



EMPTY CALORIES AND ITS IMPACT ON HEALTH AND WELL BEING

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ABSTRACT

Healthy foods are laboriously produced. This endeavor assures food safety. This starts with safe, well-controlled raw materials. These include maintaining low storage temperatures, clean working conditions, high cooking temperatures, and safe and hygienic logistics. Consumers may improve food safety by taking a few simple steps to protect their home-cooked meals. However, food safety involves other factors. These include arsenic in drinking water, alkaloids in plant foods, and heating-induced carcinogens. Arsenic in water is another example. Raw materials may potentially be polluted with cancer-causing chemicals. In addition to these underlying food issues, eating, which is also a social activity, may improve one's well-being, which is essential to a healthy existence. Because eating is sociable. Healthy living and a nutritious food are essential for long life. Unfortunately, modern people have become accustomed to eating in a way that harms their health. Due to lifestyle changes, people have less time to consider if their diet is healthful. Globalization and urbanization have had a major impact on people's eating patterns, leading many to eat high-calorie, high-end "junk foods." The study on the health risks of such high-calorie meals has provided insight on how to avoid them, but the attempts have been unsuccessful. In emerging nations, where coronary artery disease and diabetes mellitus are on the rise, junk food intake is a prominent contributor. This is a major element in the rise of illnesses like these.

KEY WORDS: *Empty Calories, balanced diet, dietary fiber, healthy lifestyle, macro-nutrients, micro-nutrients, bio-availability.*

INTRODUCTION

In addition to a great number of other socioeconomic factors, a diet of high quality is of the highest relevance for healthy growth as well as the maintenance and protection of one's health over the long term. When we talk about the many facets of the quality of meals, the one that has the biggest influence on an individual's health is the part that deals with the safety of the foods. It is possible for either the chemical hazards or the biological threats to produce immediate damage, or they may induce damage that becomes chronic over a longer period of time. During the first few years of a child's life, a healthy supply of nutrients is essential because this is the time when the fundamental programming and development of the body takes place. Because all organs, including the nervous system in its entirety, are formed during this time, it is imperative that the child receive a healthy supply of nutrients. Nearly all nutrition societies recommend adhering to the principle that one should consume a diet that is balanced in order to ensure that one receives an adequate amount of both energy and nutrients. This diet allows you to consume food from all of the following food groups: vegetables and legumes (beans), fruit, grains and cereals, chicken, fish, eggs, tofu, nuts, seeds, milk, cheese, yoghurt or alternatives, and water. This nutritious diet provides a sufficient quantity of all of the important nutrients, including protein, fat, carbohydrates, vitamins, minerals, and trace elements, in an

appropriate proportion. Dietary fiber and secondary plant metabolites are two examples of compounds that do not undergo digestion and, as a result, have the potential to contribute to a healthy lifestyle. For this reason, the fundamental purpose of high-quality diet should be to supply sufficient quantities of all macro- and micronutrients. The bioavailability of the nutrients must be sufficiently high, and the food must not be contaminated with dangerous degradation products, which may be formed during the preparation of the meal or when it is heated. These products may be produced when the food is either being heated or prepared.

What exactly is a calorie without nutritional value?

At the present time, a significant number of the foods and beverages that are consumed are high in calories that originate from solid fats and/or added sugars. These high-calorie foods and beverages are consumed in high Solid fats and added carbs both contribute to the diet with additional calories, but very few or no nutrients are provided by these foods. Because of this, it is common practice to refer to the calories that originate from solid fats and added sugars as "empty calories" in a diet. By increasing awareness of added sugars and solid fats, we may be able to enhance the quality of the food and beverages one eats on a regular basis.

Solid fats are differentiated from liquid fats by their ability to maintain their solid state at normal temperature. Some examples of solid fats are butter, beef fat, and shortening. In some of the foods consumed solid fats that have formed spontaneously. They are also able to be included into the food while it is being prepared or while the food company is in the process of processing the meal.

During the processing or preparation of meals or beverages, it is possible that extra sugars or syrups will be added. These are what are called "added sugars."

