, skin problems and infertility. Finally, obesity is associated with various psychosocial problems. The consequences of obesity for ill-health are influenced by body weight, the location of body fat, the magnitude of weight gain during adulthood, and a sedentary lifestyle(1).

Obesity leads to a strongly diminished life expectancy. A recent study published in the Lancet shows that at a BMI of 30-35 kg/m² median survival is reduced by 2-4 years. At a BMI

of 40-45 kg/m² it is reduced by 8-10 years. This is comparable to the diminished life expectancy due to smoking(5). In older people, an increased body weight does not reduce total life expectancy, but is associated with an early onset and extended duration of disability(6). Moderate overweight in adults does not reduce life expectancy, but it increases the risk of diabetes mellitus type 2, cancer and coronary heart disease. Overweight among children is likely to persist into adulthood(7).

Regarding the psychological problems it must be stressed that they do not inevitably follow from obesity as a physical state. Instead, they are a consequence “of the culture-bound values by which people view body fat as ‘unhealthy’ and ‘ugly’”(1). A review by Puhl and Heuer shows that overweight and obese persons face substantial disadvantages due to widespread negative stereotypes that they are lazy, unmotivated, lacking in self-discipline, less competent, non-compliant, and sloppy. As a consequence, overweight and obese individuals face inequalities in employment settings, health-care facilities, and educational institutions(8). Teachman and Brownell found that even health professionals who specialize in obesity treatment hold strong implicit negative beliefs that overweight persons are bad and lazy(10-11).

There is discussion on the question whether obesity is a disease or not. Within this debate, the leading scientific association dedicated to the study of obesity (The Obesity Society -TOS), takes the position that there is no clear agreed-on definition of disease, but that there are compelling utilitarian reasons to consider obesity a disease: “obesity is a complex condition with many causal contributors, including many factors that are largely beyond individuals’ control; that obesity causes much suffering; that obesity causally contributes to ill health, functional impairment, reduced quality of life, serious disease, and greater mortality; that successful treatment, although difficult to achieve, produces many benefits; that obese persons are subject to enormous societal stigma and discrimination; and that obese persons deserve better”(9). Despite efforts to prevent obesity, there will always remain people who develop obesity. Therefore, there is a need for both good care and prevention(10).

Prevention of overweight and obesity

In this thesis, I take no position regarding the issue of whether or not obesity is a disease. I focus on ethical issues that are involved in the prevention of overweight and obesity and their unfavourable health consequences. It is likely that many of both overweight- and obesity-related health problems can be prevented. A healthy lifestyle, that is, a healthy diet and sufficient physical exercise, can prevent overweight(1). Experts have advocated a combination of interventions to promote a healthy lifestyle: education (preferably education tailored to the target group or even to individual persons), optimising environmental opportunities to adopt a healthy lifestyle (e.g. with respect to the infrastructure, building of houses, available means of transport, schools, work, health care, and supply of food), and legal and other regulations (e.g. economic measures, limiting of unhealthy food supply, or putting restraints

on the commercial advertisement of unhealthy food products). Extra attention is needed for special target groups, such as adolescents and children, people with a low socio-economic status, and people from non-Western migrant groups(11).

Most interventions that are aimed at preventing overweight or obesity have not (yet) been proven to be effective or to have a favourable cost-effectiveness ratio. Authoritative agencies such as the World Health Organisation and in the Netherlands the Health Council have suggested a 'common sense' approach, because of the size and the potential consequences of the obesity epidemic. Measures that are very likely to be effective should be implemented as soon as possible(11,12). However, lifestyle interventions frequently give rise to ethical debate(13-18). The Dutch Council for Public Health and Health Care has therefore pleaded for measures that facilitate healthy choices; this Council feels that reticence concerning measures that more or less strongly force people to change their lifestyle would be appropriate, because the social and ethical problems that may be associated with such measures should be analysed first(19).

Ethical debate on the prevention of overweight and obesity

There are obvious ethical incentives to combat the obesity epidemic, such as improving individual and public health, enabling informed choice and diminishing societal costs. I regard these positive arguments to put considerable effort in the prevention of overweight as indisputable. The implementation of measures to promote a healthy lifestyle is, however, also hampered by normative issues that need to be addressed: it is unclear how the proposed measures relate to important values such as autonomy, freedom of choice, and privacy. Measures to prevent overweight may also have consequences for people's self-image and psychological well-being, for example due to stigmatisation of people with overweight. Consequences of measures concerning justice and equality have not been analysed either. The fact that food and eating habits address a primary need in everyone's life and represent important cultural and social meanings makes these issues particularly important. A systematic and comprehensive analysis of the consequences of measures to prevent overweight has not been made yet, and it is unclear how these consequences should be judged normatively and how their assessment relates to considerations of cost-effectiveness.

Ethics regarding public health

The ethical questions that arise with respect to the prevention of overweight and obesity fit within the broader discipline of ethics regarding public health. Public health is generally understood to be 'the science and art of preventing disease, prolonging life and promoting health through the organised efforts of society'(20). There is a nascent discipline of ethics regarding public health which covers ethical questions regarding various areas in public health

such as epidemiology, immunization, screening, distributing health care resources, and health promotion and disease prevention. The ethical issues that are involved in the prevention of overweight and obesity belong to the field of health promotion and disease prevention.

Within their book 'Ethics, prevention and public health', Dawson and Verweij point out that the ethical questions on public health differ in certain aspects from the ethical questions on clinical medicine. Clinical medicine is centred around the relationship between the individual patient and the medical professional who assists him or her. Public health on the other hand deals with actions by the government to improve the health of the public. These relationships differ in two aspects and by consequence give rise to distinct ethical issues. Firstly, clinical medicine focuses on the individual whereas public health focuses on the collective. This implies a different distribution of burdens and benefits. Within the clinical setting, the person who carries the burdens of health care is also the one who hopes to benefit from it. Public health actions on the other hand frequently impose burdens on the whole population whereas only a small minority will benefit from them. Secondly, the nature of the relationships is different. The relationship between doctor and individual patient is often initiated by the patient because he or she asks for assistance in being cured or relieved of sickness. Public health actions on the other hand are imposed by the government, which potentially implies an infringement of individual freedoms(18).

In the book 'Promoting healthy behavior' Daniel Callahan and others show that efforts to promote health and prevent disease may at first sight seem relatively unproblematic, but on a closer look they raise "some profound questions about the role of the state or employers in trying to change health-related behavior, the actual health and economic benefits of even trying, and the freedom and responsibility of those of us who, as citizens, will be the target of such efforts"(14).

Interventions aimed at behavior change raise liberal objections regarding the legitimacy of state interventions in personal choices. Within this debate it is important to recognize that there is a huge variety of interventions and they are not all equally susceptible to the charge of paternalism. Interventions are on a continuum from providing people with the opportunities and the information to make healthier choices, via 'nudging' (giving people a gentle push towards healthy behaviour), to interfering in people's choices. In his book 'Public health ethics' Stephen Holland points out that it is relevant to distinguish an 'empowerment approach to health promotion' from 'coercive health promotion'. The empowerment approach aims to *enable* people to make healthier choices for themselves. This approach shows respect for individual liberties but is not always effective. The coercive approach to health promotion imposes certain mandatory health behaviours on people, irrespective of what they would have chosen. This approach books more results, but raises the objection that it is paternalistic. Moreover, it makes a difference whether interventions concentrate on single behaviors (such as wearing a seatbelt in cars), or whether they aim to change people's whole lifestyle and their preferences (such as choices regarding diet and physical activity)(17).

Outline of this thesis

Objectives

This thesis examines how a structured debate can be facilitated about the ethical issues that are involved in the prevention of overweight and or obesity.

This question will be answered by addressing three objectives. The first objective of this thesis (I) is to develop a general framework for the ethical evaluation of measures to prevent overweight. The second objective (II) is to examine ethically relevant differences between unhealthy behaviours in order to explore the possibilities of using this framework for other measures to promote a healthy lifestyle. The third objective (III) focuses on one issue that is central to obesity prevention, namely stigmatization, and involves analyzing how stigmatization occurs in programs to prevent overweight and to what extent this is ethically objectionable.

Methods

The research for this thesis took place within the interdisciplinary field of ethics and health promotion. Literature analysis was performed both in the field of public health ethics and in the field of the prevention of overweight and obesity. Since our ultimate aim was to help improve the practice of overweight prevention by designing a framework that is useful for policymakers, our methodology involved a strong focus on practice. This practical focus consisted of making an inventory of current programs to prevent overweight, holding expert meetings on the ethical strengths and weaknesses of such programs, and organizing meetings to test the ethical framework. The meetings were attended by preventive health care professionals, researchers, ethicists, policymakers, and representatives of the target group of programs to prevent overweight.

Structure

Part I of this thesis (Chapter 2, 3 and 4) addresses Objective I, that is, developing a general framework for the ethical evaluation of measures to prevent overweight.

Chapter 2 involves an exploration of the relevant ethical issues by focusing on one specific target group that receives much attention in the prevention of overweight and obesity, namely children. It describes some general themes in the ethical debate on preventing childhood obesity and some questions that should be taken into account before such programs are implemented.

Chapter 3 structures the ethical issues that may occur in programs to prevent overweight and/or obesity. It is based on a selection of 60 recently reported interventions or policy

proposals targeting overweight or obesity and a systematical evaluation of their ethically relevant aspects. This evaluation was completed by a discussion in two expert meetings. The chapter describes 8 potentially problematic aspects that are not necessarily overridden by the obvious ethical incentives to combat the overweight epidemic. Therefore, an ethical framework to support decision-makers in balancing potential ethical problems against the need to do something would be helpful.

Chapter 4 describes the purpose, form and content of 6 ethical frameworks for public health, and evaluates to what extent they are useful for evaluating programs to prevent overweight and/or obesity. This selection of frameworks was based on asking experts in the field of ethics and public health for the frameworks they were aware of, performing a search in Pubmed, and checking literature references in the articles on frameworks we found. We conclude that the existing public health ethical frameworks may be supportive in the evaluation of overweight prevention programs or policy, but seem to lack practical guidance to address ethical conflicts in this particular area.

Chapter 5 presents a systematic framework for the ethical assessment of the consequences of measures to prevent overweight and obesity, and procedural guidelines to support policy makers in making rational and ethically sound decisions on implementation of these measures. We aimed at designing a framework and guidelines that, with some modifications, are also useful for the evaluation of other measures to promote a healthy lifestyle. The design of the framework was based on the inventory of ethical issues in programs to prevent overweight and obesity (Chapter 2) and on the study of the available ethical frameworks that address the area of public health (Chapter 3). Our ethical framework was tested in two international workshops. We conclude that, with some adjustments, this framework may be also applicable to the prevention of other unhealthy behaviours. However, certain issues are specifically relevant to the prevention of overweight, such as stigmatization.

Part II (Chapter 6) of this thesis zooms out of the framework, by broadening our perspective from the prevention of overweight and obesity to the prevention of unhealthy behaviours in general. It addresses Objective II, that is, examining ethically relevant differences between unhealthy behaviours in order to explore the possibilities of using this framework for other measures to promote a healthy lifestyle. We conclude that distinctions between behaviours regarding harm and free choice are sometimes wrongly overlooked, whereas distinctions regarding value judgements are sometimes wrongly influential in policy. As opposed to smoking, obesity does not pose direct health risks to other people. As opposed to booking a skiing vacation, the choice to have an unhealthy diet and insufficient exercise is much more complex, and the level of free choice differs considerably among various groups. And as opposed to workaholicism, obesity is much more subject to negative value judgements. This distinguishes ethical debate about the prevention of overweight and obesity from ethical debate about the prevention of other behaviour-related health risks.

Part III (Chapter 7) of this thesis focuses on one ethical issue in our framework, namely stigmatization, because this is a central issue in the prevention of overweight and obesity. It addresses Objective III, that is, analyzing how stigmatization occurs in programs to prevent overweight and to what extent this is ethically objectionable. The chapter analyzes how Link and Phelan's definition of stigmatization applies to some current programs to prevent overweight. According to Link and Phelan, stigmatization consists of the coincidence of four components: (1) labeling, (2) stereotyping, (3) separation, and (4) status loss and discrimination. We argue that the process of stigmatization is by definition ethically problematic. The stigmatizing role of programs is a matter of degree: the more components a program involves, and the stronger a component is present in a program, the more likely that it contributes to stigmatization.

Chapter 8 discusses the main findings of the previous chapters in light of the objectives of this thesis. General reflections, implications for the practice of the prevention of overweight and recommendations for future research are provided. We conclude that considering the ethical aspects of programs to prevent obesity or overweight is extremely important in the face of the urgent and extensive health problem of overweight and obesity. We provide professionals in the prevention of overweight and obesity with an ethical framework that provides practical guidance in the systematic ethical evaluation of programs to prevent overweight and obesity.

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Chapter 2

No country for fat children?

Ethical questions concerning community-based programs to prevent obesity

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Abstract

This chapter examines which ethical issues should be addressed before programs to prevent childhood obesity are being implemented. There are some general ethical themes in the debate on preventing childhood obesity: the effects of moral panics; responsibility; and children's right to protection from unhealthy commercial influences. Furthermore, we found that several issues should be taken into account before such programs are implemented. The proposed program should be supported by enough evidence or good reasons. It should be analyzed whether the program has consequences in terms of possible stigmatization. The program should involve parents in a respectful way, by hearing their arguments and providing them with information instead of undermining their autonomy. The program should aim at helping children to deal with temptation by developing durable skills and habits. If the program possibly infringes upon moral values, its ethical impact should be in proportion to its goals and methods. Finally, it is important to discuss whether enough safeguards against heading down slippery slopes have been incorporated, and whether the limits of the intervention are clearly communicated to the public.

Introduction: make the healthy choice the ethical choice

A personal letter from the Department of Health warning parents of overweight children(1), compulsory membership of a soccer club(2), banning soft drink vending machines in schools(3), supervision for the parents of obese children(2). What are the ethical issues when it comes to interventions and programs aimed at preventing or combating obesity in children? What questions should be asked and answered before embarking on the implementation of different measures? That is the subject of this chapter.

Convictions on balancing the responsibilities of parents, state and companies differ. We set out here to provide those who develop and implement certain measures with 'tools' to adequately take into account the ethical dimension of their work, not because they are immune, ignorant or unsympathetic to that dimension, but in order to structure the debate. While doing so, however, we do not pretend that evaluating ethical issues always leads to clear-cut and shared answers for practice.

In order to illustrate our analysis we use some examples of different measures, selected from a wide range, varying from very general information to the public, to increasing the possibilities to adopt a more healthy lifestyle, to interference with family eating habits. Across this range the ethical issues and balancing will be different. Some measures may not give rise to grave, or even any, ethical worries (e.g., increasing traffic safety in order to enable children to walk or cycle to school) whereas others are more difficult. We focus on the complex ones. Think of putting children on a weighing scale in front of their classmates during physical education lessons, health promotion campaigns with a negative and stigmatizing message about overweight, banning *all* unhealthy snacks that pupils bring from home (even sugared muesli bars)(4), forcing overweight children to participate in classes or even summer camps for weight loss(5), and advising stomach surgery and weight-loss pills for obese children(6).

We suggest six ethical issues that should be discussed before a programme is launched. The aim of our endeavour is to stimulate and structure the debate on the ethical implications. We do not think that "prefab" ethical answers that everyone will agree with exist.

In the background are three general ethical themes: the effects of moral panics; responsibility; and children's right to protection from unhealthy commercial influences. Before discussing the six issues, we offer some remarks on these background themes. The first two background themes are discussed briefly. The third issue will be elaborated more extensively, since this is a central topic in the current debate.

The bad effects of moral panics

A factor that complicates the ethical debate, but also lies at the heart of it, is the sense of urgency that sometimes borders on panic. Children are growing fatter -many children all over the world- and they will suffer the consequences. The spectre has been raised that whole

generations will die younger and be outlived by their parents. This has led policy makers to identify childhood obesity as an important and urgent policy priority. In one sense this identification is correct. Doing something about the problem is urgent; doing nothing would be forsaking our duty to protect the affected and at-risk children. But overstating the urgency, on the other hand, might also incline us to become less critical about evidence and about respecting important moral constraints when it comes to interference with lifestyles. The view that “We have to do something now. Doing nothing is not an option” may blind us to the fact that doing something where we have very little evidence that it works is, apart from in a political sense, unlikely to be much better than doing nothing. And we also have to remember that doing something without sufficient evidence may later be proved to be a bad idea. A balance is necessary, but certainly difficult.

Responsibility and the complex causal network

Underlying many ethical issues in the obesity debate (such as stigmatization, justice and interference) is a fundamental debate concerning responsibility. Whose fault is it anyway? Who is to blame -the individual or his obesogenic environment (with lazy or opportunistic governments, industries who only want to sell their fattening products to gullible people etc.)?

But framing the question this way exposes it as a false dichotomy. The responsibility question is very hard and it cannot be answered by positing just two sets of actors with possible responsibility and then demanding a choice between them. The causal network leading to obesity in the individual child is almost always complex, and the more general causal network creating the observed increase in childhood obesity is even more complex and spans many sectors of society including the family, the education system, the food industry, the media, the transport sector, designers of the built environment, the government and others. There is no good reason to apportion primary responsibility for the childhood obesity problem to only one of these sectors(7). All are to some degree responsible and all have to be ready to implement some changes. It may well be the case that parental behaviour and habits are the main causal factors in most individual cases of childhood obesity, but that does not imply that parental behaviour is the only or even most legitimate target for intervention. The cumulative effect of small causal contributions to many individual cases of obesity can justify targeting interventions at, for instance, soft drink companies.

This complex causal network had led to busy washing of dirty hands, to the competition of measuring blame (“I’m to blame but he is more to blame” etc.) and to games of responsibility ping pong: “it is not me, no, it is you”. For instance, the American campaign “Parents step up” focuses exclusively on parental responsibility. To quote from its television spot: “How could you let your kid be so overweight? (...) He could get diabetes or cancer or heart disease. And don’t blame it on videogames or fast food, you’re letting him down as a parent”(8).

Sometimes those who are blamed but feel they are unjustly blamed or exclusively blamed whereas others are as blameworthy, translate this into responsibility for the future. ("If I'm only 5 percent to blame, then I only have to contribute 5 percent to the solution.") This obviously does not contribute to any solution. It distracts. The debate would profit from focussing on *responsibility for contributions to solving the problem* rather than to argue about *responsibility for causing the problem* and blame and retribution.

Children's right to protection from unhealthy commercial influences

Children have a right to be protected against unhealthy influences. The precise scope of this right is difficult to determine because of the wide spectrum of types of such influences.

However, if childhood obesity is a public health problem of such a magnitude that it justifies intervention in family life it probably also justifies measures affecting companies. In modern societies, the freedom of action of commercial actors are circumscribed in many ways and the relevant question is, therefore, not whether such circumscription is ever warranted, but under what circumstances and for what purposes it can be justified.

Community-based interventions in relation to childhood obesity may target commercial actors like food producers, food retailers or the media. This may include measures such as differential sales taxes on high energy foods, planning requirements restricting the site of certain kinds of food outlets in relation to schools or sports fields, or specific labelling requirements. The more intrusive those measures are, the stronger is the requirement that they are evidence-based.

Research suggests that up to 80% of today's children have diets that are considered "poor" or "in need of improvement"(9). According to the Global Prevention Alliance, it is widely acknowledged that marketing plays a significant role in determining children's dietary behaviour and preferences, thereby undermining the objectives of the WHO Global Strategy on Diet, Physical Activity and Health(10). Parents are misinformed by confusing information about the health value of food products. And children (who influence household purchase decisions at an estimated value of \$500 billion annually) are tempted through commercial messages from children's icons and brightly coloured packages that often include toys(11). The strong negative influence on children's diets, suggests that marketing aimed at children should be circumscribed.

Some people argue that the problem is not so much about misleading information, but about people's lack of equipment to distinguish facts about nutrition from fiction. Therefore one should empower children and parents to cope with the temptations that will always be present in a commercial society, among other things by providing correct information about nutritional value.

Others, however, stress that it is an illusion to think that information provided by governments and consumer organizations can ever counter the effect of information provided by

the food industry, as the budget of the latter is extremely small compared to that of the former.

To what extent can we restrict the promotion of unhealthy behaviour by corporations? The level of marketing restrictions that is accepted by the public and is morally justifiable is different for different types of unhealthy behaviour. With regard to smoking tobacco, current health policy is probably most restrictive. In many countries, commercials are completely banned. Marketing strategies to promote alcoholic beverages are generally not as strict: commercial messages are permitted, provided that they contain a warning message about health risks. However, regarding foods and beverages that are high in saturated fat, sugar and salt, but of poor nutritional quality, there is hardly any boundary to the freedom of corporations. Most countries seem to accept misleading messages about the health value of products (“consuming this light drink is equivalent to going to the gym”) and allow the promotion of chocolates, potato chips, soft drinks and large fast food meals. It is quite unthinkable that a ban on eating hamburgers or oversized ice creams in public spaces would be accepted at the present time. Why are some marketing strategies that promote unhealthy behaviour granted more freedom than others?

The willingness to accept restrictions is influenced by the awareness of health risks. Twenty years ago, even non-smokers opposed paternalistic anti-tobacco measures. But now that the health risks of smoking are common knowledge, the current strict non-smoking policy evokes less criticism. The idea that food products rich in saturated fats and sugars pose a threat to our health is relatively new. It will take time for society to become fully aware of the urgency of the problem. The growing public awareness will surely influence the arguments about (unjustified) paternalistic meddling in commercial freedom.

Restrictive policy is also more easily accepted if an unhealthy behaviour comes to be understood as non-essential or even unnecessary behaviour. Whereas cigarettes and alcoholic beverages are “luxury products”, eating is a primary need in life. It would be absurd to stop corporations from marketing and selling food products altogether. Admittedly, having breakfast with a bottle of cola and a king-size bag of chips cannot be considered necessary at all. But with regard to many food products, it is difficult to draw the line between necessary products with nutritional value and luxury products, which are bad for health. Is butter healthy or unhealthy? What about strawberry yoghurt, for example? Should we only allow commercials for sugar-free cereals and mineral water? The necessity of eating and the difficulty in drawing a clear line between healthy and unhealthy food may be a reason why food policy is not as restrictive as anti-smoking policy.

