



COMFORT FOOD IN CHILDREN'S NUTRITION – BENEFIT OR THREAT?

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Abstract: *Comfort food products appeared as a reaction to human necessity of accomplish their requirements for safety, well-eating and nostalgia. Inspired by their parents, children are tended to consume comfort food products, without taking into account their provenience. Nowadays, a large number of food industry companies produce so called „comfort food”, products which lack in sugars, carbohydrates, fats and another series of preserves in order to offer the consumer a similar sensation to that they developed when tasting foods during their childhood. The present study aims at analysing the main factors that influence children's choice when taking a meal and the impact that the consumption of comfort food may have to their diet and health. The characteristics of comfort food of nowadays – children kind of comfort food - were compared with those of comfort food from last decades – parent's kind of comfort food.*

Keywords: *comfort food, carbohydrates, children, benefits, threats.*

1. INTRODUCTION

People eat food for satisfying hunger necessity. They are aimed of three characteristics of food products: appearance, taste and smell. With consumption of comfort foods, the human organism experiences pleasurable experiences and psychologically comfortable sensations. Food preferences are influenced by the socio-affective context and it has been found that childhood experiences are critical in creating habits that develop life-long. During childhood, the need of protection and care is decisive, and one of the most important factor is food ingestion.

For a child, it is crucial to have a balanced daily diet consisting of fruits, vegetables, dairy products and meat to ensure the essential mixture of vitamins, proteins, fats and carbohydrates for a healthy lifestyle and a harmonious growth. In the early childhood, first years are very important for establishing the relationship between nutrition, health and learning. These three factors are undeniably strong: nutrition is one of the three major factors that impact a child's development. As genes and environment are the other two factors, eating a certain food cannot guarantee that the child will be healthier, although research studies show that nutrition in a child's early years is linked to their health and academic performance in later years. The impact of actual trends in nutrition was experienced in children's daily intake, so called “comfort products” representing an important pawn to be taken into account when choosing their food. [1]

In 1966 it was first developed the idea of comfort food being associated with the idea of family, protection, safety. It was highlighted that: “Adults, when under severe emotional stress, turn to what could be called ‘comfort food’—food associated with the security of childhood, like mother's poached egg or famous chicken soup”. Human body possess the necessity to gain energy from food, the ingested food bringing the adequate proportion of vitamins, proteins, fats and carbohydrates that the human body needs, as it needs to bond with others. [2]

Food, in its different kinds has become an important factor in our culture. Through food, there are created special connection with others, what we consume becoming a psychological link to the person near us and the important events in our life. Our memories decide for us in the moment of choose, the image and sense creating a link with what we have consumed earlier. Food has become an important part of our lives, emotionally speaking, since our food choices are related in most of the cases with memories.

The generation who used to take most of the meals at home, prepared their food at home, together with family and children was called the traditional generation. The boiled egg, chicken soup, cheese pasta, cookies, apple pie were preferred by them, one of the most important characteristic being their palatability. Indeed, comfort foods are often prepared in a simple or traditional style and may have a nostalgic or sentimental appeal, perhaps reminding us of home, family, and/ or friends (Locher et al., 2005).

As a social reaction to this phenomenon, food producers nowadays have tried to recreate some kind of dishes to be supportive for the nostalgic consumer. Meals created in this manner tend to imitate the original ones to create the same sensation in the perception of the consumer, but the disadvantage is that some of them lack in undesired compounds in order to imitate the original, fresh ones. [3]

It is obvious that comfort food plays a prominent role in the food choices of today's consumers. Comfort food has an immense impact on the food choices of today's consumers. In the perception of actual consumer, products that offer less convenience are considered less preferable. The addition of convenience attributes to certain products induce health and benefits could increase the consumption of such food products.

A fact that draws attention is children's daily menu, especially children who are students in different schools that are situated near commercial areas. It was observed that they tend to take their main meals breakfast and lunch by consuming ready prepared food products.