A food is considered to be a source of empty calories, as a general rule of thumb, if it does not include any nutrients at all, or if the calories from sugar and fat that are included in the food outweigh the nutrients that are present in the meal.

The following are some examples of meals and beverages that are mostly composed of foodstuffs that have little nutritional value other than the calories that they contain:

- Soft drinks, sports drinks, sweet tea, lemonade and energy drinks
- Alcohol
- Food from fast-food restaurants and other types of junk cuisine
- Sugary foods such as chewy sweets, which can be either sweet or sour, as well as hard candies.
- sweets like pies, cookies, and donuts for dessert.

Why are calories that don't contribute anything to the diet such a terrible thing?

"One of the major problems with empty calories is that oftentimes they are consumed in excess without a person even knowing that it is happening," says Ramirez. This should serve as a caution. You won't just find them randomly in obvious places like desserts, for instance; you have to look for them. Empty calories may also be present in the foods that are consumed on a regular basis, such as drinks, breakfast items, snacks, and sauces. These can all be considered to be examples of daily meals, often referred to calories that have no real purpose as "sneaky calories."

ingesting an excessive quantity of any sort of food over a longer period of time can, of course, lead to health concerns. Nevertheless, ingesting an excessive amount of foods that give no advantages to one's health could have effects for one's health if done so frequently.

Because empty calories can be found in such a wide variety of foods, when you eat meals that contain empty calories, you almost always consume a large quantity of those calories. This is because empty calories have no nutritional value. According to Ramirez, this is one of the most common factors that might make it difficult for a person to reduce their weight or cause them to gain weight.

In addition to this the body processes foods high in empty calories, particularly sweets, very quickly. This means that consuming foods high in empty calories will not make you feel full for nearly as long as it would if you ate other types of foods. Eating meals that don't make you feel full is an easy method to consume more calories per day than your body actually requires, which can lead to weight gain if the pattern is continued. If you don't want to put on weight, steer clear of meals that don't make you feel satisfied after eating them. If you only need a short burst of energy and you ingest a few calories worthless in terms of nutrition, that's one thing. On the other hand, we don't generally consume these sorts of meals in this fashion," Ramirez goes on to say.

Then there's the issue of having overwhelming cravings for particular kinds of food. You're dehydrated, yet the one and only thing you want to drink is a huge glass of sweet tea. You've definitely experienced this situation before: you're thirsty, but the only thing you want to drink is sweet tea. Or when you are so hungry that the only thing that sounds appetizing is the bag of Doritos that you have stored in the far back of the closet.

"It's possible that your brain has become addicted to certain foods because of how rewarding they are," said the doctor. "It's possible that your brain has become addicted to certain foods." However, if you consume a diet that is primarily composed of foods that do not provide important nutrients, these cravings may be your body's way of requesting that you eat something that does provide these nutrients. Since empty calories do not supply you with these nutrients, your body is requesting food that does provide them in order to satisfy its needs. "Regardless of the underlying cause, these cravings encourage excessive eating, which in turn leads to weight gain," explains Ramirez.

Consuming an excessive quantity of calories that have little to no nutritional value can lead to rises in blood sugar as well as an increase in inflammation. Both of these factors can contribute to the development of chronic health conditions such as diabetes and heart disease.

Due to the prevalence of fast-paced lifestyles and eating habits in today's society, avoiding the consumption of empty calories is something that is much simpler to say than it is to really accomplish. However, Ramirez provides some suggestions for exchanging those items that are full of unnecessary calories for alternatives that are healthier:

Embrace the technique of meal planning and the slow cooking way of preparing food. It is quite simple to consume an excessive number of foods that have no nutritional value if you have a diet that consists of a diet that is largely formed of processed meals. Cooking your own food at home is not only a great choice, but it is also a great strategy for ensuring that your meals are healthier on the whole. Cooking your own food at home is a brilliant approach. If you find that you are running short on time in the evenings, you might want to consider making dinner in a slow cooker. If you discover that you don't have much time for lunch, you may profit from cooking sandwiches in advance because they are simple to prepare and healthful.

