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Decisions regarding food choices are based on a variety of factors including cost, taste, convenience, and availability. Many people feel that nutritious foods cost more than foods high in calories and low in important nutrients (Carlson & Frazao, 2012). In an effort to save money, people may select less nutritious foods when shopping resulting in less healthy meals and snacks. This is a problem because diets rich in fruits, vegetables, whole grains, beans, and healthy fats have been found to reduce the risk of chronic diseases such as obesity, diabetes, and heart disease among others. In this fact sheet we discuss the cost of healthy eating and offer strategies to make healthy eating more affordable.



Cost of Eating Nutritious Foods

The MyPlate Dietary Guidelines for Americans 2015-2020 provide the following recommendations for healthy eating:

- Fill half your plate with a wide variety of fruit and vegetables
 - Make half your grains whole grains
 - Eat fat free or low fat dairy products
 - Eat healthy fats such as a variety of vegetable oils
 - Eat lean meats, legumes, nuts, seeds, and soy
 - Limit the amount of added sugars, salt, and saturated fats
- (United States Department of Agriculture, 2015)

Unfortunately, these recommendations are easier said than done. In fact, very few Americans are meeting the Dietary Guidelines for Americans and many argue it is too difficult to eat healthy foods on a limited food budget. The most common reason people report not eating more nutritious foods is the belief that healthy foods cost more than highly processed foods that are typically less nutritious (Carlson & Frazao, 2012). So the question is, does healthy eating actually cost more?

The answer to that question is complicated. A recent study found that following the MyPlate Dietary Guidelines would cost a family of four between \$1,000-\$1,200 a month (\$12,000.00-\$14,400 annually) depending on the age of the family members and the percentage of fruits and vegetables that were fresh, frozen, and canned (Mulik & Haynes-Maslow, 2017). For a comparison, the average middle income family in the United States spends roughly \$6,224 on food each year with the average low income family spending even less at roughly \$3,862 per year (USDA, 2017). With this information in mind, following these recommendations may not be feasible for the typical family.

Other studies argue that whether healthy foods such as fruits and vegetables cost more at the checkout counter is a matter of how you calculate cost (Drewnowski, 2013, Drewnowski & Rehm, 2013; Carlson & Frazao, 2012). For example, if you look at food costs per calorie, unhealthy food costs less, but if you look at food costs per typical portion, many healthy foods are less expensive than unhealthy foods (Carlson & Frazoa, 2012). Further, if you are looking to improve your health, you get more for your money when you consider cost per nutrient value of your food choices. Sweet potatoes, tomato juices and soups, white potatoes, dark green leafy vegetables, pumpkin, and dry beans provide the most nutrition (i.e., protein, fiber, Vitamins A and C, among other nutrients) for the least cost (Drewnowski et al., 2013). When looking at food cost from this perspective, there is a wide variety of nutritious foods, specifically fruits and vegetables that can be incorporated into a diet at a lower cost.



Cost of Not Eating Nutritious Foods

When discussing the cost of healthy eating, it is important to consider the cost of not incorporating nutritious foods into meals on a regular basis. Unhealthy dietary patterns that consist of high amounts of sugar, saturated fat, sodium, and calories, are linked to higher rates of chronic diseases such as overweight and obesity, heart disease, high blood pressure, and type 2 diabetes, among many others. Not only is the risk of chronic disease greater, but the financial cost of treating the diseases listed are expensive. For example, individuals who are obese have medical costs that are nearly \$1,500 more per year on average than normal weight individuals (Finkelstein, Trogon, Cohen, & Dietz, 2009). As the number of chronic diseases an individual has increases, the annual health care costs for that individual also increases (Cohen, 2015). For example, a person with three to four chronic diseases will spend \$25,000 annually on health care expenses while individuals without any chronic diseases will spend \$6,000 annually (Cohen, 2015). These statistics indicate that the cost of regularly incorporating nutritious foods into one's diet is much less expensive than the cost of treating chronic diseases later on.

Potential Policies for Reducing the Cost of Healthy Foods

In order to improve the dietary intake of Americans and reduce the risk of chronic diseases, new approaches focused on changing the cost of food, are being considered. For instance, there have been policies proposed to add a tax to certain snack foods and sugar-sweetened beverages. The theory is, by increasing the cost of less nutritious foods, people would purchase less of it and would instead buy healthier alternatives. Another option is reducing the cost of nutritious foods like fruits and vegetables through government programs. One study found that people ate 25% more fruits and vegetables when their cost had been reduced by 50% (Thow, Downs, Jan, 2014). Although there are several policies that have been considered to make healthy foods more affordable to Americans, more research needs to be done to determine which policy would result in the biggest impact on individual food choices.

Strategies for Healthy Eating on a Budget

Here are a few tips for making the most out of your grocery budget while shopping for nutritious foods.

Money saving tips	How does it help?
Plan meals ahead of time that incorporate leftovers and/or foods that may spoil quickly such as fruit and vegetables.	On average, food waste costs individuals \$390 per year. This ends up being over \$1,562 per year for a family of four (Buzby & Hyman, 2012).
Create a shopping list, bring the list with you to the grocery store and stick to it.	Unplanned purchases increase a grocery bill by 10% on average (Bell, Corsten, Knox, 2010).
Eat at home or make your own lunch instead of eating out.	People who eat out six or more times/week spend over \$100 more per person on food in a month than those who eat out 0-3 times/week (Tiwari, Aggarwal, Tang, & Drewnowski, 2017).
Buy store brand products instead of name brand products.	Store brand products are on average 25% lower in price and yet similar in quality to their name brand counterparts (Consumer Reports, 2012).
Shop for fruits and vegetables in season.	Strawberries, for example, can be 100% more expensive in December than they are in the spring (Plattner, Perez, and Thornsby, 2014).

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