

OECD HEALTH MINISTERIAL MEETING

Session 2 Healthy Choices



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Healthy Choices

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Healthy Choices

1. The growing burden of chronic diseases

Health and longevity have improved dramatically ...

Unprecedented improvements in population health have taken place in OECD countries over the course of the past century. Life expectancy has increased on average by as much as 25-30 years. Major infectious diseases have been eradicated. Infant mortality rates have been dramatically reduced. People have gained in height and weight over time, with a substantial number moving out of under-nutrition. Economic growth has played an important role in these achievements, and so have public policies in education, sanitation, public health, and the development of welfare systems.

...but the toll of chronic diseases remains very high.

However, industrialisation and prosperity have been accompanied by increases in the incidence of a number of chronic diseases. Advances in medical care have, in some cases, prevented increasing incidence from translating into higher mortality. Nevertheless, industrialised societies bear growing burdens of disability contributing to rising health care expenditures. Lifestyle choices have played an important part in these changes.

The burden of chronic disease will worsen...

Chronic non-communicable diseases are the main cause of both disability and death worldwide. This heterogeneous group of diseases, including, among others, cardiovascular conditions, cancers, chronic respiratory conditions and diabetes, affects people of all ages and social classes, although they are more common in older ages and among the socially disadvantaged (WHO, 2002). Of the 58 million deaths that occurred globally in 2005, approximately 35 million, or 60%, were due to chronic causes. Most of them were due to cardiovascular disorders and diabetes (32%), cancers (13%), and chronic respiratory diseases (7%) (Abegunde *et al.*, 2007). This burden of chronic disease is predicted to worsen in the coming years. A WHO study projected an increase of global deaths by a further 17% in the period 2005-2015, implying that of the 64 million estimated deaths in 2015, 41 million people will die of a chronic disease (WHO, 2005).

...accounting for six out of every seven deaths in Europe.

The burden of chronic diseases is even larger in OECD countries. In 2002, they caused 86% of deaths in the European Region (WHO, 2004). However, the prevalence of many chronic diseases, including diseases of the circulatory system, digestive and respiratory diseases, was substantially lower at the end of the 20th century than it had been at the start of the century in countries such as the US (Fogel, 1994). Mortality for cardiovascular diseases more than halved in the US in the latter part of the last century, after the end of World War II. Deaths decreased by a further 13% between 1996 and 2006, as case fatality dropped by almost 30%. In many countries, mortality declined more rapidly among the better off. Social disparities in premature mortality from cardiovascular diseases and many cancers widened in countries such as Finland, Norway, Denmark, Belgium, Austria and England (Mackenbach, 2006).

Falling mortality and population ageing have increased morbidity from chronic diseases.

Mortality may have fallen dramatically, but the incidence of disease has not. When combined with the general increase in longevity, the result has been a substantial growth of morbidity associated with chronic diseases in recent years. In Denmark, an estimated 40% of the population lives with long-term conditions (WHO Europe, 2006). In the United States, the majority of seventy year olds is affected by at least one chronic condition, with cardiovascular diseases alone affecting 40% of males (Adams *et al.*, 1999). OECD research shows a generalised increase in the prevalence of diabetes among the elderly. Alarming trends were observed even in countries traditionally minimally affected by such disease. For instance, Japan saw the incidence of diabetes rise by 5.3% per year on average in the period 1989-2004 (Lafortune and Balestat, 2007).

Co-morbidities also increase with age, and populations are ageing rapidly in the OECD area. In Western Europe, the number of people aged over 64 has more than doubled in the last 60 years, while the number of those aged over 80 has quadrupled. As a consequence, many people have to live with several chronic diseases. At least 35% of men over 60 years of age have 2 or more chronic conditions (WHO Europe, 2006), and of the 17 million people living with long-term chronic diseases in the United Kingdom, up to 70-80% need help in everyday tasks (Watkins, 2004).

2. Lifestyles and chronic diseases

Environmental factors and social conditions affect lifestyles.

Lifestyles should not be viewed merely as the result of individual choices. Choices are often influenced, and even constrained in some cases, by environmental conditions, including social structures, cultural and political conditions, physical and economic environments. Whatever the reason, it is apparent that many chronic diseases are linked to lifestyles.

Healthy lifestyles can cut mortality by as much as 75%.

