

The Prevalence and Growth of Obesity and Obesity-related Illnesses in Europe

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1. Introduction

Obesity is today a global phenomenon that affects all countries, all types of societal collectives regardless of age, sex and income¹. The fact is that it has now become a problem of almost epidemic proportions, therefore dubbed 'globesity' by some. As a risk factor behind chronic non-communicative diseases like diabetes type 2, it is likely to increase the cost pressure on the already fiscally-stressed public healthcare systems in Europe. While healthcare expenditures are currently being slashed in many European countries, the prospect of reducing costs in the future by investing now in, for instance, weight-management programmes is being neglected. In the spirit of cutting costs now, future costs will likely increase.

In order to engage in long-term investment to prevent chronic diseases, more extensive awareness among policy-makers about the prevalence of obesity and related healthcare expenditures is necessary. This think piece aims to contribute to this debate by examining the scale of obesity as well as the prevalence of obesity-related illnesses in Europe. Its intention is to provide policymakers in Europe with a better understanding of the scale of the problem of obesity and provoke a discussion about what policy measures that would be best tailored to break the trend and to reduce the number of people that are obese or overweight. Furthermore, the think piece will give a brief overview of different healthcare approaches to addressing obesity.

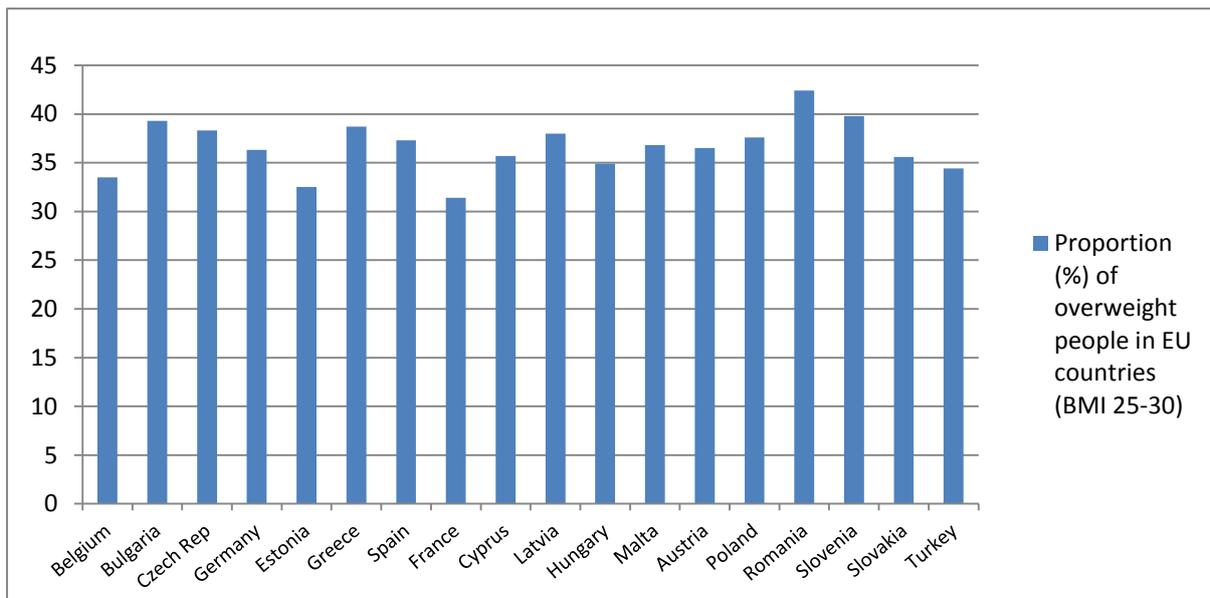
2. The majority of the European population has an unhealthy weight: The prevalence of obesity in Europe

Since the 1980s there has been a sharp increase in the prevalence of overweight and obesity around the world. In Europe, it is estimated that over 50% of all men and women were overweight in 2008, and on average around 23% of all women and 20% of men were obese, according to the World Health Organisation (WHO).

¹ A person's weight status is calculated with the help of Body mass index (BMI). A BMI above or equal to 25 but below 30 indicates overweight. A BMI equal to or above 30 indicates obesity. The BMI is calculated by dividing the body weight (in kilograms) by height (in metres) squared.