A third reason for restricting the promotion of some behaviour more than other involves harm to other people. Smokers and drunken persons pose a threat to their environment. Consuming junk food and soft drinks is *not* dangerous for others. I do not get diabetes if my neighbour is a junk food addict. But, so one could argue: there are other costs involved, such as increased costs of the health care system. We will not go into that argument here(12, 13),

but do want to mention that such harms are of a very different nature, as compared to direct threats to the health and safety of third parties.

The promotion of unhealthy products poses a specific threat to children. Children are vulnerable for influences from their environment. It is often more difficult for them to separate fact from fiction in commercial messages. They are not capable of making autonomous choices regarding their lifestyle. They are, to a great extent, dependent on their parents, who are also misled by commercial information. The vulnerable position of children provides a good reason for restricting the marketing of products that are high in saturated fat, sugar and salt, either directly targeted at children or via their parents. This was recognized in December 2007 when eleven major European food and beverage companies announced a common commitment to change the way they advertise to children. They declared that they will neither advertise food and beverage products in primary schools, nor to children under the age of twelve (except for products which fulfil specific nutrition criteria)(14).

So far the background themes. In the following we will explore some ethical issues that should be raised, analysed and thoroughly discussed before implementing interventions to prevent childhood obesity.

Evidence

The first issue concerns evidence and good reasons:

Do we have enough evidence or good reasons to support the proposed program?

No conclusive evidence is available on the effectiveness of most measures to promote healthy behaviour, but recent reports from (among others) WHO have stated that the urgency of the problem makes waiting for such evidence undesirable(15). Although this strategy is based on sound reasons, we should ensure that in the process of implementing interventions we are not over pressured by government, or panic, or by some other pressure because something has to be done now.

The less clear the benefits of a campaign are, the stronger the moral burdens weigh. This raises important questions regarding effectiveness. Is a campaign only effective if it creates weight loss? Or when it creates awareness? Or should it make people feel more happy about their weight? How sure must we be about the effectiveness of a measure before implementing it? These are important issues to think about. It is important to realize that an intervention always creates costs, in financial terms, but also in moral terms, by intervening in lifestyle. The benefits have to outweigh the burdens.

But in many cases we are not sure about the effectiveness and this does not automatically mean that a campaign should be stopped. In June 2007 government funding for a Dutch clinic for obese children was stopped because politicians claimed it was too costly too proceed without evidence. But others argued that as long as scientific evidence for long-term

effects was lacking, we should rely on experiences, which suggested effectiveness. According to them the project had to continue precisely to *gather* scientific evidence(16). More generally, there is an obligation to rigorously evaluate the effectiveness of interventions for which there is currently little evidence, so that the evidence base can be improved over time.

Stigmatization

The second issue is stigmatization:

Does the program or intervention target obesity as a state of being or the underlying behaviour? What are the consequences in terms of possible stigmatization?

Targeting obesity and the creation of stigma

Overweight and obese children face stigmatization every single day of their lives. They are bullied, laughed at, called names, and associated with bad moral character traits (being lazy, stupid etc.). In thinking about interventions for treatment and prevention of obesity it is important to note that they must necessarily differ from interventions aimed at reducing tobacco use or excessive consumption of alcohol. Obesity is a state, not a behavior, and whereas the action of smoking can be targeted directly (e.g., it can be prohibited in public places) targeting obesity would target the obese person, not the behaviours leading to obesity. Focusing on obesity directly, instead of on behaviours that are healthy whether or not a person is obese (e.g. physical activity, having a balanced diet) may increase the social stigma already attached to obesity.

Those measures that aim at promoting a healthy lifestyle in general, without focussing on overweight or emphasizing obesity, are often more acceptable, not only from the point of view of stigmatization but also from the perspective of fairness, as all participants may benefit from such measures. Healthy lifestyles are, after all, also healthy for slim children. We are aware that this can be used as a sham argument: pretending that “of course it is not focussing on overweight”, although actually it is.

Targeting vulnerable groups is also sensitive from the stigmatization angle. (“You get breakfast at school because your parents don’t care for you and they are poor.”) Special attention to the justification and possible effects is necessary. Targeting, however, may sometimes be necessary, even ethically required, in order to reach persons and groups that will not be reached by general measures or programs. For American Indian and Alaska Native children, The American National Center for Chronic Disease Prevention and Health Promotion designed “The Eagle’s Books”-program. To quote from the program: “the eagle represents balance, courage, healing, strength and wisdom, and is seen as a messenger or a teacher. In the Eagle Book series, the wise bird teaches children how to use these values to prevent

diabetes and grow safe and strong. ... Mr. Eagle reminds the young boy of the healthy ways of his ancestors”(17).

Will children across the whole BMI range profit from the measure (even if they do not lose weight) because the proposed measure increases their possibilities/options for a healthier life-style? Or will they just hear that they are too heavy?

Measures to do something about obesity might reinforce stigmatization as, whatever measures are proposed, the underlying idea is that children should *not* be overweight and certainly not fat. What does this mean for those who already are fat, for example children that are born in families where everyone has been obese for generations and did very well, thank you? What price will such children pay if the strongly promoted image is that one should not be overweight? Take, for example, the Singaporean “Trim and fit” campaign, that mentions on its website that overweight children “tend to be clumsy”. Parents are informed that “Trim and fit children” are not only healthier and feel better, but also look better(18).

Programs like “Epode”, the French cities that aim to be a motivating environment for a healthy lifestyle(19), are interesting examples of programs that would provide positive answers to the above questions. Another positive example is the “Kids in balance” campaign from the Netherlands, which offers workshops to promote an active lifestyle for children. It stresses emotional health, instead of focussing on overweight. To quote from the program: “feeling good about yourself, being emotionally fit, is just as important as eating brown bread and doing sports!” Those who do not loose weight but do develop a healthier lifestyle are not stigmatised as the “losers”, “the ones for whom the program did not work”(20).

Several experts argue that negative, stigmatizing and scary campaigns are not only ethically problematic but also ineffective. Instead, people need positive tools and motivation to work on behaviour change.

Parental involvement

The third cluster of questions has to do with parents.

In some cases, individual parental involvement is not an issue as the measure is on a very general level, e.g. restricting commercials for sweets on television at certain hours. Parents are involved in a general way as citizens, of course, but not in a more personal, individual way. Other interventions, however, do involve the individual parents. After all, programs directed at informing children about a healthy diet and the importance of physical exercise are unlikely to be sufficient as long as the parents are not involved. What’s the use of knowing that vegetables contain vitamins when all that is ever offered at home are French fries?

Is it possible to inform and/ or involve parents without undermining their parental autonomy? Can they be involved in a respectful way? Can they be convinced instead of overruled or bypassed?

Interventions that involve the individual parents vary from cooking classes in the local supermarket to supervision from social workers in families, or even putting obese children into care(21). The balance between parental autonomy and the interests of the child, in particular with regard to health, is an important area of the ethical debate. It is an issue that is debated in many different fields: from child abuse, refusal of vaccination, school and leisure, to choices of diet. Parents need (and have the right) to raise their children in their own way, according to their views on what is proper or good for children. Interference against their will is controlled and limited to serious cases where the interests of a child leave no other option. What to do if parents do not provide breakfast, give the child some money to buy a hamburger for breakfast and the kitchen is stocked with soft drinks and junk food, whereas apples are considered to be something exotic that led to dire consequences in paradise anyway?

Programs can also involve parents in a harmless way, such as the Australian 'Walking School bus' campaign, where parents take turns to accompany their children to school(22). There are programs where schools provide what the parents did not provide, *compensating* for what is absent at home. For example breakfast in the classroom, tasting classes, cooking classes, subsidized fruit and vegetables during school breaks.

And programs are often directed at informing the parents. Take, for example, the "Hello World!" campaign that provides information for future parents, such as health quizzes by email that can be stopped if unwelcome(23). This kind of campaigns enables parents, or is aimed at enabling them, with the possibilities to provide themselves what is good for their child. They may already know, but simply not manage.

Are parents' arguments and reasons for having a particular lifestyle analysed and taken seriously?

Many, probably most, parents do want the best for their children and are not a priori against information and options to do the best for their children.

What if parents just do not change their lifestyle? Think of parents who during lunchtime brought their children hamburgers because they thought the lunches provided by Jamie Oliver, the well known television cook who is campaigning for healthy food for young people in the UK, were not good, not enough, not good enough for their children. Is their right to respect for parental autonomy undermined by what seems to be a lack of responsibility? An answer to this question will, at least partly, depend on why the parents behaved in this way. Had they been involved in discussions about the changes to the school meals, had their views been taken into account, had the children been involved, and so forth? The fact that parents or children react against imposed policies is only a sign of irresponsibility if they have at least been engaged in discussion about the policies and their rationale. To involve parents in a serious way is probably not only ethically right but also helpful from a strategic point of view.

Durable skills and habits

The fourth issue has to do with the durability of proposed skills and habits:

Will the children develop skills and habits that will also serve them later in life?

In every society, in every individual life, there will be temptation. To be equipped to deal with temptation is a good thing. (And by the way does not necessarily mean that one always has to say no and never yield to temptation...to choose to yield is very different from impulsive surrender.)

In the prevention of obesity there are various skills and habits at stake, such as self-control and carefulness and the ability to say “no”. These skills are also relevant in relation to use of alcohol, safe sex, internet addiction, gambling, and so on. Teaching these skills means that children can learn something they can profit from and let others profit from for the rest of their lives.

But don't parents have the right to spoil their children if they want to? Why is self-control an important skill? It is important because people without self-control, or who are out of control, often end up in difficult and unpleasant social and emotional situations. One needs self-control in order to survive in a society. Self-control is, to some extent, something one has to learn, from one's parents, among others. Parents do not mind saying “no” (or rather yelling “no”) when a child is going to touch a hot stove, and the direct prevention of harm is at stake. But many parents find it more difficult when it comes to restricting or denying pleasures. However, this is something the child will have to accept in his or her life. If it is not “no” to the sweets, it will be “no” to something else. One will have to live with requests being refused from time to time.

This means that one has to illustrate the advantages of self-control: the enjoyment of tasting instead of the “mindless stuffing”, the idea that you are not the victim of habit, feeling or an urge stronger than you, but that you are the master of yourself. That is a reward in itself. Also, control is more effective if embraced rather than imposed. Self-control actually increases freedom.

This does not mean that one can rely on individual skills and that it is, therefore, not necessary, for example, to remove soft drink vending machines in schools. But removing the vending machines without changing the *idea* that one needs gallons of soft drinks every day is not helpful either. However, we also want to stress that the importance of engendering self-control and carefulness in relation to eating should not be conceived in an overly moralistic frame. Many persons do not stuff themselves but have become habituated to eating large portions. So what is needed in many cases is to re-set the perception of what is a normal meal.

Proportionality

The fifth question concerns proportionality:

Is there a balance between the goals, the chosen methods and the possible ethical impact?

Can a certain goal be reached with less intrusive measures? For example, to take all children with a BMI above 28 out of parental care and raise them in foster families or clinics is clearly disproportional (apart from being quite unrealistic).

How can one evaluate proportionality? The Nuffield Council has designed a framework to evaluate public health measures that can be used in the debate. It is a ladder that indicates different levels of intrusiveness, from “do nothing” until “eliminate choice” The higher up the ladder, the more intrusive a program is and the stronger its justification needs to be(24).

We want to emphasize the distinction of enabling versus enforcing.

Enabling versus enforcing

Enabling means that the opportunities are provided for children and parents to choose the healthy habit or lifestyle, whereas enforcing means they have no choice. There are important arguments to prefer enabling to enforcing. The chances that a certain healthy lifestyle or certain eating habits will be integrated, incorporated or embraced is greater if people themselves learn to appreciate them and feel better, enjoy the advantages, rather than when they feel they are submitting to dictates put upon them by others as the internal motivation may then be lacking.

Slippery slope

The sixth question regards the slippery slope:

Are the measures sensitive to the argument of the slippery slope?

The slippery slope concept is that if one measure or intervention is permitted then this will result in further, more intrusive measures being taken in the future which would then significantly infringe upon an important right or ethical principle, such as adults choosing whether to exercise or not. Fears of “1984”, total health control, or moral imperialism are enlisted in this argument along with the notion that we will all die sooner or later and that there is no point in living a frugal life with no pleasures. These slippery slope fears are often accentuated when proposed interventions are either novel or vague in their definitions and boundaries.

In many areas of public health, especially for injury prevention, tobacco control, and to some extent infectious disease control, regulations are enacted which place restrictions on individual behaviours in addition to changing the environment. Influencing personal choices

regarding behaviour is also used in the prevention of overweight. This varies from the subtle pushing message “Please take the stairs” that one may encounter as health promotion notices at the base of the stairs(25), to employers forcing their employees to walk by locating the cafeteria far away from the office building(26), to imposing a ‘fat tax’ on fattening foods(27), imposing higher insurance premiums for obese people(28, 29) or banning cars from city centres and around schools(30).

With programs requiring physical exercise for obese adolescents in Singapore(31, 32) and university diplomas being withheld from obese students in Pennsylvania(33), it is understandable that people are concerned about a slippery slope in directive programs for the prevention of obesity.

Although fear of a slippery slope does not imply that there is an actual risk of a slippery slope, it is important to discuss whether enough safeguards against heading down slippery slopes have been incorporated, and whether the limits of the intervention are clearly communicated to the public.

Conclusion

These six issues are aimed at inspiring and structuring debate on the ethical presuppositions and goals of measures. They are not a simple set of criteria to be passed in order to have ethical ‘approval’.

Within the process of developing and testing interventions to prevent overweight among children, it is crucial to pay attention to their normative aspects. Ethical analysis will help to develop measures in line with values that are deeply important to many of us. That analysis is worthwhile in its own right, and may also contribute to effectiveness.

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Chapter 3

Ethics and prevention of overweight and obesity

An inventory

Abstract

Background and objective. Efforts to counter the rise in overweight and obesity, such as taxes on certain foods and beverages, limits to commercial advertising, a ban on chocolate drink at schools, or compulsory physical exercise for obese employees, sometimes raise questions about what is considered ethically acceptable. There are obvious ethical incentives to these initiatives, such as improving individual and public health, enabling informed choice, and diminishing societal costs. Whereas we consider these positive arguments to put considerable effort in the prevention of overweight indisputable, we focus on potential ethical objections against such an effort. Our intention is to structure the ethical issues that may occur in programs to prevent overweight and/or obesity in order to encourage further debate.

Methods. We selected 60 recently reported interventions or policy proposals targeting overweight or obesity and systematically evaluated their ethically relevant aspects. Our evaluation was completed by discussing them in two expert meetings.

Results. We found that currently proposed interventions or policies to prevent overweight or obesity may (next to the benefits they strive for) include the following potentially problematic aspects: effects on physical health are uncertain or unfavourable; there are negative psychosocial consequences including uncertainty, fears and concerns, blaming and stigmatization and unjust discrimination; inequalities are aggravated; inadequate information is distributed; the social and cultural value of eating is disregarded; people's privacy is disrespected; the complexity of responsibilities regarding overweight is disregarded; and interventions infringe upon personal freedom regarding lifestyle choices and raising children, regarding freedom of private enterprise, or regarding policy choices by schools and other organizations.

Conclusion. The obvious ethical incentives to combat the overweight epidemic do not necessarily override the potential ethical constraints, and further debate is needed. An ethical framework to support decision makers in balancing potential ethical problems against the need to do something would be helpful. Developing programs that are sound from an ethical point of view is not only valuable from a moral perspective, but may also contribute to preventing overweight and obesity, since societal objections to a program may hamper its effectiveness.

Introduction

According to the World Health Organization (WHO) overweight is among this century's major health threats(1). The number of people with serious overweight or obesity is increasing steadily: in 1960-1962 an estimated 31.6% of US adults were pre-obese (BMI of 25.0 to 29.9) and 13.4% were obese (BMI of 30 or higher)(2). In 2007-2008, 68.0% of US adults were overweight, of whom 33,8% were obese(3). The trends of overweight and obesity among children and adolescents have increased in parallel: in 2007-2008 almost 17% of school-aged children and adolescents were obese(4). The prevalence of overweight is widely varying in different subgroups of the population: in developed countries it is notoriously high among persons with a low educational level and a low income(3). Obesity is an important risk factor for diabetes, cardiovascular disease, and diseases of the locomotor system. Overweight is also related to psychological problems(1).

It is likely that many of these overweight-related health problems can be prevented. Adopting a healthy lifestyle, that is, a healthy diet and sufficient physical exercise, can prevent overweight(1). According to the WHO a healthy diet includes limiting the intake of unhealthy fats, free sugars and salt and increasing the consumption of fruits, vegetables, legumes, whole grains and nuts(5). Experts have advocated a combination of interventions to promote a healthy lifestyle: education (preferably education tailored to the target group or even to individual persons), optimising environmental opportunities to adopt a healthy lifestyle (e.g. with respect to the infrastructure, building of houses, available means of transport, schools, work, health care, and supply of food), and legal and other regulations (e.g. economic measures, or putting restraints to the supply and commercial advertisement of fattening food products). It has been suggested that extra attention is needed for special target groups in which it is more likely that interventions can prevent health problems, such as adolescents and children, or in which overweight and obesity are more common, such as people with a low socio-economic status, and people from certain migrant groups(6, 7).

Most interventions that are aimed at preventing overweight or obesity have not (yet) been proven to be effective or to have a favourable cost-effectiveness ratio. In spite of a lack of comprehensive research on the effectiveness of prevention strategies, authoritative agencies such as the World Health Organisation and in the Netherlands the Health Council have suggested a 'common sense' approach, because of the size and the potential consequences of the obesity epidemic. Measures that are very likely to be effective should be implemented as soon as possible(8, 9). However, lifestyle interventions, whether they are evidence-based or not, frequently give rise to ethical debate(10-15). The Dutch Council for Public Health and Health Care has therefore pleaded for measures that facilitate healthy choices, while suggesting reticence about measures that more or less strongly force people to change their lifestyle, because the potential social and ethical problems that may be associated with such coercive measures should be analysed first(16).

In the present article, we have made an inventory of the ethical aspects of measures aimed at the prevention of overweight and obesity. There are obvious ethical incentives to combat the overweight epidemic, such as improving individual and public health, enabling informed choice and diminishing societal costs. Whereas we consider these positive arguments to put considerable effort in the prevention of overweight indisputable, we focus on potential ethical objections against such an effort. Our intention is to point out how ethical issues may occur in programs to prevent overweight and/ or obesity and to structure these issues in order to encourage further debate. Our overview includes interventions to prevent overweight as well as interventions to prevent obesity, since both raise similar ethical issues. Moreover, prevention programs aimed at the population at large are often unspecific about the exact target group. However, the health risks of obesity (BMI of 30.0 or higher) are larger than those of overweight (BMI of 25.0 to 29.9), which implies a distinct balancing of ethical arguments: the results of interventions aimed at obesity may outweigh ethical objections more easily than the results of interventions aimed at overweight.

Methods

We searched for interventions to prevent overweight on the Internet, in the media and in scientific medical literature. All interventions were proposed, implemented or studied after 1980, in the Netherlands or elsewhere. We included interventions that change the environment, interventions that consist of providing information or educating people, financial incentives, legal regulations and medical interventions. Our analysis was limited to 60 interventions, because at that number we felt that adding additional interventions would not provide new insights. A complete list of all interventions included and the sources we used to identify their characteristics can be found in appendix 1. We performed a three step systematic analysis of the potential ethically relevant aspects of interventions. By “potentially ethically relevant aspect” we refer to all aspects that may lead to ethical objections. Issues in public health ethics centre around “the trade-off that can arise between, on the one hand, protecting and promoting the health of populations, and on the other, avoiding individual costs of various kinds, including physical danger, moral harm and frustrated desires”(17). First, we searched whether or not the paper or website in which the intervention was presented included any explicit reference to potential ethically problematic aspects. In a second step, ethical issues were identified directly by two of the authors (MtH and AvdH). In the third step of our analysis we discussed the results of our inventory in two expert meetings. These expert meetings were attended by policymakers, physicians, representatives from health insurance companies, researchers, ethicists, and representatives of organizations of obese people. The first meeting was focussed on the extent to which the problems we identified are exclusively related to prevention of overweight and obesity; this meeting was attended by 14 experts.

The second meeting was focussed at prevention of overweight and obesity in children; this meeting was also attended by 14 experts. Prior to the meeting, the experts received our inventory of programs. During the meeting there was discussion on the basis of statements that we presented (see Appendix 2).

Results

The interventions that were included in our analysis are presented in Table 1. We identified and analyzed 58 concrete interventions and 2 policy proposals. 18 interventions were aimed at promoting a healthy diet, 14 were aimed at physical exercise, and 28 targeted both behaviors. Interventions were aimed at the population at large or at specific groups, such as employees, children or their parents, people with a low socioeconomic position, or people from ethnic minority groups.

The following eight potentially problematic aspects were identified. Table 1 provides an overview of them, including examples of programs for each aspect and the ethical values at stake.

Physical health

A potential problem of programs to prevent overweight that was frequently identified is that their effects on physical health are not known or not favourable. Ineffective programs should of course not be implemented, and should certainly not be financed by public means. But much more often we deal with programs that may have positive results whereas this is not certain. Many publicly financed programs are not supported by evidence. Few programs have been evaluated and for programs that have been evaluated, such as the 'balance day-campaign'(18), cost-effectiveness is often hard to prove or even doubtful. Lack of scientific evidence frequently leads to discussion about whether or not to continue a program. When government subsidy for a Dutch clinic for obese children was stopped because of insufficient scientific evidence, opponents objected that practice showed positive results, which could only be monitored if subsidy would be carried on(19, 20).

