Socioeconomic and Cultural Influences on the Prevalence of Obesity and Underweight

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With great pleasure, I welcome you to the inaugural issue of new peer-reviewed, scientific publication—Anthropology. How we can read on Home Page of the journal "Anthropology is the study of humankind and the behaviour of humans according to the diversity of societies from the origin to the present day. Anthropology explains both biological and sociocultural aspects of humans and related species like primates throughout the evolutionary period."

In recent years, many anthropological researches are concerned with prevalence and determinants of underweight, overweight and obesity. Overweight and obesity rate in many regions (eg. the US, Canada, Australia, the UK, South Africa, South America) has already exceeded 50% and a considerable number of studies have focused on the analysis of the causes and effects of excess body weight [1-3]. However, limited information is available concerning the prevalence and trends of of very low body weight for height among teenagers and young people in societies where extreme thinness is appreciated.

Excessively low BMI values also constitute a health risk. For years being underweight was associated with malnutrition, in particular of protein-energy type (PEM). However, malnutrition may result not only from insufficient food intake, but also from deliberately consuming very small amounts of food (following various diets). Prevalence of underweight is increasingly often reported not only among the poor, but also in groups of high socio-economic status. In the latter case it results from following fashion, which promotes extremely slim figure.

In Poland, as in many other European countries, obesity and overweight prevalence as well as average relative body mass is on the increase [4-6]. Simultaneously, the mass media create a contrasting image promoting slimmer and slimmer models and actresses, thus making the gap between an ideal and an average figure even wider [7].

In 2004, we carried out a test among female college/university students concerning factors correlated with the prevalence of abnormal body mass [8]. The findings revealed that the incidence of underweight was much higher than overweight or obesity (15.3% vs. 3.5%). High socioeconomic status increases a risk of underweight. 30% underweight, 70% normal-weight and 92% overweight or obese women answered "yes" to the question "Would you like to be slimmer?". The findings suggest that insufficient body weight in the studied group was culturally-determined—motivated by the desire of having a slimmer figure. In 2009, we repeated the tests, this time taking into account a higher number of factors potentially correlated with body mass (SES, eating habits, physical The sample included 1129 female students aged 20–24 from the south of Poland. 11.1% of the surveyed students were classified as underweight, 6.5% as overweight and 0.5% were obese. The risk of underweight increased together with the increasing level of parent’s education, it was also higher among women who prior to studying had lived in a town/city rather than in a village. In the case of self-rated financial situation, a negative relationship was observed. For students who rated their situation as very good or good, the risk of underweight The results indicate that the prevalence of thinness was higher than the prevalence of overweight and obesity, specially in students from families of the high status [9].

Almost 30% of surveyed students incorrectly assessed their body weight. Overestimation was more prevalent than underestimation (24.2% vs. 3.9%). Only 43.2% women from the underweight group considered their body weight as being too low, with the remainder perceiving their weight as correct. 5.9% underweight women assessed their body weight as correct, but they claimed to have too much fatty tissue on their abdomen, hips or thighs. Among normal weight women, 46.9% considered their body weight as correct, whereas 28.4% indicated that their weight was correct, but their abdomen, hips or thighs were too fat, 2.8% women. 17.7% judged their body weight as correct, 5.1% assessed their body weight as correct but they claimed that their abdomen, hips or thighs were too fat. In overweight group, 77.2% women assessed their body weight as too high.

Our result showed that BMI values above population average, even if they fit within the norm, are regarded by the students as too high. Many surveyed women, despite assessing their body weight as correct, were dissatisfied with their figure and thought they had too much fatty tissue on their abdomen, hips or thighs. The highest percentage of subjects expressed the preference to reduce thigh, waist or hip circumference; a significant percentage of women would like to have a lower weight.

The self-assessments of body mass as too high results in undertaking effort aimed at reducing it. The perception of body mass as too high prompts undertaking activities aimed at reducing it. Namely reducing the number of meals (mainly evening meals). Reducing the intake of products regarded as fattening (breads, sweets) and increasing the amount of water drunk daily. This suggests that students who assess their body mass as too high undertake efforts towards losing weight following dieting guidelines found over the internet. Simply, they try to eat less by limiting the number of meals daily although with no attention paid to the quality of the diet. No differences were found in the frequencies of recreational physical activity in relation to self-perception of body mass [10].

Similar results were obtained in other studies. from which quite a disturbing fact is emerging: that when it comes to control body mass very often irrational actions (skipping meals, eliminating certain foodstuff, restrictive diets) win over rational actions (undertaking physical activity, balancing meal contents) [11-14]. Moreover, such behaviour is frequently caused by not necessarily possessing excessive body mass in reality but by perceiving themselves as overweight.

Recent studies show that underweight or stunting can coexist with
overweight and obesity. Literature increasingly often makes references to a phenomenon of ‘the dual burden of body weight’, which describes the simultaneous occurrence of overweight and underweight in the same population. This issue is observed in May societies undergoing a transformation of their dietary habits. Even members of one family may significantly differ with respect to body mass, with one of them being overweight, and another one underweight [15,16].

These findings highlight the importance of appropriate dietary counselling and education in order to understand medical definitions of overweight for young women. There needs to be tailored strategies focused on preventing both extreme of BMI: overweight and underweight.

References