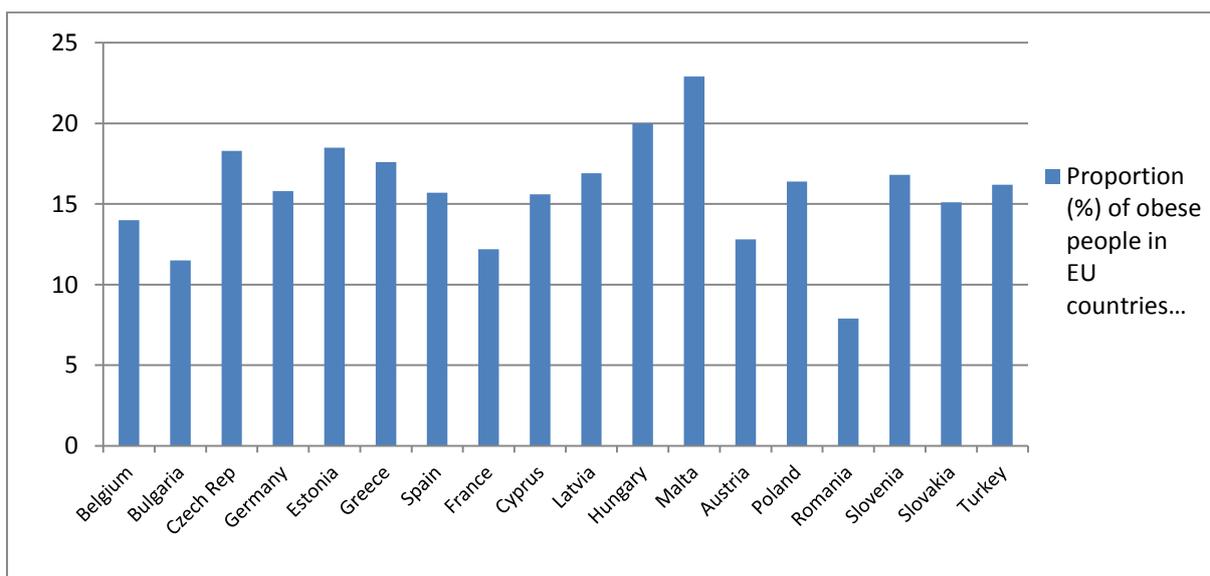
Tables 1 and 2 show variations between EU countries in the prevalence of overweight and obesity. The share of the population that is overweight is pretty similar in European countries. Variations exist, but they are not as big as the variations in obesity when European countries are compared. While Romania has the highest share of overweight people, it also has the lowest share of obesity, which is a bit surprising. Countries in the southern rim of Europe appear to be more represented among countries with the highest share of overweight than countries from the northern parts of Europe.

Chart 1. Overweight in Europe in year 2008



Source: Eurostat

Chart 2. Obesity in Europe in 2008

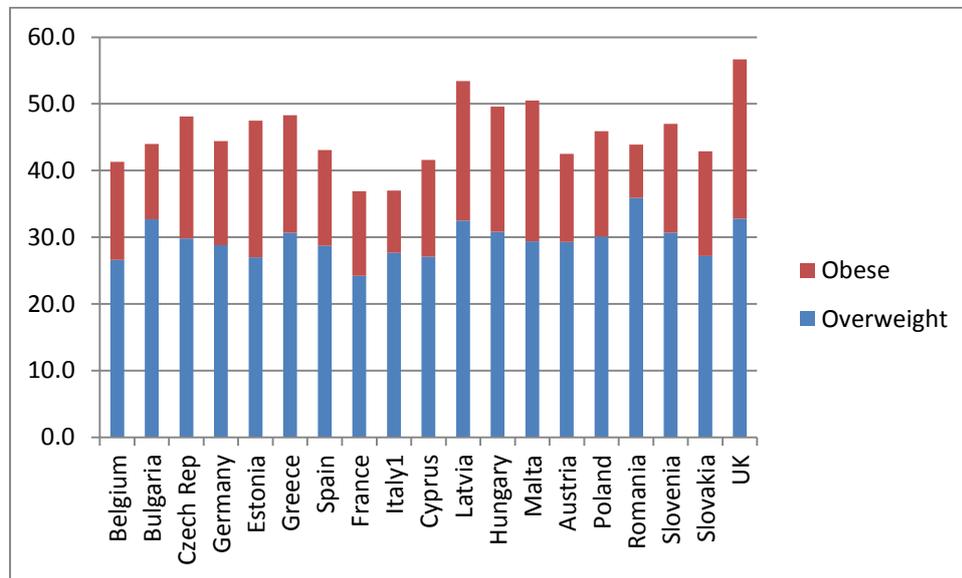


Source: Eurostat

In the European Union, between 36.9% and 56.7% of all women were overweight or obese according to data available from 2008/09. The figures for the male population vary between

