The Nutritional Story of Pears

"5-a-day." "More matters." Whatever label you put on it, it's no secret that we need to eat ample amounts of fruits and vegetables. Unfortunately, epidemiological research tells us that most people aren't eating enough. While vegetables can be a hard sell with some, fruit often isn't. Unlike vegetables, fruit is seen as an acceptable food choice at any eating occasion: breakfast, lunch, dinner, dessert and snacktime.

Pears are an example of a fruit that works equally well in a breakfast parfait or baked dessert as it does on a salad. Pears are a very good source of fiber, a good source of vitamins C and K, and contain significant amounts of specific flavonoids, particularly in the pear skin.

Fabulous Flavonoids

Flavonoids are a large family of polyphenolic compounds present in a wide variety of plants. Major dietary flavonoid subclasses include:

- Flavonols
- Flavones
- Flavanones
- Anthocyanins
- Flavan-3-ols
- Isoflavones



Anthocyanins, which are found in pears as well as apples and berries, may protect **LDL cholesterol** from oxidation. One animal model of **type 2 diabetes** mellitus (T2DM) found that anthocyanins significantly decreased blood glucose concentrations and improved insulin sensitivity in male mice. Analysis of consumption of dietary anthocyanins among participants in the Nurses' Health Study (NHS), NHS II and the Health Professionals Follow-Up Study found that a higher consumption of anthocyanin-rich fruit was associated with a lower risk of T2DM.

Bioavailability of flavonoids tends to be low. One reason is that it depends in part on the microbial population of the colon. A few flavonoids are metabolized in the small intestine, but most rely on bacterial enzymes in the large intestine.



Fantastic Fiber

Pears are a very good source of dietary fiber, and a single medium pear contains 22% of the recommended daily fiber intake. Pears contain pectin, a form of soluble dietary fiber that has prebiotic properties and so may contribute to intestinal health. It also contains lignans, polyphenolic compunds that are classified as part of the dietary fiber complex.

Pears by the Numbers...

A medium pear contains:

About **100** calories,

12.5% of the DRI for vitamin C

10% of the DRI for vitamin K

Wedick NM, Pan A et al. "Dietary flavonoid intakes and risk of type 2 diabetes in US men and women." Am J Clin Nutr 2012;95:925-33. Linus Pauling Institute Micronutrient Information Center. http://lpi.oregonstate.edu/infocenter/ Documentation for the Update of the USDA Database for Flavonoid Content of Selected foods, Release 3 (2011) USDA National Nutrient Database for Standard Reference. http://ndb.nal.usda.gov/