Furthermore, certain programs to prevent overweight may have harmful side-effects on physical health, and thus threaten the value of well-being. Sometimes health risks are taken for granted because the risks of non-interfering are even bigger, for instance when the British government recommends bariatric surgery and medication for exceptional cases of childhood obesity(21). Harm to health may also occur due to prevention programs that have a negative and problem-based focus on overweight, according to O'Dea(22). Next to probably contributing to weight concerns, unhealthy types of dieting and eating disorders, they may discourage overweight people to visit health services or to practice physical activity(22). The

Table 1. Ethical issues, examples of programs, values at stake

Ethical issue	Subissue	Examples of programs	Ethical value at stake
Negative effects on physical health	No evidence-based cost-effectiveness	De Balansdag No.28 Heideheuvel clinic No.23	Well being
	Negative effects on physical health	Stomach surgery and medication No.33 Trim and Fit No.5	
Negative psychosocial consequences	Boosting the image of the producer	Children's summer camps for weight loss No.42 Free pedometer supplied with hamburger No.12	Well being Privacy Respect for persons Truthfulness Justice
	Uncertainty, fear and worries	Webster's quote: "Overweight diminishes the chance to a long, healthy and happy life" No.26 Cholesterol test in supermarket No.60	
	Stigmatization and blaming	Trailer Jamie's School Dinners No.1	
	Unjust discrimination	Firing stewardesses No.35 Firing police officers No.36	
		Higher insurance premiums No.38 Higher prices for overweight aeroplane passengers No.39 Grouping children at normal and overweight tables during recess No.5	
Inadequate information		BMI grade on school report card No.47 Withholding university diplomas' from overweight students No.58	Truthfulness and transparency Autonomy and informed choice Well being
		De afvallers No.9 Promotion of products without fat but with a lot of sugar (General example) Promotion of quick fixes for overweight in the form of slimming products that discourage people to practice a healthy lifestyle (General example)	
Cultural and social value of eating disregarded		Ban on birthday cakes in schools No.40 '5 am Tag' campaign No.48	Respect for cultures and value pluralism Well being
		Fat tax No.6 Responsibility contract Medicaid No.18 Free swimming sessions No.46	
Inequalities aggravated			Justice and fairness

Ethical issue	Subissue	Examples of programs	Ethical value at stake
Privacy disrespected	---	Weight grade on report cards No.47 Electronic child file No.16 Work-based programs that focus on individual behaviours such as health risk assessments No.20	Respect for the personal life sphere: privacy
Complexity of responsibilities disregarded	Individual Parents Intermediate organizations such as schools, municipality or social health care services Industry	Responsibility contracts Medicaid No.18 Parents step up No.15 Compulsory cooking classes in the curriculum No.49	Balance between personal and collective responsibility Just division of responsibilities between government, schools, industry, civil society individual
Liberty infringed	Regulation and laws	Labeling restaurant calories No.7 Ban on trans fats in restaurant menus No.51 Ban on soda- and snack vending machines in schools No.3 Fat Tax Foster care for obese child No.56	Respect for the personal life sphere: autonomy and freedom of choice Freedom of action for corporations Value pluralism Justice: being consequent
	Changes in physical environment that close down options	Banning cars from city centres and around schools No.43, 44, 45 Slowing down the elevator in a company building No.52 Designing office building that encourages walking No.53 No fastfoodstrip in business area in south-east Amsterdam No.4	
	Financial triggers	Fat tax No.6 Bonus for police officers who lose weight No.37 Financial bonus for townsmen who lose weight No.55 Higher insurance premiums on the basis of bmi No.38 Tax on aeroplane tickets for overweight passengers No.39	
	Psychological motivation	Caloric information on restaurant menu No.7	
	Social influence	Sneaky fitness No.2 Promoting practicing sports by children by famous soccer players No.29 Offering employees weight loss drugs No.54	

Singaporean Trim and fit program e.g. was criticized for potentially contributing to eating disorders(23, 24).

Finally, the intended effects of commercially financed interventions may at least partly relate to providing the producer with a positive and responsible image. Examples are fastfood chains that provide free pedometers(25), and childrens' summercamps for weight loss that are financially supported by a fast food company(26). In some cases this so called "image boosting" ultimately may serve the goal of increasing the turnover of overweight-inducing products. The World Health Organization calls for controlling the promotion of dangerous and deliberately deceptive approaches to weight loss or control, such as special weight-loss aids, "miracle-cures" and certain drugs and treatments often offered through unlicensed weight-loss centres(1). When the public is actually misled about a program's aims this conflicts with the ethical values of truthfulness and transparency.

Psychosocial well-being

Overweight prevention can, in some cases, have various negative psychosocial consequences, such as uncertainty, fear and concerns about the health risks of overweight and obesity, stigmatization and blaming, and unjust discrimination.

Uncertainty, fear and weight concerns

The focus on the health risks of overweight and obesity has drawn body weight into the medical sphere. The bodily state of weight has more and more become an indicator for health. Whereas overweight children have always been bullied during gymnastics, today they are also being put on a weighing scale and sent to a medical doctor. Informative campaigns about the health risks of obesity confront healthy people with health risks that they currently do not experience and which they may not even encounter in the future. For mothers-to-be who consult a doctor about pregnancy, bodyweight is examined as an indicator for the future health of their child-to-be. This focus on health risks may create excessive and unwarranted fear and weight concerns(27). A website's quote: "Overweight diminishes the chance to a long, healthy and happy life"(28) aims to motivate people to lose weight, but how will it affect people who want to lose weight but do not succeed? Unsuccessful efforts to change one's lifestyle may result in feelings of uncertainty and powerlessness. Slightly overweight people may come to think that the health risks of severe obesity also apply to them, and people may lose sight of the line between the health consequences of occasionally versus continuously snacking. As one example, when the Dutch Heart Association organized cholesterol tests in supermarkets, concerns were raised that this action was ineffective, causing unjustified confidence and unnecessary concern(29).

Stigmatization and blaming

Being overweight is a highly stigmatized condition, which means linking individuals to negative stereotypes. Overweight persons are the victim of childhood teasing and bullying, avoidance by other people, discriminatory hiring practices and misplaced humour(30, 31). Overweight persons are frequently presented as being unattractive and they are associated with negative character traits such as laziness and stupidity(32). Take for instance a television spot for the promotion of Jamie Olivers' program to prevent overweight, where Jamie Oliver is portrayed as an obese person who drives to a snackbar and swallows a bunch of hamburgers, and consequently breaks through his motorcycle that buckles under his weight(33). On the surface, the television spot is merely a funny way of getting attention for a television program to prevent overweight. However, it could also be interpreted as expressing the implicit message that overweight persons are unattractive, lazy, silly and can only blame themselves for being overweight. Another action to prevent overweight that potentially blames the individual for being overweight is a bill in Mississippi that makes it illegal for restaurants to serve obese customers(34). Not only may stigmatization and blaming messages contain subjective or even inadequate information, but also they are often extremely hurtful and show a lack of respect.

Discrimination

Overweight persons are regularly treated differently from normal weight persons. Overweight could for instance be used as a criterion to fire people from certain professions, which happened to stewardesses(35) and police officers(36). Overweight persons may also have to pay higher insurance premiums(37-39) or higher prices for airplane tickets(40). This gives rise to the question which grounds and circumstances justify discrimination and which do not. Some Singaporean schools that participated in the before mentioned Trim and Fit program grouped children at normal and overweight tables during recess(23, 24). Discrimination may undermine psychological well-being, but it also involves ethical objections based on the value of justice. An American high school includes on its report cards a 'Weight grade' that indicates the child's BMI, evoking angry reactions from parents(41). And at an American University more than 20 students are in jeopardy of not receiving diplomas because of their overweight(42).

Equality

In general, measures to prevent overweight have a tendency to be less effective among lower educated people. In Western societies, a lower educational level is often associated with a higher prevalence of overweight and obesity(43). Although it is not a requirement for any single program to actively pursue the aim of reducing health inequalities, it is generally considered to be a positive duty of public health to diminish existing health inequalities(44, 45).

The presence of health inequalities conflicts with ideas about justice and equality. Interventions that affect financial distribution such as fat tax(46) or the responsibility contracts by Medicaid(47) are likely to hit harder among people with low income. But inequalities may also be aggravated by campaigns with a positive and innocent character. For example, offering free swimming sessions(48) will not reach women from certain ethnic minorities, as long as the swimming classes are mixed. If a campaign contains information that is hard to grasp for lower educated people or people from ethnic minorities and therefore does not succeed in changing their lifestyle, it may increase already existing health inequalities(27).

Informed choice

In some cases, education about overweight and obesity involves inadequate information, including unclear, overstated, oversimplified, subjective, incomplete or even false messages. Corporations with their own agenda frequently promote products “without fat” that contain a lot of sugar, and suggest that ‘quick’ fixes for overconsumption are available in the form of slimming products that demotivate people to practice a healthy lifestyle. In the rush of “having to do something” about the problem, messages to convince people about the necessity of a healthy lifestyle are not always in accordance with the facts. Suggesting that eating healthy or, in turn, physical activity, are the solution for all problems neglects other health determinants. A real life television program about a competition between obese families in losing weight was criticized by the Belgian association for obese patients (Bold) because it would be distributing inadequate information, by failing to acknowledge that obesity is a disease that requires long term medical treatment. Quote from their website (translated): “This type of programs undermines the struggle against obesity, which is recognized as a serious public health problem by the OMS. Our leaders should urgently recognize that obesity is a disease, in order to avoid this type of deviations where inadequate information is distributed which is harmful for society as a whole”(49). Some interventions are justified on the basis of epidemiological information that is collected at an aggregate level, and cannot be translated to individual cases without reserve. Evidence, for example, that the population-wide adoption of a healthy diet can prevent 25% of all deaths from cardiovascular disease, does not indicate that adopting a healthy diet reduces each individual person’s risk with 25%. Inadequate information is problematic from an ethical point of view since it is in tension with the value of truthfulness and transparency(50). It hampers exercising freedom of choice and autonomy and may have negative consequences on health.

Social and cultural values

Food and eating habits are related to important cultural and social values. Food is for instance consumed to celebrate, to show hospitality or as a part of cultural traditions(51).

However, many public health campaigns aimed at changing people's personal lifestyles focus exclusively on the nutritional value of food, thus neglecting or interfering with such values. They alter the practice of eating from a natural and a social event into a practice that is only about the value of health. Interventions that urge individuals to make healthy choices, such as the British '5 a day' campaign and the German '5 am Tag' campaign, have been criticized for presenting the healthy choice as the only rational and valuable choice, which is thus easy to make. Such campaigns could be ethically questionable as well as ineffective if they fail to take into account the many other values that food represents to people(52).

When collectively valued practices are violated and disappear, people may feel offended in their cultural identity. This could explain the angry reactions of American parents when the tradition of birthday cakes was banned from American schools(53). Being hampered to participate in culturally and socially valued practices may also lead to an undermining of individual well-being, because these cultural traditions often are a source of pleasure and feelings of community. Moderating participation in Christmas dinner or the festivities after the Ramadan, or turning down a colleagues' birthday cake may lower calorie intake, but may at the same time diminish positive feelings of community.

Privacy

Starting in 2009, every child that was born in the Netherlands gets a digital file from youth health care, containing information about the child's health and development, including potential overweight(54). The plan was criticized for posing a threat to privacy(54). Having one's child's BMI printed on his school report card(41), having to provide information about one's body weight and lifestyle, or being screened on overweight by company doctors also involve intervening in the personal life sphere and may thereby violate the right to privacy. Some features make requiring disclosure of personal information extra sensitive for ethical objections. Body weight, eating habits or styles of feeding and rearing children all concern very personal information. Physical contact in measuring someone's waist circumference is more personal than asking a self-reported BMI. Pressure to provide the information or lack of consent can make an intervention problematic. It also makes a difference which party collects the information (government, insurance company or employer) and whether it has a legitimate justification to do so. Work-based programs that focus on individual behaviours such as health risk assessments may raise concerns regarding privacy issues(55, 56). A final relevant distinction is whether the person whose information is required has an interest in providing it (for example to enable the general practitioner to make a diagnosis) or not (for example when information about an unhealthy weight has financial implications). In all cases, sufficient warrants must be made for safeguarding the information.

Responsibility

Any preventive program expresses ideas about who must take action to prevent overweight or obesity: individual citizens, parents, schools, the government, the industry, or a combination of these. Ethical objections arise if a program threatens the balance between individual and collective responsibility, or if we lose sight of the fact that the responsibility for the overweight epidemic cannot be attributed to one single party. Overweight is the result of a complex web of causal factors, many of which outside the individuals' control. It is partly the result of personal and voluntary choices, and partly the result of social and environmental characteristics. An emphasis on people's personal responsibility may disregard the influence of the social and physical environment and of personal characteristics that are hard to modify or cannot be changed, such as genetic characteristics, educational level and socio-economic status, or vice versa(1, 57-59). The state funded US health care insurance company Medicaid makes her clients sign so-called 'responsibility contracts'(60). If clients do not comply with promised health goals they may for instance lose their right to compensation for a diabetes treatment(60). The campaign "Parents step up" is also very straightforward in blaming parents. Under the sound of scary music, its website expresses slogans like 'And don't blame it on videogames. You are letting your child down as a parent'(61). Obviously, a distinction should be made between attributing responsibility for the problem versus attributing responsibility for resolving the problem. However, attributing responsibility for a solution without attributing accountability for the problem may also evoke objections from stakeholders. The proposal to force schools to adopt cooking classes in schools by the British minister of health made head teachers complain that the school curriculum was overdemand(62, 63). Restaurant owners from New York were furious when they were forced to label their menus with information about calories(64, 65). The weight of these objections partly depends upon the positive results of the measure.

Liberty and autonomy

The solution for the obesity epidemic is frequently sought in interventions that interfere with liberty and freedom of choice regarding personal choices, commercial actions, and policy by schools and other organizations. Personal autonomy and freedom of choice are important ethical values in modern liberal societies, just as freedom of action for corporations. Interventions to prevent overweight may infringe upon these liberties in various ways. Regulations or laws are the most far reaching form of limiting choice and include for instance prohibition of the use of trans fats in restaurants(66, 67), banning soda and snack vending machines from schools(68, 69), restricting the amount of fast food selling points in a business area(70), and banning cars from city centres(71, 72). Personal choice may be influenced or limited by interventions that change the physical environment. American employers encourage walking

by locating the cafeteria far away from the office or by slowing down the elevators in order to push its employees to take the stairs(73). Some programs reward healthy behaviour or a healthy weight. Police officers from the Mexican city Aguascalientes receive a bonus of 100 pesos for every kilo they lose, because they were thought to be too slow in pursuing criminals(74). The mayor of the Italian town Varallo offers cash money to citizens who succeed in losing three to four kilograms in a month(75). Other programs punish unhealthy behaviour or an unhealthy weight, for instance by imposing higher insurance premiums for persons with a high BMI(37, 38), a fat tax on products high in fat and sugar(46) or a tax on aeroplane tickets for overweight passengers(40). Policy that rewards certain behaviours and punishes others may raise the objection that it is inconsequential, because only some healthy or unhealthy behaviours are singled out while others are overlooked(59). A less obvious, but not necessarily less strong form of exercising pressure is using psychological motivation. Personal choice includes the choice 'not to know': not every restaurant customer would have chosen to be informed about the menu's caloric properties(64, 65), but once she is informed, it is hard to ignore and still enjoy a desert like Sticky Toffee Pie. Another form of infringing in personal liberties that is not immediately apparent, involves the use of social influence. This appears in various ways, from a campaign for school children where famous soccer players function as a role model for healthy behaviour(76), to straightforward peer pressure in the Sneaky fitness website that encourages employees to guide their inactive colleagues towards healthy behaviour by replacing the copying machine from their desk to another room, or by faking that the elevator is out of order(77). Programs that are implemented in the working atmosphere are extra likely to express pressure. When employees are offered weight-loss drugs by their employer(73), they may find it hard to refuse, even if participation is not required. Attempting to limit someone's actions or to require actions by someone for his or her own good is called *paternalism*(78). Paternalistic programs evoke moral objections because not everyone equally values a healthy lifestyle. Thus, promoting health may be in conflict with pluralism of values. From a perspective of people who work in health promotion, it may be self-evident that everyone strongly values health. But health is only one of the valuable things in life and not all people consider health to be the most important one(13). Furthermore, what people consider a healthful life may vary considerably.

Programs aimed at preventing childhood obesity often raise the question to what extent parental autonomy may be infringed(79, 80). One of the most extreme examples was the case of a 14 years old obese boy weighing 555 pounds that was put into foster care, while his mother was being arrested(81).

Discussion

Lifestyle interventions, especially regarding the bodily condition of weight, affect personal characteristics and habits. They touch upon people's feelings and core convictions and they give rise to strong ethical debate. Our analysis of 60 programs to prevent overweight and obesity and comments in two expert meetings revealed 8 types of potentially problematic ethical aspects. Four objections concern negative consequences of a program: its effects on physical health may be uncertain or unfavourable, it may have negative consequences for psychosocial well-being including uncertainty, fears and weight concerns, blaming and stigmatization and unjust discrimination, it may distribute inadequate information and it may aggravate inequalities. Four objections concern disrespect for certain ethical values; the social and cultural value of eating may be disregarded, people's privacy may be disrespected, the complexity of responsibilities regarding overweight may be disregarded, and freedom regarding lifestyle, raising children, private enterprise or policy choices may be infringed. Obviously, disrespect for such ethical values may also affect a program's effectiveness(44) or yield unintended consequences.

These potentially problematic ethical aspects arise out of various origins. Firstly, some issues concern side-effects that are unforeseen and unwanted by the designers of the intervention. They stem from a narrow focus on aiming to reduce overweight whereby other relevant issues are lost out of sight. Think about campaigns that are essentially uncontroversial but that unintentionally contain stigmatizing pictures that could easily have been replaced if more attention had been paid to ethical issues. The urgency to find solutions for overweight and obesity, sometimes bordering on panic, does certainly not always lead to solutions that are sensitive from an ethical perspective.

A second category of ethical issues originates out of conflicting interests. For instance, a campaign that informs about the health risks of obesity protects some from gaining weight, whereas at the same time it creates fear and weight concerns among those who are already obese and have great difficulties in losing weight.

A third category of ethical issues arises out of conflicting beliefs and principles. People who feel that governments must protect their citizens against unhealthy influences will appreciate a ban on trans fats in restaurant kitchens(66, 67), whereas proponents of personal and commercial liberties will object against such regulations.

In this paper we focussed on potential objections against programs to prevent overweight or obesity. However, our inventory does not show how frequent the issues actually occur, since we did not conduct an empirical analysis. Instead, we aimed to point out that programs to prevent overweight and/ or obesity may yield ethical issues, to structure these issues, and to suggest that professionals who develop and implement such programs should pay attention to them. Nor does our study show how serious the ethical issues actually are. The fact that objections are raised does not automatically imply that a program should not be

implemented. In the first place, various and sometimes contrary opinions exist about the validity of ethical objections in specific situations. For instance, depending on one's beliefs about personal responsibility, one will think differently about asking higher insurance premiums from obese persons. The variety of moral convictions implies that programs that involve ethical objections are not automatically ethically wrong. Ideas about values and the good life are to a certain extent influenced by one's cultural background and political convictions. This is not to say that all moral opinions about overweight prevention are equally valuable. As holds for all ethical discussions, some arguments are simply more convincing than others.

In the second place, ethical objections regularly refer to program characteristics that also have a positive side. Banning cars from city centres(71, 72) closes down options for car drivers, but opens up possibilities for bicycle drivers. Most programs that give rise to ethical discussion are motivated by the expectation that they will be effective in preventing overweight and obesity. The message that people feel better about themselves if they manage to lose weight may be stigmatizing on the one hand, but motivating on the other hand. Fat tax poses a financial burden and infringes upon personal choice, but at the same time may provide an extra incentive for a healthy lifestyle(46). Oversimplified information is not according to the facts, but is understandable to a broader audience than a nuanced and detailed message would be. Bariatric surgery for obese children poses serious health risks, but may offer the only solution to diminish the health risks posed by obesity(21).

Awareness of the fact that certain aspects of programs to prevent overweight and obesity may evoke ethical debate is a first and crucial step for professionals who develop and implement such programs. The second step, which is beyond the scope of this article, is to deal with these issues and the debate they induce. This leads to the question how a professional in overweight prevention should react to ethical objections: which arguments must be taken seriously and how should burdens be weighed against benefits? Further thinking about an ethical framework for such consideration and decision making would enable professionals from overweight prevention practice and policy to be prepared for ethical objections and if possible and desirable to prevent them. Developing programs that are sound from an ethical point of view is not only valuable from a moral perspective, but may also contribute to preventing overweight, since ethical analysis will make public health work more effective(44).

Conclusion

Programs to prevent overweight or obesity involve a number of potential ethical objections. Obvious ethical incentives to combat the overweight epidemic do not necessarily override these potential ethical constraints. Therefore, further debate is needed. An ethical framework would be useful for helping professionals in overweight prevention to map the ethical issues, structure the relevant arguments and make a decision about the extent to which a program

is ethically acceptable. This inventory of potential ethical issues provides a first step towards creating such a framework.