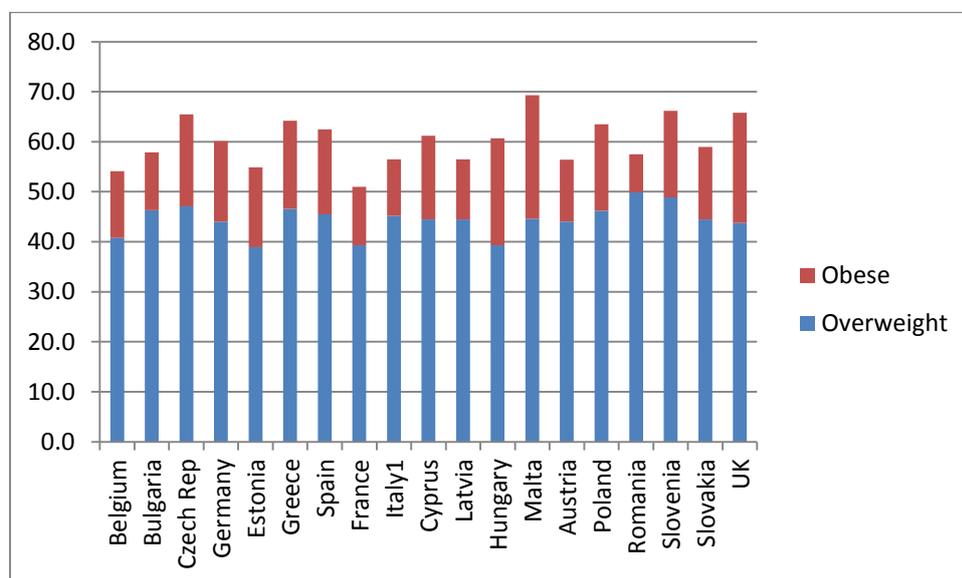
51% and 69.3% for the countries from which data is available. For women, there are more countries from the northern part of Europe that have the highest share of overweight and obesity, while for males the pattern is rather than countries in the southern part have higher shares.

Chart 3. Overweight and obesity among women in Europe, % of total population



Source: Eurostat

Chart 4. Overweight and obesity among men in Europe, % of total population



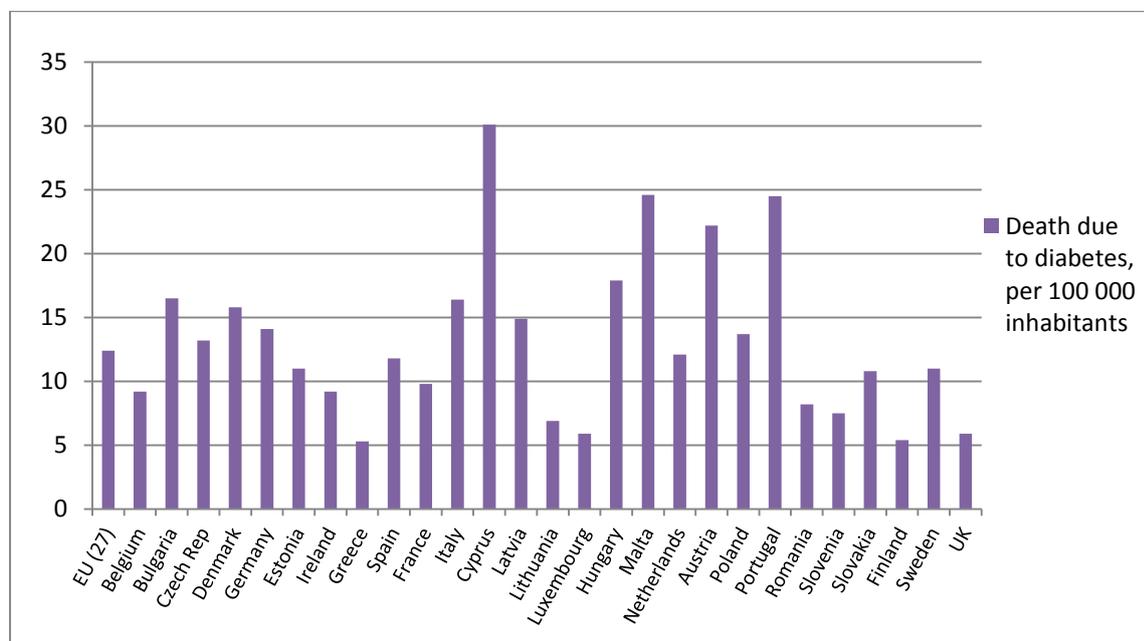
Source: Eurostat

Obesity often results from physical inactivity and unhealthy diets, as well as from tobacco and alcohol use. These are the main risk factors for the development of non-communicative diseases, notably cancer, diabetes and cardiovascular and lung diseases. It is estimated that non-communicative diseases are the main cause behind almost 86% of deaths in Europe, and 77% of the disease burden. Cardiovascular diseases, including hypertension (high blood

pressure), cause more than half of all deaths in Europe. But, diseases such as cancer, diabetes, cardiovascular and respiratory diseases at the same time represent the bulk of diseases that in Europe can be partly prevented; obesity plays a central role. Between 1990 and 2010, the so-called global burden of disease has continued to shift away from communicable to non-communicable diseases. The Global Burden of Disease Study 2010 concluded that dietary risk factors and sedentary lifestyles accounted for 10% of disability adjusted life years globally in 2010.

Obesity and overweight are estimated to be the principal causes of 44% of all cases of diabetes around the world, 23% of ischaemic heart diseases and between 7-41% of all cancer cases, according to WHO figures. As for the European Union, 80% of all type 2 diabetes cases among adults are related to obesity, 35% of ischaemic heart diseases and 55% of hypertensive diseases. All in all, the WHO considers obesity to be the 5th leading death risk.

