

# Focus on Nutrient-Dense Foods and Beverages

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Each day we are bombarded with a range of food choices—chips, vegetables, candy, and ice cream. We decide whether we should have doughnuts and coffee for breakfast or oatmeal with blueberries? Should we have pizza or a tossed salad for lunch?



When we make nutrient-dense choices we get the nutrients we need without consuming excess calories.

Many of us eat whatever we want and make food decisions with little thought about how foods benefit our bodies. The Healthy Eating Index is a tool developed by the Center for Nutrition Policy and Promotion to assess the nutritional quality of the diet of Americans. Information gathered from this document shows that approximately 74 percent of Americans need to improve their diets.

Even though many of us do not always choose the healthiest foods, we generally have good intentions. Often we do not have the time, money, or skills that would allow us to make the best food decisions. This publication provides information that allows you to make healthier food decisions by choosing nutrient dense foods.

## What is Nutrient Density?

Nutrient density refers to the amount of nutrients in a food compared to the amount of calories.

Nutrient-dense foods have more nutrients per calorie than foods that are not nutrient dense. Nutrient-dense foods contain a small portion of their calories from fat, sugar, or refined grains and have more vitamins, minerals, and protein.

## Why is Nutrient-Dense Food the Best Choice?

We all need a certain amount of calories and nutrients each day in order to be healthy. The amount of calories and nutrients needed are based on our age, sex, activity level, and how healthy we are. If we eat too many foods high in fat and sugar, it is easy to go over the amount of calories we need without getting the nutrients to keep us healthy. Making nutrient-dense choices can ensure we get the nutrients we need without consuming excess calories.

When a person eats more calories than they need, the body stores the extra calories as fat, which can lead to a person being overweight or obese.

It is important to eat the correct amount of calories and take part in physical activity so the body can burn up extra calories.

Research shows the food choices we make affect our health. Making nutrient-dense choices can prevent chronic diseases such as heart disease, stroke, hypertension, type 2 diabetes, and some types of cancer.

## How Do I Know if a Food is Nutrient Dense?

Nutrient-dense foods have:

- Few added solid fats, such as butter, margarine, shortening or lard
- Little added sugar
- Little added refined starch found in white bread
- Small amounts of solid fats naturally present in the food
- Little added sodium from salt and preservatives commonly used in ready-to-eat meals
- Naturally occurring components such as fiber still present in the food, that is, these compounds have not been removed by processing

Even if you do not know the nutrients present in certain foods, remember that fruits, vegetables, fat-free milk, lean meats, and whole grains are nutrient dense.

Candy, pastries, chips, bacon, and sugar-sweetened beverages are less nutrient dense. These foods contain added sugar, solid fats, and refined starch, and they provide few essential nutrients.

## How Do I Choose Foods that are Nutrient Dense?

Include foods from the five food groups: grains, vegetables, fruits, dairy, and protein foods (Table 1). There are a variety of food choices within each group and some foods within each group are more nutrient dense than others. Making a healthy food choice begins with knowing what you need to eat each day.

### Choose More of the Following Foods Each Day:

- Fruits and vegetables
- Whole grains like wheat bread, brown rice, rye, and whole-wheat pasta
- Fat-free or low-fat milk and milk products
- Seafood
- Lean meats, poultry, and eggs
- Beans, peas, nuts, and seeds
- Beverages such as vegetable juice and fruit juices without added sugar

### Limit the Following Foods:

- Sodium (cut back on processed foods such as commercially prepared dinners, pot pies, stews, chili, and canned soups)
- Solid fats such as butter, margarine, shortening, and lard
- Added sugar
- Refined grains, such as white bread

### Prepare More Meals at Home

Prepare meals that include more vegetables, fruits, whole grains, fat-free or low-fat dairy products, and protein foods that provide fewer calories and more nutrients.

## Make Healthy Substitutions

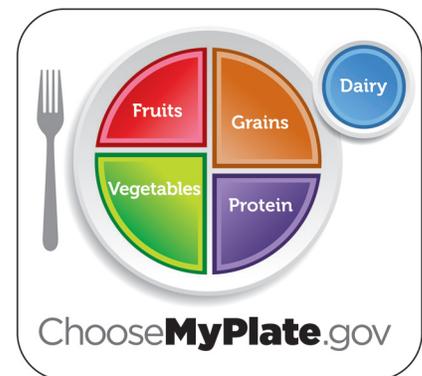
For example, reduce the amount of sugar in recipes and use healthy oils such as olive, canola, corn, safflower oils instead of butter, shortening or lard. Add whole grain to baked goods.

## Read the Label

Read the Nutrition Facts label on packaged food to learn its nutrient density. For example, choose foods that are low in calories, salt, sugar, and fat (3 grams or less fat per serving) and high in vitamins, minerals, and fiber (5 or more grams fiber per serving).

