Hungry for Change: Getting More Nutrients into the American Diet

Ingrid Adams, Dietetics and Human Nutrition

Although the U.S. food supply is abundant, many people are experiencing nutritional shortfalls. More than half of all Americans suffer from chronic diseases because of poor food choices. Research shows that many of us are not getting enough nutrient-dense foods—the foods that give our bodies the most benefit for the amount of calories consumed. Instead we are eating too much added sugar, refined grains, sodium, and saturated fat (Table 1).

Table 1. Average American consumption.

<table>
<thead>
<tr>
<th>Food/Additive</th>
<th>Percent of Recommendation Consumed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole grains</td>
<td>15%</td>
</tr>
<tr>
<td>Vegetables</td>
<td>59%</td>
</tr>
<tr>
<td>Fruits</td>
<td>42%</td>
</tr>
<tr>
<td>Dairy</td>
<td>52%</td>
</tr>
<tr>
<td>Seafood</td>
<td>44%</td>
</tr>
<tr>
<td>Oils</td>
<td>61%</td>
</tr>
<tr>
<td>Solid fats and added sugars</td>
<td>280%</td>
</tr>
<tr>
<td>Refined grains</td>
<td>200%</td>
</tr>
<tr>
<td>Sodium</td>
<td>149%</td>
</tr>
<tr>
<td>Saturated fat</td>
<td>110%</td>
</tr>
</tbody>
</table>

Source: 2010 Dietary Guidelines for Americans

Research shows that many of us are not getting enough nutrient-dense foods—the foods that give our bodies the most benefit for the amount of calories consumed.

- One-third of our calories should come from carbohydrates. But instead of nutrient-rich complex carbohydrates, most of the calories come from grain-based desserts and sweetened beverages.
- We should consume three cups of fat-free or low-fat milk or equivalent milk products a day; instead we consume an average of three-fourths of a cup of milk a day.
- Adults should eat 2½ cups of fruit per day. Most adults eat less than 1½ cups. Most of us consume most of our fruit in the form of juice that leads to an increase in sugar in our diet.
- Adults should eat about 3 to 4 ounces of whole grains each day. Most of us are eating fewer than 2 ounces.
- We consume more than twice the maximum daily amount of sodium needed because of how much we eat out instead of fixing meals at home.
- About one third of our daily calories come from snacking on chips, cookies, cakes, candy, and sweetened beverages. Our snacking is causing us to consume two to three times more than the recommended amount of fats and sugars.
• More than half of us are not getting enough magnesium, 40 percent are not getting enough vitamin A, and nearly one-third are not getting enough vitamin C from the foods and beverages we are eating.

The good news is that you can make healthy food choices and chronic diseases are very preventable. This means that you can take steps to change your behavior. We can choose groups or patterns of foods that can help us reach and maintain a healthy weight, reduce the risk of chronic disease, and promote overall health.

Healthy Eating
The Academy of Nutrition and Dietetics describes healthy eating as consuming a well-balanced diet with a variety of foods.

A healthy eating plan:
• Emphasizes fruits, vegetables, whole grains and fat-free or low-fat milk and milk products
• Includes lean meats, poultry, fish, beans, eggs, and nuts
• Is low in saturated fats, trans fats, cholesterol, salt (sodium) and added sugars

### Table 2. Daily recommendations.

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Amount Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole grains</td>
<td>Three to five 1 oz servings</td>
</tr>
<tr>
<td>Fruits</td>
<td>2 cups</td>
</tr>
<tr>
<td>Vegetables</td>
<td>2½ cups</td>
</tr>
<tr>
<td>Dairy</td>
<td>3-8 oz servings/low-fat or fat-free</td>
</tr>
<tr>
<td>Lean protein</td>
<td>5-6 oz</td>
</tr>
<tr>
<td>Oils (healthy fats)</td>
<td>In moderation</td>
</tr>
<tr>
<td>Seafood</td>
<td>2-3 servings per week</td>
</tr>
</tbody>
</table>

Source: Academy of Nutrition and Dietetics

### Table 3. Food by group.

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole grains Make half your grain whole grains</td>
<td>Whole grain bread, whole grain cereal, whole grain pasta, brown rice, oats</td>
</tr>
<tr>
<td>Fruits Eat a variety of fruits</td>
<td>Apples, blueberries, grapes, watermelon, kiwi, bananas, peaches, oranges, pears, melon, pineapple</td>
</tr>
<tr>
<td>Vegetables Eat more dark green leafy, yellow/orange veggies</td>
<td>Leafy greens, carrots, broccoli, bell peppers, onions, mushrooms, pumpkin, squash, tomatoes, Brussels sprouts</td>
</tr>
<tr>
<td>Dairy Choose non-fat or low-fat dairy</td>
<td>Low-fat and fat-free milk, yogurt, and cheese, fortified soy, rice, and almond milk</td>
</tr>
<tr>
<td>Lean protein Choose lean sources of protein</td>
<td>Chicken, turkey, beans, lentils, peas, fish, dairy</td>
</tr>
<tr>
<td>Oils (healthy fats) Replace solid fats with oils</td>
<td>Canola oil, vegetable oil</td>
</tr>
<tr>
<td>Seafood Eat 8 or more ounces a week</td>
<td>Tuna, salmon, crab, tilapia, catfish, shrimp</td>
</tr>
</tbody>
</table>

### Nutrients of Concern for Americans

The diet of many Americans is lacking in potassium, fiber, calcium, and vitamin D. The average American consumes 56 percent of recommended potassium, 40 percent of recommended fiber, 75 percent of recommended calcium, and 28 percent of recommended vitamin D. By increasing our intake of whole grains, vegetables, fruits, and dairy, our intake of these nutrients of concern will also be increased.