Chart 5. Death due to diabetes in 2009, per 100 000 inhabitants



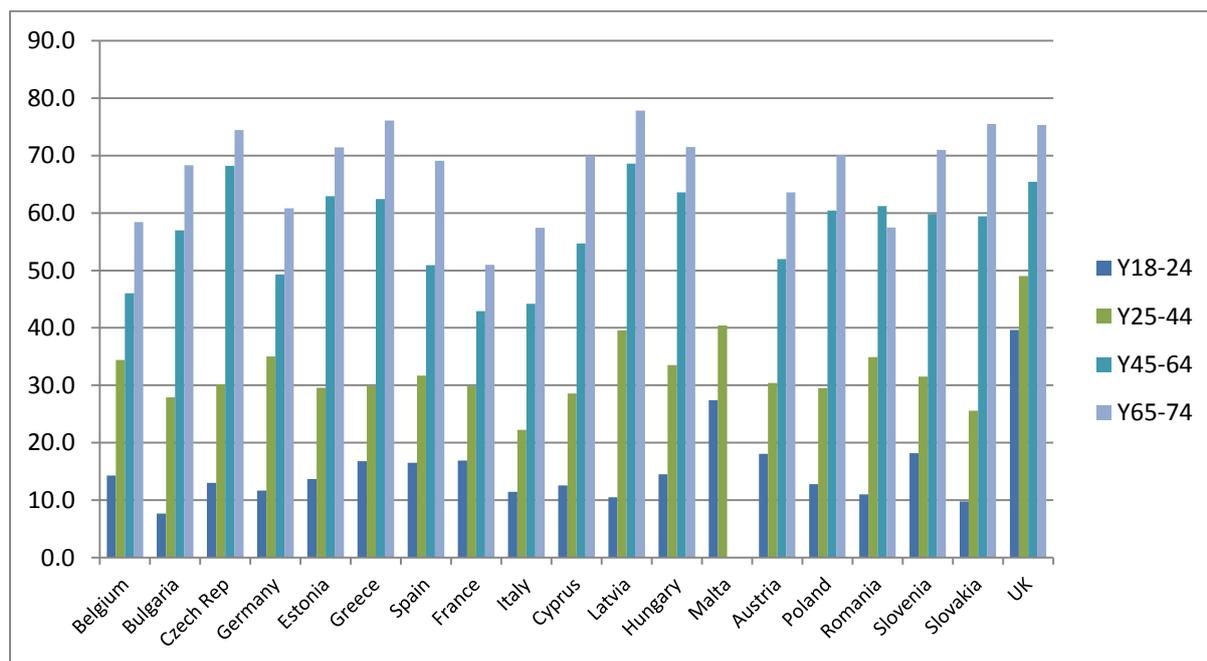
Source: Eurostat

3. Variations among different age groups and level of education

There is no systematic difference in the rates of obesity in the European Union member states, according to Eurostat statistics. In some countries the proportion of obesity is higher among women, whereas the proportion of obese people is higher among men in other countries, according to Eurostat.

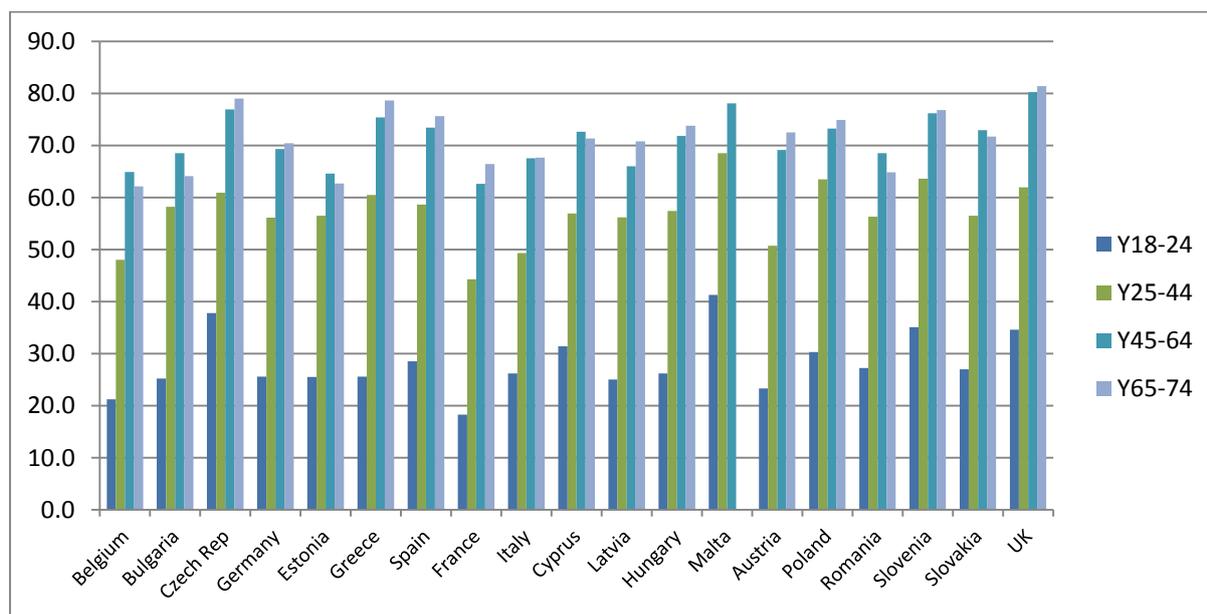
The proportion of obesity and overweight among adults tends to increase with age in all European countries. This pattern is particularly clear among women. As for men, there is a general increase in the prevalence of obesity up until the age of 65. Thereafter the pattern is somewhat diminishing.

