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1 Introduction

1.1 Research Problem

“Fat Camp” on MTV, “The Biggest Loser” on NBC, and “Huge” on ABC are reality television shows in the United States enjoying increasing demand. All three shows document about people trying to lose weight and doing more exercise to overcome overweight and obesity. Similar television shows exist in Europe, for example, the show “African adventure – German teens battle their way through”¹ that entertains during the current summer break family households in Germany. The reality television format presents unscripted dramatic or humorous situations, and documents actual events usually featuring ordinary people. The reasons for the great demand of these shows are manifold e.g., similarity to self, desire to see the contestant win or lose (Young and Irwin 2006, p. 335).

The large demand for such weight control reality television shows might be explained by Taylor et al.’s (2006) study results which report that in general, people are aware that they consume more food and calories and eat more frequently than what they consider good, but more so for others than themselves. They perceive their own and other people’s consumption behavior as irrational in the sense that they believe that they would be better off if they would consume less and care more about their future well-being (Stutzer 2007, p. 5). This irrationality implies that the big problem of overweight and obesity is consumers’ self-control. An article by Akst (2009) in the Wall Street Journal puts it in a nutshell: “No one puts a gun to our heads and commands that we overeat and lead the life of a couch potato.”² People do things as a result of circumstances, ignorance, and perhaps most of all, weakness of will.

¹ The television show is called in German: „Abenteuer Afrika – Deutsche Teenies beißen sich durch“. The show is about overweight adolescents who are living for three weeks with the African tribe Ju’hoansi in the Namibian Kalahari Desert.

² Couch potato is a person who watches a lot of television and does not have an active style of life. University of Cambridge (1995), *Cambridge International Dictionary of English*, Cambridge, UK: Cambridge University Press.

1.1.1 The Prevalence of Obesity

The prevalence of overweight and obesity³ is increasing at an alarming rate and has become a major challenge. Obesity, or excessive fatness, is not a new phenomenon; however, it is startling that overweight and obesity is increasing worldwide (Haslam 2007, p. 32).

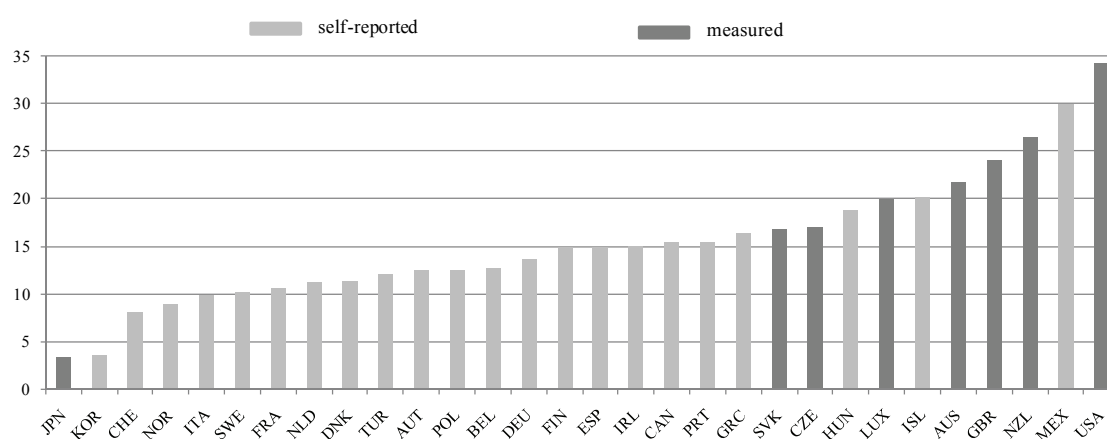
As of 2005, according to the World Health Organization (WHO), worldwide 1.6 billion adults are overweight, at least 400 million adults are obese, and at least 20 million children under the age of 5 years are overweight. For the year 2015 the WHO predicts 2.3 billion of adults to be overweight and 700 million to be obese. In Europe, 400 million adults are overweight and 130 million obese, and 10-13% of deaths are attributable to complications from obesity (World Health Organization 2006).

