

Basic Nutrition: Nutrient Density

What makes superfoods so super?

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How do you decide which foods you want to eat? Flavor? Texture? Convenience? Comfort? Many people choose the foods they eat based on immediate gratification, without much thought about the long-term effects of their selections. That often results in choosing foods that taste good, but are not good for you.

Think about the *nutrient density* of the foods before choosing your meals. Nutrient density refers to the amount of [essential nutrients](#)¹ for the given volume of food. Nutrient-dense foods have lots of nutrients, generally with fewer calories. All those [superfoods](#)² you've heard about are nutrient-dense. [Energy-dense](#)³ foods have more calories for the volume of food and generally fewer nutrients.



A Nutrient Dense Salad
Gruby Dolar

How Nutrient Density Works

You're hungry and it's a few hours until dinner, so you decide you want a snack. You can choose either an apple or a glazed donut. They are roughly the same size and either food works as a quick snack before you get back to work. Which one do you choose?

Hopefully you chose the apple. Why? The apple has around 80 calories and lots of vitamins, [fiber](#)⁴ and [phytochemicals](#)⁵. The fiber in the apple will fill your stomach and keep you satisfied until dinner.

The donut has calories. Lots of calories. In fact, the donut has more than 200 calories, but it doesn't have many nutrients. There's only about one gram of fiber -- it won't keep you feeling full either. Eating a sugary donut can easily lead to eating a second one, and possibly a third. Sure it tastes good, but your body might pay quite a price later, for this immediate gratification.

Compare nutrient density using the amount of calories in the food by weight or volume, or you can compare by [portion size](#)⁶. For example, compare a cup of carrot slices to four saltine crackers. Both snacks have about 50 calories, but the carrots have many more nutrients for the same number of calories. The carrots are nutrient dense; the crackers are energy-dense. This is important for people on weight-loss diets. Foods that are low in calories, but [high in fiber](#)⁷ and other vitamins, can help you [lose weight](#)⁸.

Nutrient-Dense Superfoods

You can probably already see from the examples that brightly colored fruits and vegetables are big winners in nutrient density. That's one reason why so many fruits and vegetables qualify as superfoods, or foods that are rich in nutrients and other compounds that have healthy benefits such as fiber, phytochemicals and [essential fatty acids](#)⁹. Carrots, tomatoes, broccoli, [kale](#)¹⁰, spinach, [berries](#)¹¹, [apples](#)¹², [cherries](#)¹³, [pomegranate](#)¹⁴ and [oranges](#)¹⁵ are all superfoods.

Other nutrient-dense superfoods include [salmon](#)¹⁶, tuna, trout, low-fat dairy products, [oatmeal](#)¹⁷ and [whole grains](#)¹⁸, soy, dry beans and even some [fortified](#)¹⁹ foods. On the other hand, energy-dense, nutrient-poor foods include things that are high in sugar and fat such as refined white breads, pasta, pastries, processed lunch meats and cheeses, ice cream, candy, soda, potato chips and corn chips. In other words, [junk food](#)²⁰.

Choosing nutrient-dense superfoods at the grocery store is pretty easy if you stay along the edges of the store, where the produce, fresh lean meats, low-fat dairy and fresh bakery goods are found. These fresh foods may be more expensive than the energy-dense packaged foods, but you buy more [nutrition](#)²¹ for that price.

Most shoppers choose some packaged foods for convenience, but you can still make smart choices with those products -- just read the labels. You can easily find the [Nutrition Facts labels](#)²² on the backs or sides of the packages. Look at the serving sizes, note the number of calories per serving and look at the amount of fiber, vitamins, [calcium](#)²³ and [iron](#)²⁴. The packaged food that has the better combination of lower calories, higher nutrients and less [sodium](#)²⁵ is the winner. (If you're not sure what all the words and letters mean, this will help: [Abbreviations Used In Nutrition](#)²⁶.)

Nutrient-Dense Meals

A nutrient-dense meal should have one serving of a [healthy protein](#)²⁷ source such as legumes, fish, poultry or lean meat (one serving of protein is typically about the size of a pack of playing cards). The rest of the meal should be made up of healthy side dishes. Vegetables are always good, even with a little bit of cheese or sauce (or try a vegetarian [cheese alternative](#)²⁸. Choose whole grain pasta instead of regular pasta, and [brown rice instead of white rice](#)²⁹. Add a green salad with lots of vegetables as side dish or [serve a big salad as a meal](#)³⁰. Vegetable soups made with clear broth is nutrient-dense and has fewer calories than a comparable cream soup.

Eating nutrient-dense food will ensure you are getting the nutrients and won't leave you feeling hungry later. Choosing nutrient dense foods can become a habit. Once you understand which foods are more nutrient dense, the rest is easy. Just remember that the foods you eat can affect your health in a big way. To be healthy or unhealthy? The choice is yours.

When Would I Want Energy-Dense Foods?

People who are underweight need some energy-dense foods to make sure they are getting enough calories to [gain weight](#)³¹. Nutrient-dense and energy-dense foods include foods like [peanut butter](#)³², [dried fruits](#)³³, starchy vegetables, and cheese.

Sources:

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