

Prevention of Overweight and Obesity at Global Levels in Particular to Gastronomic Opportunities

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Abstract

With the advent of the Coronavirus and in addition to many factors, stress also appears to be more pronounced in people's lives. In addition, in a life full of constraints, the weight gain is also a function of time spent at home. A stressful lifestyle and home-spend time affects not only the mental but also physical health. Therefore, a number of chronic diseases have manifested, of which the appearance of abnormal weight gain is increasing. Obesity and overweight once considered the problem of high-income nations but now increasing in low- and middle-income countries, particularly in urban areas. The prevalence of obesity nearly tripled between 1975 and 2016. It is estimated that over 340 million children and adolescents aged 5-19 were overweight or obese in 2016. Obesity rates in adults were found highest in several countries including Mexico, USA, New Zealand and others. In India, the prevalence of obesity is estimated around 40 %. The common health consequences of overweight and obesity are cardiovascular disease, diabetes mellitus, osteoarthritis, and cancer. The manuscript, therefore, first summarizes the nutritional suggestions for the prevention and treatment of overweight and obesity. Then it helps in practical implementation by presenting the possibilities offered by gastronomy. In doing so, we present foods that, with their energy and macronutrient content, greatly help to protect against overweight and obesity. Their other useful active ingredient contents are also important in achieving the normal body weight and optimizing energy levels. It is advised that an increased intake of energy-dense foods that are very rich in fats and sugars must be avoided by everyone. Further, the importance of daily regular physical activities should be highlighted in order to prevent overweight and obesity.

Keywords

Healthy lifestyle, Gastronomy, Nutritional recommendations, Obesity, Overweight, Special diet

1. Introduction

Nowadays, the rate of chronic diseases is increasing mainly due to the stressful lifestyle and also unhealthy eating. In addition to cardiovascular, gastrointestinal and other well known diseases, overweight and obesity are becoming more common in both sexes and all age groups [1, 2, 3]. This is emerging as a global problem all over the world, mainly due to poor nutrition and a lack of exercise lifestyle [4, 5, 6, 7]. The development of overweight and obesity can lead to several health disorders, such as diabetes mellitus, cardiovascular disease, osteoarthritis, cancer; and the body can become much more susceptible to the development of many diseases as well [8, 9]. Furthermore, several methods are now available to measure and treat the overweight and obesity [10, 11].

In addition to diagnostic procedures, a number of researches and recommendations for the prevention and treatment

of overweight and obesity have been made by experts [12, 13]. These recommendations differ in part according to the nutritional characteristics of the countries [14, 15, 16]. However, the recommendation provided by the nutrition pyramid is globally accepted [17].

It is also important to summarize foods that help prevent overweight and obesity. After that, we present foods that help maintain a healthy diet. By using our manuscript in practice, we can contribute to the inhibition of abnormal weight gain. The amount of food and food consumed should always be adjusted individually, based on the level of metabolism and physical activity, taking into account co-morbidities, during the maintenance of the special diet. To adjust the amount of energy and macronutrients, it is advisable to seek the help of a specialist, and then, following the basic recommendations, follow the guidelines for energy and macro-nutrient content using a nutrition table. For this reason, the manuscript helps to develop a fast and healthy form of eating that can help us achieve normal body weight.

2. Healthy food groups to prevent overweight and obesity

Cereals: Cereals are the sum of grains and baked goods made from them. Considering the nutritional recommendations, it is advisable to choose a croissant made from wholemeal flour, bread, pasta and other products. The consumption of brown rice is recommended as well. These products have a number of beneficial physiological effects on the body [18]. The growing role of cereals in human nutrition for healthy life is discussed by Pal and Judit [19].

Vegetables and Fruits: Fruits and vegetables are easily available throughout the world. The significance of fruits and vegetable in human health is delineated earlier [20]. Most fruits and vegetables or fermented fruits and vegetables are a great help in maintaining a healthy diet effectively. Due to their high fiber and fluid content, they help in digestion and have a positive effect on blood sugar levels. It is also recommended to consume vegetables and fruits in a variety of forms, taking into account their energy and macronutrient contents [21].

Milk and dairy products: Among milk and dairy products, it is recommended to consume reduced-fat products during the special diet. Thanks to the beneficial lactic acid bacteria, they have a beneficial effect on the intestinal flora, and thus also on digestion. They can also be used during cooking [22].

Meats, fish and eggs: Low-fat meats can be well incorporated into a healthy diet, which also helps prevent overweight and obesity. Consuming low-fat fish also provides the body with a complex protein that can be well incorporated into the diet. Of eggs, it is most recommended to consume egg white, which can be used for many foods [23].

The use of gentle kitchen technology, methods and environmentally sustainable ingredients also play an important role in food preparation. Therefore, the use of vegetable-based oils or the use of processes that reduce the amount of fat in the food is recommended. The excessive use of salt and sugar also needs to be reduced. It is pertinent to mention that alcohol should be avoided due to its high energy content. It is stated that water helps to maintain the body's balance, so fluid intake requires increased attention [24].

