THE EFFECT OF JUNK FOOD FOR CHILDREN IN DEVELOPMENT COUNTRIES

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One labeled “junk” was associated with increased consumption of high-fat processed foods (burgers, coated poultry) and snack foods high in fat and/or sugar (such as crisps, and chocolate), which tend to be of poor nutritional quality (1). Behavior is leading to the weight gain, increased blood pressure, and increased cholesterol levels that are contributing to diabetes epidemics and our current obesity. Childhood obesity is a major public health problem. In 2009–2010 in children and adolescents aged 2–19 y, it was estimated that 15% of them were overweight, and 17% of them were obese (2).

Many food habits and patterns are formed during childhood and will remain till the end of individual’s life. There is increasing trend of junk food use. Combined with sedentary life style, high prevalence of obesity, diabetes mellitus, hypertension and coronary heart disease, it is detrimental to health and will aggravate existing life style diseases (3). These eating habits will affect their physical, emotional, and mental growth and development, and even their adult years. It can be difficult to make sure that children eat balanced meals and snacks every day, and in some cases, children will not eat enough. School-age children need between 1,740 and 1,970 calories per day; it is important that these are not empty calories from junk food.

Psychological studies demonstrate that food advertising influences parents’ and children’s normative beliefs about what others eat and what they should be able to eat (5). Environmental influences can promote excess energy and fat intake, which are a potential factor in this upward secular trend in obesity (6).

Many packaged and processed foods are marketed for children because they are tasty and easy to eat. However, these foods are high in sugar and fats and low in nutritional value. It is important to teach your children to eat more balanced, whole foods and avoid junk food (7).

Junk food to be around children

Children's eating habits and patterns are at first just under the influence of the family situations; however, they may change, with their entering the school, as they spend more time away from home and from the parents direct supervision, and the children get many eating habits about “what to eat” and “how to eat” from outside the home. Nowadays, the intake of junk foods as snacks among the children,
specially the primary schools students, is on the rise. Changing the eating patterns during the recent decade has caused the nutrient snacks to be replaced by junk food and worthless eating materials (7).

The junk food availability in schools has contributed to the childhood obesity epidemic. junk food availability in schools was collected from the school administrators and from children. School administrators were asked whether students could purchase 17 individual food and beverage items, either from vending machines (School vending machines and school stores were more prevalent in high schools (93%) than middle (84%) and elementary (30%) schools)(8), canteen, snack bar or a la carte items from the cafeteria during school hours. Children asked about their purchases of sweets, salty snack foods, and sweetened beverages during the previous week. children substituting in-school purchases of junk food for that taken from or eaten at home. A substantial majority of the children did not purchase junk food in school during the reference week (9).

**Contained content in junk food**

Beverage items containing high sodium and/or sugar, including candy, chocolate, baked foods (e.g. cookies), salty snacks (e.g. potato chips), ice cream or frozen yogurt, or sweetened beverages.(9) Food categories per 100 grams: total energy, fat grams, percentage fat, and percentage saturated fat per 100 grams, along with values for other nutrients of interest such as sugar, calcium, vitamins A and C, fiber, and iron.the most energy-dense food category was chips/crackers (average kcal/100 g=515); on average, 50% of these kcals were from fat. Only 10.8% of the foods in the chips/crackers category met the TACOS (Trying Alternative Cafeteria Options in Schools) lower-fat criterion of ≤5.5 fat grams/serving. The second most energy-dense food category was cookies/bars: school prepared (487 kcal/100 g; 43.1% fat kcals), in which only 1.2% of the items met the TACOS (Trying Alternative Cafeteria Options in Schools) lower-fat criterion. By contrast, all items in the fruit candy, non-frozen dairy products, bagel, and soft pretzel met the TACOS (Trying Alternative Cafeteria Options in Schools) lower-fat criterion. The food categories varied in their contribution of other essential nutrients. The largest category, chips/crackers, contributed little in terms of other important nutrients. High sugar categories included candy and fruit candy as well as cookies/bars, cookies/bars: packaged, and dessert. Several categories provided 100 mg or more calcium per serving, including pizza, nachos with cheese, non-frozen dairy products, soft pretzel with cheese, and french fries/onion rings/fried cheese sticks (due to the inclusion of fried cheese sticks in this category). However, the non-frozen dairy products, pizza, and soft pretzel with cheese categories were much lower in fat than the other categories that were good calcium sources. Although the fruit candy items were fortified to provide substantial amounts of vitamins A and C, they were second only to regular candy in their sugar content. Breakfast items were modest in sugar content, low in fat and energy, and
provided notable amounts of calcium, iron, and vitamin A (6).

**Impact of the content in junk food**

Children consuming “junk food” are likely to have a lower intake of vitamins, minerals, essential fatty acids and particularly omega-3 and omega-6 which are vital building blocks for brain function (1). Junk food may lead to peaks and troughs in blood sugar, with associated periods of hyperactivity and lethargy (1), can make a layer of fat in the body because that food contain large amounts of fat, your skin can be a lot of stretch mark, overweight, diabetes, heart disease, and osteoporosis or weak, brittle bones later in life (7).

Ingredients of junk food usually containing saturated fatty acids like palmitic, oleic and stearic acid. (Bakery (bagel, cookies) shortening contains Consumption of saturated fatty acids (especially of saturated fatty acids (SFAs), which have been implicated in diseases associated with modern life, mostly in developed countries. Coronary heart disease and arteriosclerosis are among the most important causes of human mortality, and are strongly associated with dietary intake of cholesterol and saturated fatty acids In addition, a strong relationship has been demonstrated between cellular cholesterol concentration and Alzheimer’s disease) (10) in higher amount leads to health disorders like obesity, cardiovascular and other metabolic diseases. On the other side, omega-3 polyunsaturated fatty acid (PUFA) have been associated with various health benefits relating to treatment of rheumatoid arthritis, improving blood pressure control and preserve renal function even in hypertensive heart transplant recipients and coronary artery disease (11).

Sodium is an independent risk factor for cardiovascular disease. Cardiovascular disease accounts for about one-third of all deaths in the United States (12). A positive relationship between sodium intake and blood pressure (BP) has been documented in hypertensive and normotensive individuals (13). Symptoms (side effects) if excessive of sodium (during the last 7 days), including headache, bloating, dry mouth, excessive thirst, fatigue or low energy, lightheadedness, nausea (14). The dietary guidelines for Americans, American Diabetes Association, and American Heart Association, concerns about the impact of the degree of sodium restriction on cardiovascular health continue to be raised. This literature review examines the effects of dietary sodium intake on factors contributing to cardiovascular health, including left ventricular hypertrophy, heart rate, albuminuria, rennin–angiotensin–aldosterone system activation, serum lipids, insulin sensitivity, sympathetic nervous system activation, endothelial function, and immune function (15).

**Reduces the consumption of junk food**

Proper nutrition in this age causes development and child growth and also reduces the risk of chronic diseases in adulthood (4) which was associated with vegetarian style foods, rice, pasta, salad
and fruit, and a “traditional diet” of meat, potatoes and vegetables (1).

References


12. Matthews, Evan L;Brian, Michael S;Ramick MG-ESDGWB. High dietary sodium reduces brachial artery flow-mediated dilation in humans with salt-sensitive and salt-resistant blood pressure. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4587630/

