

FLAXSEED WHOLE GRAIN – ANCIENT GRAIN

Flaxseed (*Linum usitatissimum*), also known as linseed, is a highly nutritional whole grain...and ancient grain.

Whole grains – a matter of definition

The definition of “whole grain” is often confusing. It was the subject of a FDA “draft guidance”¹ submitted in 2006 for comment. It has yet to be resolved.

The value of marketing “whole grain” comes from a recognition of the superior nutritional value provided when *all* of a seed’s components are consumed together – i.e., the bran, germ and endosperm. This is agreed. Where confusion arises is in the term “grain”.

By some historic definitions, the term “grains” refers only to seeds of cereal plants, which are related to the grass family *Graminaea*.² A looser definition of “grain” is simply that of any plant seed that can be ground into a flour. The proposed FDA draft guidance includes seeds from so-called *pseudocereals*, a general classification that refers to broadleaf plants morphologically similar but unrelated to grasses. Flaxseed, like quinoa, buckwheat and amaranth, is a pseudocereal that can be ground into flour and developed into a gluten-free dough.

There is also confusion with regard to whole grain flaxseed’s status as an oilseed. The term “oilseed” is not taxonomic but industrial: “oilseed” refers to any seed grown for its oil content³. This includes rice and corn (which are cereals), flaxseed (a pseudocereal), and soy (a legume). Whole grain flaxseed (not meal) contains about 40% oil, half of which is in the form of omega-3 fatty acids.

The important definition for “whole grain” is nutritional: “whole grain” references aside, there is enormous nutritional variation between different whole grains. For example, the average total dietary fiber (TDF) contents of cereals such as whole-grain rice (4.6%), oats (10.6%) and wheat (12.7%) are very different from one another⁴, and from whole-grain flaxseed (27%)⁵.

Flaxseed is a whole grain and especially nutritious, too.

Ancient Grain – and well traveled, too.

“Ancient grains” is a relatively recent “marketing” term coined to reference both cereals and pseudocereals used since ancient times but largely forgotten...by most people...until recently, anyway. “Ancient grains” include grains such as kamut, quinoa, amaranth, teff and flaxseed.

The earliest references to flaxseed’s cultivation and use as a food are in Asia Minor about 5,000 years ago⁶, about the same time that rice cultivation began in China’s Yangtze River valley⁷. Abyssinians roasted the seeds for food. Flaxseed was widely utilized in Roman and Greek times

and was recognized for its nutraceutical properties. Hippocrates, the ancient Greek physician deemed the “Father of Medicine, prescribed flaxseed for a number of digestive ailments. It has been used in northern India as a dough filling and in Ethiopia as an ingredient in spreads, porridges, stew and tea. Flaxseed was purportedly brought to the Americas in the 17th Century by the French and the Puritans. Although interest in flaxseed waned in Western Europe and the Americas, modern discoveries of the nutraceutical benefits of flaxseed’s omega-3 fatty acids, lignans, other polyphenolic antioxidants, and dietary fiber for a wide range of health conditions⁸ have revived interest in this ancient whole grain as a food ingredient.

Speaking of which, here is a recipe for Ethiopian flaxseed (telba) tea, with a flavor similar to green tea:

Ethiopian “Telba” Tea Recipe

- Add one tsp. ENRECO Sterling Choice™ whole-milled flaxseed to a tea holder or strainer.
- Strain in 1-cup hot water for 20 minutes.
- Allow water to cool to desired temperature.
- Add honey and lemon to taste.

Supports digestive and immune system health.

1. Anonymous. “Whole Grain Label Statements: Guidance for Industry and FDA Staff “ Draft Guidance; February 17, 2006, Food & Drug Administration.

² Ensminger, A.H, Ensminger, M.E., Konlande, J.E., and Robson, J.R.K. Food & Nutrition Encyclopedia-2nd Ed.(Vol. 1); 1994, 1092. CRC Press, Inc., Boca Raton, Fla.

³ Ensminger, A.H, Ensminger, M.E., Konlande, J.E., and Robson, J.R.K. Food & Nutrition Encyclopedia-2nd Ed.(Vol. 1); 1994, 1663. CRC Press, Inc., Boca Raton, Fla.

⁴ Cho, S.S., Proskey, L. and Dreher, M. “Complex Carbohydrates in Foods”, 1999, 639-642; Marcel Dekker, Inc., New York.

⁵ ENRECO – Whole Flaxseed Specifications Sheet. ENRECO, Inc., Sheboygan Falls, Wis.

⁶ Ensminger, A.H, Ensminger, M.E., Konlande, J.E., and Robson, J.R.K. Food & Nutrition Encyclopedia-2nd Ed.(Vol. 1); 1994, 1663. CRC Press, Inc., Boca Raton, Fla.

⁷ Trager, J. The Food Chronology: A Food Lover’s Compendium of Events and Anecdotes, from Prehistory to the Present, 1995. Henry Holt and Company, Inc., New York.

⁸ Thompson, L.U. and Cunnane, S.C. Flaxseed in Human Nutrition. 1995, AOCS Press, Champaign, Ill.