

Obesity and Fast-Food

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ABSTRACT

Obesity is one of the most significant public health challenges and becomes a public health problem. Consumption of fast-food, which have high energy densities and glycemic loads, and expose customers to excessive portion size, is frequently associated with weight gain, therefore, it is hypothesized that relative availability of fast-food is a risk for obesity.

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I. INTRODUCTION

In 21st century, obesity has been one of the most significant public health challenges and in most nations has become a public health problem. Tragically, adult obesity is more common globally than under-nutrition.

Overweight and obesity are categorized according to individual body mass index

(BMI), which is calculated as weight (Kg) divided by height (m²). The World Health Organisation (WHO) defined overweight as $30 > \text{BMI} \geq 25$ (kg/m²) and obese as $\text{BMI} \geq 30$ (kg/m²).[1]

According to the WHO (2014), there are around 2 billion adults overweight, of those 670 million are considered to be affected by

obesity and 98 million severely affected by obesity (BMI \geq 35 kg/ m²).

II. MATERIAL AND METHOD:

We analyzed correlation between obesity, fast-food and urban population, especially in young persons with declining physical labor especial in metropolitan area.

III. DISCUSSION AND RESULTS:

We aim to identify risk factors for cardio and cerebrovascular disease, and correlation with increasing population in the specific area, with bad dietary habits and inactivity.

Since the 1980s its prevalence has tripled in many countries of the WHO European Region, and the numbers of those affected continue to rise at an alarming rate.

In the United States, the prevalence of obesity has increased dramatically during the past few decades and is now a major health concern. [2]

According to „ Prevalence of Obesity Among Adults and Youth: United States, 2011-2014”, 36 % American adults and 17 % of the American youth is obese.[3]

Obesity is caused by a multitude factor contributing to the increased energy consumption and decreased energy expenditure, including:

Declining levels of physical labor as populations move from rural to urban settings and abandon walking in favor of driving, labor-saving devices in the home, and the replacement of active sport and play by television and computer games;

Higher levels of food consumption or an increase in energy density (particularly fat content) of the food we eat.

Consumption of meals eaten away from home, especially from fast-food restaurants, has increased in the United States since the 1970s.[4-6]

Eating out may lead to overconsumption and increase the risk of obesity in part because of larger portion size, high-energy-dense foods, and increased variety and preferred taste of foods.[7-9]

Also, the increasing availability of fast-food restaurants, bars, and convenience stores, can adversely affect dietary patterns, especially among less health conscious individuals.[10-12]

There is some evidence that there are more “fast food” restaurants in geographic areas in which obesity prevalence is high (e.g. low-income areas).[13]

Many factors, including behavioral, environmental, cultural and socioeconomic influences, affect people’s food choice. These choices, which affect the balance of energy intake, combined with genetic and metabolic factors, determine body weight and composition.[14]

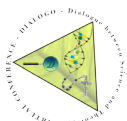
Particularly, fast-food consumption has been associated with poor diet quality and adverse dietary factors related to obesity, including higher intakes of calories, salt, fat, saturated fat, sugar-sweetened drinks.[15-16]

Most fast-foods contain substantially fewer vitamins and minerals such as vitamin A, carotene, vitamin C, vitamin E, calcium, magnesium, and zinc.

Some studies have reported that sodium intake was associated with elevated systolic blood pressure and diastolic pressure both among adults [17-22] and children [23-25].

Scientists claim that fast- food causes obesity by encouraging the sense of intentional overeating. A close explanation to the claim made by scientist explains that fast-foods are foods with 150 % more of high-density energy than any other traditional meal. High-density foods, tend to compel people to intake more calories than needed by the body.

The unhealthy ingredients of fast- food



are also available in large portion sizes which have grown parallel with the average body weight of a person from the 70s to date.

One of the main reasons people cannot stop eating fast-food is its low cost. As per a research conducted by the University of Washington, a diet containing 2000 calories of fast-food costs much less than a diet with 2000 calories of healthy food.

In the USA, obesity has taken the shape of an epidemic and is leading to major health complications such as premature deaths and illnesses like heart diseases, diabetes, fatty liver, arthritis, gallbladder diseases and joint disorders.

Also, in the obese and overweight population, the mortality rates are elevated. Data from the longitudinal Framingham Heart Study found a six to seven-year decrease in life expectancy for overweight individuals over the age of 40. [26]

Excess adiposity can be detrimental to psychological and emotional well-being, lowering an individual's overall quality of life.[27] Moreover, obese and overweight individuals tend to face discrimination regarding employment, education, healthcare and wages. [28-29]

Researchers have shown a correlation between fast-food, weight gain and insulin resistance. Participants in the „ 15- year study shows strong link between fast food, obesity and insulin persistence” who consumed fast-food two or more times a week gained approximately 10 more pounds and had twice as great increase in insulin resistance in the 15 year period than participants who consumed fast-food less than once per week.[30]

Fast-food frequency was lowest for white women (about 1.3 times per week) compared with the other ethnic and gender groups (about twice a week). Frequency was higher in African-Americans than in whites and in men than in women for every

examination year.[31]

In a study conducted by the University of California at Berkeley, it was found that children who had easy access to places where fast-food was sold were at increased risk to obesity. [38] If a fast-food restaurant was within a tenth of a mile from a school, the risk of obesity among ninth graders increased by 5.2 percent.

World Health Organization (WHO) has labelled childhood obesity as one of the most serious public health challenges of the 21st century. According to WHO, in 2010, there are an estimated 42 million children under five years old who are overweight, and this figure is increasing at an alarming rate.³¹ In 2007-2008, in Australia, around eight percent of children were estimated to be obese and 17 percent overweight.[32]

Children who are overweight or obese are likely to grow into obese adults who risk developing a number of chronic diseases, such as diabetes and cardiovascular diseases. [33]

An increasing number of overseas findings agree that television commercials for sweets, snacks and fast-food are the mainstays of advertising which target children.[34] According to a study by the American Kaiser Family Foundation, half of all advertising time on children's television is devoted to food advertising, none of this includes advertisements for vegetables or fruits.[35]

A Children's Food Campaign and a British Heart Foundation concluded that food marketing to children is almost always for unhealthy products and this plays an essential role in encouraging unhealthy eating habits which are likely to continue into adulthood.[36]

A study that was just published in the American Journal of Clinical Nutrition didn't find that fast-food consumption in children was independently associated with being

overweight or obese. [37]

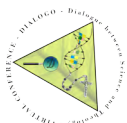
CONCLUSION:

In many countries, obesity caused by fast food has increased because of the easy availability of fast food in the grocery shops, gas stations and dispensers everywhere. So it is difficult to escape from the lure of these delicious advertisements and showcases.

The rapid increase in obesity prevalence coupled with the expanding fast-food industry has caused many to posit a potential link between the two, in addition to causing great public health concern.

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