

# **Lifestyle choices for prevention of obesity**

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## **Introduction:**

Throughout most of human history, weight gain & fat storage have been viewed as signs of health & prosperity. Today, however, as standards of living continue to rise, weight gain and obesity are posing a growing threat to health in countries all over the world. It is so common that, it is replacing the more traditional public health concern, including under nutrition & infectious disease as one of the most significant contributors of ill health. The global epidemic of obesity is a reflection of the massive social, economic & cultural problems currently facing developing & newly industrialized countries, as well as the ethnic minorities & the disadvantaged in developed countries. Examination of the factors involved in weight gain & obesity in developed countries is crucial for predictions about the future impact in countries in the early stages of frequently dramatic socioeconomic change and provides a unique opportunity for taking preventive action.

## **Obesity as a public health priority:**

Globally *from 1980 to 2013* as per the systemic analysis published in the Lancet the prevalence of obesity and overweight has risen substantially in the past three decades, with marked variations across countries in the levels and trends in overweight and obesity with distinct regional patterns. The number of overweight and obese individuals increased from 857 million in 1980, to 2.1 billion in 2013. *In adults (28 % increase) and children (up by 47 %)*. The US topped the list (13%), China (around 46 million) and India (around 30 million) together accounted for 15 %. In India it is increased from 11% in NFHS- 2 to 15% in NFHS-3

## **Key drivers of obesity:**

Conceptually, the causes of obesity at the individual level are self-explanatory. Weight gain occurs when energy intake from food is greater than energy expenditure over a prolonged period of time, resulting in the accumulation of excess body fat. The world health report 2002 describes high blood pressure, high cholesterol, inadequate intake of fruit and vegetables, overweight or obesity, physical inactivity and tobacco use as the most important risks of non-communicable diseases. Five of these risk factors are closely related to diet and physical activity. Attempts to explain the large increases in obesity in the past 33 years have focused on several potential contributors, including increases in calorie intake, changes in the composition of the diet, decreasing levels of physical activity, and changes in the gut microbiome. Nutrition transition from a traditional diet to eating more processed, energy dense foods plays important role in weight gain. Nutrition transition is stimulated by a number of factors, e.g. reduced price of certain foods (oil/sugar), increased urbanization; that modifies lifestyle, food patterns and energy expenditure (45% of the population of low & middle income countries now live in urban areas), culture of obesity & overweight as signs of affluence, making high energy dense processed foods more available, accessible, desirable. These complex pathological processes reflect environmental and genetic

interactions, and individuals from disadvantaged communities seem to have greater risks than more affluent individuals.

**Consequences:**

Excess body weight is the sixth most important risk factor contributing to the overall burden of disease worldwide. The main adverse consequences are cardiovascular disease, type 2 diabetes, and several cancers.

**Addressing the problem of obesity:**

Obesity, with its array of comorbidities, necessitates careful clinical assessment to identify underlying factors and to allow coherent management. The epidemic reflects progressive secular and age-related decreases in physical activity, together with substantial dietary changes with passive over-consumption of energy despite the neurobiological processes controlling food intake. Effective long-term weight loss depends on permanent changes in dietary quality, energy intake, and activity. Neither the medical management nor the societal preventive challenges are currently being met. Obesity in low-income families originates at an early stage of life, possibly through unhealthy food selection and eating patterns and a sedentary lifestyle. Aside from economic considerations, a lack of knowledge about and a limited access to healthy food choices seem to be crucial aspects of the problem. Therefore, strategies against obesity need to encompass educational efforts to promote a healthy lifestyle and remove obstacles to the achievement of that goal for persons at high risk for obesity.

Effective prevention and management of obesity should therefore focus on –elements of the social, cultural, political, physical and structural environment that affect the weight status of the community or population, processes and programmes to deal with high risk groups and management protocol for individuals with obesity. Key strategies in obesity management are prevention of weight gain, promotion of weight maintenance, management of obesity comorbidities and promotion of weight loss. WHO has suggested three levels of prevention considering the complexities in obesity e.g. universal / public health prevention directed at everyone in the population, selective intervention directed at high risk group and targeted intervention directed at those with existing weight problems, and those at high risk of diseases associated with overweight.

Because of the established health risks and substantial increases in prevalence, obesity has become a major global health challenge. Not only is obesity increasing, but no national success stories have been reported in the past 33 years. This raises the question as to whether many or most countries are on a trajectory to reach the high rates of obesity seen in countries such as Tonga or Kuwait. Considering this; urgent global action and leadership is needed to help countries to more effectively intervene. A possible policy options for obesity prevention can be mandatory nutritional information labeling for energy-dense food, Controls on the advertising and promotion of food and drink products, agricultural policy reform to encourage production of cheaper fruit and vegetables, incentives to improve the nutrient composition of processed foods.

## References:

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