2. DIMENSIONS OF COMFORT

2.1. Time spent in the kitchen

Most of the parents are busy with their job, or spend long time out of home due to their daily activity at the office, fact that denotes an absence in children's life. Only one day in a week is spent together with family and studies have shown that the traditional breakfast together or even dinner is out of thinking. Children spend about 8 hours in a day at school or involved in different activities, situation that implies consumption of food out of home. Most of the children mentioned that they have a difficulty in remembering or specifying a list with the meals that bring them comfort during and after consumption. [4]

2.2. The ease of access to ready meals

Some schools or educational centers are situated in proximity of restaurants, fast foods, sweet shops, bagels, ice cream shops and create an alternative for children to choose their daily menu. Taking into account taste, smell, flavour, appearance, comfort food represent an easy alternative for both parents and children for different meals of the day. Children tend to choose tasty and appetizing products without being informed on the effects that a long-term consumption could have on their health. A most alarming situation is that parents tend to encourage this habit due to the necessity of ensuring something to eat for their children during courses.

2.3. Shorten time spent for preparing meals

An additional dimension of comfort created by comfort food has also been established, and refers to the different stages of the home food production chain. Preparing a meal at home requires different stages of food production such as: planning, buying the ingredients, storing, cooking and serving. Sometimes the time spent for developing these activities is considered to be longer comparing to the alternative of buying the similar comfort product – a frozen product and with a single step – thawing and then baking or heating is prepared the dinner for the entire family. Observing that custom, children tend to apply the same idea for their breakfast or lunch at school. The so called “snacks” could become a factor that determine different health problems and chronic problems such as: diabetes, cardiovascular diseases and the worst infantile obesity. [6]

2.4. Special moments of life

The large dimension of comfort food reached even the important moments of life – celebrating birthday, New Year, Christmas. Children prefer to celebrate their birthdays in different restaurants consuming comfort food and parents agree the idea considering that it is an actual trend that it has to be followed. Encouraging children to consume this kind of products creates bad nutritional habits that generate long-term effects concerning the growth and development of the future adult.

2.5. Eating on the run

New eating habits are gradually taking over. In the past, families generally ate three home-cooked meals a day while sitting together at the dining table. Today, people tend to consume ready-made meals, often alone, on the run and at irregular hours. Many prefer to snack at their desks rather than to sit down and enjoy a meal in the company of others. [5]

Tab.1. Most popular Comfort foods

Type of product	Consumption rate
Potato chips	24%
Ice cream	14%
Cookies	12%
Candy/ candy bars	11%
Pizza and pasta	11%
Beef/ Steak Burgers	9%
Fruits/ vegetables	7%
Soup	4%
Others	9%