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Appendix 1. List of interventions

No.	Description of intervention	Source	
1	Jamie's School Dinners television programme	Televisionseries by chef Jamie Oliver, aimed at serving proper school meals. Including manifesto for the government, web petition and trailer.	Pedersen K. Had a few too many school dinners, Jamie? Daily Mail. August 16 2006 http://www.dailymail.co.uk/news/article-400791/Had-school-dinners-Jamie.html (accessed 27 november 2009)
2	Sneaky fitness	Website by food company Vifit by Campina with recommendations to make colleagues, friends and family physically active without their notice. For instance by replacing the copying machine or sticking a fake note "out of order" to the elevator.	Campina lanceert Sneaky fitness. 2006 http://www.evmi.nl/nieuws/marketing-sales/2734/campina-lanceert-sneaky-fitness.html (accessed may 24th 2009)
3	Ban on soda-and-snack-selling vending machines in schools	French government bans soda-and-snack-selling vending machines from public schools	Sciolino E. France battles a problem that grows and grows: fat. The New York Times. http://www.nytimes.com/2006/01/25/international/europe/25obese.html (accessed july 15 2010). Mercer C. France launches controversial school vending machine ban Beverage Daily. http://www.beveragedaily.com/Financial/France-launches-controversial-school-vending-machine-ban (accessed May 24 2009)
4	No fastfoodstrip in South-east Amsterdam	Action against the arrival of four fastfoodrestaurants in a business area	Convenant Gezond Gewicht. Oproep: geen fastfood op elke straathoek. 2006 http://www.convenantgezondgewicht.nl/nieuws/geen-fastfood-op-elke-straathoek (accessed May 24 2009)
5	Trim and Fit	Governmental weight loss program targeting childhood obesity in schools. The program was criticized for being stigmatizing, and potentially contributing to psychological problems.	Wikipedia. Trim and Fit program. http://en.wikipedia.org/wiki/Trim_and_Fit (accessed May 24 2009). Davie S. School link to eating disorders possible The Straits Times. 16 May 2005 http://www.moe.gov.sg/media/forum/2005/forum_letters/20050520.pdf (accessed Januari 31 2010)
6	Fat tax	Surcharge upon fattening food	Laurance J. Time for a fat tax? Lancet 2009 373(9675):1597.
7	Labeling restaurant calories	Law requiring calorie counts next to prices in some restaurants menus	Lueck TJ. City may asks restaurants to list calories New York Times. http://travel.nytimes.com/2006/10/30/nyregion/30calories.html (accessed July 15 2010). Rony CR. Calorie Labels may clarify options, not actions The New York Times. http://www.nytimes.com/2007/07/17/health/nutrition/17cons.html (accessed 1 november 2010)
8	The Eagle's nest	Website and books to inform children from American Indian and Alaska native backgrounds about diabetes and healthy living. The eagle is a symbol for wisdom and harmony.	National Centre for Chronic Disease Prevention and Health Promotion (NCCDPHP). The eagles nest campaign. 2007 http://www.cdc.gov/diabetes/eagle/index.html (accessed 9 July 2008)

9	De afvallers	Real life television program about a competition between obese families in losing weight.	Bold. Een reality show over een ziekte: opgepast gevaar! 2005 [http://www.boldnet.be/fr/news_detail/10] (accessed January 31 2010) SBS6. De afvallers. URL http://www.sbs6.nl/web/show/id=78016/langid=43/dbid=21/typeofpage=73941 , accessed at may 24, 2009; Wikipedia. De Afvallers. http://nl.wikipedia.org/wiki/De_Afvallers , accessed at May 24, 2009
10	Walking Schoolbus or cycling trains	Website that encourages parents to start a walking schoolbus or a cycling train. The first is a group of children walking to school with one or more adults, and the second is a group of children riding their bicycles under supervision of adults.	Walking school bus: starting a walking school bus. http://www.walkingschoolbus.org (accessed 9 July 2008)
11	Move Europe	Campaign for the improvement of lifestyle-related workplace-health promotion in Europe	Move Europe. http://www.enwhp.org/index.php?id=83 , accessed at may 24, 2009
12	Free pedometer supplied with hamburger	Free pedometer offered when buying a hamburger	CNNMoney.com. McDonald's adult Happy Meal arrives 2004 http://money.cnn.com/2004/05/11/news/fortune500/mcdonalds_happymeal/index.htm (accessed 12 July 2010)
13	Self-regulation Disney	Disney bans junkfood from amusement parks and Disney characters from junk food commercials targeting children. Disney's television channels keep on broadcasting junk food commercials targeting children.	Thomas, L. Disney says it will link marketing to nutrition. New York Times, October 17 2006.
14	Cycling strategy	Pharmaceutical company GlaxoSmithKline has created lockers, showers and parking facilities to facilitate cycling to work.	Lord Krebs K, Unwin J, al. e. Public health, ethical issues. P91. London: Nuffield Council on Bioethics, 2007.
15	Parents step up	Information campaign that calls parents to take responsibility for the overweight of their child. Quote from the commercial: "And don't blame it on the videogames. You're letting him down as a parent."	Parents step up. Parents step up/ Familias en Marcha, an innovative, bilingual, childhood obesity public information campaign in south florida. 2005 http://www.parentsstepup.com/ad1_english.html (accessed november 27 2009)
16	Electronic child file	Starting in 2009 every child that was born in the Netherlands gets a digital file by youth health care, containing information about the child's health and development (including potential overweight), family situation and environment.	Duthler AW, Dupuis H. Je hebt een jaar borstvoeding gehad, begrijp ik. NRC Handelsblad. http://www.nrc.nl/nieuwsthema/privacy/article1992979.ece/Je_hebt_een_jaar_borstvoeding_gehad_begrijp_ik (accessed July 15 2010)
17	National measurement program for children	Children are being weighed at school. Parents receive information letter including length, weight and lifestyle advice. Notion of obesity is being avoided because parents may conceive this as insulting.	Elliot, F. Parents of fat children to be given a warning. The Times. October 22 2007. http://www.timesonline.co.uk/tol/news/uk/health/article2709161.ece (accessed at november 27 2009)
18	Responsibility contracts	Medical insurer Medicaid makes clients sign so called "responsibility contracts" if they do not comply with the rule to loose weight	Bush Administration Approves West Virginia Plan For Medicaid 'Personal Responsibility' Contracts. Medical News Today. http://www.medicalnewstoday.com/articles/43010.php (accessed November 27 2009)
19	Sport in school-curriculum	Government compels schools to have 2 hours a week of sport classes in the curriculum (such as traditional Australian sports like cricket) and sends 'physical activity resource kit' to schools.	Compulsory sport to tackle childhood obesity http://www.abc.net.au/news/stories/2007/05/16/1924710.htm (accessed July 12 2010)

20	Work-based health risk assessments	Work-based programs that focus on individual behaviours such as health risk assessments	Schulte PA, Wagner GR, Ostry A, Blanciforti LA, Cutlip RG, Krajnak KM, et al. Work, obesity, and occupational safety and health. <i>Am J Public Health</i> 2007 97(3):428-36. 56. Gabel JR, Whitmore H, Pickreign J, Ferguson CC, Jain A, K CS, et al. Obesity and the workplace: current programs and attitudes among employers and employees. <i>Health Aff (Millwood)</i> 2009 28(1):46-56.
21	Overweight prevention Dordrecht	Community markets about health including music, cooking demonstrations, breakfast in the open air, information tours in supermarkets.	Gemeenschappelijke Gezondheidsdienst Zuid-Holland Zuid www.ggdzhd.nl (accessed at november 27 2009)
22	Please take the stairs	Message at the elevator	Promoting stair climbing: intervention effects generalize to a subsequent stair ascent.' Webb O.J., Eves F.F., <i>Am J Health Promot.</i> 2007 Nov-Dec;22(2):114-9. Zernike K. Fight Against Fat Shifting to the Workplace <i>The New York Times</i> . http://www.nytimes.com/2003/10/12/us/fight-against-fat-shifting-to-the-workplace.html (accessed 27 november 2009)
23	Heideheuvel clinic	Dutch clinic for obese children.	Berkeljon S, Vos C. Klink stopt financiering kliniek voor obesitas [Klink stops funding clinic for obesity]. <i>Volkskrant</i> . june 8 2007 http://www.volkskrant.nl/economie/article433510.ece/Klink_stopt_financiering_kliniek_voor_obesitas (accessed Januari 31 2010); Putters K, Weller F. Zorgstelsel bij zich in de staart [Health care system undermines itself]. <i>NRC Handelsblad</i> . 7 september 2007 http://www.nrc.nl/opinie/article1836188.ece/Zorgstelsel_bij_zich_in_de_staart (accessed January 31 2010)
24	Tasting classes	Tasting classes for elementary school about food, taste and physical activity	Smaaklessen kennisnet www.smaaklessen.kennisnet.nl (accessed at november 27 2010)
25	Schoolslag Limburg	Tailored advice for professionals in elementary school and high school for developing planned prevention and health promotion.	Schoolslag Limburg. http://www.schoolslag.nl/client/5/?websiteitid=5&contentid=5999&hoofd-id=5978 (accessed at January 31 2010)
26	Website Drenthe beweegt	Website to encourage physical activity among citizens of Dutch province Drenthe, including many questions and answers regarding physical activity and overweight.	Drente beweegt. Veel gestelde vragen: Wat is overgewicht? http://www.drenthebeweegt.nl/veelgestelde/voedingsvragen/wat_is_overgewicht/ (accessed February 5 2010)
27	De Eetmeter	Cd-rom with analysis and advice regarding eating pattern	De Eetmeter. http://www.eigenkracht.nl/links/producten/eetmeter2002 (accessed at november 27 2009)
28	De Balansdag	Mass media campaign including brochure, television spot, newsletter, cook book, all suggesting to let a day of snacking follow by a so called "balance day" with a healthy food intake.	Redactie Wetenschap. Campagne tegen dikte miste doel [Campaign against overweight missed goal]. <i>NRC</i> . Februari 13 2009 http://www.nrc.nl/wetenschap/article1769564.ece/Campagne_tegen_dikte_miste_doel (accessed November 27 2009)

29	Scoring for health	Professional soccer players coach schoolchildren in adopting a healthy lifestyle	Scoren voor gezondheid. 2010 http://www.scorenvoorgezondheid.nl (accessed July 15 2010)
30	National health test (NGT)	Yearly test in september to improve physical activity, followed by analysis of physical condition, lifestyle advice, participation in a course for physical activity.	Nationale gezondheidstest. www.nationalegezondheidstest.nl (accessed July 15 2010)
31	Ban on sweetened drinks at school	Elementary school bans sweetened drinks such as chocolate milk and fruit drinks	School verbiedt chocomelk en fruitsap. <i>Nieuwsblad.Be</i> . May 15 2008. http://www.nieuwsblad.be/Article/Detail.aspx?articleID=6s1s0rup (accessed at november 27 2009)
32	Overweight NHS staff must lose weight	Overweight NHS staff target of governmental campaign for weight loss, including personalised support for weight loss, diet and exercise programs, creation of healthy workplace	Overweight NHS staff targeted by health drive. <i>The Guardian</i> April 7 2009. http://www.guardian.co.uk/society/2009/apr/07/nhs-staff-obesity (accessed at november 26 2009)
33	Stomach surgery and medication	Government report recommends stomach surgery and medication for obese children and adults in exceptional cases	Hall S. Stomach surgery and drugs for children to tackle obesity epidemic <i>The guardian</i> December 13 2006 http://www.guardian.co.uk/society/2006/dec/13/health.lifeandhealth (accessed Januari 31 2010)
34	Obesity kills	French poster of a naked obese woman with the slogan 'Obesity kills. Does that still make you laugh?'	Sciolino E. France battles a problem that grows and grows: fat. <i>The New York Times</i> . http://www.nytimes.com/2006/01/25/international/europe/25obese.html (accessed July 15 2010)
35	Firing stewardesses	Air India fires overweight stewardesses, high court approves	Blakely R. Air India fires air hostesses for being too fat to fly. <i>The Times</i> . januari 6 2009 http://www.timesonline.co.uk/tol/travel/news/article5452570.ece (accessed november 27 2009)
36	Firing police officers	Letter to overweight police officers: if they do not succeed in losing weight, this is sanctioned by losing holiday time, lowering salary and eventually being fired.	Scrignar CB. Mandatory weight control program for 550 police officers choosing either behavior modification or "willpower" <i>Obesity/Bariatric Med</i> 1980 9(3):88-92.
37	Bonus for police officers who lose weight	Mexican police officers are offered a bonus for losing weight (100 pesos a kilo), because they are said to be too slow in pursuing criminals	Mexico cops offered cash to slim http://news.bbc.co.uk/2/hi/americas/7236199.stm (accessed November 27 2009)
38	Higher insurance premiums	Insurance premiums are based on Body Mass Index	Darling D. Extra weight, higher costs. <i>The New York Times</i> . December 2 2006 http://www.nytimes.com/2006/12/02/business/02money.html (accessed november 27 2009); Bachelor L. Insurers pile pounds on the overweight. <i>The Guardian</i> . Januari 1 2006 http://www.guardian.co.uk/money/2006/jan/01/observecashsection.healthinsurance (accessed November 27 2009); Schmidt H. Sickness funds, healthy people, obese people: are higher contributions for 'those who cannot control themselves' justified? In: Vandamme S, Van de Vathorst S, De Beaufort ID, editors. <i>Whose weight is it anyway?</i> First ed. Leuven/ Den Haag: Acco; 2010. p. 105-20.

39	Higher prices for overweight airplane passengers	Budget airline Ryanair considers fat tax for overweight passengers	Stocks J. Budget airline ryanair considers 'fat tax' for overweight passengers. Daily Mail April 22 2009 http://www.dailymail.co.uk/travel/article-1172536/Ryanair-considers-fat-tax-overweight-passengers.html (accessed November 27 2009)
40	Ban on birthdaycake	US schools ban birthday cakes. Angry reactions from parents because the state should not take away this 'childhood tradition'.	Cohen S. US schools ban birthday cakes. 2006 [updated september 2 2006; http://news.bbc.co.uk/2/hi/americas/5308796.stm (accessed November 27 2009)
41	Global code to govern the marketing of food to children.	Among the measures suggested were a ban on television and radio advertising of junk food from 6 a.m. to 9 p.m., internet and cellphones free from commercials, no toys, celebrities and cartoon characters for promotion.	Food industry advertising draws fire from children's health advocates. New York Times. March 23 2008. http://www.nytimes.com/2008/03/23/technology/23iht-adco24.1.11334271.html (accessed November 27 2009)
42	Children's summer camps for weight loss	Children's summer camps aimed at a healthy weight for children of and above 14 years old, financed by fastfood company Quick.	Snackkoerier. Fastfoodketen Quick houdt sportkampen. 2006 http://www.missethoreca.nl/1029416/fastfood/fastfood-nieuws/FastfoodketenQuickHoudtSportkampen.htm (accessed November 27 2009)
43	Home zones	Cities including Bristol have introduced 'home zones', which are residential areas where pedestrians take priority over traffic, and feature trees, benches and play areas	Lord Krebs K, Unwin J, al. e. Public health, ethical issues. P91. London: Nuffield Council on Bioethics, 2007.
44	Integrated policy for town and traffic planning	Since 1977 Dutch city Groningen has integrated policy for town and traffic planning aimed at reducing car traffic while enhancing accessibility and the use of public transport and walking and cycling.	Lord Krebs K, Unwin J, al. e. Public health, ethical issues. P91. London: Nuffield Council on Bioethics, 2007.
45	5 Minute Walking Zone	5 minutes from school zone without cars, measured by pupils	Pupils get the measure of the walk to school. Gateshead Council; 2008 november 5 2008 http://www.gateshead.gov.uk/Council%20and%20Democracy/news/News%20Articles/Pupils%20Get%20the%20Measure%20of%20the%20Walk%20to%20School.aspx (accessed 27 november 2009)
46	Free swimming sessions	Free swimming sessions are being offered in Nottingham to people under 16 and over 60.	Free swimming for young and old. BBC Newschannel December 29 2008. URL http://news.bbc.co.uk/2/hi/uk_news/england/nottinghamshire/7803148.stm (accessed at november 27 2009); Compulsory sport to tackle childhood obesity http://www.abc.net.au/news/stories/2007/05/16/1924710.htm (accessed July 12 2010)
47	Weight report cards	School includes 'Weight grade' on report card that indicates the child's Body Mass Index. This evokes angry reactions by parents.	ABCnews. Weight grade on report cards angers parents. 2007 http://abcnews.go.com/Nightline/story?id=3153074 (accessed november 27 2009)
48	5 am Tag	Campaign to promote 5 portions of fruit and vegetables a day.	Vandamme S, Van de Vathorst S. Eat, drink, and be merry In: Vandamme S, Van de Vathorst S, de Beaufort I, editors. Whose weight is it anyway? Essays on ethics and eating. Leuven/ Den Haag: Acco; 2010. p. 13-22.

49	Compulsory cooking classes	Minister of health Ed Balls proposes compulsory cooking classes in schools. Headteachers and parents complain.	Helm T. Ed Balls cooking lessons won't stop obesity Telegraph. http://www.telegraph.co.uk/comment/3554061/Ed-Balls-cooking-lessons-wont-stop-obesity.html (accessed november 27 2009); MacLeod D. Cooking lessons to be made compulsory in schools The Guardian http://www.guardian.co.uk/education/2008/jan/22/schools.uk1 (accessed 1 november 2009)
50	Cholesterol test in supermarket	Dutch Heart Association organizes cholesterol test in supermarkets. Dutch Organization of General Practitioners claims that it is ineffective, causes unnecessary worries and unjustified reliefs, and is expensive.	Hartstichting organiseert cholesteroltest in supers [Dutch Heart Foundation organizes cholesterol tests in supermarkets]. De Volkskrant. March 7 2005 http://www.volkskrant.nl/archief_gratis/article613892.ece/Hartstichting_organiseert_cholesteroltest_in_supers (accessed November 27 2009) Kwakzalverij: de nationale cholesteroltest. URL http://www.medicalfacts.nl/2006/05/22/kwakzalverij-de-nationale-cholesteroltest/ (accessed at november 27 2009); Nederlands Huisartsen Genootschap. Standpunt cholesteroltest. URL http://www.shhv.nl/pool/1/documents/NHG%20standpunt%20cholesteroltest.pdf accessed at november 27 2009
51	Ban on trans fats in restaurant menus	New York severely limits use of trans fats in restaurant kitchens. Angry reactions from the industry and New York citizens.	Lueck TJ, Severson K. Big brother in the kitchen? New Yorkers balk New York Times. http://www.nytimes.com/2006/09/28/nyregion/28fat.html (accessed July 15 2010); Lombardi KS. Does that trans-fat ban grease a slippery slope? New York Times. http://www.nytimes.com/2008/01/27/nyregion/nyregionspecial2/27colwe.html (accessed July 15 2010)
52	Slowing down elevator	Office slows down elevators in order to prevent overweight	Zernike K. Fight Against Fat Shifting to the Workplace The New York Times. http://www.nytimes.com/2003/10/12/us/fight-against-fat-shifting-to-the-workplace.html (accessed 27 november 2009)
53	Designing office building that encourages walking	For instance locating the work cafeteria far away from the office. Officials eased the culture transition by welcoming employees with umbrellas during rainy whether.	Zernike K. Fight Against Fat Shifting to the Workplace The New York Times. http://www.nytimes.com/2003/10/12/us/fight-against-fat-shifting-to-the-workplace.html (accessed 27 november 2009)
54	Offering employees weight loss drugs	Union Pacific Railroad has begun offering some employees the latest prescription weight-loss drugs as part of a study to determine how best to get its workers to slim down.	Zernike K. Fight Against Fat Shifting to the Workplace The New York Times. http://www.nytimes.com/2003/10/12/us/fight-against-fat-shifting-to-the-workplace.html (accessed 27 november 2009)
55	Financial bonus for losing weight	Mayor of Italian town Varallo offers cash money to citizens who lose weight. Townsmen would receive 50 euros (about \$74) if they lost 9 pounds in a month; townswomen would get that same amount for shedding 7 pounds.	Halpern J. Penny a Pound. Should the government pay you to lose weight? Slate. http://www.slate.com/id/2179078 (accessed July 15 2010)

56	Foster care for obese child	14 years old boy weighing 555 pounds it put into foster care, mother is arrested	Barnett R. S.C. case looks on child obesity as child abuse. But is it? USA Today. http://www.usatoday.com/news/health/weightloss/2009-07-20-obesityboy_N.htm (accessed December 3 2009)
57	This city is going on a diet	This City is Going On A Diet is a challenge created by Mayor Mick Cornett to the citizens of Oklahoma City to lose One Million Pounds.	This city is going on a diet. www.thiscityisgoingonadiet.com (accessed at november 27 2009)
58	BMI requirement for university diploma	at Lincoln University, a historically black college in rural Pennsylvania, more than 20 students are in jeopardy of not receiving diplomas because of their weight.	Ruiz RR. A University Takes Aim at Obesity The New York Times November 27 2009 http://thechoice.blogs.nytimes.com/2009/11/27/a-university-takes-aim-at-obesity (accessed December 3 2009)
59	Victory for Life	Summertime camps for youngsters aimed at weight loss. Explicit attention for psychological aspects of weight loss.	Convenant Overgewicht. http://www.convenantovergewicht.nl/partners/victory_for_life_kids (accessed at december 3 2009)
60	Epode	Integrated approach aimed at families. Positive results.	Epode. http://www.epode.fr/ (accessed at december 3 2009)

Appendix 2. Statements that were being presented and discussed during expert meetings

Expert meeting I 'Moral differences between various forms of unhealthy behaviour'

Part of Zonmw project 'Prevention of obesity: the weight of ethical arguments'

Utrecht, Februari 1 2008

14 guests

Statement 1. *Information regarding overweight and obesity by the Dutch government is way too soft, and is therefore not effective. It is now up to others, such as industry and insurance companies, to implement harsher measures.*

Statement 2. *As opposed to smoking and drinking, eating concerns a primary need in life. Designers of prevention campaigns must take this into consideration.*

Statement 3. *A preventive program is objectionable if it leads to stigmatization, guilt feelings or 'blaming' of people who are sick (partly) as a consequence of the behaviour that is being prevented. Think about the consequences of non-smoking campaigns for lung cancer patients.*

Statement 4. *A program that leads to stigmatization of people with a certain lifestyle is not objectionable per sé. Such a program is acceptable if it has proven to be cost-effective, and if its message is based on scientific evidence instead of on prejudices.*

Statement 5. *When behaviour creates health damage for other people, harsh interventions are required. However, financial damage to others provides no basis for such interventions.*

Expertmeeting II 'Ethical aspects of measures to prevent overweight among children'

Part of Zonmw project 'Prevention of obesity: the weight of ethical arguments'

Utrecht, April 2 2008

14 guests

Statement 1. *Overweight among children is a form of child abuse.*

Statement 2. *All schools should be healthy schools.*

Statement 3. *Stigmatization of overweight people must be put in as an instrument in the struggle against overweight.*

Statement 4. *Every child under eighteen years old should be obliged to visit a yearly consult to prevent obesity together with his or her parents.*

Statement 5. *Junk food commercials aimed at children should be prohibited.*

Statement 6. *It is better to teach children to deal with temptations than to protect them from temptations.*

Chapter 4

An overview of ethical frameworks in public health

Can they be supportive in the evaluation of programs to prevent overweight?