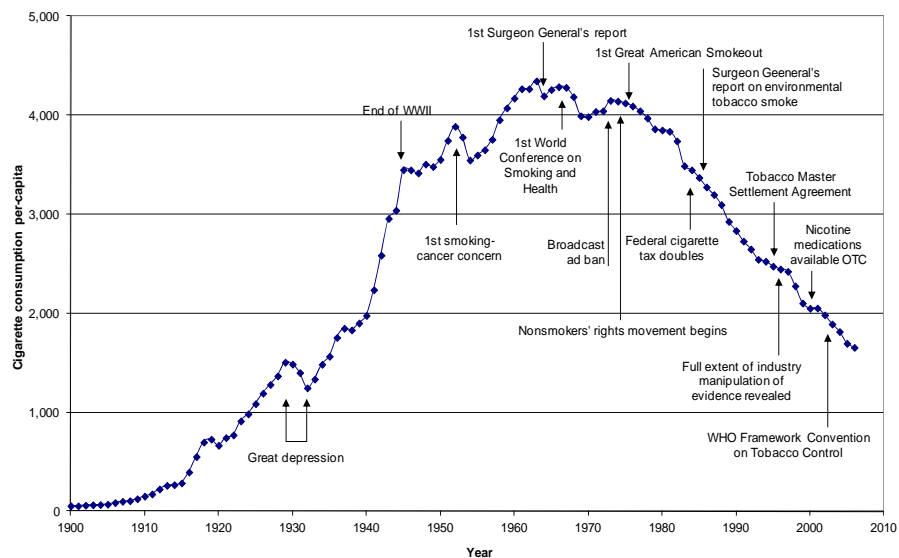
In high-income countries, smoking alone is responsible for 22% of cardiovascular diseases, and for the vast majority of some cancers and chronic respiratory diseases. Alcohol abuse is the source of 8%-18% of the total burden of disease in men and 2%-4% in women. Overweight and obesity account for 8%-15% of the burden of disease in industrialised countries, while high cholesterol accounts for 5%-12% (WHO, 2002). Different lifestyle-related risk factors have different health and social impacts, and may require different responses.

People who lead a physically active life, do not smoke, drink alcohol in moderate quantities, and eat plenty of fruits and vegetables have a risk of death that is less than one fourth of the risk of those who have invariably unhealthy habits (Khaw *et al.*, 2007). In Ireland, almost half of the reduction in CHD mortality rates during 1985-2000 in the age group 25-84 was due to falls in the number of smokers and in mean cholesterol and blood pressure levels (WHO, 2006). Twenty-five years of efforts to improve the health of adult men in Finland, the North Karelia project, led to a 68% decline in cardiovascular disease mortality, 73% in coronary heart disease, 44% in cancer, 71% in lung cancer, and to a 49% decline in deaths from all causes (Puska *et al.*, 1998).

Tobacco smoking is responsible for 18% of deaths, rates reached peaks of 50% in the 1960s and 1970s.

Cigarette smoking was a phenomenon of negligible importance at the start of the 20th century, but smoking rates increased steadily during the course of the century, in line with the mass production of cigarettes. The increase was particularly steep between the 1930s and the 1960s. During the 1960s and 1970s, smoking rates reached peaks of 50% or more in many OECD countries, before starting to decline (Figure 1).

Figure 1. Trends in annual adult cigarette consumption in US after 1900



Solid evidence of the harm caused by tobacco to the health of smokers became available at least since the 1950s. In 1964, the US Surgeon General issued a landmark report outlining the sheer scope of the health risks associated with smoking. However, it took many more years for the addictive nature of tobacco and the dangers of passive smoking to be fully and widely recognised.

Obesity is becoming the number one public health challenge.

The obesity epidemic developed more recently. Height and weight have been on a long-term increasing trend since the 18th century in many OECD countries, largely in association with economic growth, but the rate of increase in the Body Mass Index (BMI) has accelerated recently. For example, American men increased their average BMI by 3.6 units between 1910 and 1985-88, and by almost the same amount in the following 25 years. Average BMI increased by 1.5 units in England over 15 years, from the early 1990s to the mid-2000s, and by 1 unit in France in the same period. Before 1980, obesity rates were generally well below 10%. Since then, rates have doubled or tripled in many countries, and in almost half of OECD countries 50% or more of the population is overweight. Our progress towards increased longevity has been slowed down by our increasing weight.

