Child Obesity

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**Introduction**

The issue of child obesity has been a source of scourge for the global health care because it has serious health-related implications for children suffering from it (Ulijaszek, 2015). Obesity among the children has been known to cause serious health-related problems like type 2 diabetes, cardiovascular implications, and in some cases cancer (Drewnowski et.al, 1992). The underlying factors of child obesity are genetic, social, ecological, food production and dietary patterns (Ulijaszek, 2015). Widespread public campaigns to highlight issue such as child obesity have a little impact so far. Although food retailers have many low-priced products to attract buyers, the foods are nutrient-poor, causing to increase obesity among children (Marti, Martinez-González & Martinez, 2008). Due to an increase in consumer demand, the food that is growing now is just to cater to the needs of the consumers, neglecting the issue of obesity that it is causing among children. For instance, the mixing of sugar in many foods is an apt example of the change that has been brought in food manufacturing. This instance of adding sugar to foods renders them unhealthy. As a result of the consumption of unhealthy diet, children are now facing dental health challenges along with obesity-related health implications (Ulijaszek, 2015). The quality of food consumed helps to understand the health and nutrition status of a child. The focus of many international bodies monitoring public health has been to bring improvement in public health along with addressing the issue of child obesity (World Health Organization, 2003). This paper intends to overview the relationship of food nutrients, and food technology with a growing issue like child obesity. Additionally, this paper would suggest potential strategies to bring improvement thus addressing the scourge of child obesity.

**Discussion**

**Foods and Farming Practices- Nutrients’ Quantity versus Quality**

Hundreds of thousands of years ago, human beings identified that growing crops could serve as the primary source of food for mankind. This fact is reflected today as cereal crops account for more than 50% of calories in global food consumption. The agriculture industry is very well aware of the resources that go into the production of healthy and nutrient-rich foods. These resources are clean water, healthy seeds, and a healthy and nutrient-rich soil apart from the precious time and planning that go into the food production process (D’Hose, 2014). However, any food or plant that is grown using poor soil that has been stripped off all the minerals and nutrients is bound to be nutritionally poor (D’Hose, 2014). Over the past few decades, the human population has burgeoned at a rapid pace (Lawrence et.al, 2015). As a result of this exponential growth of human beings, the demand to cater to the nutritional and dietary needs of such a large population also increased significantly. Farmers and agriculture industry, in order to provide food to such a big population, started employing synthetic fertilizers and pesticides that decreased the quality and nutrition of the food that was grown (Lawrence et.al, 2015). Furthermore, the practice of genetic modification to enhance the yield of the farms has also significantly affected the nutrients of the yield. It is a common practice that the foods are picked prior of becoming ripe which also accounts for the loss of nutrients among them. For instance, tomatoes that are picked before ripening are found to have less than 50% of vitamin C in comparison to the tomatoes that are picked after ripening. Researchers have found a significant relationship between lower levels of vitamin C and child obesity. As a result, major health-related complications arise in children due to obesity. These complications are type 2 diabetes, several cardiovascular diseases, and cancer (Basu et.al, 2013). Therefore, a change in farming practices and the use of modern farming technology, unfortunately, has resulted in cropping up health-related issues among children due to obesity. The change in farming practices and technologies was intended to cater to the hunger needs of a large population overlooking the fact that nutrition-rich food is a basic necessity for healthy sustenance. Certainly, this issue was highlighted by many international bodies that overlook global health-related issues years ago (World Health Organization, 2003). The international health monitoring bodies highlighted that due to increasing urbanization and free trade agreements between different countries would that compromise would be made on the quality of the food grown in order to address the demand of quantity. For instance, consider the example of New Zealand, a food secure country that produces enough food that not only feeds its population of 4.8 million but could also feed another 40 million people. However, the picture of nutritional status of New Zealand portrays a grim a picture. A study conducted during the year 2011 revealed that more than 30% of children were found obese, while more than 60% of the households were declared food secure.