Avoid getting drunk by consuming alcohol in excessive amounts. Keeping alcohol use to a minimum is a vital component of a healthy lifestyle, and it is also an efficient technique for reducing calorie intake that isn't from healthy sources. Keeping alcohol usage to a low also helps minimize the risk of cardiovascular disease. The consumption of alcohol is connected with the consumption of seven calories for every gram of alcohol consumed; nevertheless, alcohol does not include any calories that have any health advantages.

"We want the majority of what we eat to provide not only the calories we require for energy but also the nutrients, vitamins, and minerals we require to live," adds the nutritionist. "This is the ideal situation." According to Ramirez's explanation, this implies that it is extremely important to place a focus on natural meals and to make an attempt to minimize intake of an excessive number of calories that have been processed or that serve no purpose.

Which kinds of meals have extra amounts of sugar and solid fats added to them?

The addition of solid fats and sugars to a meal or beverage has the potential to make it more appetizing; nevertheless, this may also result in a large increase in the total number of calories that the food or beverage contains. The following are some examples of foods and beverages that are rich in calories yet offer little in the way of nutritional value to those living in the United States:

- Desserts like cakes, cookies, pies, and donuts all include additional sugars in addition to the solid fat that they already contain.
- Beverages such as soda, energy drinks, sports drinks, and fruit drinks all have additional sugars in their formulations.
- Pizza, which also contains solid fat, cheese, which comprises of solid fat, etc.
- The solid fat in ice cream is balanced out by the extra sugars that are mixed into it.
- All of the following are examples of foods that include solid fat: sausages, hot dogs, bacon, and ribs.

On the other hand, many of these meals and beverages may be obtained in versions that have less solid fat or no added sugars at all, making them preferable options for individuals who are attempting to reduce the number of calories they take in. For instance, low-fat cheddar and low-fat hot dogs are both available at the supermarket. You could drink water, milk, or sugar-free soda if you want a beverage other than one that contains sugar, but sugar-containing beverages are not a good option. Check to determine whether the reduced-calorie version of these items has less calories than the regular version of the product.

OBJECTIVES OF THE STUDY

1. To the study of the Food and its effect on Well-Being
2. To the study of the foods that are mostly empty calories

What precisely does it mean when people talk about "empty calorie foods"?

It is generally accepted that the bulk of the calories that are contained in sweets and beverages fall into the category of being empty calories. People commonly refer to items like these as "empty calorie foods." However, other foods that are high in important nutrients may also contain foods that are high in empty calories due to the presence of added sugars and solid fats in the food. These foods can contribute to the overall calorie content of the food. The following are some examples of meals that are high in calories but low in calories that don't contribute anything to the body's function and yet still offer the body with the nutrients it needs:

Food with some empty calories	Food with few or no empty calories
Sweetened applesauce (contains added sugars)	Unsweetened applesauce
Regular ground beef (75% lean) (contains solid fats)	Extra lean ground beef (95% or more lean)

Fried chicken (contains solid fats from frying and skin)	Baked chicken breast without skin
Sugar-sweetened cereals (contain added sugars)	Unsweetened cereals
Whole milk (contains solid fats)	Fat-free milk

If you choose healthier choices, such as unsweetened applesauce or ground beef with a greater percentage of lean meat, you will be able to keep your intake of added sugars and solid fats to a minimum, which will help you maintain a healthy weight.

It's not a big deal to take in a few more calories without adding much value here and there, but the average person takes in far more than the amount that is deemed healthy. It is of the utmost importance to maintain an intake of empty calories at a level that is in line with your requirements for the number of calories as well as the nutrients. You may cut down on the number of calories you take in by consuming meals and drinks that are low in nutritional value less frequently or by decreasing the quantity of food and drink that you take in. Both of these strategies can help you lose weight.

