

The 30 Pound Club

Join at drchet.com

April 21, 2011 – Grand Rapids, MI

Fresh, Frozen, Canned

Going through the list of questions you've asked, I chose this one because there are a lot of people who use their intuition about it:

What has more nutrition: fresh, frozen, or canned vegetables or fruit?

The answer: yes! Okay, so what does that mean? It really depends on which vegetables and fruit we're talking about.

Fresh-picked vegetables and fruit are obviously the best choice, with organically grown the best option. The problem is that we have the best food-distribution system in the world. Why would that be a problem? Right now in the supermarkets in Grand Rapids, strawberries are plentiful and they're on sale. Where did those strawberries come from—because it's not Grand Rapids where we had snow three days ago and the high temperature yesterday was 36 degrees. They came from Florida, California, or Mexico. That means it took days if not weeks to get transported, distributed, and displayed. Every day means they lost some nutritional value. The same thing happens to organic produce. If we can get it fresh and just picked, it has great nutritional value, but no possibility of pesticides and herbicides. That can happen in the summer in GR but not at this time of year.

That raises the question: might frozen be better? Yes, because of the way that produce is harvested and packaged. Often, whether it's raspberries, spinach, or broccoli, the produce is harvested, cleaned, and flash frozen. That sets the nutrient content exactly where it was at that moment in time. That means there could be more nutrients in frozen produce than fresh produce.

A study of the vitamin C content of organically grown green beans was conducted with the green beans distributed two ways. First was the traditional: harvested, marketed, purchased, and cooked. The second was flash frozen, purchased, and prepared. The fresh green beans had only 20% of its vitamin C content when it was consumed, while the frozen still had 80% of the vitamin C content. That's a pretty compelling argument to make for frozen. Keep in mind that produce retains all of its mineral and fiber content; only vitamins and phytonutrients fade away with time.

What about canned? It really depends on the produce. In order to be safe, some vegetables such as green peas and asparagus are cooked in the can. As long as you use the liquor from the can in making soup or some other dish, that would work. But often, they add significant amounts of sodium. When comparing the nutrient content of frozen versus canned peas, the major difference was in the vitamin A activity: the frozen peas had four times the amount as did the canned. However in carrots, known for high vitamin A activity, there was no difference. It will vary by the type of produce, and you can compare what interests you for yourself at www.nutritiondata.com.

What can we conclude? Fresh-picked produce is by far the best. It's a good reason to know what's in season close to you so you can take advantage of the freshest produce—and a good reason to support your local farmers' market and community-supported agriculture (CSA). But fresh-picked isn't practical for many of us for most of the year; frozen might trump fresh and canned, so keep that in mind especially in winter.

Here's what I'd like to see: I just want everyone to eat more vegetables—fresh, frozen, or in a can, I don't care. Just more.

One and Done.

What are you prepared to do today?

Dr. Chet

 **WGUV** Straight Talk on Health

Hear Dr. Chet's take on the latest health news and research—listen to *Straight Talk on Health* at 7 p.m. Sunday in the Eastern Time Zone on WGUV-FM 88.5 or 95.3, or listen live via the Internet by going to www.wgvu.org and clicking on "Listen Live" in the gray bar at the top.

The health information in this message is designed for educational purposes only. It's not a substitute for medical advice from your healthcare provider, and you should not use it to diagnose or treat a health problem or disease. It's designed to motivate you to work toward better health, and that includes seeing your healthcare professional regularly. If what you've read raises any questions or concerns about health problems or possible diseases, talk to your healthcare provider today.

Subscribe to the Message from Dr. Chet at DrChet.com — © Chet Zelasko PhD LLC