**Potassium**

It is important to get the recommended amount of potassium because potassium helps in the prevention of heart disease. It helps blood pressure stay low by balancing the sodium in the blood. By decreasing our sodium intake, blood pressure also will decrease.

**Fiber**

It is important to consume the recommended fiber because fiber helps with heart health, diabetes, weight management, and the digestive system. Fiber helps keep us feeling full so we are less likely to overeat.

**Calcium**

It is important to get the recommended calcium intake because calcium is what keeps our bones strong. When we do not eat enough calcium, the body takes calcium from the bones to keep the calcium blood level normal which can cause the bones to become weak and brittle. With such a high rate of osteoporosis in the United States, calcium intake is important.

**Vitamin D**

It is important to consume the recommended vitamin D intake because vitamin D aids in the absorption of calcium and phosphorous into the bones and teeth. Vitamin D is unique in that our bodies can make vitamin D from our skin being exposed to sunlight.
Adding Nutrients into the Diet

Vegetables and Fruits
Vegetables and fruits are a major source of folate, magnesium, potassium, dietary fiber, and vitamins A, C, and K. Intakes of 2½ cups of vegetables and fruit daily is associated with reduced risk of cardiovascular disease, heart attack, and some types of cancers. In addition, vegetables and fruits are low in calories without the added sugars and fats, so they can help achieve and maintain a healthy weight.

Tips
- Fresh, frozen, and canned fruit and vegetables all count. When choosing canned vegetables, choose those labeled as “low sodium” or “no salt added.”
- Add vegetables to soups, stews, casseroles, and stir fries.
- Try fruit on your pancakes instead of syrup.
- Add a salad to lunch or dinner with dark green leafy vegetables. Salads are easy and you can make them fun by adding fruit.
- Add beans or peas to salads, soups, and side dishes for added dietary fiber.
- Keep washed and cut-up fruit and vegetables handy for a quick and easy snack.
- Have fruit for dessert; the natural sugar satisfies a sweet tooth.
- Select 100 percent fruit juice when choosing juices, but eating your fruit will always give you better nutrition than drinking the juice.

Dairy
Dairy products contribute many nutrients, such as calcium, vitamin D (for products fortified with vitamin D), and potassium, to the diet. Scientific evidence shows that intake of milk and milk products are linked to improved bone health, especially in children and adolescents. Scientific evidence also shows that eating milk and milk products is associated with a reduced risk of cardiovascular disease and type 2 diabetes. It also reduces the risk of high blood pressure in adults.

Tips
- Drink low-fat or skim milk.
- Instead of creamer, add low-fat or fat-free milk to coffee and tea.
- Use low-fat or fat-free milk on cereals and in oatmeal instead of water.
- Have fruit salad with low-fat yogurt on top for a mid-morning snack.
- Choose low-fat cheese.
- If you are lactose intolerant, try soy, rice, or almond milk.

Protein
Protein is a good source of B vitamins (niacin, thiamin, riboflavin, and B6), vitamin E, iron, zinc, and magnesium. Protein should be eaten in variety, such as seafood, lean meats, nuts and beans, eggs, and poultry. Seafood is an excellent source of omega-3-fatty acids, which promotes heart health. Seafood is also low in fat, especially saturated fat, which helps in maintaining a healthy weight. Eating the right amount of protein also helps the body maintain and build muscle.

Tips
- Eat many different types of foods from the protein group each week: seafood, beans, peas, and nuts as well as lean meats, poultry, and eggs.
- Eat seafood in place of meat or poultry at least twice a week. Select seafood that is higher in oils and lower in mercury, such as salmon, trout, herring, and tuna.
- Select lean meats and poultry. Choose meat cuts that are low in fat and ground meat that is extra lean (90 percent fat-free). Trim or drain fat from meat and remove poultry skin before cooking or eating.
- Try grilling, poaching, or roasting instead of frying meats, and avoid breading to reduce added calories.

Whole Grains
Whole grains are a source of iron, magnesium, selenium, B vitamins, and dietary fiber. Whole grains may reduce the risk of cardiovascular disease and help to manage weight. Some limited evidence also shows that whole grain is associated with a reduced risk of type 2 diabetes.

Tips
- Substitute whole grains for refined grains in cereals, breads, crackers, rice, and pasta. Choose products that say “100% whole grain.”
Check the ingredient list for “whole” or “whole grain” before the grain ingredient’s name.

Note that food labeled with the words “multigrain,” “stone ground,” “100% wheat,” “cracked wheat,” “seven-grained,” or “bran” are usually not 100 percent whole wheat and may not contain any whole grains.

Eat fewer refined grain products, especially those high in calories from solid fats and/or added sugars, such as desserts or pizza.

References