Chart 6. Overweight and obesity among women in Europe, by age group



Source: Eurostat

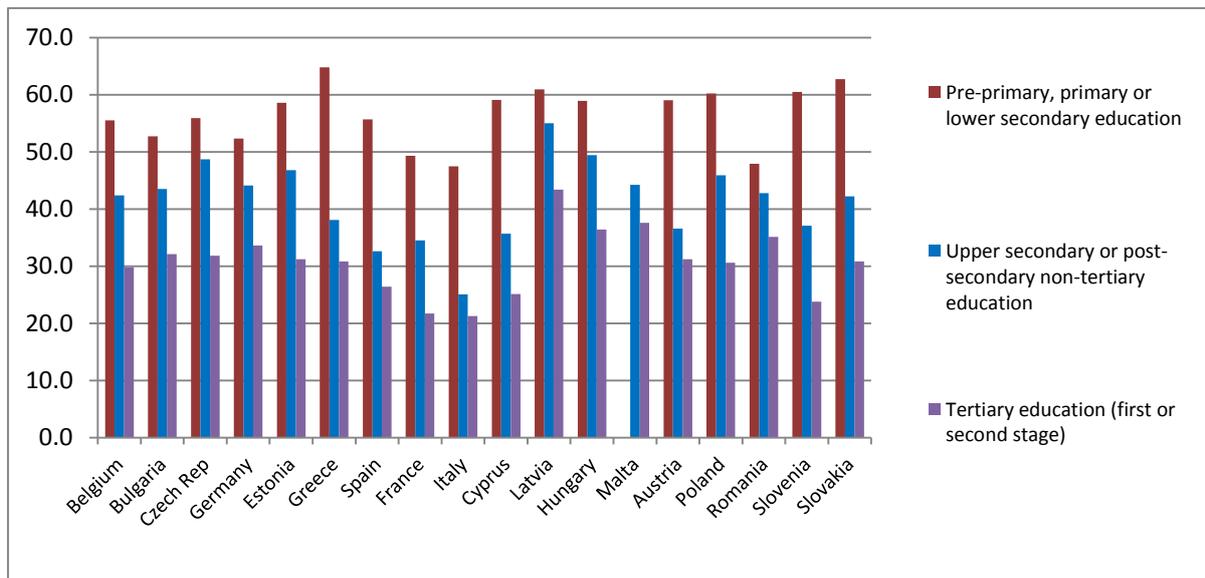
Chart 7. Overweight and obesity among men in Europe, by age group



Source: Eurostat

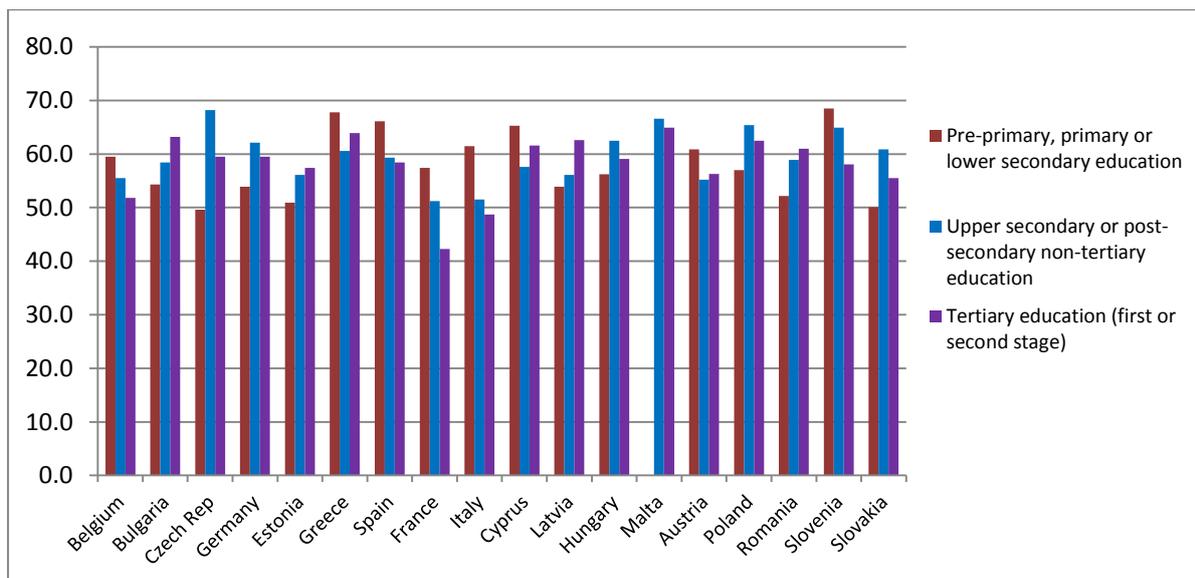
The level of education is identified as a factor associated with overweight and obesity among women. Excessive weight is overall more common among women with lower education. In contrast, there is no systematic difference in terms of obesity among men related to the level of education in Europe.