Half or more of the adult population is now defined as being either overweight or obese in 13 Organisation for Economic Co-operation and Development (OECD) countries: Mexico, the United States, the United Kingdom, Australia, Greece, New Zealand, Luxembourg, Hungary, the Czech Republic, Portugal, Ireland, Spain, and Iceland. By comparison, overweight and obesity rates are much lower in Japan and Korea and in some European countries such as France and Switzerland, although these countries' rates are increasing as well (see Table 1).

³ To calculate if a person is overweight or obese the body mass index (BMI) can be used which is a statistical measure of bodyweight on the basis on a person's weight and height. Details about the BMI can be found in Appendix 1.

The rate of obesity has more than doubled over the past 20 years in the United States, almost tripled in Australia, and more than tripled in the United Kingdom. Some 20-24% of adults in the United Kingdom, Australia, Iceland, and Luxembourg are obese, about the same rate as that prevailing in the United States in the early 1990s (see Figure 1). Obesity rates in many European countries have increased substantially over the past decade. In all countries, more men are overweight than women. However, in almost half of all OECD countries, more women are obese than men (Organisation for Economic Co-operation and Development 2010).

Figure 1: Obese Population Aged 15 and Older



Source: OECD Factbook 2010

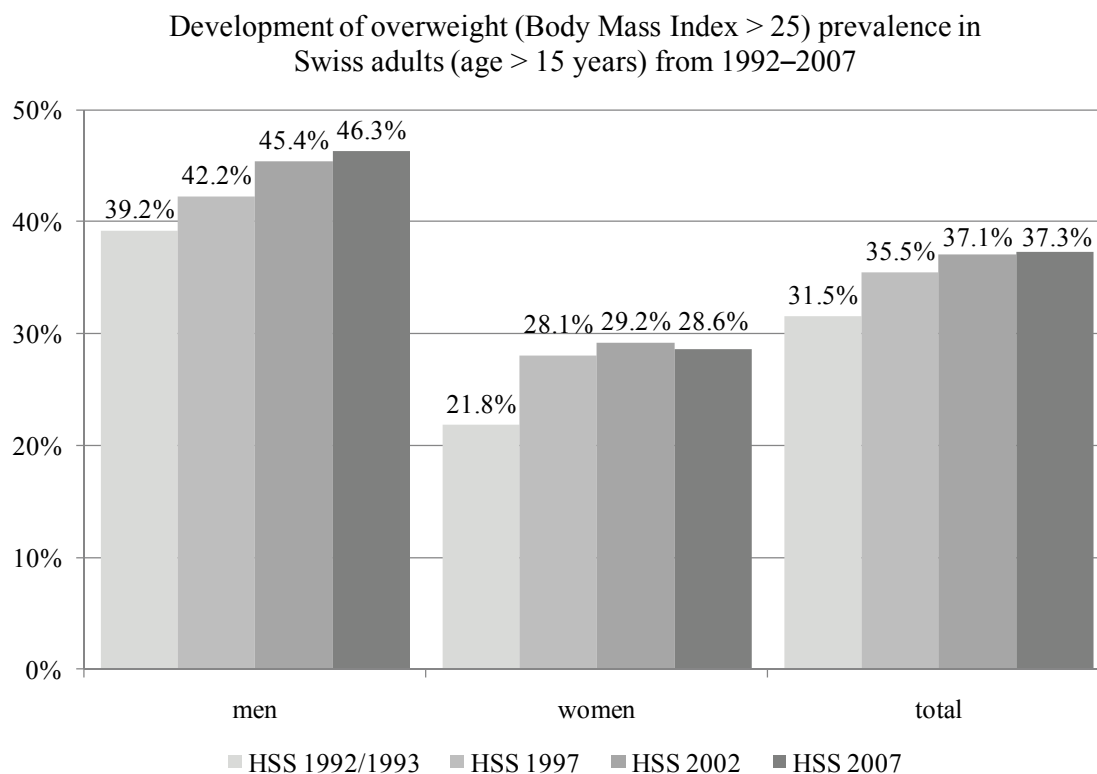
In Switzerland, the number of overweight people has increased over all age groups. The first health survey for Switzerland conducted in 1992/93 (age > 15 years) across Switzerland indicates an obesity rate of 5.6% and an overweight rate of 25.9%. The second survey in 1997 indicates an obesity rate of 7.0% and an overweight rate of 28.5%. Five years later, in 2002, a third survey shows an obesity rate of 7.7% and an overweight rate of 29.4%. The latest public poll was conducted in 2007 and yielded a prevalence of 8.1% for obesity, and 29.2% for overweight (Schneider, Venetz, and Gallani Berardo 2009, p. 6). According to the latest health survey, the overweight situation has stabilized (Swiss Federal Statistical Office 2008). Table 2 summarizes the development of overweight and obesity in Switzerland over the past 15 years.