Ten Have M, De Beaufort ID, Mackenbach JP, Van der Heide A. An overview of ethical frameworks in public health: Can they be supportive in the evaluation of programs to prevent overweight? *BMC Public Health* 2010, 10:638.

Abstract

Background. The prevention of overweight sometimes raises complex ethical questions. Ethical public health frameworks may be helpful in evaluating programs or policy for overweight prevention. We give an overview of the purpose, form and contents of such public health frameworks and investigate to which extent they are useful for evaluating programs to prevent overweight and/ or obesity.

Methods. Our search for frameworks consisted of three steps. Firstly, we asked experts in the field of ethics and public health for the frameworks they were aware of. Secondly, we performed a search in Pubmed. Thirdly, we checked literature references in the articles on frameworks we found. In total, we thus found six ethical frameworks. We assessed the area on which the available ethical frameworks focus, the users they target at, the type of policy or intervention they propose to address, and their aim. Further, we looked at their structure and content, that is, tools for guiding the analytic process, the main ethical principles or values, possible criteria for dealing with ethical conflicts, and the concrete policy issues they are applied to.

Results. All frameworks aim to support public health professionals or policymakers. Most of them provide a set of values or principles that serve as a standard for evaluating policy. Most frameworks articulate both the positive ethical foundations for public health and ethical constraints or concerns. Some frameworks offer analytic tools for guiding the evaluative process. Procedural guidelines and concrete criteria for solving important ethical conflicts in the particular area of the prevention of overweight or obesity are mostly lacking.

Conclusions. Public health ethical frameworks may be supportive in the evaluation of overweight prevention programs or policy, but seem to lack practical guidance to address ethical conflicts in this particular area.

Background

Is a campaign that stresses the importance of a healthy weight acceptable when it stigmatizes overweight persons? At what point does encouraging physical activity in the workplace become too intrusive in the personal life sphere? Is policy to inform people about health risks of obesity ethically sound when it does not reach people from ethnic minorities? Much public health activity is going on in the field of preventing overweight and obesity. Sometimes this raises pressing ethical questions. Suppose that a public health professional is determined to design a program that will not raise ethical objections from society. Or suppose that he is faced with the question whether to implement a program or not. Or that he must justify a controversial program in the national media. Assuming that this professional did not receive much training in ethics, he may need some guidance in dealing with thorny ethical issues and in articulating the ethical foundations underlying programs to prevent overweight(1). Where can he turn to?

Analysing ethical issues in public health programs and policy requires a specific field in ethics(2, 3). Public health is generally understood to be 'the science and art of preventing disease, prolonging life and promoting health through the organised efforts of society'(4). The ethically relevant features of public health differ from those of clinical medicine in at least two respects. First, traditional clinical ethics often addresses the individual relationship between physician and patient, but public health focuses on the population. Second, the emphasis of clinical ethics is predominantly of medical cure and care, whereas public health is mainly concerned with prevention(5, 6).

Public health ethics conducts analysis at different levels of abstraction. Not all theories in public health ethics are designed for guiding decision-making in daily practice. According to Dawson, the primary aim of *theories* is to provide *justification* for actions. By contrast, *ethical frameworks* are more concrete instruments that are aimed at assisting professionals in *deliberating* about ethical aspects of programs and policy in order to support the day to day decision-making about their implementation(7).

Several ethical frameworks have been developed for evaluating public health policy. Such frameworks may also be useful in the field of preventing overweight or obesity. The aim of this paper is to give an overview of currently available ethical frameworks that can be useful for evaluating programs to prevent overweight and/ or obesity.

Methods

We identified relevant frameworks by asking 15 experts for the frameworks they were aware of that may be useful in evaluating ethical aspects of public health interventions or prevention of overweight or obesity. 7 experts in the fields of public health ethics, medical ethics

and obesity, from various countries, responded. They identified six frameworks(5, 8-12). In order to be as complete as possible, we also searched for frameworks in Pubmed(13). This search was limited to frameworks that were published in English after 1995. Frameworks that are specifically focussed on public health issues other than overweight and obesity, such as smoking and vaccination, and frameworks for screening programs were excluded(14-21). The search strategy is described in appendix 1. Literature references in the articles on frameworks we found were also checked. This search provided no additional frameworks.

All papers and documents in which the frameworks were described were scrutinized by one author (MtH) and discussed in detail with two other authors (AvdH and IDdB). We assessed the area on which the available ethical frameworks focus, the users they target at, the type of policy or intervention they propose to address, and their aim. Further, we looked at their structure and content, that is, tools for guiding the analytic process, the main ethical principles or values, possible criteria for dealing with ethical conflicts, and the concrete policy issues they are applied to.

In our analysis we assumed that the practical usefulness of frameworks for evaluating the ethical aspects of programs to prevent overweight and/ or obesity is determined by a number of characteristics. To start with, the framework should be applicable to concrete programs for prevention of overweight and/ or obesity. Next, according to Dawson's above-mentioned definition of frameworks, it should be practically feasible. Procedural guidelines for applying the framework may help satisfying this criterion. According to the same definition, it should facilitate deliberation about ethical aspects of programs. Also following from Dawson's definition, it should provide criteria for making a decision regarding the acceptability of implementing programs. Furthermore, the framework should map negative as well as positive normative aspects of a program. An ethical evaluation that only pays attention to either ethical strengths or ethical weaknesses would be unbalanced and incomprehensive, which diminishes its practical value. A last characteristic holds that the framework should address all ethical issues that programs to prevent overweight and/ or obesity may involve, that is, effectiveness, psychosocial effects, equality, information, liberty, responsibility, privacy and cultural values.

Results

An overview of several characteristics of the six selected frameworks is presented in table 1. All frameworks address the area of public health in general. The Nuffield framework(11) is the only one that includes a specific section about the ethical issues in prevention of obesity. The Public Health Leadership Society framework(9) and the framework by Childress et al.(8) focus on public health policy in the United States, whereas the Europhen framework(10) concentrates on public health policy in Europe. Tannahill's framework(12) is directed at the

Table 1. Overview of frameworks

	Kass	Childress et al.	Public Health Leadership Society	Europhen	Nuffield	Tannahill
Title	An ethics framework for public health	Public health ethics: mapping the terrain	Principles of the ethical practice of public health.	Public policies, law and bioethics: a framework for producing public health policy across the European Union	Public health: ethical issues	Beyond evidence- to ethics: a decision-making framework for health promotion, public health and health improvement
Year issued	2001	2002	2002	2006	2007	2008
Area	Public health	Public health in the USA	Public health in the USA	Public health in the EU	Public health	Health promotion, public health and health improvement
Target group	Professionals	Public health agents	Institutions with an explicit public health mission	Policymakers in the European Union	Policymakers in government, industry, other organisations and individuals	Decision-makers
Type of policy or intervention that is addressed	Interventions, policy proposals, research initiatives, programs	Interventions	Public health practice, including ideals and policies of institutions	Policy	Measures, policy	Policies, programs, services, activities
Aim	To indicate ethical implications of programs, to indicate defining values of public health	To provide a rough conceptual map of public health ethics, to help thinking through and resolving conflicts between promoting public health and other moral requirements	To guide institutions by clarifying distinctive elements of public health and the related ethical principles, to provide a standard to which public health institutions can be held accountable	To help producing common approaches to public health policy across the European Union, especially with regard to tensions between private and public interests	To help considering ethical issues of measures and policy for health improvement	To indicate the function of evidence and ethics in founding policies, to indicate what actions should be implemented
Analytic tool	<i>Six-Step-Questionnaire</i>	None	None	None	<i>Intervention-Ladder</i>	<i>Decision-Making Triangle</i>

Table 1. Overview of frameworks

	Kass	Childress et al.	Public Health Leadership Society	Europfen	Nuffield	Tannahill
Set of principles, values or recommendations	Values are mentioned in the text, for instance: <i>public health seeks to improve the well-being of communities</i>	9 General moral considerations, for instance: <i>producing benefits</i>	12 Principles of the ethical practice of public health, for instance: <i>public health should address principally the fundamental causes of disease and requirements for health, aiming to prevent adverse health outcomes</i>	11 Recommendations for more effective ways of developing and implementing policy that attracts greater public support, for instance: <i>public health should strive to create an environment that structures and facilitates individual health, wellbeing and flourishing</i>	10 principles (Stewardship model), for instance: <i>acceptable public health goals include reducing the risks of ill health that result from other people's actions, such as drink driving and smoking in public places</i>	10 possible ethical principles, for instance: <i>do good</i>
Main ethical values	Well-being Privacy and confidentiality Liberty and self-determination Distributive justice Procedural justice These values have been extracted from the description of the considerations of questions 3, 5 and 6.	Well-being Utility Distributive justice and fairness Procedural justice and participation Liberty and autonomy Privacy and confidentiality Trustworthiness Transparency and openness These values have been extracted from the nine moral considerations that are provided in appendix 2.	Well-being Individual rights Participation Empowerment Equality Evidence based Transparency Effectiveness Consent Swiftness Cultural value pluralism Respect for environment Confidentiality and privacy Professionalism Trustworthiness These values have been extracted from the twelve principles that are provided in appendix 2.	Well-being Empowerment Individual rights Liberty and autonomy Personal responsibility and duties Communitarianism Participation Transparency Accountability Trust Confidentiality and privacy Swiftness These values have been extracted from the eleven recommendations that are provided in appendix 2.	Well-being Care of the vulnerable Empowerment Autonomy Fairness and equality Liberty and self-determination Openness Privacy These values have been extracted from the ten principles that are provided in appendix 2.	Well-being Equality Respect Empowerment Sustainability Social responsibility Participation Openness Accountability These values have been extracted from the ten principles that are provided in appendix 2.

area of public health, health promotion and health improvement. In the following section, each of the selected frameworks is shortly described in order of publication. Further details can be found in appendix 2.

Kass: An ethics framework for public health(5, 22)

Kass aims to raise awareness of the ethical issues of proposed programs and to help consider means of responding to them. Her framework includes an analytic tool that consists of a step-by-step-list of six questions for deciding how the burdens and benefits of an intervention can be fairly balanced (see table 2), and a description of relevant ethical considerations. The framework expresses the defining values of public health, including positive obligations to improve population health and to reduce social inequalities. Kass further distinguishes three categories of ethical burdens, namely: risks to privacy and confidentiality, risks to liberty and self-determination, and risks to justice. She describes specific burdens for six types of public health activities, two of which are used in overweight prevention. The first type of activities, health education, is relatively unproblematic since it is voluntary and aimed at empowerment, but may nevertheless give rise to ethical problems: lack of effectiveness; manipulation, coercion and inadequate information; paternalism; stigmatization resulting from targeting; and directing personal choice by using incentives. The second type of activities, regulations and legislation, are considered the most intrusive approach to public health: by imposing penalties for non-compliance they threaten liberty and self-governance; they may involve health risks (for instance in case of vaccination); and if they pose undue burdens on particular segments of society they can be unjust. A number of criteria should help weighing burdens and benefits. First, the greater a program's ethical burden, the greater its expected public health benefit must be. Second, the more uneven the benefits and burdens are divided between groups, the greater the expected benefit must be. And third, coercive programs must be kept to a minimum. Within a pluralistic society, the balancing of benefits and burdens will inevitably lead to disagreements. They should be solved through a system of fair procedures. This requires a democratic process including public hearings to consider minority views.

Table 2. Ethical framework for public health by Kass(5)

1.	What are the public health goals of the proposed program?
2.	How effective is the program in achieving its stated goals?
3.	What are the known or potential burdens* of the program?
4.	Can burdens be minimised? Are there alternative approaches?
5.	Is the program implemented fairly?*
6.	How can the benefits and burdens of a program be fairly balanced?

*Burdens refer to risks for privacy and confidentiality, liberty and self-determination, and justice.

**Fair implementation refers to the ethical principle of distributive justice.

Childress et al.: Public Health Ethics(8)

Childress et al. provide a conceptual map of public health ethics in the United States. Furthermore, they attempt to resolve conflicts between the promotion of public health and other moral values. The framework consists of nine general moral considerations in public health ethics (see table 3). When these principles conflict with each other, each may have to yield in some circumstances, because they have no absolute character and are not hierarchically ordered. The first three considerations reflect the goals of public health: producing benefits, preventing harms, and maximizing the balance of benefits over harms and costs. Under certain conditions these public health goals may override the other six moral considerations, such as justice, liberty and privacy. Those conditions involve that (1) the program is *effective* in protecting public health; (2) its benefits to public health outweigh the infringement of moral considerations (*proportionality*); (3) there is no alternative program that is less morally troubling (*necessity*); (4) the degree to which the program is infringing should be minimised (*least infringement*); and (5) public health agents should explain and justify the infringement (*public justification*). Additionally, the process of resolving conflicts between public health goals and other moral considerations must be transparent. Transparency involves honestly disclosing information, but also seeking information by consulting the public.

Childress et al. furthermore provide criteria for defining the degree of paternalism of public health interventions. Coercive intervention in behaviour that is voluntary and that affects primarily the actor himself is called strong paternalism and is difficult to justify.

Table 3. General Moral Considerations of public health ethics by Childress(8)

-
- producing benefits
 - avoiding, preventing and removing harms
 - producing the maximal balance of benefits over harms and other costs (often called utility)
 - distributing benefits and burdens fairly (distributive justice) and ensuring public participation, including the participation of affected parties (procedural justice)
 - respecting autonomous choices and actions, including liberty of action
 - protecting privacy and confidentiality
 - keeping promises and commitments
 - disclosing information as well as speaking honestly and truthfully (often grouped under transparency)
 - building and maintaining trust
-

Public Health Leadership Society(2, 9, 23)

The Public Health Leadership Society's *Principles of the ethical practice of public health* is a code of ethics for public health institutions. It was proposed in 2001 and adopted by several organizations such as the American Public Health Association. It serves both as a guide for public health institutions and as a standard to which these institutions can be held accountable. The framework consists of a set of twelve ethical principles (see table 4 for a selection

Table 4. Sample of principles by PHLS(9)

1.	Public health should address principally the fundamental causes of disease and requirements for health, aiming to prevent adverse health outcomes.
2.	Public health should achieve community health in a way that respects the rights of individuals in the community.
3.	Public health policies, programs and priorities should be developed and evaluated through processes that ensure an opportunity for input from community members.
4.	Public health should advocate and work for the empowerment of disenfranchised community members, aiming to ensure that that the basic resources and conditions necessary for health are accessible to all.

of principles, the complete set can be found in appendix 2). The principles are related to the ten essential public health services. For instance, the principle of ‘collaboration’ is linked to the public health service ‘mobilize community partnerships to identify and solve health problems’. One of the key beliefs underlying the framework is the notion of ‘interdependence’ between humans. This means that each person both affects and depends upon others. It relates to public health’s concern with the population instead of individuals. The idea of interdependence serves to correct a perspective that is only concerned with the individual right to autonomy. The framework is not designed as an instrument for resolving particular conflicts. Instead it provides an overview of principles that should be considered in a dispute.

Europphen(10)

Europphen is directed at producing common approaches to public health policy across the European Union. The framework does not contain an analytic tool, or a set of principles or values. Instead, it examines normative issues that should guide public health programs and their implementation. The Europphen report firstly provides a theoretical analysis of tensions between private and public interests. Secondly, it compares public health structures and policy responses to selected public health problems (not including overweight and obesity) in member states of the European Union. Thirdly, it offers an empirical analysis of public attitudes regarding public versus private interests for a number of topics, such as parental rights, incentives and enforcement, solidarity, rights and responsibilities. European policy for public health should be pluralistic and flexible, because the variety of socio-economic settings in individual countries will lead to different priorities. The report proposes three main policy goals: promotion of population health, promotion of health-related autonomy and promotion of health-related equality. Furthermore eleven recommendations are made for more effective ways of developing and implementing policy that attracts greater public support (see table 5 for a sample and appendix 2 for the complete set). Public health should, for instance, ‘strive to create an environment and structures that facilitate individual health, wellbeing and flourishing’.

Table 5. Sample of policy recommendations by Europhen(10)

-
- Public health should strive to create an environment that structures and facilitates individual health, wellbeing and flourishing.
 - Public health has a strong role to play in ensuring that people feel part of a society so that they can make a contribution to society.
 - Public health institutions should respect the confidentiality of information that can bring harm to an individual or community if made public.
 - Where there are risks to health, public health institutions should act in a timely manner on the information available.
-

Nuffield Council on Bioethics(11)

The Nuffield Council on Bioethics aims to help considering the ethical issues of public health policy. It offers two analytic tools, the ‘stewardship model’ and the ‘intervention ladder’. The stewardship model describes acceptable goals and restrictions for public health policy. It departs from the position that the state has a duty to enable people to lead healthy lives. Next to this, governments should try to remove inequalities that affect disadvantaged groups or individuals. Acceptable public health goals include for example “reducing the risks of ill health that result from other people’s actions”. Restrictions include “coercing adults to lead healthy lives”. The principles of the stewardship model are not listed in an order of priority. The overall aim should be to achieve the desired health outcomes while minimising restrictions on people’s freedom. Furthermore, special attention should be paid to consent and care of the vulnerable. The ‘Intervention ladder’ lists levels of intrusiveness of public health policies, from “do nothing” until “eliminate choice” (see table 6). The higher upon the ladder a program is, the stronger its justification needs to be.

The report includes, by means of example, a case study on ethically sensitive issues in obesity prevention. It provides policy recommendations on obesogenic environments; food labelling; protecting children; personal responsibility and NHS treatment, the roles of the food and drink industries, the government and public services; collecting data about childhood obesity and intervention in the home for childhood obesity. One of its conclusions is for instance that ‘There is an ethical justification for the state to intervene in schools to achieve a more positive attitude towards healthy eating, cooking and physical activity’.

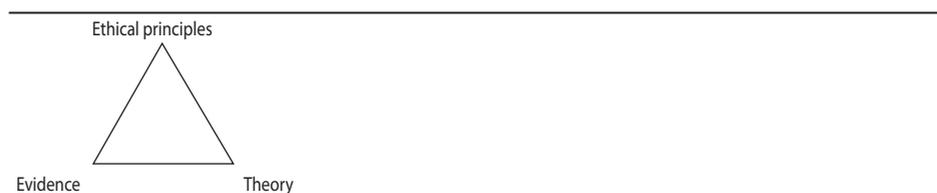
Table 6. Intervention ladder by Nuffield Council on Bioethics(11)

-
- Eliminate choice
 - Restrict choice
 - Guide choice through disincentives
 - Guide choice through incentives
 - Guide choices through changing the default policy
 - Enable choice
 - Provide information
 - Do nothing or simply monitor the current situation
-

Tannahill: Beyond evidence – to ethics(12)

Tannahill's framework describes the position of evidence and ethics in decision-making about public health interventions. Using the framework should lead to a decision whether or not to implement an intervention. The framework consists of a 'decision-making triangle' that has on its top *ten ethical principles*, and *evidence* and *theory* on its bottom (see Table 7). The triangle illustrates Tannahill's claim that the emphasis in decision-making should be on the explicit application of an identified set of ethical principles. Available evidence, which is always incomplete, and plausible theory on effectiveness should inform whether a program satisfies the ethical principles. Within this framework the effectiveness of an intervention is essential, but only because it serves the ethical principles. The set of principles includes for instance social responsibility and sustainability. How the principles should be interpreted and weighed, depends upon political and cultural perspectives. In case of disagreement, documenting judgements should facilitate a constructive dialogue. An explicit use of the triangle is supposed to contribute to the values of openness and accountability.

Table 7. Decision-making triangle by Tannahill(12)



Discussion

Our overview of ethical frameworks shows that various efforts have been made to help policymakers and public health professionals deliberating about the ethical aspects of public health policy and programs. Kass offers a step-by-step procedure to weigh the burdens and benefits of a program(5). Childress et al. assist in evaluating programs that promote public health but that infringe upon other moral considerations(8). PHLS provides ethical standards to guide the practices of American public health institutions(9). Europhen gives insight in ethically relevant public health differences within the European Union and in ways to bridge them(10). The Nuffield stewardship model distinguishes acceptable goals and restrictions of public health programs, and its intervention ladder helps in balancing a program's benefits and its intrusion in people's lives(11). Finally, Tannahill's triangle assists in integrating ethics and evidence in such a deliberation(12).

However, all frameworks have limitations with respect to their practical value in the evaluation of programs to prevent overweight and/ or obesity (see Table 1). Nuffield is the

only framework that specifically addresses obesity prevention(11). Four frameworks can be applied to concrete programs related to overweight or other public health problems, but Europhen and PHLS cover a more abstract question, namely: 'what ethical values should direct public health policy?'(9, 10).

We found it remarkable that none of the frameworks specifies when and by who it should be used. This may stem from the desire to develop a framework that is broadly applicable and that can be used by anybody at anytime. We think that users of a framework would benefit from procedural guidelines for applying the framework. Especially professionals who have no experience with ethical consultation and who must fit the application of an ethical framework into their other tasks may profit from suggestions. Advice about the best time to apply a framework (before the implementation of a program or already during the designing phase) and about the number and background of the persons who are to use it, may save efforts and thus lower the threshold of using a framework.

Kass, Nuffield and Tannahill offer an *analytic tool*, which is an instrument to guide the evaluative process. These tools comprise a decision-making-triangle, a step-by-step-questionnaire and a ladder to indicate proportionality(5, 11, 12). Such tools make a framework more practically useful for policymakers than merely a set of ethical values does. In addition, framing questions may contribute more to adequate deliberation of the ethical aspects of programs than providing fixed answers or guidelines. The Europhen policy recommendations, for instance, aim to help policymakers solving ethical issues by indicating the direction that policy should take(10, 11). As opposed to this, Kass and Tannahill for instance frame the *questions* that should be raised and thereby encourage the process of deliberation. Kass leaves answering the question 'How can burdens and benefits be fairly balanced?' up to the public health professional or policymaker(5). Tannahill's triangle formulates the steps that are to be taken in the process of deliberation without filling in the decisions that should be made(12).