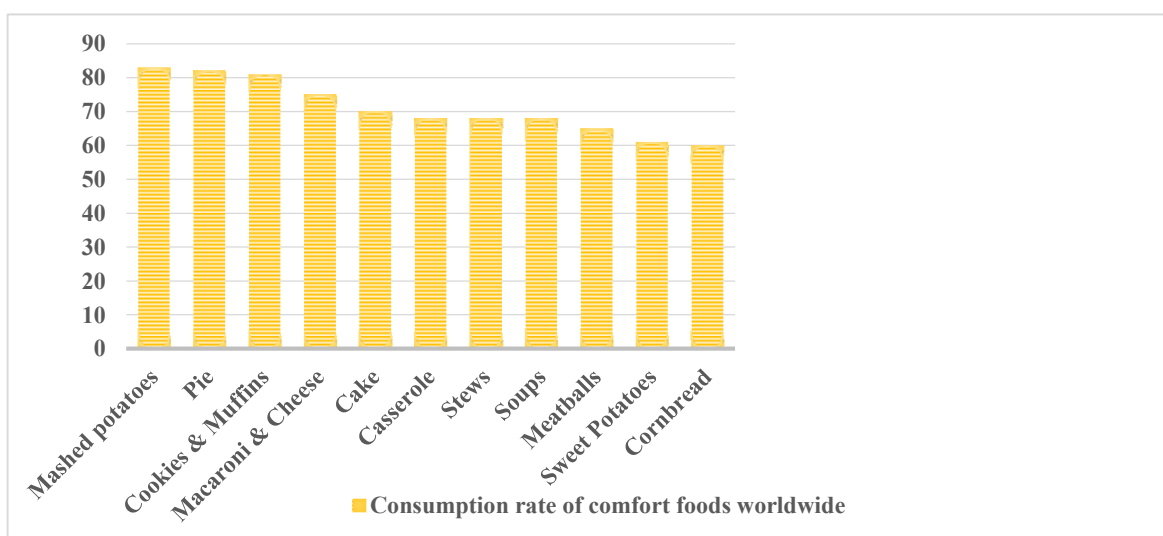


Fig. 1. Comfort food index

As it is shown in the chart from fig. 1, the most consumed comfort foods are Mashed potatoes, pie, cookies & muffins, macaroni & cheese, cake, casserole, stews, soups, meatballs, sweet potatoes, cornbread. The higher rate of consumption is having potatoes, followed by pie and cookies and muffins. Cornbread seems to be on the last position, but it is consumed by a number of 60% of persons. It is easy to notice that the products are high protein and carbohydrates content, fact that could produce serious problems for children health consuming comfort food.

3. ATTRIBUTES OF COMFORT FOOD

Even if comfort food is sometimes confused with fast food products, there is a need to make a distinction between the two types of products. Comfort food are that category of products that induces that sensation of nostalgia and safety during consumption being consumed for different reasons such as: need to remember the taste of childhood, need to celebrate, reward, happiness, depression, loneliness, boring. On the other side, fast food products are a type of mass-produced food designed for commercial resale and with a strong priority placed on "speed of service" versus other relevant factors involved in culinary science

Evoking pleasurable sensations during consumption, comfort food products have the ability to offer consolation and the feeling of being near family or the loved ones. Children learn from an early age to associate food with social interaction and family. Intake of food items has been shown to decrease feelings of helplessness, depression, loss of control, and distress (Markus et al., 1998), decrease stress (Oliver et al., 2000) and increase feelings of joy (Macht and Dettmer, 2006). [7]

Comfort food tend to imitate fresh prepared food. For example, there is a large assortment of products that are easily found in supermarkets, that are popular for the consumers. Fresh chicken soup can be found canned and with a simple heating procedure, the parent can offer to the child one meal quick and tasty. Without considering

the risk that consuming this kind of products for a long period could affect child’s health and development, parents support this custom being attracted of the fact that they could offer the child one fresh meal without a very important effort.

3.1. School nutrition services

School nutrition services provide access to a variety of nutritious foods that promote students’ health and their capacity to attend to academic tasks. The availability of nutritious foods as part of school meals increases children’s consumption of whole grains, fruits, vegetables and low-fat milk. Also, school offer students different alternatives for lunch including recently comfort foods. Potato chips, Macaroni and cheese from a box, Frozen lasagne, Pancakes, The fried-chicken file, Waffles, Donuts are often included in daily menu, children being allowed to combine them as they want. This fact is alarming because daily consumption increases the chances of developing infant obesity. [8]

An example of school menu for an elementary school is shown in fig. 2.