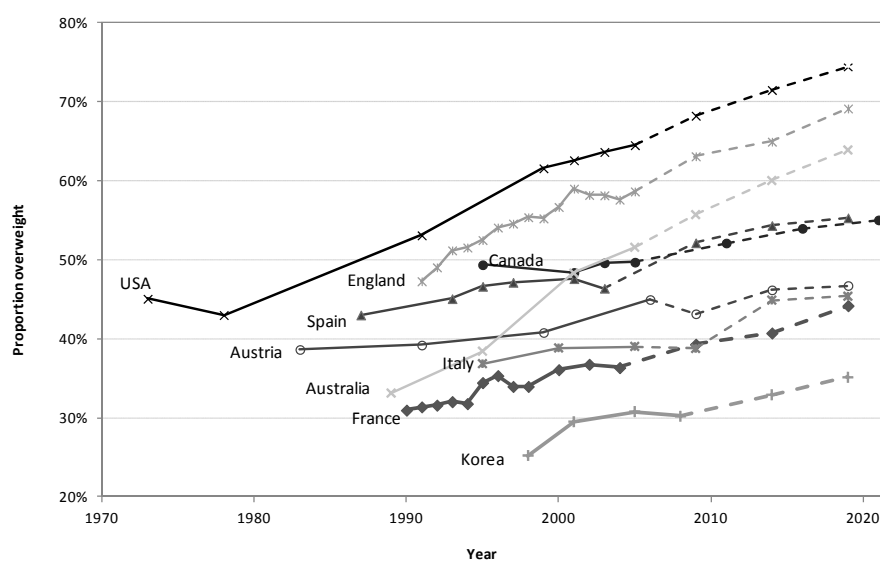
The obesity epidemic is a problem in emerging economies, too.

Combating obesity through a balanced diet and physical activity is a very challenging task.

The obesity epidemic is not just a high-income country problem. In China, overweight rates doubled from 13.5% to 26.7% between 1991 and 2006. The obese are a small proportion of these, but tripled over the same period of time (Lu and Goldman, 2010). A recent report estimates that the prevalence of diabetes in China is as high as in the US, with over 92 million cases (Yang *et al.*, 2010). In Brazil, obesity rates grew threefold in men and almost doubled in women between 1975 and 2003 (Monteiro *et al.*, 2006). Smaller increases in overweight were recorded in India (rates for women increased from 10.6 to 12.6 between 1998-99 and 2005-06), but increases were much steeper in west urban areas, where rates approached 40% in the early 2000s, almost doubling in less than ten years (Wang *et al.*, 2009).

Evidence of a link between body weight and mortality dates back to the early 1950s, but the harmful effects of specific nutrients have proven much more difficult to ascertain. A clear link between unsaturated (trans) fats, particularly hydrogenated oils, and coronary heart disease was established only in recent years. Determining what constitutes a balanced diet is a challenging undertaking, especially when differences across individuals and across countries are taken into consideration. The same applies to determining what constitutes an ideal physical activity regimen, despite long-standing evidence of the health risks associated with sedentary lifestyles.

Figure 2. Historical and projected overweight rates in OECD countries



3. Can governments influence lifestyles?

Prevention policies which intrude the least into individual lifestyles are also the most expensive.

Maintaining good health is an important goal for most individuals, but it is not their only one. Individuals wish to engage in activities from which they expect to derive pleasure, satisfaction, or fulfilment, even when the activities in question are unhealthy. Stopping or discouraging them from doing so will never be popular. However, interventions which are more ‘intrusive’, in the sense that they shape the environments in which people make choices, rather than merely informing them, tend to be less expensive than others.

The complex nature of chronic diseases, their multiple determinants and causal pathways suggest that pervasive and sustained efforts and comprehensive strategies involving a variety of actions and actors are required for successful prevention. However, the reality is that governments spend, at best, only a small fraction of their health budgets on prevention. Governments rarely deploy effective joined-up actions, or coordinate policy across government departments. On the contrary, it is not unusual for policies likely to have undesirable impacts on individual lifestyles and population health (e.g. in agriculture, transport, urban planning, etc.) to be adopted in the absence of coordination with health ministries.

