

Golden Flax vs. Brown Flax- Is There a Nutritional Difference?

Promoters of golden flax are confusing consumers by claiming that golden flax is nutritionally superior to brown flax in an attempt to justify the higher price of the golden flax product. Is there really a nutritional difference between the two flax varieties, or is the confusion due to marketing strategies?

The Flax Council of Canada confirms that the color of the seed coat has little to do with the nutritional value of the flaxseed. Color is a trait that can be manipulated by conventional plant breeding methods. For example, if you wanted to change the color of the seed in the brown flax variety you could do this and still maintain all the nutritional characteristics of the brown flax, just with a different seed coat color. The oil produced from the seed does not differ significantly in the essential fatty acid content of alpha linolenic acid (ALA) between brown and golden seed varieties, as ALA levels are not linked to seed coat color. The POS Pilot Plant Corporation (an independently certified lab) has analyzed the fatty acid profile of golden and brown flaxseed, confirming an insignificant difference between the two varieties. (Table 1).

Table 1: Analytical Comparison of Golden and Brown FlaxSeed

Fatty Acid Composition	Golden Flax	Brown Flax
Palmitic Acid C16	4.87	5.61
Stearic Acid C18	3.44	3.02
Oleic Acid C18:1	15.34	16.77
Linoleic Acid C18:2	15.59	14.70
Alpha Linolenic Acid C18:3	60.97	59.21

Mucilage content (also known as soluble fibre) is slightly higher (2%) in the brown seed in comparison to the golden seeds. The mucilage is the coating of the seed, which gives the high shine and causes the seed to become sticky when wet. Most of the soluble fibre in flaxseed is mucilage. Soluble fibre has been linked to lowering blood sugar levels in people suffering from diabetes and reducing coronary heart disease risk by lowering cholesterol levels, preventing colon and rectal cancer and also reducing the risk of obesity.

Bioriginal's brown flaxseed is grown in the heart of the prairies in Saskatchewan, Canada where the cooler summers provide ideal growing conditions. Cooler postflowering temperatures (10-25 days following flowering) can increase both the oil content and the levels of ALA. The Canadian Grain Commission has compared agronomic data on flax quality and has found that the further south flax is grown, the lower the oil and ALA content. Golden flax is typically grown south of Saskatchewan in North and South Dakota, whereas brown flax is grown in the prairies, giving it an edge in quality over the flax grown in other climates.

Flaxseed, whether brown or golden in color, is packed with powerful nutritional components. Protein, dietary fibre, lignans and ALA are natural properties of flaxseed which provide many health benefits. The components of flaxseed are known to help prevent certain types of cancer, protect the heart from cardiovascular disease, and help treat menopausal and premenstrual symptoms.

The nutritional content of flaxseed is not affected by the seed coat color. Despite certain marketing strategies promoting the superiority of golden flax, brown flax is nutritionally equal or superior to golden flax.

References:

1. Flax Council of Canada. www.flaxcouncil.ca. Oct. 18, 2001.
2. POS Pilot Plant Corporation, Analytical Services Division Oct 27, 1999.
3. Cunane S.C. and Thompson L.U. *Flaxseed in Human Nutrition*. AOCS Press, Champaign Il., 1995.
4. Jenkins et al. *American Journal of Clinical Nutrition* 1985; 42:604.

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