**Food Processing**

Under the notion of "farm to fork", the food that has been growing in the farms is processed using modern technological advancements (Monteiro et.al, 2013). The food that comes out afterward is safe, with enhanced food texture, color, taste, and flavor. Additionally, food processing using technology aims to bring down the prices of food significantly. Undoubtedly, global industrialization has helped agriculture industry to make huge fortunes. However, food that has been processed using modern technologies is found to be nutritionally poor (Monteiro et.al, 2013). For instance, the food that is processed using modern technologies is found to have significantly lower levels of protein and fiber. Consider the example of processing and refining of whole grains. During the refining process, bran and germ are extracted from the endosperm rendering it nutritionally poor. Moreover, foods that are processed highly using technologies are energy-dense and contain significant levels of sugar, salt, and saturated fats (Monteiro et.al, 2013). Sugars are added to the processed foods to address the taste needs of human beings. Foods that contain a high level of sugars and fats are significantly associated with an increase in body weight and increase obesity levels among children due to their poor nutrition properties. Additionally, food with remarkably increased levels of salt is known to increase blood pressure levels and obesity among children. Processed foods contain multiple preservatives and additives for the food to become more appealing towards the consumers and to further enhance the taste. Sadly, the addition of preservatives and additives to increase the shelf life of the food is linked with depleted nutrient density of the food. Therefore, giving rise to multiple health-related issues among children such as obesity.

**Strategies to improve nutrition and reduce obesity levels**

**Food literacy**

The foremost and paramount influential factor regarding the dietary habits of a child is the family environment. By adopting modern lifestyles there is little to no time spent on food preparation in homes and dependence on processed foods has increased (Vidgen & Gallegos, 2014). It is therefore essential to bring awareness to families regarding food and nutrition. This is also called food literacy. It is widely agreed between researchers that within communities where individuals are equipped with the know-how of food nutrients make healthier food choices. For increasing awareness of and equipping the mass population with food literacy, randomized controlled interventions intended to reduce obesity levels and within schools must be undertaken (Vidgen & Gallegos, 2014). Apart from reducing obesity levels, children should be acquainted with healthy weight gain strategies and dietary habits (Vidgen & Gallegos, 2014). Furthermore, it is incumbent on food monitoring authorities to replace food that is less in nutrition levels from the school and replaced with more healthy foods. Bringing change through interventions from school would be reflected by a change in widespread dietary habits.

**Changes in the food supply**

There is a dire need to bring a significant amount of positive changes in the food supply. The potential benefit of these changes would be that individuals would be able to make choices that are healthy for them (Swinburn et.al, 2013). Furthermore, bringing changes in dietary patterns of children would bear positive effects on the entire public health care domain. The changing in the food supply chain means that the food and agriculture industry must work with government departments and other non-governmental organizations. Food supply chains and systems are complex with several interconnected global nodes. Therefore, it is necessary to undertake global level policy initiatives to bring systematic change in the food supply. Domestically, local businesses and small farms should be encouraged and supported in every possible way to bring these changes.

**Conclusion**

Taking into account the discussion above, it is evident that foods that are rich in nutrients have a profound impact on entire public health status. Furthermore, the quality of food is determined by several environmental factors. The food and agriculture industry must understand that the demand and supply of foods can still be fulfilled by reconciling unsafe food practices and technologies with standards that are deemed safe and acceptable for human consumption. Should the food and agriculture industry adopt these changes; it would certainly help reduce growing obesity levels among children and subsequent diseases like type2 diabetes, cardiovascular implications, and cancer. To promote a healthy life, it is reasonable to look to food patterns rather than individual nutrients. This would help in early disease prevention and bringing down obesity levels among children. As far as bringing changes to food supply is concerned, all concerned stakeholders must work together with the food industry. Food industry working in tandem with the concerned stakeholders would result in the production of safer and healthier food products and enable consumers to make healthier life choices. Furthermore, cross-disciplinary research would help to improve food supply and reduce the growing obesity levels among children.

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