Box 1. ActNow British Columbia, Canada’s “all-of-government” approach

ActNowBC is a pioneering all-of-government approach to health promotion that sets long-term (2005-15) targets for key risk factors. The initiative’s goals are to develop and promote programs across society that make healthy choices easier, build community capacity to create healthier, more sustainable and economically viable communities, and, reduce the demand on the health care system. The ActNowBC initiative is built on four pillars: promoting physical activity; healthy eating; living free from tobacco; and responsible alcohol consumption, especially during pregnancy.

All government ministries in British Columbia are required to view their mandate through a health promotion lens and reflect initiatives in their service plans that create health-supporting environments aligned to the four pillars of ActNowBC. Ministries are working in partnership with communities, non-government and private sector organisations to broaden responsibility for population health beyond the health sector.

It has taken 30 years for tobacco control to move from information campaigns to smoking bans.

Although clear evidence of a link between tobacco smoking and cancer had been available at least since the 1950s, it was not until the second half of the 1960s that the first actions specifically aimed at deterring smoking were undertaken in the US. Early initiatives were to give health warnings to smokers and provide information about the risks associated with smoking, but more incisive actions were undertaken in the 1970s when broadcast advertising of tobacco products was banned and stop-smoking campaigns were organised in the United States. Similar actions were undertaken at the EU level starting from the 1980s, although measures had been in place previously in some member countries. Taxes on tobacco have been used since the 19th century, but only in relatively recent times has raising taxes been viewed as a way of reducing smoking rates and, even more recently, as a way of funding tobacco-control initiatives. Generalised smoking bans in public places were adopted in a wide range of countries only in the 2000s. These have not just protected non-smokers from passive smoking, but have also been effective in reducing smoking rates.

Obesity control policies are still in their infancy.

In the past five years OECD countries have been very active in trying to improve diet and increase physical activity. Governments have taken action in response to calls by international organisations and pressure by the media and the public health community, although there has been, up to now, little convincing evidence on ‘what works’. Most governments have adopted initiatives aimed at school-age children, changing the school environment and school menus, as well including health and lifestyle education in the school curriculum. The second most common intervention in OECD countries is the dissemination of nutrition guidelines and other health messages through health promotion campaigns. A number of governments have shown an increasing interest in forms of regulation and fiscal measures, although only in relatively few instances have these been explicitly used as ways to tackle the obesity epidemic. In some cases, the food and beverages industries have adopted voluntary schemes.

4. What can prevention achieve?

Above all, prevention improves health and longevity.

Governments have great expectations of prevention, hoping it will cut health expenditures and redress health inequalities, in addition to advancing population health. Many prevention programmes are indeed effective and cost-effective in improving health and longevity. However, expectations concerning the benefits of prevention must be realistic. Prevention can improve our health and quality of life, with a cost-effectiveness that is as good as, or better than, that of many accepted forms of health care. However, the costs of prevention occur now, whereas the benefits are often only realised after many years, or even decades, when people who otherwise might be suffering from diabetes or other chronic diseases instead continue to enjoy a health life. This long gap between spending on prevention and reaping its benefits makes prevention programmes particularly vulnerable when health budgets are under strain.

Prevention should not be regarded primarily as a way to save money.

Programmes for the prevention of chronic diseases mostly delay the *onset* of disease, and in some cases they prevent it altogether. This adds years of healthy life to people’s health expectancy, reducing health care costs. However, the health benefits of prevention are such that people also live longer with chronic diseases, and years of life are added in the oldest age groups, increasing the need for health care. As a result, reducing health expenditure should not be regarded as the main goal of prevention, because most programmes will not have this effect. OECD work has shown that interventions to improve diet and increase physical activity may, at best, generate reductions in the order of 1% of total expenditure for major chronic diseases. At the same time, many such interventions involve costs which outweigh any reductions in health expenditure. Potential productivity gains are larger than intervention costs for many forms of prevention; however, those gains depend largely on the ability of labour markets to absorb the increased labour supply.

Prevention may improve health disparities.