3. Foods and gastronomic suggestions to help prevent and treat overweight and obesity

In addition to formulating nutritional recommendations, it is also important that the requirements summarized in the manuscripts can be implemented in practice. Therefore, it is worth considering the possibilities provided by the science of gastronomy when preparing the food for human consumption (Figures 1-7). The meals are prepared solely in accordance with the principles of a healthy lifestyle and can be used well as part of the prevention and treatment of overweight and obesity. On the one hand, they supplement the daily need for nutrients, and on the other hand, they also offer the opportunity to maintain a special diet and achieve the desired goal on rushing days, taking into account the quantitative indicators of the food consumed [25].



Ingredients: Mozzarella: 50g; vegetablesalad: 200g; Energy: 184Kcal; Protein:13.8g; Fat: 11.8g; Carbohydrate: 5.1g

Figure 1. Vegetable salad with mozzarella (Own cuisine).



Ingredients: Whole meal wheat flour: 50g; yeast, water; mozzarella: 50g; ham: 50g; mushroom: 100g; vegetable salad: 200g; Energy: 440.5Kcal; Protein: 34.3g; Fat: 12.5g; Carbohydrate: 44.2g

Figure 2. Pizza made from wholemeal wheat flour with mozzarella (Own cuisine).



Ingredients: Chicken breast: 80g; mushroom: 50g; vegetable salad: 200g; Energy: 143.6 Kcal; Protein: 25.4g; Fat: 1.5g; Carbohydrate: 6.1g

Figure 3. Chicken-breast with vegetable salad (Own cuisine).



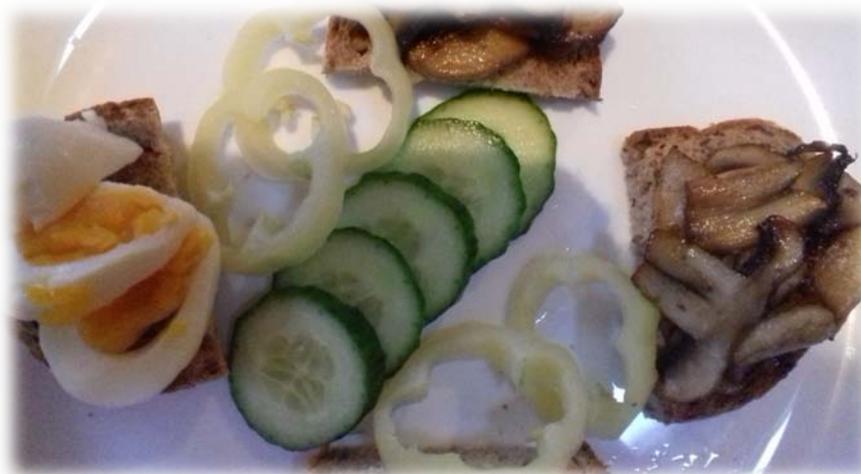
Ingredients: Banana 100g; mandarin 100g; orange: 200g Energy: 232Kcal; Protein: 3,2g; Fat: - g; Carbohydrate: 51g

Figure 4. Fruit salad (Own cuisine).



Ingredients: Banana: 100g; orange 100g; water Energy: 146Kcal; Protein: 1.9g; Fat: - g; Carbohydrate: 32.7g

Figure 5. Fruits moothie (Own cuisine).



Ingredients: Eggs: 60g; brown bread: 80g; mushroom: 50g; vegetables: 100g; Energy: 338.2 Kcal; Protein: 19.3g; Fat: 8,3g; Carbohydrate: 44.5g

Figure 6. Sandwich variations (Own cuisine)



Ingredients: Mozzarella: 50g; ham: 50g; croissant: 80g; tomatoes: 50g; avocado: 100g; Energy: 461.2 Kcal; Protein: 26.1g; Fat: 27.3g; Carbohydrate: 21,9 g

Figure 7. Sandwich variations (Own cuisine).

4. Conclusion

Overweight and obesity is a global problem and affecting the children as well as adults in developed as well as developing nations. Overweight and obesity are associated to more deaths worldwide than underweight. In our manuscript, we make suggestions for the prevention and treatment of overweight and obesity with the possibilities provided by nutrition science. Next, with the help of gastronomic science, we present foods that can be easily prepared in practice (vegetable salad with mozzarella; pizza made from wholemeal wheat flour with mozzarella; chicken-breast with vegetable salad; fruit salad; fruit smoothie; sandwich variations), which play the most important role in lifestyle change and mastering the special diet. Due to their useful active ingredient content (for example: fibre, protein, complex carbohydrate), these foods help to reach a normal weight and are easy to prepare and follow. It is emphasized that people should be informed about the importance of healthy diets and regular physical activity to maintaining good health. Furthermore, food whether originated from plant source or obtained from animals must be consumed in moderate quantity to maintain good health. With our manuscript, we hope to be able to provide support for people with overweight or obesity in the implementation of practical nutrition.

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