NUTRITION / DETOXIFICATION

Green Vegetables vs. Whole Grains: No Comparison

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While most people appreciate green vegetables as being healthy foods, their true power from a health perspective is generally not understood. A great example of this lack of understanding is apparent if I tell a patient to eat green vegetables in place of whole grains. The typical response is, "If I do this, where will I get my fiber from?" In fact, there is no comparison between the fiber amounts and overall nutritional density of green vegetables versus whole grains.

On a calorie by-calorie-basis, green vegetables contain substantially more fiber than whole grains. For example, 2 pieces of whole-wheat bread contain approximately 140 calories, only 4 grams of fiber, and 140 milligrams (mg) of potassium. In contrast, 2 cups of broccoli contain only 87 calories, but more than 9 grams of fiber and about 1,000 mg of potassium. And 5 cups of romaine lettuce (about the size of a large salad) provide only 80 calories, but 5 grams of fiber and 580 mg of potassium.

To understand the role green vegetables can play in your nutritional health, particularly when combined with other healthy foods such as fruit, consider that by eating 2 apples, 2 oranges, 2 cups of broccoli, and 5 cups of romaine lettuce on a daily basis, you would get approximately 450 calories, 28 grams of fiber, and more than 2,400 mg of potassium. The average American consumes only 15 grams of fiber per day; the typical recommendation is to get 25-30 grams per day (even that amount is likely too low).

Nutritional Powerhouses Pound for pound, calorie for calorie, green vegetables pack a nutritional wallop - just look at the nutritional profile for relatively small portions of these six popular green foods, courtesy of the Food and Drug Administration. (Note: DV = recommended daily value based on 2,000 calorie daily diet)							
Vegetable	Calories	Fiber	Potassium	Vitamin A (% DV)	Vitamin C (% DV)	Calcium (% DV)	Iron (% DV)
Asparagus (5 spears)	20	2 g	230 mg	10%	15%	2%	2%
Broccoli (1 medium stalk)	45	3 g	460 mg	6%	220%	6%	6%
Bell pepper (1 medium)	25	2 g	220 mg	4%	190%	2%	4%
Leaf lettuce (1.5 cups shredded)	15	1 g	170 mg	130%	6%	2%	4%
Celery (2 medium stalks)	15	2 g	260 mg	10%	15%	4%	2%
Cucumber (1/3 medium)	10	1 g	140 mg	4%	10%	2%	2%

Many diseases are associated with low fiber and low potassium intake. Diets low in fiber may underlie or exacerbate constipation, appendicitis, hemorrhoids, deep-vein thrombosis, varicose veins, diverticulitis, hiatal hernia, and gastroesophageal reflux. Fiber is thought to help prevent colon cancer, diabetes, and heart disease.

The general public rarely hears about importance of potassium in promoting health, so people rarely consider the need to eat potassium-rich foods - which coincidentally, are vegetables and fruits. (Animal protein and potatoes also provide substantial amounts of potassium, and by the way, whole and refined grains are generally among the worst dietary source of potassium. Research indicates that human beings need to take in about 7,000-11,000 mg of potassium per day, and this should come from diet, not supplements. However, the average American comes up well short of this number, consuming only about 2,500 mg per day or less. Numerous diseases are thought to be associated with such a low level of consumption,including high blood pressure, strokes, kidney stones, osteoporosis, gastrointestinal tract cancers, asthma, and insomnia.

Of course, besides containing high levels of fiber and potassium, green vegetables also contain an abundance of phytochemicals, which are known to offer numerous disease-fighting benefits. The most well-known phytochemicals are bioflavonoids and carotenoids. In recent years, a substantial amount of research has been devoted to phytochemicals; the general conclusion from this research is that we need to ensure adequate intake of fruits and vegetables so we can reap the benefits of phytochemicals.

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