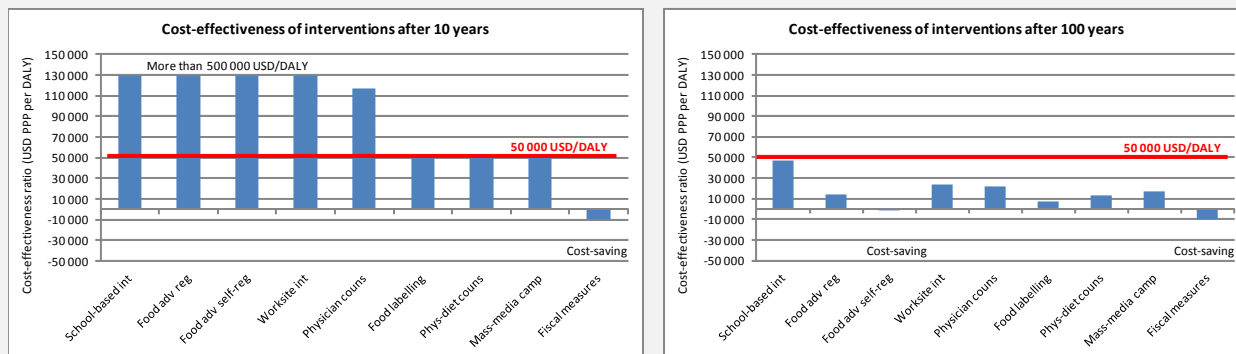
Morbidity and mortality from most chronic diseases are concentrated among the socially disadvantaged, so prevention can reduce social disparities. However, it can be hard to reach those most in need, at least to the same degree as those who are better off, and in some cases prevention programmes elicit a lesser response among the least educated and the socially disadvantaged. OECD work shows that under a reasonable range of assumptions, interventions to improve diet and increase physical activity will enhance health equity to some degree, but they will not eliminate disparities in health status and longevity across socioeconomic groups.

Prevention may improve employment, productivity and wages.

Finally, prevention can help increase productivity and wealth. Those who have unhealthy behaviours and the obese have fewer chances of finding a job and greater chances of losing their employment if they have one, partly as a reflection of the social stigma they suffer. Those who work have systematically lower wages, reflecting both increased time off work on ill-health grounds, and lower productivity.

Box 2. Tackling obesity: the cost-effectiveness of prevention

The OECD, jointly with the WHO, assessed the health and economic impacts of a range of strategies for the prevention of chronic diseases linked to unhealthy diets, sedentary lifestyles and obesity. The interventions assessed can generate annual gains ranging from 39 000 DALYs (mass media campaigns) to 490 000 DALYs (intensive counseling in primary care) in the European region, against an overall burden attributable to overweight and obesity of over 3.6 million DALYs in the same region. Most interventions have favourable cost-effectiveness ratios (below USD 50 000 per DALY), relative to treating diseases once they emerge. The most efficient interventions are outside the health sector (*e.g.* food labeling, fiscal measures). Counselling individuals at risk in primary care can have a large impact on obesity and related chronic conditions, but is also the most expensive strategy of those assessed by the OECD. Interventions targeting younger age groups are unlikely to have significant health effects at the population level for several decades. On a per-capita basis, the cost of preventive interventions ranges from USD 0.10 (industry self-regulation of food advertising to children) to over USD 15 (intensive counselling in primary care). Interventions costs are offset only to a small extent by reduced health care expenditures. The two graphs below illustrate the cost-effectiveness of different interventions after they have been in place for ten years (left-side panel) and in the long run (right-side panel). Strategies combining multiple interventions may increase population coverage by targeting different age groups and so exploit synergies between interventions. OECD analyses suggest that such multi-pronged approaches may be up to twice as effective as the single most effective intervention, at a comparable cost-effectiveness ratio.



4.1. Prevention in primary care

Counselling of individuals at risk in primary care is one of the most effective ways of improving health...

Smoking cessation advice provided by general practitioners features invariably at the top of any published cost-effectiveness league-table as one of the most efficient interventions a health service may deliver. Primary care counseling of patients at risk due to their unhealthy lifestyles can be one of the most effective ways of changing behaviours and curbing obesity, especially if advice is delivered jointly by physicians and non-medical practitioners (e.g. dieticians). In the long run, this may generate ten times larger gains of disability-adjusted life-years than interventions such as food labelling, or worksite health promotion, and 2 to 4 times larger gains of life years, with greater savings in health expenditures than most interventions. A counseling intervention has the potential to generate an annual gain of one additional year of life expectancy per every 12 individuals in a population, or one additional disability-adjusted life year every ten individuals. However, counseling of individuals at risk in primary care is also expensive, and costs can exceed health expenditure savings by a large margin.

...but capacity is constrained.