Diseases That Can Be Traced Back to Certain Foods

There are a variety of diseases that have been associated to particular diets, and these diseases are discussed in the medical literature. The use of these foods does not directly cause a number of these diseases; rather, it only enhances the probability that a person will get ill at some point in their life. These diseases can develop as a result of an excessive supply of food in general (for instance, obesity can be caused by an excessive supply of energy), or they can be related to the consumption of particular foods or nutrients (diabetes is related to the consumption of fat and sugar; dental decay is related to the consumption of sugar; gout is related to the consumption of meat and fish); these are all examples of diseases that can develop as a result of an excessive supply of food. In addition to the function that food performs, other factors, such as genetic and inherited traits, play a considerable effect in the development of this type of disease. In addition to this, it is also known that this can lead to the development of cancer or hyperlipidemia. Food intolerances, on the other hand, are the consequence of a direct response to particular components of certain meals. This group includes conditions such as an intolerance to histamine or lactose, both of which are affected differently depending on the concentration. Other types of intolerance, such as allergies, are largely unrelated to the degree to which a person is exposed to the substance that causes intolerance in them. People have the potential to develop sensitivities to allergens in a wide variety of foods, including peanuts, soy, milk, prawns, fish, and other seafood and shellfish. There is a discussion on the most prevalent forms of food allergies, such as those to peanuts, soy, milk, shrimp, fish, and a variety of other foods. Immunoglobulin E, more commonly referred to as Ig E, is the primary mediator of the allergic response. In addition, diagnostic applications have been found for this antibody. It is possible for certain contaminants to cause the development of acute hazardous effects if they are consumed. The most hazardous ones are those that originate in microbes and include campylobacter, salmonella, listeria, E. coli, Vibrio cholerae, noroviruses, parasites, and prions. Being exposed to chemical pollutants such as mycotoxins, aquatic biotoxins, cyanogenic glycosides, furocoumarins, and pyrrolizidine alkaloids is also not a good idea. Mycotoxins may be found in almost any environment; the concentration at which they are present is the single factor that determines whether or not they pose a risk to human health. Those that originate from warmer and more humid environments have a greater chance of containing aflatoxins compared to those that originate from locations with a lower average temperature. They are most frequently discovered on cereals and nuts that have either been improperly prepared or that have not been stored in dry conditions for the necessary period of time. It is the mycotoxin known as aflatoxin B1 that is responsible for the majority

of the harm that is done to human beings. Arsenic, which falls under the category of inorganic contaminants, is the component that causes the most cause for concern. It has been found in a variety of nations all over the world, and there is a possibility that it is present in ground water in some of those countries. Other foods may also become tainted with arsenic if they are irrigated. It is possible to eliminate arsenic from water by treating it with the appropriate chemicals and procedures.

Safer Food

The World Health organization (WHO) has provided consumers and food manufacturers with a set of rules that they may adhere to in order to mitigate the negative effects that some foods have on people's health. There are a variety of diseases that have been associated to particular diets, and these diseases are discussed in the medical literature. It is important to emphasize that eating food does not directly cause several of these diseases; rather, it only enhances the risk that a person will get ill at some point in their lifetime. These diseases can develop as a result of an excessive supply of food in general (for instance, obesity can be caused by an excessive supply of energy), or they can be related to the consumption of particular foods or nutrients (diabetes is related to the consumption of fat and sugar; dental decay is related to the consumption of sugar; gout is related to the consumption of meat and fish); these are all examples of diseases that can develop as a result of an excessive supply of food. In addition to the function that food performs, other factors, such as genetic and inherited traits, play a considerable effect in the development of this type of disease. In addition to this, it is also known that this can lead to the development of cancer or hyperlipidemia. The World Health organization (WHO) has just published a report in an effort to encourage safe practices for food handling. Some of the "five keys to safer food" are listed below for your convenience: a. Keep clean (wash your hands before handling food and often during food preparation; wash your hands after going to the toilet; wash and sanitized all surfaces and equipment used for food preparation; protect kitchen areas and food from insects, pests, and other animals), b. Separate raw and cooked foods (separate raw meat, poultry, and seafood from other foods; use separate equipment and utensils such as knives and cutting boards for handling raw foods; store food in c) temperature-controlled environments Verify that the fluids coming off the meat and poultry are clear, rather than pink, and discard any that are. In an ideal situation, use a thermometer; reheat cooked food thoroughly), d. Keep food at safe temperatures (do not leave cooked food at room temperature for more than two hours; refrigerate promptly all cooked and perishable food (preferably below 5 °C); do not store food for too long even in the refrigerator; do not thaw frozen food at room temperature), e. Use safe water and raw materials (use safe water or treat it to make it safe; select fresh and wholesome foods;

Both Food and Well-Being of the Body The satisfaction we derive from our food is an important contributor to our overall health and happiness.