Chart 8. Overweight and obesity among women, by educational level, % of total population



Source: Eurostat

Chart 9. Overweight and obesity among men, by educational level, % of total population



Source: Eurostat

4. Trends of increases – widespread childhood obesity

There has been a significant increase in the number of people who are obese in OECD countries in recent decades. Before the 1980s, around 10% of the population was considered obese. In just 30 years, rates of obesity in OECD countries have more than doubled, and it is predicted to get worse. In half of the OECD countries, at least one in two people is overweight or obese. Research from OECD predicts that the number of overweight

people (BMI 25-30) within the age group of 15-74 will stabilise in most countries. The rate of obesity is however likely to continue to increase.

Obesity among children is an alarming and up-going trend which suggests that the impact on health and healthcare costs will multiply in the years to come. Among children up to 4 years old globally, the prevalence of overweight and obesity has increased over the last decade. In 1990, 4.2% of all preschool children were overweight or obese. In 2010, the figure had increased to 6.7%, and it is expected to increase to 9.1% 2020. Looking at children between 5-17 years old, around 21.4% of all girls and 22.9% of all boys were overweight or obese in OECD-countries in 2011.

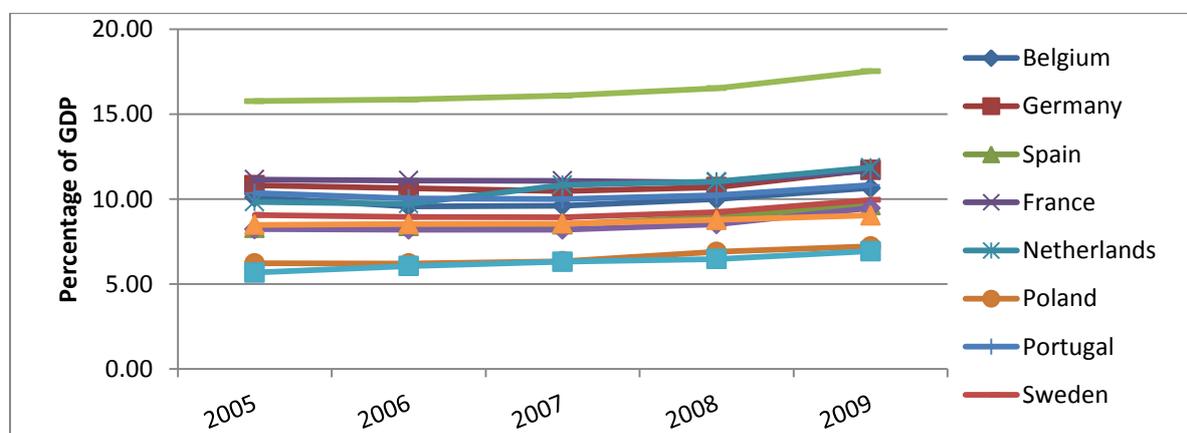
Excess weight can entail complications even at a young age, including diabetes, hypertension and cardiovascular problems. Children who are overweight or obese are more likely than non-obese children to be obese later in life. Even if excess weight is lost, childhood obesity is one of the main causes behind complications later in life, according to a study by Trasande and Elbel (2012).

Childhood obesity incurs healthcare costs at an early age. A recent German study showed that overweight and obese children have higher healthcare costs than others; €62 higher for obese children per year and €27 for overweight children in comparison to a child with a healthy weight. In relation to this, a study from Ireland showed that the percentage of hospital days related to childhood obesity increased from 0.81% to 1.37% of total hospital days in 2004, involving an increased in expenditures from €0.9 to €2.7 million (Trasande & Elbel).

5. Government responses to the growth of obesity

Healthcare expenditures are currently equivalent to between 8-10% of GDP in many European countries. Out of this already high figure, obesity-related illnesses are estimated to account for between 1-3% of total healthcare expenditure in most OECD-countries (the figure for the U.S. is 5-10%). OECD estimates suggest that the healthcare expenditures for an obese person are 25% higher compared to a person of normal weight at any given age. In addition to direct medical expenses, obesity and overweight also causes indirect costs in terms of loss of productivity and costs to society.