Most OECD countries face tight capacity constraints in primary care and urgent demands tend to take priority over prevention. Mixed payment systems for general practitioners, combining capitation with incentive-based payments, are increasingly being adopted as an attempt to make primary care more efficient in the pursuit of longer term health goals. A range of financial and non-financial incentives have proven to be effective in expanding the supply of preventive services in primary care, although it is difficult to see how such incentives may lead to the systematic delivery of lifestyle counseling to those most at risk for chronic diseases if incentives are not coupled with measures to ease capacity constraints.

4.2. Using regulation and fiscal levers to influence lifestyles

Regulation and fiscal measures may succeed where explicit motivation and empowerment fail to change lifestyles.

A wide range of regulatory and fiscal measures have been put in place in many OECD countries to curb consumption of tobacco and alcohol. A minimum age has been set for purchasing cigarettes and alcoholic drinks, which often carry health warnings printed on their labels. Advertising has been severely restricted and hefty taxes have been imposed on the consumption of both commodities. All of these measures have contributed to containing consumption and WHO work has shown that most have very favourable cost-effectiveness profiles.

Box 3. Strategies to reduce the harmful use of alcohol

In May 2010, the 193 member states of WHO endorsed a resolution to tackle the harmful use of alcohol. The two-year-long process started in May 2008 brought together representatives from intergovernmental organisations, health professionals, NGOs and economic operators. The aim of the strategy is to set a general framework which can promote and support the development of public health policies at regional and national level. Throughout the document, special emphasis is placed on population subgroups that are at particular risk from harmful use of alcohol – children, pregnant and breastfeeding women and groups with low socioeconomic status. The policy options are based on available evidence about the effectiveness and the cost-effectiveness of interventions to reduce the harmful use of alcohol. Proposed interventions are grouped into ten target areas: i) leadership, awareness and commitment; ii) health services' response; iii) community actions; iv) drink-driving policies and countermeasures; v) availability of alcohol; vi) marketing of alcoholic beverages; vii) pricing policies; viii) reducing the negative consequences of drinking and alcohol intoxication; ix) reducing the public health impact of illicit alcohol and informally produced alcohol; and x) monitoring and surveillance.

Enforceable and fair fiscal incentives are difficult to design and implement, but may deliver health returns rapidly.

Several studies suggest that food taxes can have an impact on both consumption of unhealthy foods and people's weight. Recent OECD analysis of the impact of an intervention combining taxes on foods high in fat with subsidies on fruit and vegetables has shown that such measures could generate larger gains in life expectancy and disability-adjusted life expectancy than most other interventions, in the short run as well as in the longer run. The costs associated with implementing these measures would be lower than the reduction in health expenditure they would bring about. However, fiscal measures aimed specifically to change behavior are complex to design and enforce; their impact may be unpredictable as the price elasticity of demand varies across individuals and population groups; they can bear more heavily on low-income groups than on those with higher incomes, and substitution effects are not always obvious.

The US State of Alabama offers a USD 25 health insurance discount to State employees who participate in a wellness programme or show commitment to reduce their levels of risk in relation to BMI, blood pressure cholesterol and glucose. This adds to a similar incentive for non-smokers in the same jurisdiction. In Japan, health insurers have been mandated to screen 56 million people aged 40-74 for the "metabolic syndrome", and to engage those at risk in an effective wellness programme, with financial incentives for its delivery. Incentives of this type have been advocated as a more equitable, and possibly a more effective, alternative to taxes on certain forms of food and beverage consumption, although most existing empirical evidence does not appear to support the claim that financial incentives may contribute to sustainable weight loss.

Box 4. Mandatory health check-ups and counselling in Japan

The Specific Health Check-up and Specific Health Guidance System in Japan has mandated health insurers to implement screening and guidance with the aim of preventing lifestyle related diseases. The focus of the programme is on the metabolic syndrome, and the target is individuals over 40 years old. Those who are diagnosed with the metabolic syndrome, or as being at risk of developing it, in the health check-up are provided with health guidance to encourage behavioural changes and improve lifestyle. An improved lifestyle is expected to contribute to better quality of life and to an adjustment in health expenditure growth in the mid- to long-term. An early evaluation suggests that the programme was effective in reducing the numbers of individuals with, or at high risk for, the metabolic syndrome after a 6-month follow-up.