Table 2: Overweight and Obesity in Switzerland (1992-2007)

1992/1993		1997		2002		2007	
Overweight	Obese	Overweight	Obese	Overweight	Obese	Overweight	Obese
25.9%	5.6%	28.5%	7%	29.4%	7.7%	29.2%	8.1%
Total: 31.5%		Total: 35.5%		Total: 37.1%		Total: 37.3%	

Source: Swiss Federal Statistical Office 2008

Figure 2 depicts the development of overweight (body mass index ≥ 25) over the period 1992-2007, showing that the portion of the Swiss population suffering from overweight has increased considerably over the past 15 years. This development is particularly obvious in men; a steady state seems to have been reached for women. Differences in overweight and obesity among individuals with different levels of education are remarkably consistent across countries (Sassi et al. 2009, p. 10). In most countries a gradient is observed: the lower the education attainment, the higher the likelihood of being obese or overweight. Switzerland is not an exception as the obesity prevalence also decreases with higher educational level in both genders (Christakis and Fowler 2007, p. 370).

Figure 2: Development of Overweight in Switzerland

HSS = Health Survey Switzerland

Source: OECD Factbook 2010

Overweight and obesity are chronic, which makes it difficult to tackle the problem. The fundamental cause of obesity and overweight is an energy imbalance between calories consumed and calories expended (Spiegelmann and Flier 2001, p. 531). Global increases in overweight and obesity are attributable to several factors, including a global shift in dietary patterns toward an increased intake of energy-dense food high in fat and sugars but low in vitamins, minerals, and other micronutrients and a trend toward decreased physical activity due to the increasingly sedentary nature of many forms of work, changing modes of transportation, and increasing urbanization (World Health Organization 2006).

Obesity is a major risk factor for many chronic diseases, including those listed in Table 3.

Table 3: Chronic Diseases Due to Overweight and Obesity

Chronic Diseases	Comments
Cardiovascular disease (mainly heart disease and stroke)	Already the world's number one cause of death, killing 17 million people each year
Diabetes	The WHO estimates that diabetes deaths will increase by more than 50% worldwide in the next 10 years
Musculoskeletal disorders	Especially arthritis and chronic back problems
Cancer	Especially endometrial, breast, colon, and liver

Source: World Health Organization 2006

The full long-term consequences of increased obesity rates at the aggregate level are not yet visible (Sturm 2002, p. 251). However, most studies show an increase in mortality rates associated with obesity, particularly with higher levels of obesity (Flegal, Carroll, and Ogden 2002, p. 1727). In Europe, obesity is responsible for 2-8% of all health costs (World Health Organization 2006).

1.1.2 Economic Costs of Overweight and Obesity in Switzerland

As Finkelstein et al. (2003, p. 219) point out, obesity is not only a health but also an economic phenomenon, and it entails important economic costs. The epidemic of overweight and obesity results in high costs to societies, as the resulting disabilities and diseases create enormous burdens for the health systems (World Health Organization 2006).

Health costs can be direct or indirect. Direct health costs are those for prevention, diagnostics, and treatments such as doctor or clinic visits. Direct treatment costs for obesity in Switzerland were estimated at 46.5 million Swiss francs for 2007. This sum includes drug costs of 24.5 million Swiss francs, counseling costs (e.g., nutritionists) of 3 million Swiss francs, and costs for surgical interventions at a minimum of 19 million Swiss francs (Schneider et al. 2009, p. 29). Indirect costs include wages, which overweight and obese employees lose because they are not able to work or are sick. Also, the value of future earnings that they cannot earn due to premature death can be subsumed under indirect health costs (Schneider and Schmid 2004, p. 3).

Other indirect costs include the substantial increases in hypertension, cardiovascular disease, and diabetes attributable to overweight and obesity. In recent years, researchers have investigated and demonstrated the link between weight gain and the develop-