## Fill Half your Plate with Fruit and Vegetables

Choose red, orange, and dark-green vegetables and fruit. Divide the other half of your plate in two, and include about 4 ounces of protein and a starchy food of your choice.



**Table 1: More and Less Nutrient-Dense Choices**

Food	More Nutrient-Dense Choices	Less Nutrient-Dense Choices
<p><b>Grains:</b> Foods made from wheat, rice, oats, cornmeal, barley or other cereal grain. Bread, pasta, oatmeal, breakfast cereals, tortillas, and grits are examples of grain products.</p>	<p>Brown rice Oatmeal Whole-wheat or whole-grain bread Whole-wheat tortillas Air-popped popcorn Whole-grain ready-to-eat cereals</p>	<p>White rice White bread Flour tortillas Noodles</p>
<p><b>Fruit:</b> Fruits may be fresh, canned, frozen, or dried, and may be whole, cut-up, or pureed. Any fruit or 100% fruit juice counts as part of the fruit group.</p>	<p>Apples Bananas Berries and cherries Melons Kiwi Oranges Peaches Pears Pineapple</p>	<p>Fruits and fruit juices with added sugar</p>
<p><b>Vegetable:</b> Vegetables may be raw or cooked; fresh, frozen, canned, or dried/dehydrated; and may be whole, cut-up, or mashed. Any vegetable or 100% vegetable juice counts as a member of the vegetable group.</p>	<p>Broccoli Cauliflower Carrots Leaf lettuce Dark greens (kale, spinach, collard greens, parsley) Asparagus Tomatoes Onions and Garlic Peppers and Squash</p>	<p>Potato Corn Parsnips Beets</p>
<p><b>Protein:</b> All foods made from meat, poultry, seafood, beans and peas, eggs, processed soy products, nuts, and seeds are considered part of the protein food group. Beans and peas also are part of the vegetable group.</p>	<p>Lean beef or lamb Fish Poultry Eggs Shellfish</p>	<p>Pork Beef Lamb Processed meats Meat and poultry skin</p>
<p><b>Dairy:</b> All fluid milk products are considered part of this food group. Foods made from milk also are part of this group if they retain their calcium content. Foods made from milk that have little to no calcium, such as cream cheese, cream, and butter, are not. Calcium-fortified soymilk (soy beverage) is also part of the dairy group.</p>	<p>Fat-free or low-fat milk Cheese Yogurt Calcium-fortified soy beverages</p>	<p>Whole and flavored milk Sweetened yogurts</p>

**Two Scenarios, Two Options**

If you have a choice between an orange or two oatmeal cookies for a snack, consider the nutrient density of the two products. An orange contains 45 calories,

has no fat and little sugar, but lots of vitamins C and A and about 8 grams of fiber. The oatmeal cookies contain about five times as many calories (224) as the orange, more fat and

sugar, no vitamin C, and small amounts of vitamin A and fiber. The orange is more nutrient-dense because it provides more nutrients and fewer calories (Table 2).

You have low-fat milk, chocolate milk, and a sugar-sweetened soft drink in your refrigerator. Which beverage is the most nutrient-dense? The most nutrient-dense beverage contains the least amount of sugar, fat, and calories and the most amounts of other nutrients. The low-fat milk contains the most nutrients and the least amount of calories, and therefore it is the most nutrient-dense choice (Table 3).

Because you aim to eat nutrient-dense foods does not mean you should never eat candy or cookies. These foods may be chosen in moderation. However, most of our food choices should consist of nutrient-dense foods that meet our nutritional needs and provide the amount of calories the body needs.

## Choosing Nutrient-Dense Beverages

Making nutrient-dense beverage choices also are important. Many of us try to reduce the amount of calories in the food we eat but we often forget that beverages are also a source of calories and they contribute to the amount of calories we should take in daily. The calories in beverages can really add up. Remember these tips for choosing nutrient dense drinks.

- Choose water first.
  - Drink water throughout the day.
  - Serve water with meals.
  - Keep water in the refrigerator.
  - Flavor water by adding fruit (lemon, kiwi, watermelon, orange, peach), ginger, basil, or cucumber.

- Choose low-fat or non-fat milk instead of sugar sweetened beverages.
- Drink diet or low-calorie beverages instead of sugar-sweetened beverages.
- Watch your portion sizes. Choose smaller portions of your favorite drinks.

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**Table 2. Nutrient Density: Orange vs. Oatmeal Cookies**

Food	Calories	Fat (grams)	Sugar (grams)	Vitamin C (mg)	Vitamin A (IU)	Fiber (grams)
1 Orange	45	0	9	51	216	2
2 Oatmeal cookies	224	10	12	0	8	1.4

**Table 3. Nutrient Density: Milk vs. Soda**

Food	Calories	Fat (grams)	Sugar (grams)	Calcium (mg)	Phosphorus (mg)
Fat-free milk	83	0	12	299	247
Chocolate milk	158	3	24	290	258
Sugar sweetened soda	88	0	22	0	24

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