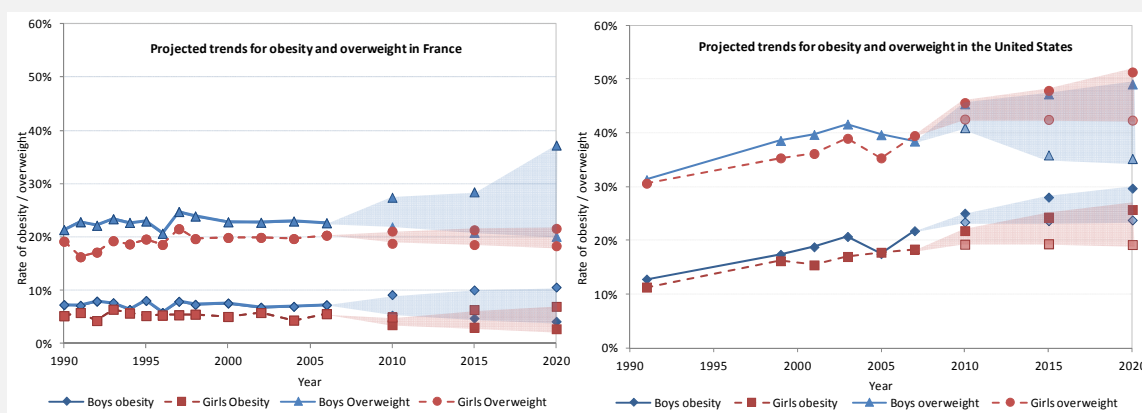
4.3. Targeting children

Protecting children against obesity is a policy imperative for OECD countries, even if health gains will materialise much later.

Protecting children is a special priority for all governments. This is particularly important in the case of addictive behaviours, such as tobacco smoking or drug abuse, but even in the fight against obesity measures which cause unease and opposition when aimed at adults tend to be viewed as adequate and desirable when they target children.

Box 5. The child obesity escalation

A shocking growth in child obesity is one of the most disturbing features of the current obesity epidemic. Child obesity rates have quadrupled in many OECD countries since the 1960s (Lobstein *et al.*, Obesity Reviews, 2004). Lifestyle changes in adults are mostly to blame for the rise in child obesity – the less active are parents, the less active are their children, and if parents indulge in poor diets, their children suffer as well. However, the most recent data on trends in child obesity provide some positive signs too. Child overweight and obesity rates appear to have stabilised in at least some countries, such as the United States and France, and there are even some early signs of a possible decline in countries such as England and Japan. The charts below show historical rates of child overweight and obesity in the past 20 years, and OECD projections up to 2020, based on national health examination (US) or health interview (France) survey data. Projection bands reflect statistical uncertainty regarding future rates. Campaigns such as “Let’s move” in the United States, and “Mangerbouger” in France will hopefully prove more successful and effective than previous attempts to change child behaviour.



Virtually all OECD countries have put in place school-based programmes at the national or local levels. This is, by far, the most widely adopted intervention to counter obesity, although OECD analysis suggests its health outcomes are relatively modest and will not even begin to materialise until after about 50 years from the initial implementation.

Box 6. Industry initiatives to reduce food advertising to children

The International Food and Beverage Alliance (IFBA) is a coalition of nine major multinational food and beverage companies (General Mills, Grupo Bimbo, Kellogg's, Kraft, Mars, Nestle, PepsiCo, the Coca-Cola Company, Unilever) which made five global commitments to the WHO in May 2008 in support of the 2004 Global Strategy on Diet, Physical Activity and Health. IFBA companies have rolled-out national pledge programmes around the world, designed to implement a responsible advertising to children policy. IFBA engaged the audit company Accenture to evaluate the impact of some of their pledges. In the European Union, between 2005 and 2009, Accenture reported an overall drop in children's exposure to member companies' advertising (for all products) with a 61% decline in programmes with an audience composed of a majority of children under 12 years, and a 30% decline overall (all programmes on all channels at all times).

Action has focussed in particular on limiting children's exposure to advertising.