CONCLUSION

This international problem of consuming junk food on a large scale and its impact on health demands attention and education on health, which may greatly help to lowering the amount of junk food that is consumed and transitioning to healthy eating habits for enhanced quality of life. Information should be provided that focuses on eating habits, nutritional considerations, the quality of unhealthy meals, the impact on health caused by these foods, and preventative actions in order to raise awareness and provide health education for the purpose of effecting a change towards healthier eating practices. This information should be provided in order to effect a change towards healthy eating practices. The issue of junk food and its effects on health have been examined using a range of sources, and the findings have been organized and presented in such a way as to focus an emphasis on the negative repercussions of junk food as well as the actions that should be done to adopt a better way of life.

REFERENCES

- 1) National Restaurant Association. Rapid response. Available at: www.restaurant.org/pressroom/rapid_response.cfm?ID=607
- 2) Goyal A, Singh NP. Consumer perception about fast food in India. An exploratory study. *Brit Food J.* 2007; 109 (2): 182-95.
- 3) Powell LM, Nguyen BT, Han E. Energy intake from restaurants: demographics and socioeconomics, 2003-2008. *Am J Prev Med.* 2012; 43 (5): 498-504.
- 4) Vikraman S, Fryar CD, Ogden CL. Caloric intake from fast food among children and adolescents in the United States, 2011-2012. *NCHS Data Brief.* 2015; 213: 1-5.
- 5) Sebastian RS, Wilkinson EC, Goldman GD. US adolescents and My pyramid: associations between fast-food consumption and lower likelihood of meeting recommendations. *J Am Diet Assoc.* 2009; 109: 226-30.
- 6) Euromonitor Passport Database. Fast Food in Singapore; 2016. Available at: <https://go.euromonitor.com/passport.html>
- 7) Wang Y, Wang L, Xue H, Qu W. A Review of the Growth of the Fast Food Industry in China and Its Potential Impact on Obesity. *Int J Environ Res Public Health.* 2016; 13 (11): 1-16.
- 8) China Fast-Food Restaurants Market: New Market Research Published. Available at: <http://clients1.ibisworld.com/reports/cn/industry/notsubscribed.aspx?indid=940>
- 9) Naidoo N, Dam RMV, Sheryl NG, Tan CS, Chen S, Lim JY, et al. Determinants of eating at local and western fast-food venues in an urban Asian population: a mixed methods approach. *Int J Behav;*14(1):1-12.
- 10) Nipun TS, Debnath D, Miah MSUH, Kabir A, Hossain MK. Bangladeshi Student's Standpoint on Junk Food Consumption and Social Behaviour12 (1): 68-75.
- 11) Bipasha MS, Goon S. Fast food preferences and food habits among students of private universities in Bangladesh. *South East Asia J Public Health.* 2013; 3 (1): 61-4.
- 12) Guthrie JF, Lin BH, Frazao E. Role of food prepared away from home in the American diet, 1977-78 versus 1994-96: changes and consequences. *J Nutr Educ Behav.* 2002; 34 (3): 140-50.
- 13) Food Standards Agency. Consumer Attitudes to Food Standards: Wave 8. January 2008. Available at: <http://www.food.gov.uk/multi media/pdfs/cas2007ukreport.pdf>.
- 14) Smith KJ, McNaughton SA, Gall SL, Blizzard L, Dwer T, Venn AJ. Takeaway food consumption and its associations with diet quality and abdominal obesity: a cross-sectional study of young adults. *Int J Behav Nutr Phys Act.* 2009; 6: 29.
- 15) Paeratakul S, Ferdinand DP, Champagne CM, Ryan DH, Bray GA. Fast-food consumption among US adults and children: dietary and nutrient intake profile. *J Am Diet Assoc.* 2003; 103 (10): 1332-8.