No simple solution seems to be available for dealing with ethical conflicts, although it is precisely the tendency of ethical principles to infringe upon each other that creates the need for frameworks. The designers of the frameworks agree that the principles cannot be ordered according to priority but must be weighed in concrete circumstances. Kass, Nuffield and Childress et al. identify criteria for this weighing process(5, 8, 11). They agree on the fact that the burdens of a public health program should be in proportion to its benefits. Furthermore they refer to the 'harm principle', which implies that restrictions to people's freedom should be minimized and that they are only justified in case of a clear public health requirement. Childress et al. distinguish themselves from the other frameworks by putting ethical conflicts at the centre, rather than merely pointing out ethical values(8). They point out five justificatory conditions for public health programs that infringe moral principles, namely: effectiveness, proportionality, necessity, least infringement, and public justification. PHLS and Europhen do not articulate criteria for dealing with ethical conflicts(9, 10).

However, even with sound weighing criteria, disagreement about the outcome of a framework is inevitable. That is because personal, cultural and political perspectives affect the process of interpretation and weighing. Several frameworks recommend fair procedures for dealing with difference of opinion. Tannahill encourages an explicit use of the decision-making triangle, including documenting judgements. This may contribute to consultation and dialogue, and enables a discussion about disagreements on the basis of shared principles(12). Kass argues for a democratic process and public hearings to consider minority views(5). And Childress et al., to conclude, advocate a transparent process for expressing justice and sustaining public trust. Such a process requires both asking input from the public, as well as offering justifications for decisions that have been made(8).

Most of the frameworks aspire not only to set ethical boundaries (such as restrictions to interference), but also to articulate positive ethical foundations for public health (such as the duty to diminish inequalities), which seems to contribute to their practical value. However, the usefulness for prevention of overweight or obesity requires that all ethical issues that are relevant for this field are clearly addressed. The majority of the frameworks frames abstract ethical values without outlining the concrete ethical issues they may give rise to. Most frameworks contain a set of ethical values. Some are articulated as principles, whereas others take the form of policy recommendations or goals. Only Kass' framework does not include a list of values, but her description of relevant ethical considerations does refer to them(5). These abstract ethical values do more or less cover the relevant ethical themes. For instance, the issues of *liberty* and *responsibility* that may occur in programs to prevent overweight are in all frameworks covered by the classical values of liberty and responsibility. Nuffield, Europhen, PHLS, and Tannahill explicitly mention social responsibility and stress the need for creating a healthy environment and facilitating healthy behaviour, which are both relevant for the prevention of overweight(9-12). Europhen is the only framework that emphasizes that citizens also have duties, thereby paying attention to the debate about accountability for an unhealthy weight. It states that 'citizens consider themselves as consumers of healthcare who see health services as their right as taxpayers. However rights have reciprocal responsibilities, and the public must be reminded of these'(10).

Furthermore, all frameworks (except for Tannahill's) address the issues of *privacy* by mentioning the values of privacy and confidentiality. And all frameworks address the issue that the *effectiveness* of a program to prevent overweight may be uncertain or unfavourable by mentioning the values of well-being, and sometimes by mentioning the value of utility (producing the maximal balance of benefits over harms and other costs)(5, 8, 11, 12).

However, almost none of the frameworks describes the concrete ethical issues that may occur in programs. The issue of *equality* is covered in all frameworks except for the recommendations by Europhen(10). But knowing that equality is an important value does not specify that programs to prevent overweight may increase already existing health inequalities by being least effective among groups that have the highest risk of developing overweight.

Likewise, the importance of providing adequate *information* is covered by the values of autonomy, transparency and trustworthiness that are mentioned in all frameworks. However, inadequate information is sometimes distributed by accident, and the frameworks do not provide guidelines about what adequate information exactly entails and how to prevent the accidental distribution of inadequate information.

Furthermore, two issues were absent in most frameworks. One issue, that interference may occur with cultural and social values of food and eating habits, is only covered by the PHLS framework, which articulates the need to respect cultural value pluralism: 'Public health programs and policies should incorporate a variety of approaches that anticipate and respect diverse values, beliefs and cultures within the community'(9). The other issue, namely the potential negative *psychosocial consequences* of programs to prevent overweight (such as uncertainty, fear and weight concerns about the health risks of overweight and obesity, stigmatization and blaming, and unjust discrimination), is by most frameworks only covered to a limited extent. Only Kass and Nuffield warn against the potentially stigmatizing effects of targeted messages(5, 11). None of the frameworks goes into detail about how programs can reinforce the negative image of overweight people, how they may create unnecessary concerns about health risks, or how they may undermine self-confidence for people who do not succeed in losing weight. The lack of attention for cultural values, and for stigmatization and other psychosocial issues may be explained by the fact that these issues are particularly relevant for the field of overweight prevention and less for other fields in public health.

Designers of frameworks face the challenge of acknowledging the complex character of ethical issues, without losing sight of their main task, namely guiding professionals in the process of articulating and dealing with ethical issues. Presenting a set of abstract ethical principles does not provide guidance to policymakers who are not familiar with ethics. This is not a shortcoming of the frameworks in themselves, since each has its own particular aims, but it does indicate that our last criterion is not satisfied by the available frameworks. Thus, it is questionable to what extent the frameworks facilitate deliberation among policymakers regarding the concrete ethical issues in the prevention of overweight and obesity.

Our study has several limitations. It is possible that we overlooked one or more frameworks that are suitable for evaluating the ethical aspects of programs to prevent overweight and/or obesity. Furthermore, our analysis of the usefulness of frameworks is restricted to self-developed criteria. We did not interview policymakers in the field of overweight prevention about the usefulness of frameworks and we did not test the frameworks on actual programs.

Conclusion

We found no framework that takes into account all ethical issues that are relevant for the prevention of overweight. Further, the practical value of currently available frameworks is

limited in several aspects. Practically valuable frameworks that address all relevant ethical issues are needed because much public health activity is going on in the field of preventing overweight that has distinct ethical features, such as the issue of stigmatization of behaviour.

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Appendix 1. Search strategy in pubmed

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((ethic*[ti] OR moral[ti] OR normative[ti]) AND ("decision making"[ti] OR framework*[ti] OR guideline*[ti] OR principle*[ti] OR code*[ti])) OR (("ethical decision making" OR "ethical framework" OR "ethics framework" OR "ethical guideline" OR "ethical guidelines" OR "ethics guidelines" OR "ethical principle" OR "ethics principle" OR "ethical principles" OR "ethics principles" OR "ethical code" OR "ethics code" OR "ethical codes" OR "ethics codes" OR "moral framework" OR "normative framework" OR "moral guidelines" OR "normative guidelines" OR "moral principle" OR "normative principle" OR "moral principles" OR "normative principles" OR "moral code" OR "moral codes") AND ("guideline"[Publication Type] OR "guidelines as topic"[MeSH Terms]))) AND ("public health" OR "public health"[mesh:noexp] OR "public health practice"[mesh]) AND 1995:3000[dp] AND eng[la]
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Appendix 2. Overview of principles and values in the frameworks

	Set of ethical principles, values or recommendations
Kass	<i>Instead of a set of principles or recommendations, values are mentioned in the text</i>
Childress et al.	<p><i>General moral considerations</i></p> <ul style="list-style-type: none"> -producing benefits -avoiding, preventing and removing harms -producing the maximal balance of benefits over harms and other costs (often called utility) -distributing benefits and burdens fairly (distributive justice) and ensuring public participation, including the participation of affected parties (procedural justice) -respecting autonomous choices and actions, including liberty of action -protecting privacy and confidentiality -keeping promises and commitments -disclosing information as well as speaking honestly and truthfully (often grouped under transparency) and -building and maintaining trust
Public Health Leadership Society	<p><i>Principles of the ethical practice of public health</i></p> <ol style="list-style-type: none"> 1. Public health should address principally the fundamental causes of disease and requirements for health, aiming to prevent adverse health outcomes. 2. Public health should achieve community health in a way that respects the rights of individuals in the community. 3. Public health policies, programs and priorities should be developed and evaluated through processes that ensure an opportunity for input from community members. 4. Public health should advocate and work for the empowerment of disenfranchised community members, aiming to ensure that the basic resources and conditions necessary for health are accessible to all. 5. Public health should seek the information needed to implement effective policies and programs that protect and promote health. 6. Public health institutions should provide communities with the information they have that is needed for decisions on policies or programs and should obtain the community's consent for their implementation. 7. Public health institutions should act in a timely manner on the information they have within the resources and the mandate given to them by the public. 8. Public health programs and policies should incorporate a variety of approaches that anticipate and respect diverse values, beliefs and cultures in the community. 9. Public health programs and policies should be implemented in a manner that most enhances the physical and social environment. 10. Public health institutions should protect the confidentiality of information that can bring harm to an individual or community if made public. Exceptions must be justified on the basis of the high likelihood of significant harm to the individual or others. 11. Public health institutions should ensure the professional competence of their employees. 12. Public health institutions and their employees should engage in collaborations and affiliations in ways that build the public's trust and the institution's effectiveness.

<p>Europhen</p>	<p><i>Recommendations for more effective ways of developing and implementing policy that attracts greater public support</i></p> <ol style="list-style-type: none"> 1. Public health should strive to create an environment that structures and facilitates individual health, wellbeing and flourishing. 2. Public health should achieve population health in a way that respects the rights of individuals. 3. Public health policies must take heed of the pre-eminence of autonomy in European society. 4. Citizens consider themselves as consumers of healthcare who see health services as their right as taxpayers. However rights have reciprocal responsibilities, and the public must be reminded of these. 5. Public health has a strong role to play in ensuring that people feel part of a society so that they can make a contribution to society. 6. The public are unlikely to support policies which they do not understand or which they see as unconnected to their lives. 7. Public health policy should be implemented in a transparent manner that facilitates accountability. 8. There is a need to actively build trust in public health policy. 9. A balanced approach is required between incentives and restrictions. 10. Public health institutions should respect the confidentiality of information that can bring harm to an individual or community if made public. 11. Where there are risks to health, public health institutions should act in a timely manner on the information available.
<p>Nuffield</p>	<p><i>The Stewardship model</i></p> <p>Acceptable public health goals include:</p> <ul style="list-style-type: none"> -reducing the risks of ill health that result from other people's actions, such as drink-driving and smoking in public places; -reducing causes of ill-health relating to environmental conditions, for instance provision of clean drinking water and setting housing standards; -protecting and promoting the health of children and other vulnerable people; -helping people to overcome addictions that are harmful to health or helping them to avoid unhealthy behaviours; -ensuring that it is easy for people to lead a healthy life, for example by providing convenient and safe opportunities for exercise; -ensuring that people have appropriate access to medical services; and -reducing unfair health inequalities. <p>At the same time, public health programs should:</p> <ul style="list-style-type: none"> -not attempt to coerce adults to lead healthy lives; -minimise the use of measures that are implemented without consulting people (either individually or using democratic procedures); and -minimize measures that are very intrusive or conflict with important aspects of personal life, such as privacy
<p>Tannahill</p>	<p><i>Ten possible ethical principles for health promotion, public health and health improvement</i></p> <ul style="list-style-type: none"> Do good Do not harm Equity Respect Empowerment Sustainability Social responsibility Participation Openness Accountability

Chapter 5

An ethical framework for the prevention of overweight and obesity

A tool for thinking through a program's ethical aspects

Ten Have M, Van der Heide A, Mackenbach JP, De Beaufort ID. An ethical framework for the prevention of overweight and obesity: A tool for thinking through a program's ethical aspects. *Submitted.*

Chapter 6

Preventing unhealthy behaviours

**Distinctions regarding ethical arguments
and moral prejudices**

Ten Have M, Van der Heide A, Mackenbach JP, De Beaufort ID. Preventing unhealthy behaviours: Distinctions regarding ethical arguments and moral prejudices.
Submitted.

Chapter 7

Stigmatization in programs to prevent overweight and obesity

Ten Have M, Van der Heide A, Mackenbach JP, De Beaufort ID. Stigmatization in programs to prevent overweight and obesity. *Submitted.*

Chapter 8

General discussion

Introduction

Our study was aimed at examining how a structured debate can be facilitated about the ethical issues that are involved in the prevention of overweight and obesity. The *first objective* of this thesis (Chapter 2-5) was to develop a general framework for the ethical evaluation of measures to prevent overweight. The *second objective* (Chapter 6) was to examine ethically relevant differences between unhealthy behaviours in order to explore the possibilities of using this framework for other measures to promote a healthy lifestyle. The *third objective* (Chapter 7) was analyzing how stigmatization occurs in programs to prevent overweight and to what extent this is ethically objectionable.

This chapter presents the main findings, describes some general reflections and limitations, and presents implications for the practice of prevention policy and recommendations for future research.

Main findings

Objective 1. To develop a general framework for the ethical evaluation of measures to prevent overweight.

Based on an exploration of the relevant ethical issues in the prevention of childhood obesity, we found (chapter 2) that there are some general ethical themes in the debate on preventing childhood obesity: the effects of moral panic; responsibility; and children's right to protection from unhealthy commercial influences. Furthermore, we found that several issues should be taken into account before such programs are implemented. The proposed program should be supported by enough evidence or good reasons. It should be analyzed whether the program has consequences in terms of possible stigmatization. The program should involve parents in a respectful way, by hearing their arguments and providing them with information instead of undermining their autonomy. The program should aim at helping children to deal with temptation by developing durable skills, habits and virtues. If the program possibly infringes upon moral values, its ethical impact should be in proportion to its goals and methods. Finally, it is important to discuss whether enough safeguards against heading down slippery slopes have been incorporated, and whether the limits of the intervention are clearly communicated to the public.

Based on a systematic evaluation of recently reported interventions or policy proposals and a discussion about them in expert meetings we found (Chapter 3) that currently proposed interventions or policies to prevent overweight or obesity may (alongside the benefits they strive for) include the following potentially problematic aspects: effects on physical health may be uncertain or unfavourable; there may be negative psychosocial consequences including uncertainty, fears and concerns, blaming and stigmatization and unjust discrimina-

tion; inequalities may be aggravated; inadequate information may be distributed; the social and cultural value of eating may be disregarded; people's privacy may be disrespected; the complexity of responsibilities regarding overweight may be disregarded; and interventions may infringe upon personal freedom regarding lifestyle choices and raising children, regarding freedom of private enterprise, or regarding policy choices by schools and other organizations. We concluded that the obvious ethical incentives to combat the overweight epidemic do not necessarily override the potential ethical constraints, and further debate is needed. An ethical framework to support decision makers in balancing potential ethical problems against the need to do something would be helpful. Developing programs that are sound from an ethical point of view is not only valuable from a moral perspective, but may also contribute to preventing overweight and obesity, since societal objections to a program may hamper its effectiveness.

Based on the evaluation of a selection of existing ethical frameworks for public health, we found (Chapter 4) that all frameworks aim to support public health professionals or policymakers. Most of them provide a set of values or principles that serve as a standard for evaluating policy. Most frameworks articulate both the positive ethical foundations for public health and ethical constraints or concerns. Some frameworks offer analytic tools for guiding the evaluative process. Procedural guidelines and concrete criteria for dealing with important ethical conflicts in the particular area of the prevention of overweight or obesity are mostly lacking. We concluded that public health ethical frameworks may be supportive in the evaluation of overweight prevention programs or policy, but seem to lack practical guidance to address ethical conflicts in this particular area.

Based on the inventory of ethical issues, the study of the available ethical frameworks, and tests in two international workshops we finally designed an ethical framework for the prevention of overweight and obesity. This framework is presented in Chapter 5. At the heart of the framework is a list of eight questions on the morally relevant features of a program: its effects on physical health, psychosocial well-being, informed choice, cultural values, equality, privacy, responsibility and liberty. Answering these questions provides a map of the potential ethical pitfalls of a specific program. This mapping should be followed by a structured discussion of the arguments and their weight, and deciding whether, and if so under what conditions, the program should be implemented. Considering the ethical aspects of programs to prevent obesity or overweight is extremely important in the face of the urgent and extensive health problems of overweight and obesity. Our framework is a practical tool for systematic ethical evaluation. It is applicable to a broad range of programs in different stages of development and implementation.

Objective II. To examine ethically relevant differences between unhealthy behaviours in order to explore the possibilities of using this framework for other measures to promote a healthy lifestyle.

Based on literature analysis, we found (Chapter 6) that several nuances are relevant for the ethical evaluation of the prevention of unhealthy behaviours. We conclude that distinctions between behaviours regarding harm and free choice are sometimes wrongly overlooked, whereas distinctions regarding value judgements are sometimes wrongly influential in policy. As opposed to smoking, obesity does not pose direct health risks to other people. As opposed to booking a skiing vacation, the choice to have an unhealthy diet and insufficient exercise is much more complex, and the level of free choice differs considerably among various groups. And as opposed to workaholicism, obesity is much more subject to negative value judgements. This distinguishes ethical debate about the prevention of overweight and obesity from ethical debate about the prevention of other behaviour-related health risks.

Objective III. To analyze how stigmatization occurs in programs to prevent overweight and to what extent this is ethically objectionable.

According to Link and Phelan, stigmatization is characterized by the coincidence of four components: (1) labeling, (2) stereotyping, (3) separation, and (4) status loss and discrimination. Based on an application of this definition to some current programs to prevent overweight, we found (Chapter 7) that in evaluating programs to prevent overweight, stigmatization must not be regarded as an act that takes place in isolation, but as a complex social process that is already pervasively present in western culture. This process is by definition ethically problematic. The stigmatizing role of programs is a matter of degree: the more components a program involves, and the stronger a component is present in a program, the more likely that it contributes to stigmatization. Carefulness is required in designing and implementing programs, because the stigmatizing role of programs can be easily overlooked.

General reflections and some limitations

In this paragraph we outline some of the limitations of our research results and share some reflections for inspiring further research.

Situating this thesis within ethics regarding public health

The ethical issues that are involved in the prevention of overweight and obesity belong to the field of public health ethics, and in particular to ethics regarding health promotion and disease prevention. We have addressed this field by looking from an ethical perspective at the practice of overweight and obesity prevention. Our aim was to examine how a structured discussion about ethical issues can be facilitated for professionals in the prevention of over-

weight and obesity. In this way we hope to serve practice and to integrate ethical reflection in the design, development and implementation of measures.

We have added to the field of ethics regarding public health an inventory of the ethical issues that may occur in programs to prevent overweight and/or obesity (chapter 2), an overview of currently available ethical frameworks (chapter 3), an ethical framework for the prevention of overweight and obesity (chapter 4), an analysis of the differences between various forms of unhealthy behaviour that should be taken into account in the ethical evaluation of interventions (chapter 5) and an analysis of the ethical limitations regarding stigmatization in programs to prevent overweight (chapter 6).

Stephen Holland has remarked that research in public health ethics is always challenged by the so called “re-description problem”. This entails that what seem like fruitful discussions of the ethics of specific public health activities end up by merely re-describing the central dilemma in public health ethics (i.e. between the rights and freedoms of individuals, and the needs and good of the community), albeit in new terms. To a certain extent our research is vulnerable to this charge, because the ethical arguments that we have described in this thesis are not new to the ethical debate regarding public health. Nevertheless, we believe that we have made a contribution to the debate on the ethics of obesity prevention. We have aimed to clarify the ethical issues that are at stake, to distinguish the relevant ethical arguments, and to facilitate further debate by providing a tool to discuss them.

Our explicit aim was to facilitate this debate not only among professional ethicists, but also among professionals who dedicate themselves to the cause of obesity prevention. Therefore, we have submitted our papers mainly to journals focused on public health or obesity. Furthermore we have given various presentations at international conferences that were attended by professionals in the field of overweight and obesity. Finally, we have participated in a commission of the Partnership Overweight in the Netherlands (PON) where health care professionals, patient associations, health care insurers and the government work together at improving care for people with overweight and obesity in order to improve their health and quality of life.

The ethical framework

In this thesis we have shown that various frameworks exist that are valuable for analyzing ethical issues in public health, but that seem to lack practical guidance for addressing ethical conflicts in the particular area of the prevention of overweight and obesity. The framework that we have designed (chapter 4) is a practical tool for facilitating a structured analysis of the extent to which a program to prevent overweight or obesity is ethically acceptable. Our framework addresses all ethical issues that we found to be relevant for the prevention of overweight (chapter 1), including two issues that were absent in most frameworks, namely the social and cultural value of eating, and stigmatization and other psychosocial issues. Fur-

thermore, our framework does not only address ethical values on an abstract level (as most frameworks do) but also outlines the concrete ethical issues that may arise within programs to prevent overweight and obesity. Our framework facilitates deliberation by providing a questionnaire including possible answers and alerts, a list of steps for applying the framework and some procedural recommendations regarding the people who are to use it and the meetings in which the framework could be applied.

There are several things that our framework does not provide. Firstly, our analysis of ethical issues is focused on inspiring debate and does not provide clear-cut solutions to ethical issues. The framework presents alerts for detecting an ethical issue, the main arguments that may arise with regard to the issue, criteria for dealing with the issue and some procedural recommendations. Based on our research of other frameworks and based on the tests of our framework we did not find more concrete criteria for solving important ethical conflicts. Secondly, this thesis does not include an application of the entire ethical framework to an existing program. We think that the value of applying the framework lies in its application in the form of a group discussion. In order to illustrate how such discussion could take place, each question in the framework is accompanied by examples that illustrate how this question could be applied to an existing program. We have tested preliminary versions of the framework two times during the development stage, because we find usefulness and comprehensibility very important. However, the final version of the framework has not been tested. We recommend further research, monitoring and evaluation to assess the implementation, use and results of the framework.

The variety of existing frameworks raises the question whether we really need all these separate frameworks, or whether we should be working toward one overarching framework for public health. To answer this question, we should first note that the term 'ethical framework' is used for very different concepts. Not only is it applied to practical instruments, but it is also used for theoretical models (such as Rawls' theory of justice). This leads to much confusion in the debate and makes it desirable to specify what we mean exactly when speaking about frameworks. In our overview of frameworks, we have used Dawson's definition of a framework, which holds that ethical frameworks are concrete instruments that are aimed at assisting professionals in deliberating about ethical aspects of programs and policy in order to support the day-to-day decision-making about their implementation(1). But even the collection of frameworks for public health that we gathered under this definition is very diverse, because facilitating deliberation and decision-making can be done in various ways. We think that the variety of frameworks exists because there are various needs. There is a need for reflection on how public health programs may infringe upon ethical values on a more abstract level (which is done in Childress' framework), and there is a need for reflection on how such ethical issues appear in the practice of policy and programs (what we have aimed to do). There is a need for reflection on ethical issues in public health in general (what Kass' framework has done) and there is a need for reflection on ethical issues in one particular

field within public health (what we have aimed to do). So each framework serves its own aim. Most of them can be seen as complementary and cannot be integrated into one aim. However, taking into account the various needs for reflection on ethical issues regarding public health, and the variety of documents that are offered for facilitating such reflection, we may wonder whether it is helpful to group them all under the same label as an ethical framework for public health.