Restrictions in advertising of potentially unhealthy products to children have also found support in many countries. Food advertising is no exception, as a large proportion of this concerns energy-dense and nutrient-poor foods, whose excessive consumption has been blamed as one of the factors contributing to the obesity epidemic. In countries such as Sweden, the United Kingdom, and the Canadian Province of Quebec, governments took the initiative of implementing outright bans of food advertising to children. A recent evaluation of the UK programme indicated that the number of adverts of potentially unhealthy foods seen by children aged 4 to 15 fell by over a third between 2005 and 2008. The food industry has strongly opposed advertising bans, but it has launched its own programme of "pledges" to limit advertising to children, or avoid it altogether. Largely on the basis of the results obtained in the UK, the OECD has calculated that the health returns of government regulation of food advertising would be slightly larger than those of school-based interventions, but with substantially lower costs and a similar time frame.

Box 7. Reducing trans fats as a good practice in preventing child obesity

Based on the Comprehensive Food Safety Management Plan for Children developed in 2007 and the Special Act on Food Safety Management for Children legislated in 2008, the Korean government requires the content of trans fat to be on the label of child food products. The government also assisted the development of "low-saturated and free-trans" fats through R&D support for the industry and have the Korea Food and Drug Administration (KFDA) own the relevant patents, allowing the industry to share the technologies. The policy entails collaboration between industry, universities, research institutes and government.

As a result, the contents of trans fats per serving dropped. For biscuits, it reduced from 0.8g to 0.1g. For chocolate processed products, from 1g to 0.1g and for snacks, the figure decreased from 0.8g to 0.1g for the same period.

5. Conclusions

Tackling chronic diseases through interventions aimed at modifying lifestyle risk factors is possible and cost-effective, and it is likely to decrease health inequalities within countries. However, turning the tide of diseases that have assumed epidemic proportions during the course of the 20th century requires fundamental changes in the social norms that regulate individual and collective behaviours. Such changes can only be triggered by wide ranging prevention strategies addressing multiple determinants of health in a wide-range of social groups.

Curbing obesity is now a leading public health priority in OECD countries. Although the most efficient interventions for this purpose are outside the health sector, health care systems can have the largest impact on obesity and related chronic conditions by focusing on individuals at high risk.

The growth in childhood obesity has gloomy implications for public health in the future. Interventions targeting younger age groups are unlikely to have visible health effects at the population level for many years. Nevertheless, countries face a policy imperative to protect children from adult lifestyle changes and make healthier lifestyles more viable. We must act in order to prevent obesity from becoming our legacy to future generations.

All countries are putting efforts into improving health education and information. Evidence suggests, however, that these are unlikely to have a major impact on obesity, nor are they particularly cost-effective. More stringent measures, such as regulation of advertising or fiscal measures, are more intrusive on individual choices and more likely to generate conflict among relevant stakeholders, but are also likely to weigh less on public finances and to produce health returns more promptly. Getting doctors and other professionals involved in primary care to make greater efforts to counsel those whose behaviours put them at risk has the biggest effect on obesity, but tends to be expensive. Careful targeting of such efforts is necessary.

Hence a successful strategy to tackle obesity will, at the least, have to protect children, inform adults and target extra efforts at those most at risk. It may well need to go further in trying to influence adult behaviour, if this is politically acceptable. How should such efforts be structured? In light of the (eventually) successful attempts to limit smoking, it is tempting to think in terms of regulating advertising, taxing consumption, and banning the most harmful sorts of consumption. However, there are good reasons to think that such an approach will work much less well in the case of altering food consumption. For example, taxing or regulating just one type of product might lead people to switch consumption patterns with little effect on overall health; people who exercise more will be able to consume more calories without adverse effects on their health – why should they be penalised? There are many other ways in which the conditions which led to the assault on tobacco being successful are absent when considering the much more complicated issue of controlling obesity.

The food and beverage industry has made a potentially important contribution to tackling unhealthy diets and sedentary lifestyles, often in co-operation with governments and international organisations, showing they can be a partner in an alliance against obesity. If industry does not see labelling or regulation of advertising as a threat, it is much more likely to partner with policymakers to implement desirable changes. There are increasing numbers of examples of industry and government and other important elements of society including employers, GPs, schools and urban planners working together in a multi-stakeholder approach to tackling obesity. Such an approach would make interventions more acceptable, and perhaps more effective. Governments would retain overall control of initiatives for the prevention of chronic diseases, while encouraging private sector commitment and contributions. It must be recognised that the interests at stake are often in conflict with each other, but no party is in a position to meaningfully reduce the size of the obesity problem and associated chronic diseases without full co-operation with other stakeholders. Failure to tackle rising obesity will impose heavy burdens on future generations.