

# Obesity: The Gateway to Ill Health - an EASO Position Statement on a Rising Public Health, Clinical and Scientific Challenge in Europe

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**Clinical Information**

# Obesity: The Gateway to Ill Health – an EASO Position Statement on a Rising Public Health, Clinical and Scientific Challenge in Europe

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## Obesity: A Global and European Burden

Although obesity was only introduced in the 1950s into the International Classification of Diseases (currently ICD-10 code E66, though EASO thinks that this categorization requires revision and is committed to propose novel criteria for ICD-11), it had already reached epidemic proportions by the end of the century, becoming one of the leading causes of death and disability worldwide. According to the World Health Organization (WHO) the prevalence of obesity has tripled since the 1980s in many countries of the WHO European Region, with overweight and obesity affecting 50% of the population in the majority of European countries [1]. In 2008, 1.5 billion adults, 20 years and older, were overweight with an estimated 500 million adults worldwide being obese (over 200 million men and nearly 300 million women); approximately 65% of the world's population inhabit countries where overweight and obesity kill more people than underweight [2, 3]. The figures of affected individuals rage on unabated, and more than 40 million children under the age of 5 years were overweight in 2010 [3]. Noteworthy, severe obesity (i.e., a BMI > 35 kg/m$^2$) is a rapidly growing segment of the obesity epidemic in which the detrimental effects are particularly evident and harsh. Moreover, obesity not only disproportionately affects the disadvantaged segments of the population, but these groups experience the most important increases in obesity prevalence. Thus, the WHO has declared obesity as the largest global chronic health problem in adults, which is emerging

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as a more serious world health problem than malnutrition. In fact, obesity has become a truly global problem that has led to coin the term 'globesity' to describe the escalating global pandemia affecting both developed and developing countries [2]. In this sense, it has been estimated that 60% of the world's population, i.e., 3.3 billion people, could be overweight (2.2 billion) or obese (1.1 billion) by 2030 if recent trends continue [4]. In spite of these preoccupying facts, obesity is frequently not even thought of as a frequent, serious, complex and chronic disease and is often even dismissed or neglected as a clinical entity.

## The Health Risks of Obesity

Regrettably, the consequences of obesity are more far-reaching than mere aesthetic problems and heavily impact both directly and indirectly on a broad range of aspects of health, expanding from single individuals up to whole nations. The WHO highlights that obesity is responsible for 10–13% of deaths in different parts of the world [1]. Although a BMI above 30 kg/m$^2$ has been shown to increase the risk of death from heart disease, stroke, and some cancers, the questions about the strength of the relationship between high BMI and all-cause mortality as well as the optimal BMI in relation to mortality are still discussed [5, 6]. A recent meta-analysis looking at all-cause mortality spanning nearly 3 million people (and comprising 270,000 deaths) provided clear evidence that, relative to normal weight, both all grades of obesity (i.e., a BMI > 30 kg/m$^2$) and grade 2 and 3 obesity (i.e., a BMI 35–40 kg/m$^2$ and > 40 kg/m$^2$, respectively) were associated with significantly higher all-cause mortality [6]. However, grade 1 obesity (i.e., a BMI 30–35 kg/m$^2$) overall was not associated with higher mortality, and overweight (i.e., a BMI 25–30 kg/m$^2$) was reportedly associated with significantly lower all-cause mortality. These latter findings were not in line with those of a prior systematic analysis comprising 1.46 million white adults and over 160,000 deaths [5], including pooled data from 19 prospective studies adjusted for age, study, physical activity, alcohol consumption, education, and marital status, in which, overall for men and women combined, for every 5-unit increase in BMI, a 31% increase in risk of death was observed, with all-cause mortality being generally lowest with a BMI of 20.0–24.9 kg/m$^2$. Among others, the controversies between both extensive studies may well be the result of methodological challenges of applying different BMI categories for the normal-weight comparison as well as the limitations of the BMI in reflecting real body fat content and distribution [7]. Whatever discussions are arising from these data, the evidence altogether emphasizes the deleterious health consequences of severe obesity (i.e., BMI > 35 kg/m$^2$) which is indeed associated with increased all-cause mortality.

While a more precise BMI cut-off value or a better indicator of unhealthy body composition is identified, it is worth considering that the Global Burden of Disease Study 2010 (GBD), a multi-investigator collaboration for global comparative descriptive epidemiology, concluded that in the time period from 1990 to 2010 the GBD continued to shift away from communicable to non-communicable diseases (NCDs) and from premature death to disability-adjusted life years (DALYs) [8]. Dietary risk factors and physical inactivity collectively accounted for 10% of global DALYs in 2010 [9]. Not surprisingly, the comparison of risk factors during those decades showed that several dietary risks factors had moved up the rankings with the most prominent one being diets low in fruits [10]. Excess weight drastically augments a person's risk of developing a number of NCDs, like cardiovascular disease, diabetes and cancer, at the same time as causing diverse psycho-social problems and various physical disabilities. The WHO emphasizes that 44% of the diabetes burden, 23% of the ischaemic heart disease burden and around 7–41% of certain cancer burdens are attributable to overweight and obesity [3]. In the majority of European countries, overweight and obesity



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are responsible for about 80% of cases of type 2 diabetes, 35% of ischaemic heart disease and 55% of hypertensive disease among adults [11]. Moreover, the risk of developing more than one of these co-morbidities also increases when body weight is elevated. Noteworthy, excess body weight also puts patients at a higher risk of hypertension, dyslipidaemia, stroke, sleep apnoea, and other serious co-morbidities. In addition, a range of debilitating conditions such as osteoarthritis, respiratory difficulties, gallbladder disease, infertility, and psycho-social problems, which lead to reduced life expectancy, quality of life and disability, are extremely costly in terms of both absence from work and use of health resources [1, 12, 13]. Importantly, while until now life expectancy rates had continuously increased in the USA despite the obesity epidemic, a recent study shows that particularly among uneducated females life expectancy has actually decreased, with obesity likely representing one of the underlying reasons [14].

## Time for Action versus Complacency

Although overweight and obesity are considered the 5th leading risk for global deaths according to the WHO [3], clear opportunities for diagnosis and, consequently, treatment are being missed [15]. Since obesity truly is a 'gateway' to so many other disease areas, it will block, if appropriately managed and prevented, a major supply route to ill health [16]. Obesity should be viewed as one of the main targets for current efforts to combat the increasing NCDs epidemic [17]. As a harbinger of a multitude of disabling and fatal diseases, obesity represents one of the most relevant public health challenges of the 21st century, threatening to reverse many of the health gains achieved so far. We already lost the battle of halting the epidemic in the past century [18]. In order to curb this situation, obesity should be a top priority, with increased commitment for concerted, coordinated and specific actions. It is clearly imperative that obesity is targeted as an area for immediate action and priority. A comprehensive and pro-active strategy to deal with the challenges posed by the obesity epidemic in a sustainable way is urgently needed. Encouraging the instauration and implementation of programmes for early competent diagnosis, treatment and prevention is mandatory. Obesity is a serious, chronic disease that will only worsen without thoughtful and evidence-based interventions that address both individual citizens and the environmental context they live in. It is clearly imperative that obesity is targeted as an area for immediate action and priority for research, innovation and action at European level.

## Disclosure Statement

The authors declared no conflict of interest.

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