We have pointed out that it is understandable and necessary that various frameworks with various aims exist. But this does not alter the fact that looking at overlap and differences between these frameworks and searching for integrative approaches can be fruitful and informative. We have done so by comparing various ethical frameworks for public health and by analyzing differences between various behaviours. We concluded that some arguments within the obesity debate have generic value, and that other arguments are specifically important for obesity. We recommend recognizing these obesity-specific arguments, as well as examining the applicability of our framework to the prevention of other types of unhealthy behaviour.

The ethical issues

There are some constraints on the depth and the extent to which we have explored the eight ethical issues. This is due to our choice of a broad perspective on all potential ethical issues that may occur across the whole range of interventions for overweight prevention. Each of the ethical issues raises many ethical questions and debate which have not all been addressed in this thesis. To which extent should childhood obesity be regarded as parental abuse? To what extent are financial incentives for healthy behaviour and disincentives for unhealthy behaviour justified? When do programs that treat overweight persons differently for the sake of prevention cross the line to unjust discrimination? How should general practitioners address the issue of overweight to their clients? We recommend further research regarding specific questions that arise with regard to the ethical issues.

In this thesis we have focused on programs that raise ethical issues, but only for ultimately facilitating the design, development and implementation of programs that avoid or properly deal with such issues. In the ethical framework we indicate that the ideal program has positive effects on physical health and psychosocial well-being, increases equality, promotes informed choice, respects social and cultural values, respects privacy, acknowledges that various parties are responsible for preventing obesity, and promotes autonomy and freedom of choice. Programs are more likely to be ethically sound when they focus on a healthy lifestyle instead of on weight. Focusing on lifestyle helps to avoid stigmatization, because it does not label overweight persons. It is also valuable from the perspective of justice, because it may be beneficial for all people. Finally, programs are more likely to be ethically sound when they avoid focusing solely on individual choice, but instead, focus on the complex causal

network leading to obesity and on reducing influences from the obesogenic environment. This helps to avoid stigmatization and blaming of overweight individuals and increases the effectiveness of interventions. Naturally, ethically sound programs should be effective in preventing overweight. Prevention in general is more likely to be effective if it is aimed at behaviour change and not only at increasing knowledge. Systematic overviews of programs for preventing overweight and obesity conclude that some of these programs are effective, but that it is unclear which component of the program established this. The number of methodologically sound studies is limited(2). Recent research about effective interventions in the Netherlands shows that the number of programs that has been proven to be effective is limited. Furthermore, programs that have been proven to be effective are rarely or not used in practice. Existing programs are often insufficiently interconnected, and are not adequate in reaching important target groups, such as people of low socio-economic status (SES), migrant groups and parents. Effective prevention of overweight requires an integral approach, that is, activities and efforts by different fields and at different levels(3).

The severity of ethical issues in current interventions

Our aim was to examine which ethical issues may occur, not how frequently and to what degree they do occur. The results of our present exercise raise the question how matters stand in current prevention policy regarding these ethical issues. This question is beyond the scope of this thesis and requires further research, but we want to share some reflections on this.

The number of programs that we considered obviously ethically incorrect is limited. One of the most extreme examples we have encountered was the Trim and Fit program (which reverse acronym is FAT), a weight loss program initiated by the Singapore ministry of education, that targeted child obesity in Singapore schools between 1992 and 2007. The program imposed a process of separation where overweight students were required to follow intense physical activities during recess, received food ration coupons indicating the maximum number of calories they were allowed to consume during lunchbreak (the higher the BMI, the fewer calories), grouped children at normal and overweight tables, made overweight students parade in front of morning assembly and awarded slim students with special bracelets(4-6).

However, various measures are ethically questionable without being extremely or obviously wrong. Some programs cross ethical borderlines in an implicit way. Stigmatizing messages are likely to be perceived as 'normal' and may therefore go unnoticed. Take for instance Jamie's School Dinner series, aimed at improving diets for school children. The trailer for his program shows television cook Jamie Oliver, who, portrayed as an obese person, drives to a snackbar, swallows a bunch of hamburgers, and consequently breaks through his motorcycle that buckles under his weight(7). On the surface this may appear merely as a funny way of attracting attention for Oliver's program. However, the trailer ridiculizes obese persons and

suggests that obese persons are lazy and cannot control themselves, which may indirectly affect the way in which overweight individuals are regarded by, for instance, future employers. Furthermore, programs may be ethically questionable because relatively unproblematic interventions could lead to problematic consequences. Take the Dutch mass media campaign 'Balance day' which aims to prevent increase of weight by suggesting that a day of eating too much should be compensated by a day of eating less or being more physically active. While the effects of mass media campaigns on people's behaviour are generally modest and have not been examined for this particular campaign, there are some worries that people who are dieting may, anticipating a 'balance day', eat extra on the day before, and thereby risk developing an eating disorder(2). Finally, interventions can be ethically problematic because they form part of a trend. There is nothing wrong with one information campaign that informs people about healthy diets, but it is problematic that the majority of campaigns focuses on personal responsibility(8).

Ethical debate may also arise when interventions that are on the borderline of what is considered to be ethically acceptable create the impression that ethical boundaries will decline further in the future. Consider the discussion about interventions that direct personal choices. Such interventions vary from a subtle pushing message "Please take the stairs" that one may encounter close to an elevator(9), to employers forcing their employees to walk more by locating the cafeteria far away from the office building(10), to straightforward restrictions on unhealthy behaviours such as imposing a fat tax on fattening foods(11), banning cars from city centres and around schools(12) or imposing higher insurance premiums for obese people(13, 14). Especially when one hears about extreme measures that are implemented outside of Europe, such as forced physical exercise for obese adolescents in Singapore and withholding university diplomas from obese students in Pennsylvania(15), it is understandable that people are concerned about a slippery slope in directive programs for the prevention of obesity. Even if a slippery slope is not occurring in reality, fear of a slippery slope has an influence on the public. For instance, when it may be clear to policymakers that putting one obese child into foster care because the conditions are truly bad, this may give rise to among overweight children that one day it will be their turn. If it is not clearly communicated that slippery slopes will be prevented, fear of a slippery slope may raise unnecessary worries. This may also undermine the public willingness to cooperate with certain interventions. Therefore, it is important to discuss whether enough safeguards against slippery slopes have been incorporated, and whether the limits of an intervention are clearly communicated to the public.

The focus of this thesis was not limited to governmental public health programs, because initiatives to prevent overweight and obesity take place at a wider level. There are many initiatives by commercial parties (such as television programs for weight loss, soccer games and summer camps by junk food chains, slimming products and weight advice by diet gurus) and by private citizens (such as websites and walking schoolbuses organized by parents).

In all these areas it is important that ethical issues in programs are avoided (although one may argue that governments bear more responsibility for doing so). Interventions that are not initiated by the government are even less likely to be systematically planned, monitored and evaluated, and we have encountered several examples of such initiatives that involve ethical issues. Research on the effects of non-governmental campaigns is recommended(2). Fortunately, if an intervention involves ethical issues, this does not imply per se that the whole intervention must be dismissed, because such issues can often be prevented or adjusted.

Exposure of the ethical issues in media and political debate

The media play an important role in presenting public health interventions to the general public. However, the way in which the media cover the ethical issues in the prevention of overweight does not necessarily reflect the way they occur in the reality of policy or the weight that is ascribed to them within scientific debate.

We have the impression that the issue of paternalism is overexposed. Within the debate on overweight prevention, objections against paternalism are expressed frequently and in an eloquent manner ("Big brother in the kitchen", "Pizza paternalism", and "Michele Obama wants you to eat your vegetables"). That is because they come from a group of well-educated people, who are sufficiently verbally equipped to defend their own rights and decisions on how they design their personal life. However, overweight occurs much more often among people who are lower educated and may be less capable of making autonomous choices regarding diet and physical activity. The very thing this group needs is not to be left alone, but to be informed on how to make healthy choices and to be protected against unhealthy influences from their environment. The interests of these two groups sometimes conflict with each other, which for policy-makers poses a logistical problem. Regardless of the solution one prefers for this situation, the well-articulated manner in which the anti-paternalistic argument is expressed should not obscure the fact that there exists another group whose interests are not served simply by leaving them alone.

Related to this, we have the impression that personal responsibility is overrated within media debate and actual policy. That overweight is the consequence of an imbalance in energy intake (eating and drinking) and energy output (physical exercise) does not automatically imply that overweight is the consequence of personal failure. There is scientific consensus that overweight is the consequence of a complex web of factors, which includes individual lifestyle choices, but also influences from obesogenic society(16-18). Despite this, claims about personal responsibility take an important position within societal debate on obesity prevention. The idea remains widespread that overweight is a matter of 'personal failure', 'getting what one deserves' and that overweight people are 'undisciplined, lazy and gluttonous'(8). Apparently, there is a big discrepancy between the scientific consensus that

policy to prevent overweight should not focus solely on personal responsibility versus general opinion.

Even more worryingly, the agreed-upon direction that policy should take (e.g. as proposed by authorities such as the WHO) is not always reflected in the beliefs of the people who are to carry out this policy (designers of programs, doctors and dieticians), and the persons who are to present this policy to the general public (journalists). According to the WHO "Prevention is not just the responsibility of individuals but also requires structural changes in societies". As opposed to this, many studies show that physicians, nurses, dieticians, and medical students hold implicit and explicit negative attitudes about obesity, including the beliefs that obese people lack self-control and are lazy, that obesity is caused by character flaws, and that failure to lose weight is due only to non-compliance(19-21). In July 2010, the British Public Health Minister Anne Milton suggested that doctors should encourage overweight persons to take responsibility for their condition by telling them that they are 'fat'. She called on the National Health Service to ban terms such as 'obese', because they do not have the same emotional impact: 'If I look in the mirror and think I am obese I think I am less worried than if I think I am fat', said the minister. This focus on overweight as an issue of personal responsibility and failure raises concern. Further research is necessary on how to prevent the stigmatization of overweight within the prevention of obesity and beyond.

We believe that stigmatization poses one of the biggest ethical pitfalls for the prevention of overweight and have the impression that this problem is underexposed in media and political debate. Precisely because stigmatizing beliefs regarding overweight are deeply rooted in our culture, they are often perceived as "normal" and go unnoticed, or they are accepted because they are for instance considered to be "just a joke". The media play an important role in contributing to the stigmatization of overweight(21). This raises our concern because stigmatizing expressions in debate that are not being substantiated in actual policy can still have substantial consequences for overweight persons.

Challenges

When performing this research we encountered three general challenges. We mention them here to inform persons who consider conducting similar research.

The first challenge concerns satisfying the methodological requirements of performing interdisciplinary research. The interdisciplinary character of our research involved both the topic (we performed a philosophical analysis on a topic within public health), and the presentation (we presented our research results to ethicists as well as researchers within the field of obesity). We explored potential ethical issues in the light of normative theories and real life examples. While the field of ethics mainly concentrates on philosophical analysis, the fields of obesity research and public health focus on the collection of empirical data and on systematic literature searches. These different methodologies are not incompatible,

but when we presented our results at meetings or to journals they sometimes tended to be barriers. From the philosophical side we encountered the objections that definitions were vague and arguments were insufficiently profound or new, while criticisms from the arena of obesity prevention focused on the lack of empirical evidence or on potential gaps in the methodology. In principle, research that is based on sound methodology, clear definitions, and thorough arguments would not be vulnerable to these criticisms. However, in practice it sometimes turned out to be demanding to serve two masters. This made it particularly important to clearly define and communicate the standards we aimed to live up to.

The second challenge also followed from performing interdisciplinary research. We sometimes encountered a tension between the need of performing a thorough analysis of ethical issues as opposed to the need to be understandable for a public from other scientific disciplines. Naturally, we didn't want to provide health promoters who ask how to design ethically sound interventions with a philosophical analysis about the complexity of ethical issues. For enabling the creation of ethically sound programs it is desirable to provide clear guidelines on how to avoid such issues. But at the same time, avoiding ethical issues in programs to prevent overweight requires a sensitivity for potential tensions between ethical principles. This ethical sensitivity is not always promoted by providing a simple list of do's and don'ts.

The third challenge involved our focus on a broad range of values within a field that is mainly focused on the value of health. We sometimes encountered a tension between our aim to stress values that are not central to the debate versus our aim to reach the very people who design programs for overweight prevention. We are convinced that an ethical analysis of overweight prevention does not pose a threat to the prevention of overweight, but serves to strengthen it, and even to enhance its effectiveness. In many instances, an ethical perspective just functions as a way of safeguarding that attention has been paid to *all* important values instead of taking a narrow focus on a healthy weight alone. In some cases, however, programs to prevent overweight are at odds with certain values. In pointing this out within the field of obesity prevention we encountered various reactions. They ranged from professionals who were interested in looking from a different angle at their own discipline and who sometimes shared our ethical concerns, to professionals who felt that any perspective that differs from the utilitarian perspective was potentially undermining for the prevention of overweight. The challenge of performing potentially unpopular research is of course not insurmountable and certainly less difficult than the first two challenges, but does require careful formulations.

Implications for policy and recommendations for further research

We have shown that programs that are currently implemented or discussed to prevent overweight and obesity may involve various ethical issues. Considering the ethical aspects of programs to prevent obesity or overweight is extremely important in the face of the urgent and extensive health problem of overweight and obesity. We provide professionals in the

prevention of overweight and obesity with an ethical framework that provides practical guidance in the systematic ethical evaluation of programs to prevent overweight and obesity.

We conclude with the following recommendations for further research.

- We recommend further research, monitoring and evaluation to assess the implementation, use and results of the framework.
- We recommend further analysis of the specific questions that arise with regard to each ethical issue.
- We recommend further research on how to prevent the stigmatization of overweight within and beyond the prevention of obesity.
- We recommend further research on how frequently ethical issues occur and how severe they are in actual policy.
- We recommend to examine how our framework could be incorporated in the process of planned development of interventions, such as 'Intervention Mapping', a framework for effective decision-making at each step in intervention planning, implementation, and evaluation(22).
- We recommend to examine the overlap and the differences between various frameworks, and to explore under what conditions our framework could also be applied to other types of unhealthy behaviour

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Summary

Summary

This thesis is aimed at systematically analyzing the normative issues regarding measures to prevent obesity.

In **Chapter 1** ('General introduction') we argue that efforts to counter the rise in overweight and obesity, such as taxes on unhealthy food, limits to commercial advertising, a ban on chocolate drink at schools, or compulsory physical exercise for obese employees, sometimes raise questions about what is considered ethically acceptable. The *first objective* of this thesis (Chapter 2-4) is to develop a general framework for the ethical evaluation of measures to prevent obesity. The *second objective* (Chapter 5) is to examine ethically relevant differences between unhealthy behaviours in order to explore the possibilities of using this framework for other measures to promote a healthy lifestyle. The *third objective* (Chapter 6) is to analyze how stigmatization occurs in programs to prevent obesity and to what extent this is ethically unacceptable.

Objective 1. To develop a general framework for the ethical evaluation of measures to prevent obesity.

Chapter 2 ('No country for fat children? Ethical questions concerning community-based programs to prevent obesity') is aimed at examining which ethical issues should be addressed before programs to prevent childhood obesity are implemented. There are some general ethical themes in the debate on preventing childhood obesity: the effects of moral panic; the division of responsibility; and children's right to protection from unhealthy commercial influences. Furthermore, we found that several issues should be taken into account before such programs are implemented. The proposed program should be supported by enough evidence or good reasons. It should be analyzed whether the program has consequences in terms of possible stigmatization. The program should involve parents in a respectful way, by hearing their arguments and providing them with information instead of undermining their autonomy. The program should aim at helping children to deal with temptation by developing durable skills and habits. If the program infringes upon ethical values, its ethical impact should be in proportion to its goals and methods. Finally, it is important to discuss whether enough safeguards against heading down slippery slopes have been incorporated.

Chapter 3 ('Ethics and prevention of overweight and obesity: An inventory') is aimed at structuring which ethical issues may occur in programs to prevent overweight and/or obesity. It provides a systematic evaluation of 60 recently reported interventions or policy proposals and a discussion about them in expert meetings. We found that currently proposed interventions or policies to prevent overweight or obesity may (alongside the benefits they strive for) include the following potentially problematic aspects: effects on physical health are uncertain or unfavourable; there are negative psychosocial consequences including uncertainty, fears and concerns, blaming and stigmatization, and unjust discrimination; in-

equalities are aggravated; inadequate information is distributed; the social and cultural value of eating is disregarded; people's privacy is disrespected; the complexity of responsibilities regarding overweight is disregarded; and interventions infringe upon personal freedom regarding lifestyle choices and raising children, regarding freedom of private enterprise, or regarding policy choices by schools and other organizations. We conclude that the obvious ethical incentives to combat the overweight epidemic do not necessarily override the potential ethical constraints, and that further debate is needed. An ethical framework to support decision-makers in balancing potential ethical problems against the need to do something would be helpful. Developing programs that are sound from an ethical point of view is not only valuable from a moral perspective, but may also contribute to preventing overweight and obesity, since societal objections to a program may hamper its effectiveness.

Chapter 4 ('An overview of ethical frameworks in public health: Can they be supportive in the evaluation of programs to prevent overweight?') is aimed at describing the purpose, form and content of ethical frameworks for public health, and to evaluate to what extent they are useful for evaluating programs to prevent overweight. We selected 6 ethical frameworks and assessed the area on which the available ethical frameworks focus, the users they target, the type of policy or intervention they propose to address, and their aim. Further, we looked at their structure and content. We found that all frameworks aim to support public health professionals or policymakers. Most of them provide a set of values or principles that serve as a standard for evaluating policy. Most frameworks articulate both the positive ethical foundations for public health and ethical constraints or concerns. Some frameworks offer analytic tools for guiding the evaluative process. Procedural guidelines and concrete criteria for dealing with important ethical conflicts in the particular area of the prevention of overweight or obesity are mostly lacking. We conclude that public health ethical frameworks may be supportive in the evaluation of overweight prevention programs or policy, but seem to lack practical guidance to address ethical conflicts in this particular area.

Based on the inventory and the overview of frameworks **Chapter 5** ('An ethical framework for the prevention of overweight and obesity: A tool for thinking through a program's ethical aspects') presents an ethical framework for the prevention of overweight and obesity. The framework facilitates a structured analysis of the extent to which a program to prevent obesity is ethically acceptable. It was tested in two international workshops. At the heart of the framework is a list of eight questions on the morally relevant features of a program: its effects on physical health, psychosocial well-being, informed choice, cultural values, equality, privacy, responsibility and liberty. Answering these questions provides a map of the potential ethical pitfalls of a specific program. This mapping should be followed by a structured discussion of the arguments and their weight, and a decision about whether, and if so under what conditions, the program should be implemented. Considering the ethical aspects of programs to prevent obesity or overweight is extremely important in the face of the urgent and extensive health problem of overweight and obesity. Our framework is a practical tool

for systematic ethical evaluation. It is applicable to a broad range of programs in different stages of development and implementation.

Objective II. To examine ethically relevant differences between unhealthy behaviours in order to explore the possibilities of using this framework for other measures to promote a healthy lifestyle.

Chapter 6 ('Preventing unhealthy behaviours: Distinctions regarding ethical arguments and moral prejudices') describes that in debates and policy-making regarding unhealthy behaviours, the diversity of unhealthy behaviours, and their effects, causes and motivations is frequently disregarded. In this paper we investigate which differences between various forms of unhealthy behaviour should or should not be taken into account in the justification of interventions. We argue that unhealthy behaviours differ regarding the harm they cause and regarding the level of free choice that is involved. It is important to recognize these distinctions because they affect the justification of interventions. Furthermore, we point out that various unhealthy behaviours evoke distinct value judgements. It is important to notice these differences in appraisal, because they may implicitly influence the design, implementation and acceptance of interventions, whereas their ethical relevance for justifying public health interventions is highly questionable. The existence of differences implies that we should be careful when considering similar policies or interventions for different types of unhealthy behaviour. Attention to the variety of unhealthy behaviours is important to ensure nuanced debate and ethically sound interventions.

Objective III. To analyze how stigmatization occurs in programs to prevent overweight and to what extent this is ethically objectionable.

Chapter 7 ('Stigmatization in programs to prevent overweight and obesity') describes that there is consensus that stigmatization poses certain ethical limitations to programs to prevent overweight, but that positions diverge on the question which programs cross ethical borderlines regarding stigmatization. This is due to confusion over the definition of stigmatization as well as to normative disputes about the extent to which stigmatization in public health programs is ethically acceptable. In this chapter we address these issues by applying Link and Phelan's definition of stigmatization to some current programs to prevent overweight. This definition entails that stigmatization is characterized by the coincidence of four components: (1) labeling, (2) stereotyping, (3) separation, and (4) status loss and discrimination. We argue that in evaluating programs to prevent overweight, stigmatization must not be regarded as an act that takes place in isolation, but as a complex social process that is already pervasively present in western culture. This process is by definition ethically problematic. The stigmatizing role of programs is a matter of degree: the more components a program involves, and the stronger a component is present in a program, the more likely that it contributes to stigmatization. Carefulness is required in designing and implementing programs, because the stigmatizing role of programs can be easily overlooked.

Chapter 8 ('General discussion') provides a general discussion of the main findings and presents implications for the practice of prevention policy and recommendations for future research. We have shown that programs that are currently implemented or discussed to prevent obesity may involve various ethical issues. We provide professionals in the prevention of obesity with an ethical framework that supplies practical guidance in the systematic ethical evaluation of programs to prevent obesity. Some arguments within the obesity debate have generic value, and other arguments are specifically important for obesity. Of particular concern is the pervasive stigmatization of overweight. Although authorities such as the World Health Organization (WHO) stress that prevention of obesity is not just the responsibility of individuals but also requires structural changes in societies, the belief that obesity is a matter of personal failure remains widespread. Attention is needed to avoid stigmatization of overweight within and beyond the prevention of overweight. We recommend further research, monitoring and evaluation to assess the implementation, use and results of the framework.