Monday	Tuesday	Wednesday	Thursday	Friday
253 Hot Dog with French Fries & 907 Hot Dog Bun OR 227 BBQ Chicken & Cheese Wrap 611 Bagged Baby Carrots 540 Garlic Hummus 608 Dole Tropical Fruit Cup 932 Cinnamon Scooby Snacks 1	255 Cheese Stuffed Breadsticks 622 Marinara Sauce 635 Calypso Crush Vegetable Juice 670 Fresh Fruit 2	205 Popcorn Chicken 704 French Fries 670 Fresh Fruit 932 Cinnamon Scooby Snacks 3	226 Philly Cheesesteak Pinwheel OR 272 Four Cheese Panini 708 Romaine Salad with Spinach & Chickpeas 752 Fruit Punch Juice 4	210 Crispy Chicken Filet & 914 Hamburger Bun OR 248 Breaded Chicken, Turkey Pepperoni & Mozzarella on a Bun 631 Cherry Star Vegetable Juice 670 Fresh Fruit 620 Salsa 941 Tostitos Scoops 5
234 Chicken Tenders with Potato Wedges OR 269 Mini Corn Dogs & Chicken Nuggets with Potato Rounds 631 Cherry Star Vegetable Juice 608 Dole Tropical Fruit Cup 904 Wheat Bread 8	200 Hamburger OR 201 Cheeseburger 704 French Fries 749 Apple-Cherry Juice 914 Hamburger Bun 9	233 Popcorn Chicken with Sweet & Sour Broccoli OR 276 BBQ Chicken Fajitas 611 Bagged Baby Carrots 546 Cheesy Pizza Hummus 752 Fruit Punch Juice 914 Hamburger Bun 10	265 Chicken Ranch Flatbread OR 264 4 x 6" Cheese Pizza 708 Romaine Salad with Spinach & Chickpeas 670 Fresh Fruit 11	289 Pancakes with Sausage OR 251 Chicken Nuggets 634 Hash Brown 635 Calypso Crush Vegetable Juice 670 Fresh Fruit 932 Cinnamon Scooby Snacks 12
211 Sloppy Joe OR 294 Meatballs with Sauce 623 Broccoli 752 Fruit Punch Juice 914 Hamburger Bun OR 907 Hot Dog Bun 15	207 Rib-B-Que OR 281 Salisbury Steak with Gravy 610 Mashed Potatoes 635 Calypso Crush Vegetable Juice 670 Fresh Fruit 914 Hamburger Bun 16	253 Hot Dog with French Fries 603 Maple Baked Beans 670 Fresh Fruit 907 Hot Dog Bun 17	204 Chicken Parmesan & 914 Hamburger Bun OR 263 5" Round Cheese Pizza 708 Romaine Salad with Cherry Tomatoes 749 Apple-Cherry Juice 18	273 Rotini Bake OR 274 Curly Cheesy Lasagna 670 Fresh Fruit 901 Honey Biscuit OR 908 Dinner Roll 19
215 Beef & Cheese Taco OR 275 BBQ Chicken Filet & 914 Hamburger Bun 611 Bagged Baby Carrots 546 Cheesy Pizza Hummus OR 545 Cranberry Orange Hummus 670 Fresh Fruit 22	234 Chicken Tenders with Potato Wedges OR 269 Mini Corn Dogs & Chicken Nuggets with Potato Rounds 670 Fresh Fruit 620 Salsa 941 Tostitos Scoops 23	255 Cheese Stuffed Breadsticks 622 Marinara Sauce 631 Cherry Star Vegetable Juice 670 Fresh Fruit 24	205 Popcorn Chicken 704 French Fries 749 Apple-Cherry Juice 932 Cinnamon Scooby Snacks 25	218 Mozzarella Pinwheel OR 252 Cheeseburger Macaroni 708 Romaine Salad with Spinach and Chickpeas 752 Fruit Punch Juice 26
201 Cheeseburger OR 200 Hamburger 603 Maple Baked Beans 631 Cherry Star Vegetable Juice 670 Fresh Fruit 914 Hamburger Bun OR 904 Wheat Bread 29	271 Spaghetti & Meatballs OR 292 Penne Pasta with Meat Sauce 670 Fresh Fruit 903 Maple Biscuit OR 908 Dinner Roll 30	251 Chicken Nuggets OR 265 Chicken Ranch Flatbread 634 Hash Brown 611 Bagged Baby Carrots 606 Chl'n Bar Water Ice 993 Pumpkin Cookie 31	264 4 x 6" Cheese Pizza OR 263 5" Round Cheese Pizza 708 Romaine Salad with Cherry Tomatoes 752 Fruit Punch Juice 1	233 Popcorn Chicken with Sweet & Sour Broccoli OR 276 BBQ Chicken Fajitas & 910 Calabita Bread 635 Calypso Crush Vegetable Juice 670 Fresh Fruit 2

Fig. 2. Elementary school menu in the USA [10]

It can be easily observed that everyday the menu can be composed by comfort food products as hot dog, French fries, meatballs, potato wedges, hamburger or cheeseburger are almost twice a week in children menu. For balancing the dietary menu, fruits are included or fruit juices. High calorie comfort foods consumed daily could have undesired effects on children lifestyle.

Keeping a good balance of carbohydrates in the diet is essential, but even more important for kids. Children are generally more active and have higher metabolisms than adults, which means they require a greater supply of the easily accessible fuel that carbohydrates provide. Not to mention that their bodies are growing – a process that requires a constant supply of nutrients.

Restricting an entire category of foods like carbohydrates can greatly compromise a child’s energy level and even mental acuity. When you consider that the brain needs glucose to function properly, it makes sense that without a ready supply, kids will have a harder time staying alert.

