

Health & Wellness

For a rich source of Omega-3 fatty acids, dietary fiber, antioxidants and lignans, choose flaxseed. Nature's best source of the Omega-3 fatty acid ALA, flaxseed offers a wide range of health benefits, particularly for cardiovascular, immune system and skin and hair. In addition, flaxseed's lignans—which are strong antioxidants and phytoestrogens—can enhance women's and men's health. And flaxseed is low in carbohydrates, high in protein and rich in dietary fiber (an amazing 27%), which offers cardiovascular benefits and helps with weight maintenance.

Milled Flaxseed Composition

Carbohydrate	30%	Less than 3% net carbs
Dietary Fiber	27%	Whole Grain
Protein	20%	Comparable quality to soy
Fat	37%	
ALA	22%	Omega-3
Moisture	7%	

BevGrad™ Fine-Milled, Pasteurized Whole Flaxseed

- Fine-granulation whole milled flaxseed
- Smooth texture
- Enhanced microbial stability
- Available in Organic
- Beverages and ready-to-mix beverages

UltraGrad™ Flaxseed with Fish Oil

- Contains all three Omega-3s—ALA, EPA and DHA
- Smooth texture
- Enhanced shelf life
- Trans-fat free, gluten-free and kosher certified
- No fishy odor or taste

Label & Claims

Adding Pizzeys' flaxseed ingredients to your foods can strengthen your nutrition label. Research supports nutrient content, structure function and qualified heart health claims:

CLAIM	REQUIREMENTS	USAGE LEVEL	SAMPLES
Nutrient Content	260 mg of Omega-3 per serving	1.3 g BevGrad per serving	Rich/high/excellent source of ALA Omega-3
	130 mg of Omega-3 per serving	0.65 g BevGrad per serving	Good source of ALA Omega-3
Structure Function	Must be based on scientific research, must be truthful and not misleading. Can only refer to affect substance may have on normal structure or function of body, cannot refer to disease.	0.65 g BevGrad per serving	Omega-3 fatty acids support cardiovascular health. Omega-3 fatty acids support overall health.
Qualified Heart Health		1.8 g Ultra (flaxseed with fish oil) per serving (260 mg of ALA and 32 mg of EPA and DHA combined)	Supportive but not conclusive research shows that consumption of EPA and DHA Omega-3 fatty acids may reduce the risk of coronary heart disease. One serving of [name of food] provides [x] grams of EPA and DHA Omega-3 fatty acids. [See nutrition information for total fat, saturated fat and cholesterol content.]

meadowpure™
FLAX

for
Beverage
Products



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Flaxseed Smoothes the Way for Beverages

Succeeding in the competitive beverage market takes ingredients as versatile as your portfolio. Enter MeadowPure™ flaxseed, full of Omega-3s, fiber, protein and antioxidants, plus the stability and consistency to perform in your finished products.

For dairy, fruit, soy protein beverages and more, MeadowPure ingredients offer the ideal way to fortify and provide smooth, creamy texture without compromising taste or detracting from fruit flavors.

Just 2% provides 1,200 mg of Omega-3 ALA per 8-oz. serving, more than enough to qualify your product for a “rich, excellent or high” source of alpha-linolenic acid (ALA) Omega-3 FDA-approved content claim.

2.2% **=** **900 mg**
of Pizzey's fine-milled flaxseed in an 8 oz. beverage serving
of ALA Omega-3

Particularly in opaque beverages like smoothies, tropical juices and soymilk, flaxseed is an excellent addition.

BevGrad™ flaxseed contributes mild, pleasant oatmeal-like cereal flavor with slight banana notes. It is particularly appropriate for milk and soy protein beverages, creating a well-rounded, blended flavor. In protein drinks, BevGrad flaxseed creates an appealing vanilla cream color.

Pizzey's BevGrad Flaxseed

Flaxseed is an oilseed/grain composed of both soluble and insoluble components. Consequently, it does not totally solubilize but will form a suspension with the insoluble fractions in the beverage. Pizzey's BevGrad flaxseed is a specialty whole-flaxseed ingredient that has been fine-milled using patented and proprietary technology for specific beverage and confectionary applications. BevGrad flaxseed provides a smooth creamy texture while preserving its quality, consistency and stability under storage. Pizzey's guarantees the shelf stability of its BevGrad whole milled flaxseed for a minimum of two years at room temperature.

RECOMMENDED STARTING LEVELS: 2.2% TO 2.8% (by weight)



Competition for Water

BevGrad flaxseed contains about 18% dietary fiber and 6% soluble fiber. Consequently, the flaxseed will absorb water in solution and during processing, thereby contributing to the beverage viscosity. Flaxseed will also compete for water with other ingredients, such as soy proteins, fruit concentrates and sweeteners. Flaxseed use levels should be varied accordingly. Excessive viscosity can be addressed by increasing the water content of the formulation. It is recommended that filtered water be used in flaxseed beverage formulations.

RECOMMENDED SOLUBLE SOLIDS CONTENT: less-than 21% (13° to 23° Brix)

Stabilizers and Suspending Agents

Two natural stabilizers are recommended for use in flaxseed beverage formulations: pectin and agar. Starting levels are provided that offer two levels of viscosity. These stabilizers have been chosen for their ability to suspend BevGrad flaxseed particles and to provide a smooth, creamy texture. Use levels can be adjusted to obtain desirable beverage viscosities.

RECOMMENDED STARTING LEVEL: 0.01% TO 0.40% (by weight)

Contribution of Stabilizers to pH and Viscosity

Stabilizer	Starting Use Level	pH (initial)	pH (processed)	Soluble Solids °Brix	Viscosity (72°F / 22° C)
Pectin	0.30%	4.08	3.99	12.8	18.0 cps
Agar	0.40%	3.94	3.96	12.3	297.5 cps

Acidulants and pH

BevGrad flaxseed works well in both high –acid and low-acid beverage formulations. Use solutions of food-approved acidulants, such as citric or malic acid, to adjust the pH of flaxseed beverages to the desired end-point. The type of acidulant used in the formulation will affect both the flavor release and flavor profile. Typically, acidified beverage pHs run between 3.0-4.0. The pH contribution of other ingredients should also be considered. Addition of flaxseed to water with a pH of around 5.0 will typically increase the pH by 1.0 to 1.5 points. Addition of fruit juices and/or soy milk will also significantly affect the pH of flaxseed beverage formulations. In formulation tests conducted by Pizzey's Nutritionals, very little, if any, pH drift was observed during processing and storage.

Flavor and Color

BevGrad flaxseed contributes a mild, pleasant smooth “oatmeal”-like cereal flavor, with slight “banana” notes, to beverages. It marries very well with milk and soy protein beverages, creating a well rounded, blended flavor. The flaxseed contributes to the creamy character of milk and soymilk. The flavor of flaxseed enhances the flavor of soymilk. The flavor does not detract from fruit flavors. Spices such as cinnamon, cardamom, and vanilla can be added to further enhance the flavor quality of flaxseed beverages or to create “chai” formulations.

Because flaxseed forms suspensions rather than solutions, its application is more appropriate for opaque (versus clear) beverages. When added to protein drinks the beverage color becomes less white and more vanilla cream colored, which can be very appealing. It does not detract from the desired “milky” color of the beverage. The addition of natural colorants is recommended for fruit-flavored beverages and smoothies. Beta-carotene is recommended for enhancing orange colors. Natural cochineal or elderberry juice colors are recommended to overcome the browner color notes contributed by flaxseed in light peach-or pink-colored beverages.