Samenvatting

Samenvatting

Dit proefschrift geeft een systematische analyse van de normatieve aspecten van maatregelen ter preventie van obesitas.

In **hoofdstuk 1** ('Algemene introductie') beargumenteren we dat pogingen om de toename van overgewicht en obesitas een halt toe te roepen, zoals belastingen op ongezonde voeding, beperkingen aan reclame, een ban op chocolademelk op scholen, of gedwongen lichamelijke activiteit voor obese werknemers, soms vragen oproepen over wat ethisch acceptabel is. De *eerste doelstelling* van dit proefschrift (hoofdstuk 2-4) is een algemeen kader ontwikkelen voor de ethische evaluatie van maatregelen ter preventie van obesitas. De *tweede doelstelling* (hoofdstuk 5) is het onderzoeken van de ethisch relevante verschillen tussen diverse vormen van ongezond gedrag, om de mogelijkheden te verkennen voor het toepassen van dit ethische kader op andere maatregelen ter bevordering van een gezonde leefstijl. De *derde doelstelling* (hoofdstuk 6) is analyseren op welke wijze stigmatisering voorkomt in programma's ter preventie van obesitas en in hoeverre dit ethisch onacceptabel is.

Doelstelling I. Het ontwikkelen van een algemeen kader voor de ethische evaluatie van maatregelen ter preventie van obesitas.

In **hoofdstuk 2** ('Geen plaats voor dikke kinderen? Ethische vragen over maatschappelijke programma's ter preventie van obesitas') onderzoeken we met welke ethische kwesties men rekening moet houden voordat programma's ter preventie van obesitas bij kinderen worden geïmplementeerd. We bespreken enkele algemene ethische thema's in het debat over de preventie van obesitas bij kinderen: het effect van morele paniek, de verdeling van verantwoordelijkheid, en het recht van kinderen om beschermd te worden tegen ongezonde commerciële invloeden. Verder beargumenteren we dat men rekening moet houden met de volgende specifieke kwesties voordat dergelijke programma's worden geïmplementeerd. Het voorgestelde programma moet ondersteund worden door voldoende bewijs of goede redenen. Men moet analyseren of het programma stigmatiserend zou kunnen zijn. Het programma moet ouders op een respectvolle manier benaderen, door te luisteren naar hun argumenten en hen te voorzien van informatie in plaats van hun autonomie te ondermijnen. Het programma moet kinderen helpen duurzame vaardigheden en gewoonten te ontwikkelen voor het omgaan met verleidingen. Als het programma ethische waarden ondermijnt, dan moet deze ethische impact in verhouding staan tot de doelen en middelen van het programma. Tenslotte moet men nagaan of voldoende bescherming is ingebouwd tegen het zogenaamde 'hellend vlak'-argument.

In **hoofdstuk 3** ('Ethiek en preventie van overgewicht en obesitas: Een inventarisatie') structureren we welke ethische kwesties kunnen voorkomen in algemene programma's ter preventie van obesitas. Het hoofdstuk beschrijft een systematische evaluatie van 60 recente interventies of beleidsmaatregelen en een discussie hierover in expertmeetings. Op

dit moment voorgestelde interventies of beleid ter preventie van obesitas kunnen (naast de positieve effecten waarop ze gericht zijn) de volgende potentieel problematische aspecten hebben: er zijn onzekere of ongunstige effecten op de fysieke gezondheid; er zijn negatieve psychosociale consequenties zoals onzekerheid, angst en bezorgdheid, beschuldiging en stigmatisering, en discriminatie; ongelijkheid wordt versterkt; er wordt onjuiste informatie verstrekt, de sociale en culturele waarde van eten wordt veronachtzaamd; privacy wordt niet gerespecteerd; de complexiteit van verantwoordelijkheden voor overgewicht wordt veronachtzaamd; en er wordt inbreuk gemaakt op de persoonlijke vrijheid van leefstijlkeuzes en het opvoeden van kinderen, op de vrijheid van ondernemen, of op de vrijheid van beleidskeuzes door scholen en andere organisaties. We concluderen dat de vanzelfsprekende ethische motieven om de overgewicht-epidemie een halt toe te roepen niet noodzakelijkerwijs opwegen tegen de potentiële ethische bezwaren, en dat verder debat nodig is. Een ethisch kader om professionals te ondersteunen bij het afwegen van potentiële ethische problemen tegen de noodzaak om iets te doen zou nuttig zijn. Het ontwikkelen van ethisch verantwoorde programma's is niet alleen wenselijk vanuit een moreel perspectief, maar kan ook bijdragen aan de preventie van obesitas, omdat maatschappelijke bezwaren tegen een programma de effectiviteit ervan kunnen ondermijnen.

Hoofdstuk 4 ('Een overzicht van ethische kaders op het gebied van publieke gezondheidszorg: Kunnen deze nuttig zijn in de evaluatie van programma's ter preventie van overgewicht?') beschrijft het doel, de vorm en de inhoud van bestaande ethische kaders voor publieke gezondheidszorg, en beoordeelt de bruikbaarheid ervan voor het evalueren van programma's ter preventie van overgewicht. We vonden 6 kaders en stelden vast op welk gebied deze zich richten, tot welke gebruikers ze zich richten, het type beleid of interventie dat ze behandelen, en hun doelstelling. Verder bekeken we hun structuur en inhoud. Alle kaders hebben als doel om professionals of beleidsmakers op het gebied van publieke gezondheidszorg te ondersteunen. De meeste kaders geven een reeks waarden of principes die als standaard dienen voor het evalueren van beleid. Ze beschrijven zowel de positieve ethische fundering voor publieke gezondheidszorg als de ethische beperkingen of kwesties. Sommige kaders geven analytische instrumenten om het evaluatieproces te begeleiden. Procedurele richtlijnen en concrete criteria voor het omgaan met belangrijke ethische conflicten op het specifieke gebied van de preventie van overgewicht ontbreken over het algemeen. We concluderen dat ethische kaders op het gebied van publieke gezondheidszorg de evaluatie van programma's of beleid ter preventie van overgewicht kunnen ondersteunen, maar dat deze voor dit specifieke gebied onvoldoende praktische handvatten bevatten.

Gebaseerd op de inventarisatie en het overzicht van kaders, presenteren we in **hoofdstuk 5** ('Een ethisch kader voor de preventie van overgewicht en obesitas: Een instrument om de ethische aspecten van een programma te analyseren') een ethisch kader voor de preventie van overgewicht en obesitas. Het kader faciliteert een analyse van de ethische aanvaardbaarheid van een programma ter preventie van obesitas. Het kader werd getest in twee

internationale workshops. De kern van het kader bestaat uit een lijst van acht vragen over de moreel relevante aspecten van een programma, namelijk de effecten op fysieke gezondheid, psychosociaal welzijn, geïnformeerde keuze, culturele waarden, gelijkheid, privacy, verantwoordelijkheid en vrijheid. Het beantwoorden van deze vragen geeft een beeld van de potentiële ethische valkuilen van een specifiek programma. Na het in kaart brengen van de potentiële ethische valkuilen, zou een structurele discussie moeten plaatsvinden over de argumenten en hun gewicht, om tenslotte een beslissing te nemen over de vraag of, en zo ja, onder welke voorwaarden, het programma kan worden geïmplementeerd. Ons kader is een praktisch instrument voor een systematische evaluatie. Het is toepasbaar op een brede reeks programma's in verschillende stadia van ontwikkeling en implementatie.

Doelstelling II. Het onderzoeken van ethisch relevante verschillen tussen diverse vormen van ongezond gedrag, om de mogelijkheden te verkennen voor het toepassen van dit ethisch kader op andere maatregelen ter bevordering van een gezonde leefstijl.

Hoofdstuk 6 ('Preventie van ongezond gedrag: Onderscheidingen in ethische argumenten en morele vooroordelen') beschrijft dat de diverse vormen van ongezond gedrag, en hun effecten, oorzaken en motivaties regelmatig over het hoofd worden gezien in debat en beleid. In dit hoofdstuk onderzoeken we met welke onderscheidingen op het gebied van ongezond gedrag men wel of niet rekening moet houden in de rechtvaardiging van interventies. We beargumenteren dat ongezonde leefstijlen verschillen ten aanzien van hun schadelijke effecten en ten aanzien van de mate van keuzevrijheid. Het is belangrijk om deze verschillen te erkennen omdat ze de rechtvaardiging van interventies beïnvloeden. Daarnaast beschrijven we dat diverse vormen van ongezond gedrag verschillende waardeoordelen oproepen. Het is belangrijk om deze verschillen qua beoordeling op te merken, omdat deze impliciet van invloed zijn op het ontwerpen, implementeren en accepteren van interventies, terwijl hun ethische relevantie voor het rechtvaardigen van dergelijke interventies zeer twijfelachtig is. Het bestaan van verschillen impliceert dat we voorzichtig moeten zijn wanneer we hetzelfde beleid of dezelfde interventies overwegen voor diverse vormen van ongezond gedrag. Aandacht voor de variëteit aan ongezond gedrag is belangrijk voor genuanceerd debat en ethisch verantwoorde interventies.

Doelstelling III. Analyseren op welke wijze stigmatisering voorkomt in programma's ter preventie van overgewicht en in hoeverre dit ethisch onacceptabel is.

Hoofdstuk 7 ('Stigmatisering in programma's ter preventie van overgewicht en obesitas') beschrijft dat er consensus bestaat dat stigmatisering ethische beperkingen oplegt aan programma's ter preventie van overgewicht, maar dat de meningen uiteenlopen over de vraag welke programma's de ethische grenzen ten aanzien van stigmatisering overschrijden. Dit komt zowel door verwarring over de definitie van stigmatisering als door meningsverschillen over de mate waarin stigmatisering in programma's ter bevordering van de volksgezond-

heid ethisch acceptabel is. In dit hoofdstuk behandelen we deze kwesties door Link en Phelans definitie van stigmatisering toe te passen op enkele programma's ter preventie van overgewicht. Deze definitie karakteriseert stigmatisering als het samenvallen van vier componenten: (1) etikettering, (2) stereotypering, (3) scheiding, en (4) verlies van status en discriminatie. We beargumenteren dat men bij de evaluatie van programma's ter preventie van overgewicht stigmatisering niet moet beschouwen als een op zichzelf staand verschijnsel, maar als een complex maatschappelijk proces dat indringend aanwezig is in de Westerse maatschappij. Dit proces is per definitie ethisch problematisch. Het stigmatiserende effect van programma's is een kwestie van gradatie: hoe meer componenten een programma heeft, en hoe sterker een component aanwezig is in een programma, des te waarschijnlijker dat het programma bijdraagt aan stigmatisering. Voorzichtigheid is geboden bij het ontwerpen en implementeren van programma's, omdat men het stigmatiserende effect van programma's gemakkelijk over het hoofd kan zien.

Hoofdstuk 8 ('Algemene discussie') geeft een algemene discussie van de belangrijkste bevindingen en presenteert de implicaties voor de praktijk van preventiebeleid en aanbevelingen voor toekomstig onderzoek. We hebben aangetoond dat er diverse ethische kwesties spelen bij programma's ter preventie van obesitas die op dit moment worden geïmplementeerd of overwogen. Wij bieden professionals in de preventie van obesitas een ethisch kader met praktische handvatten voor de systematische ethische evaluatie van programma's ter preventie van obesitas. Sommige argumenten binnen het obesitasdebat hebben algemene waarde, en andere argumenten gelden specifiek voor obesitas. Een belangrijk aandachtspunt is de vergaande stigmatisering van overgewicht. Hoewel belangrijke organen, zoals de Wereldgezondheidsorganisatie (WHO), benadrukken dat de preventie van obesitas niet alleen een kwestie is van individuele verantwoordelijkheid maar ook structurele veranderingen in de maatschappij vereist, blijft het idee wijdverspreid dat obesitas een kwestie is van persoonlijk falen. Aandacht is nodig voor het vermijden van stigmatisering van overgewicht binnen en buiten de preventie van overgewicht. We bevelen verder onderzoek, monitoring en evaluatie aan naar de implementatie, het gebruik en de resultaten van het ethisch kader.

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Dankwoord

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About the author

Curriculum Vitae

Marieke ten Have was born on March 21st 1981, in Amsterdam, the Netherlands. In 1999 she graduated from secondary school, the Montessori Lyceum in Amsterdam. Subsequently she studied philosophy at the University of Amsterdam. During her studies she performed a practice in a research on a societal agenda for biotechnology at VU University Amsterdam, under the supervision of Prof. Dr T. de Cock Buning. She wrote her master's thesis on predictive medicine, life insurances and distributive justice, under the supervision of Prof. Dr G.A. den Hartogh. In 2005 she obtained her masters in philosophy cum laude. In April 2006 she started as a PhD student at the Department of Medical Ethics and Philosophy of Medicine and the Department of Public Health at the Erasmus Medical Centre in Rotterdam, where she carried out the research presented in this thesis. During this period she was a member of the PhD Student Council of the Netherlands School for Research in Practical Philosophy. She participated in the workshops of the international and interdisciplinary project 'EUROBESE' on the ethical aspects of obesity prevention, which was funded by the European Union and coordinated by Prof. Dr I.D. De Beaufort. As a participant in a project group of the Partnership Overweight Netherlands, she was involved in the development of a national integrated health care standard for the management and prevention of obesity in the Netherlands. Marieke is currently employed at the Centre for Ethics and Health that is a joint venture of the Health Council of the Netherlands and the Council for Public Health and Health Care.

Marieke ten Have werd geboren op 21 maart 1981 in Amsterdam. In 1999 behaalde zij haar eindexamen aan het Montessori Lyceum in Amsterdam. Vervolgens studeerde zij filosofie aan de Universiteit van Amsterdam. Tijdens haar studie liep ze stage bij een onderzoek naar een maatschappelijke agenda voor biotechnologie aan de Vrije Universiteit van Amsterdam, onder leiding van prof. dr. Tj. de Cock Buning. Ze schreef haar masterscriptie over voorspellende geneeskunde, levensverzekeringen en verdelende rechtvaardigheid onder begeleiding van prof. dr. G.A. den Hartogh. In 2005 behaalde zij haar master filosofie cum laude. In april 2006 begon zij als promovenda aan de afdeling Medische ethiek en Filosofie van de Geneeskunde en de afdeling Maatschappelijke Gezondheidszorg aan het Erasmus Medisch Centrum te Rotterdam, waar zij het onderzoek uitvoerde dat resulteerde in dit proefschrift. Gedurende deze periode was ze lid van de promovendiraad van de Onderzoeksschool Ethiek. Ze nam deel aan de internationale en interdisciplinaire workshops van het project 'EUROBESE' over de ethische aspecten van overgewichtpreventie, dat werd gefinancierd door de Europese Unie en onder leiding stond van prof. dr. I.D. de Beaufort. Als deelnemer aan een werkgroep van het Partnerschap Overgewicht Nederland, was zij betrokken bij de totstandkoming van de Zorgstandaard Obesitas voor kinderen en volwassenen. Marieke is momenteel werkzaam bij het Centrum voor Ethiek en Gezondheid, een samenwerkingsverband van de Gezondheidsraad en de Raad voor de Volksgezondheid en Zorg.

Publications

Ten Have M, De Beaufort ID, Teixeira PJ, Mackenbach JP, Van der Heide A. Ethics and prevention of overweight and obesity: An inventory. *Obesity Reviews* (in press).

Ten Have M, De Beaufort ID, Mackenbach JP, Van der Heide A. An overview of ethical frameworks in public health: Can they be supportive in the evaluation of programs to prevent overweight? *BMC Public Health* 2010, 10:638.

Ten Have M, De Beaufort ID, Holm S. No country for fat children? Ethical questions concerning community-based programs to prevent obesity. In: Waters E, Swinburn B, Seidell J, Uauy R, editors. *Preventing Childhood Obesity: Evidence Policy and Practice*: Wiley-Blackwell; 2010.

Ten Have M. Obesitas: Reden tot bemoeizorg? [Casus 33: Obesity: reason for meddle care?]. In: De Beaufort ID, Van de Vathorst S, Hazebroek F, Van der Heijden B, Leeuwenburgh-Pronk W, Aartsen H, editors. *Kwetsbare kinderen: een ethische zorg: casus en commentaren [Vulnerable children: an ethical concern: casus and comments]*. Den Haag: LEMMA; 2008. p. 360-5.

Ten Have M. Ouderlijke macht en het vetgemeste kind: 'Wie werpt de eerste steen?' [Parental autonomy and the fattened child]. In: De Beaufort ID, Hilhorst M, Vandamme S, Van de Vathorst S, editors. *De Kwestie: praktijkboek ethiek voor de gezondheidszorg [The issue: practice book ethics for health care]*. Den Haag: LEMMA; 2008. p. 173-9.

Ten Have M, De Beaufort ID. Hogere premies, goedkope worteltjes en bemoeizuchtige collega's [Higher premiums, cheap carrots and meddling colleagues]. *Hartbulletin* 2007 38(4):91-5.

Ten Have M. Overgewicht en eigen verantwoordelijkheid [Overweight and personal responsibility]. *Nieuwsbrief Nederlandse Vereniging voor Bio-ethiek (NVBE)* 2006 13(4):4-5.

PhD Portfolio Summary



Name PhD student: Marieke ten Have	PhD period: 2006-2011
Promotor: Prof.dr. I.D. de Beaufort	Erasmus MC Department of Medical Ethics and Philosophy of Medicine
Promotor: Prof.dr. J.P. Mackenbach	Erasmus MC Department of Public Health
Supervisor: Dr. A. van der Heide	

PhD training

At the Netherlands School for Research in Practical Philosophy (NSRPP)

Summerschool for PhD students 'Ethics and politics'	2006	3 ECTS
Course 'Liberalism and communitarianism'	2006	1,5 ECTS
Course 'Ethical theories and moral practice'	2007	1,5 ECTS
Seminars on various ethical topics and research skills for PhD students	2006-2008	3 ECTS

At the Netherlands Institute for Health Sciences (NIHES)

Summerschool course 'Principles of research in medicine and epidemiology'	2006	0,7 ECTS
Summerschool course 'Introduction to public health'	2006	0,7 ECTS
Summerschool course 'Health economics'	2006	0,7 ECTS
Summerschool course 'Prevention research'	2006	0,7 ECTS
Course 'Public health research: from epidemiology to health promotion; intervention development and evaluations'	2007	1,4 ECTS

Teaching activities

At the department of Public Health, Erasmus Medical Centre:

Curriculum 4 th year medical students, 'Public health genomics'	2007	0,8 ECTS
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At the department of Medical Ethics and Philosophy of Medicine, Erasmus Medical Centre:

Discussion group 2 nd year medical students, 'Overweight and personal responsibility'	2007	0,25 ECTS
Discussion group 2 nd year medical students, 'Overweight and personal responsibility'		
Discussion groups 4 th year medical students 'Professional ethics'	2008	0,5 ECTS
Discussion groups 2 nd year medical students		
'Medical Ethics Review Committee'	2008	0,5 ECTS
Discussion groups 1 st year medical students 'Introduction to medical ethics'	2008	0,5 ECTS

Lecture 1 st year medical students 'Ethics en prevention'	2011	0,5 ECTS
Supervision bachelor thesis	2008	0,8 ECTS

At HOVO, higher education for older people:

Seminars 'Ethics and obesity prevention'	2009	0,5 ECTS
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International Conferences

EUROBESE* workshop 'Overweight, images and ethics', Paris, France	2006	1 ECTS
EUROBESE meeting 'Ethics and obesity prevention', Manilla, the Philippines	2007	1 ECTS
Conference 'Setting an ethical agenda for health promotion', Ghent, Belgium	2007	1 ECTS
EUROBESE workshop 'Technologies for reducing and preventing overweight', Marrakech, Morocco	2008	1 ECTS
Annual meeting International Society of Behavioral Nutrition and Physical Activity (ISBNPA), Banff, Canada	2008	1 ECTS
EUROBESE workshop 'An ethical framework for obesity prevention', Ghent, Belgium	2008	1 ECTS
Annual meeting, International Society of Behavioral Nutrition and Physical Activity (ISBNPA), Cascais, Portugal	2009	1 ECTS

*International and interdisciplinary project on the ethics of obesity prevention, funded by the European Union and coordinated by Prof. Dr I.D. de Beaufort.

Presentations

'Obesity prevention and ethics', at summerschool NSRPP, Utrecht, the Netherlands	2006	1 ECTS
'Introduction ethical framework', at EUROBESE, Paris, France	2006	1 ECTS
'Overweight and personal responsibility', at EUROBESE, Manilla, the Philippines	2007	1 ECTS
'Obesity prevention and ethics', at Department of Public Health, Erasmus MC Rotterdam, the Netherlands	2007	1 ECTS
'Overweight and personal responsibility', at conference 'Setting an ethical agenda for health promotion', Ghent, Belgium	2007	1 ECTS
'Comparison various types of unhealthy behaviour', at EUROBESE, Marrakech, Morocco	2008	1 ECTS
'Developing an ethical framework for obesity prevention', at ISBNPA, Banff, Canada	2008	1 ECTS

'Personal Responsibility for health', at Capita Selecta, Erasmus Medical Centre, Rotterdam, the Netherlands	2008	1 ECTS
'Developing an ethical framework for the prevention of obesity', at EUROBESE, Ghent, Belgium	2008	1 ECTS
'Developing an ethical framework for the prevention of obesity', at ISBNPA, Cascais, Portugal	2009	1 ECTS

Other activities

- Participant peer review group 'Ethics and Health', the Netherlands School for Research in Practical Philosophy (NSRPP)
- Member PhD Student Council, the Netherlands School for Research in Practical Philosophy (NSRPP)
- Organization of expert meetings and international workshops for the research presented in this thesis
- Participant project group and conference of the Partnership Overweight Netherlands (PON), aimed at the development of a national integrated health care standard for the management and prevention of obesity in the Netherlands