Chart 10. Total healthcare expenditures in selected OECD countries, % of GDP



Source: Eurostat

Despite clear rationale and calls from the World Health Organisation and the OECD as well as others, governments are not engaging in effective measures to curb the increasing trend of obesity and will have to pay the price of associated increased healthcare costs

Using England and Italy as examples, OECD (2012) estimates that a comprehensive strategy to prevent obesity from causing chronic non-communicative diseases could avoid around 70,000 deaths each year. Such a strategy would cost USD 19 in England and USD 22 per capita in Italy – and it would be based on prevention strategies including physical activity and dietary standards. There are reasons to believe these figures are underestimating the cost as they build on best practices that are not universally replicable. What we know from existing research is that prevention strategies generally have been ineffective in curbing the growth of obesity.

Measures to tackle obesity and overweight and thereby prevent chronic non-communicative diseases could be seen as investments for the future. There are a number of possible measures that EU member states in a more or less extensive way have been dabbling with. Such measures include food education and physical activity at school level or food taxes targeting food products with high content of sugar or saturated fats. The effects of taxes also depend on the use of the resulting revenue. In France, attempts have been made where the tax revenues are reinvested in the healthcare sector, where as similar taxes in Denmark and Hungary were disconnected from the healthcare sector. Obesity treatment programmes can also be organised within the healthcare sector, for instance by physicians referring obese people to intensive multi-component behavioural counselling (as recommended by the U.S. Preventative Services Task Force (Moyer, 2012)). Compared to 30 years ago, there is now much more knowledge about what is effective and cost effective for the treatment of obesity; there is a range of solutions available that have been proven to be effective. This increasing wealth of knowledge has translated into International scientific evidence and recommendations. However, governments have been slow and incomplete to respond to the developing evidence base and consensus. It is fair to say that there are opportunities for improvements in obesity treatment that are currently not being undertaken across Europe.

Let us turn to healthcare strategies and what governments in Europe do in order to prevent obesity and obesity-related illnesses. Table 1 below outlines some general characteristics of healthcare policy in five EU countries. There are many similarities between countries. Most countries puts a lot of emphasis on prevention, and do make efforts to increase the knowledge about obesity and the virtues of healthy lifestyles. Most governments are also focusing many of its targeted activities towards risk groups – people that have developed diabetes or that are in diabetes risk groups. Most governments also have strong restrictions on the uses of medicines to treat obesity. There has been an increase in surgical treatments for people with very high BMI and/or obesity related illnesses.

Exactly what levels of expenditures that governments or other entities responsible for healthcare allot to various approaches to obesity is unknown. Some local healthcare entities have said that they know the expenditures on some components – for surgeries or pharmaceuticals – but they have yet to release such data. While several governmental entities can produce fairly granular data on expenditures and cost per patients for many

other diagnoses, their methodologies for reporting expenditures on obesity-related treatments are underdeveloped.

There is no doubt that governments understand the necessity of addressing obesity. But, there seems to be a distance between that acknowledgment and structured actions that are consequential. There are differences between countries, and differences between different healthcare bodies inside countries, that should be acknowledged. Some governments clearly are more focused at the problem than others – and the degree of focus is partly a reflection of the prevalence of obesity. Yet most countries appear too often to approach their programmes with a “tick-the-box” mentality. All governments put the emphasis on prevention, but have been remarkably unimaginative in how to engage with effective solutions to treat obesity. Lots of resources seem to be used for prevention strategies, but despite the considerable opportunity for cost savings and societal benefits, no government have been able to effect sizeable aggregate changes through treatment. Perhaps, with the doubling of obesity in the last 30 years or so, governments have yet to truly engage in concerted strategies to treat obesity in the volumes that will meet demand?

All governments surveyed in this study claim to offer weight management programme to diabetes patients or diabetes risk groups. While it is probably true that governments do offer such programmes they appear to rather be about structured education and information support to people with diabetes. Yet there is generally a fairly weak link in the chain of obesity treatment. Consequently, most governments offer some levels of dietary counselling or access to obesity patient groups, but volumes versus need is questionable. So while it may be true that governments have scaled up their expenditures to treat obesity, such expenditures take place in a fixed healthcare structure that does not offer people choice or a greater degree of individual tailoring. Some countries do offer elements of choice but only in a limited way. In addition, the assumption behind the structure of current public approaches to obesity treatment seems often to be that weight management programmes *going beyond* dietary counselling and access to obesity patient groups should be paid by individuals out of pocket.

All governments perform more surgical treatments of obesity than in the past, which is only natural as new treatment standards have been developed. All governments are also using medicines in a very restrictive way, partly because the limited availability of pharmaceuticals that are not associated with dangerous side-effects.