3.2. Benefits of comfort food

For keeping up with the new habits of modern families, the manufacturers of ready-made meals have expanded their range of products. As a result, health-conscious consumers on tight schedules can eat balanced meals if they take the trouble to make smart choices. For instance, supermarkets now offer a selection of prepared salads made from fresh vegetables that provide the roughage and vitamins that nutritionists recommend.

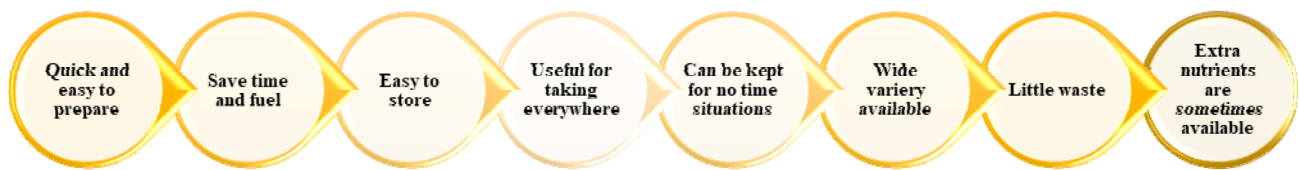


Fig. 3. Advantages of comfort food

Quick and easy to prepare

Comfort food is an alternative for every meal. It can be prepared in a short time and in an easy manner with few resources required. The final results are similar to the result obtained with long hours spent in kitchen preparing the meal. Also, in the mornings, parents use to serve children the breakfast using comfort food products such as: frozen bread, frozen baguettes, toaster pastries or mac and cheese. [9]

Save time and fuel

Time is an important factor that decides in the moment of food choosing. Also, the process of going to the market and time lost for searching the ingredients and time waiting for payment matter for the actual consumer. That is why most parents nowadays choose comfort food. It is simple to have the food already cooked in the refrigerator or freezer and with a simple heating to meet all the family for meal. [9]

Easy to store

Storage is also important in the actual context. Spending less time at home, is difficult to monitor every day the foodstuff in the fridge. Comfort food require simple storage conditions, fact that constitutes an advantage. [9]

Useful for taking everywhere

The problem of carrying food in different conditions was always an inconvenient for most of the consumers. Taking a bowl of soup or fresh mashed potatoes or boiled egg out in order to be served in another area was difficult due to the conditions required for this fact. Taking a comfort food product is easy and tasty and always available. [9]

Can be kept no time situations

Preparing a fresh meal requires cutting, boiling, frying, mixing and availability of ingredients. Since parents leave home early in the morning together with children, spend more and more time at the office, when it is time to come at home and there is no time for cooking, most of the parents choose comfort food because it can be an easy alternative. [9]

Wide variety available

A wide variety of comfort products are available at the supermarkets. From frozen bread to fresh soup, chips, steak, pie and even pancakes are available. Also, ethnical products are much more accessible and cheaper than fresh products. With comfort foods, ethnical dishes that require a special mode of preparation or special ingredients are ready to hand for the consumer. [9]

Little waste

Waste could be also a problem nowadays and it is well known that managing waste is sometimes difficult due to the high demand of food. Consumers are tempted to buy lots of food products without taking into account their term or properties. This is the main factor that generates waste. By consuming comfort food products, waste is reduced, because the quantity is exactly established according to the number of persons that are to be served. [9]

Extra nutrients are sometimes available

Nutrients are extremely important for a rational nutrition. Children need an adequate proportion of nutrients especially in the growing period. Comfort food can sometimes ensure a high proportion of nutrients, especially when we talk about fresh comfort products such as salads. [9]

4. CONCLUSIONS

The goal of the present study was to analyse the main implication that comfort food consumption could have on children health. There were analysed a series of factors that could contribute to the increase of comfort food consumed by children. The main cause can be lack of information for the parents who encourage comfort food consumption. It is very important to know better the effects that such products can have on children health, especially on elementary school children who are in plain evolution mentally and physically.

Taking into account the psychological dimension of comfort food consumption and the feelings that evoke ingestion of such products – nostalgia, protection, safety it could be taken into account the need of care and protection that children manifest when they feel in different locations. School can be one of the environments that encourage the consumption of these products, children spending almost half a day at school.

There are several advantages of comfort products that should be mentioned and taken into account when creating a menu for a child. Some comfort food offer certain nutrients beneficial for health and are recommended, but not all comfort food should be considered healthy.

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