Table 1. Healthcare policy towards obesity in selected EU countries

	Prevention	Weight management	Surgery	Medicines
France	<ul style="list-style-type: none"> - Government investments in health promotion and life styles - Comparatively weak government leadership 	<ul style="list-style-type: none"> - Weight management offered to risk groups through existing healthcare structures - No policy for choice 	<ul style="list-style-type: none"> - Yes, if necessary, but restrictive (guidelines for morbid obesity) 	<ul style="list-style-type: none"> - Restrictive use of medicines/reimbursement
Germany	<ul style="list-style-type: none"> - Investments in information, education, and 	<ul style="list-style-type: none"> - Big differences between regional and healthcare bodies 	<ul style="list-style-type: none"> - Yes, if necessary, it is reim- 	<ul style="list-style-type: none"> - Restrictive use of medicines/re-

	<ul style="list-style-type: none"> - life styles - Comparatively weak government leadership: diffused on many health insurers - Yet a lot of focus on prevention as the key step to address obesity growth 	<ul style="list-style-type: none"> - Offer weight management treatment through usual healthcare centres; focus on individual dietary standards - No choice exists, even if it may happen - Focus on diabetes patients and high-risk groups 	<ul style="list-style-type: none"> - bursed 	<ul style="list-style-type: none"> - imbursement
Netherlands	<ul style="list-style-type: none"> - Concerted efforts by health insurers and the government to inform and educate about life styles and overweight/obesity - Comparatively strong government leadership - Programme to improve nutrition standards and sports in schools 	<ul style="list-style-type: none"> - National partnerships binding together various healthcare and health insurance entities - National guidelines and care standards have been established - The Dutch Insurance Board has strong guidelines for health insurers on reimbursement - Differences between health insurers in weight management treatment: choice exist but is limited 	<ul style="list-style-type: none"> - Yes, if necessary, reimbursed by health insurers 	<ul style="list-style-type: none"> - Yes, if necessary, for risk groups and combined with weight management (differences between health insurers)
Sweden	<ul style="list-style-type: none"> - Information to schools - Information to patients in risk groups 	<ul style="list-style-type: none"> - National guidelines exist on weight management programmes - No national policy for reimbursement or choice of programmes: weight management usually offered through local healthcare bodies - Local healthcare bodies focus on diabetes patients or diabetes risk groups 	<ul style="list-style-type: none"> - Yes, if necessary (BMI >40kg/m²) reimbursed by government 	<ul style="list-style-type: none"> - Medicines only prescribed and reimbursed if patient has type-2 diabetes - Medicines prescribed in addition to weight management treatment
United Kingdom	<ul style="list-style-type: none"> - General investments in information and education - Special educational campaigns to schools and risk families 	<ul style="list-style-type: none"> - Dietary programmes/recommendations - Weight management reimbursed through NHS (e.g. Weight Watchers) - Selective use of individual choice for weight management 	<ul style="list-style-type: none"> - Yes, if necessary, reimbursed by government 	<ul style="list-style-type: none"> - Restrictive use of medicines

		programmes: selection of NHS physicians that can prescribe access to other than the NHS preferred programme - NICE clinical guidelines for weight management		
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Sources: Dutch Ministry for Health, Welfare and Sport; French Ministry for Social Affairs and Health; German Ministry for Health; National Institute for Care and Health Excellence (United Kingdom); Partnership Overweight Netherlands; Socialstyrelsen (Sweden); Stockholm County Council, Action programme against overweight and obesity 2010-2013; Weight Management Centre (United Kingdom).

6. The way forward

Overweight and obesity, and illnesses related to obesity, is growing in all parts of Europe. The current high levels of obesity prevalence presents huge problem to individuals, societies and healthcare systems and is set to get worse. Left unaddressed, obesity will become a source of economic concern – both from the viewpoint of the overall economy and the financing of already financially stressed healthcare systems.

Governments are clearly aware of the problems, but it seems to be difficult for them to garner the attention needed to make obesity treatment a priority in healthcare and to motivate a resource allocation corresponding to the size of the problem.

Governments also appear to be uncertain about the costs and benefits of various approaches. While there is a lot of emphasis put on prevention, there is less knowledge about the efficiency and cost effectiveness of various preventive actions than there is for the range of treatment solutions. Preventative efforts taken are often general and not very targeted. Most of them that we have come across in our research feel a bit “old-school”, better fit for the 19th century than the 21st century, in that they do not use imaginative technology and methodology, or find ways to adjust the approach to individual preferences.

The same can be said for many existing approaches to obesity treatment: whilst there is now clear guidance on what works in obesity treatment and increasing evidence of effectiveness and cost effectiveness, obesity treatment across Europe seems based on old structures in existing healthcare systems and put a lot of emphasis on information while paying scant interest to motivation and support to help people to make and sustain the necessary behavioural changes to manage their weight.

Obesity treatment across Europe does not implement the range or scale of solutions that the best available evidence and guidance recommend. Obesity treatment across Europe does not get the focus it needs and governments will be paying the price through higher healthcare costs. Generally, governments do not seem to taken seriously the role of obesity treatment.

Healthcare policy to address obesity will have to improve. The role of research and medical developments need to be part of that improvement, but concerted and adequate national

focus and investment is critical. Equal emphasis need to be put on the methodologies used for prevention and for treatment. Finding the way to combine these efforts is critical.

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