



Flax Seeds

Health Benefits of Flaxseeds

Flax seeds, also called flaxseeds or linseeds, are best consumed ground, which releases the nutrition within. They are a good source of protein, essential omega-3 fats, lignans and dietary fiber.

2 Tbsp (per day) ground flaxseed provides:

- 70 Calories, 3 gm protein, 3 gm fiber, 4.5 gm fat, no cholesterol

Potential benefits of consuming ground flaxseed:

- Source of soluble fiber that helps lower cholesterol, maintain steady blood sugars and promote satiety for weight management
- Contain compounds our body converts to lignans, plant estrogens shown to reduce risk of cancer, osteoporosis and heart disease
- Rich in the essential omega-3 fatty acid, alpha linoleic acid (ALA), with anti-inflammatory properties associated with lowering risk of heart disease, stroke, autoimmune disease and depression
- Also contain B vitamins, manganese, magnesium, phosphorus, calcium, iron and potassium
- Ground flaxseed has a nutty flavor, delicious in oatmeal, salads or baked goods. 1 Tbsp ground flaxseed + 3 Tbsp water replaces 1 egg

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Family & Community Health and Advanced Health



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Flax seeds, also called flaxseeds or linseeds, are small nuggets of good nutrition. They are one of the richest sources of the essential omega-3 fatty acid, Alpha Linolenic Acid (ALA), second only to chia seeds. They are high in lignans, dietary fiber and are a good source of protein.

Flaxseeds are best consumed ground which unlocks the nutrition contained within. If consumed whole, they pass through the intestinal tract undigested, their nutrition inaccessible. They are usually brown or golden yellow. Golden flaxseeds have a higher ALA content than brown, but brown flax seeds have more antioxidants.

Ground flaxseed is sometimes called flax meal because the texture is similar to cornmeal. Technically, the milling of flax into meal requires removing the oils and is used for making fabric. Grinding flaxseeds at home or purchasing ground flaxseed retains the healthy oils but is still sometimes referred to as flax meal.

Flaxseeds can be found in a variety of forms: whole seeds, ground (for consuming), defatted ground (for fabric), flaxseed oil and, more recently, flaxseed non-dairy milk.

WHAT MAKES FLAXSEEDS GREAT?

Nutrition

- 2 Tbsp (per day) ground flaxseed provides 70 Calories, 3 gm protein, 3 gm fiber, 4.5 gm fat, no cholesterol

Fats

Flaxseeds are rich in ALA, an essential omega-3 fatty acid. Omega-3 fats are anti-inflammatory and essential for brain development and function. Omega-3s have also been shown to reduce risk of heart disease by helping to lower blood pressure and cholesterol.

Lignans

Lignans are a fibrous component of plants, but unlike fiber, they have estrogen-like properties. Studies show that plant estrogens bind to receptors, blocking human estrogen and lowering risk of estrogen-receptive cancers like breast and endometrial. Flaxseeds have up to 800 times more lignans than other plant foods. Lignans also function as anti-oxidants protecting against aging and chronic diseases.

Vitamins & Minerals

Flaxseeds contain B vitamins, manganese, magnesium, phosphorus, calcium, iron, copper, zinc, potassium and the antioxidant, selenium. They contain no sodium.

Protein

Like all seeds, flaxseeds contain protein, nearly 20%.

Fiber

About 30% of flaxseed composition is carbohydrate, 95% of that being fiber. The majority of fiber is insoluble, helping the digestive tract to move food through quickly, and feeding the healthy microbiota. About 20-40% of the fiber is soluble, considered a rich source. Soluble fiber has been shown to lower cholesterol and help modulate blood sugars. Adding ground flaxseed to foods helps to lower the glycemic load.

Soluble fiber and water mix to form a glutenous mixture which can be used as a substitute for egg in recipes. Mix 1 tablespoon ground flaxseed with 3 tablespoons warm water, stir and let rest for 2-3 minutes. Use in baked goods as cholesterol-free egg substitute.

BUYING AND USING FLAXSEEDS

When choosing flaxseeds, you can opt for golden or brown varieties. You may find a small price difference between them but both are considered equally healthy. You can also choose between whole flaxseeds and grind them at home in your coffee grinder, or ground flaxseed which should always be purchased sealed, never in bulk.



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The omega-3 fats are highly susceptible to oxidation or spoilage. Once ground, those fats can rapidly deteriorate and go rancid. If you choose the convenience of ground flaxseed, take out what you need and store the remainder in the freezer until you need it again.

Flaxseed oil has had the solids removed, including the healthy fiber and lignans. It also has a very short shelf-life so pay attention to sell-by dates and keep refrigerated after opening.

Using flaxseeds:

- 2 Tbsp per day ground flaxseed is a serving. Use all at once or split this throughout your day. They have a nutty flavor and are delicious in a variety of foods.
- Sprinkle ground flaxseed in oatmeal or on salads. Stir into soups or stews as a thickener or toss into smoothies or shakes. Add to baked goods or use as egg substitute. Omega-3s are not affected by heat.
- Flaxseed oil contains 7,196 mg of omega-3 fatty acids, more than 5 times the recommended amount. This oil would be used in small amounts as a supplement in place of fish oil capsules. Check with your doctor.
- Do not use flaxseed oil for cooking.
- Flaxseed oil can be applied topically as a face or hand moisturizer or as a hair treatment.

CAUTIONS

Because flaxseeds are high in fiber, be sure when adding them to your diet that you consume plenty of water.

Flaxseed Breakfast Cookies

Adapted from PowerHungry.com

Ingredients:

- 1/2 c unsweetened nut butter (almond, peanut)
- 1/3 c non-dairy milk (almond, soy)
- 1/3 c pure maple syrup (or 1/4 cup coconut sugar)
- 1 tsp vanilla
- 1/2 tsp cinnamon
- 2/3 c ground flaxseed
- 2/3 c dried fruit (raisins, cranberries, dates or figs)

Directions:

1. Preheat oven to 325°F. Grease or spray 12-cup muffin pan with non-stick spray.
2. In a medium bowl, combine nut butter, syrup, milk and spices. Stir in ground flaxseed and dried fruit.
3. Evenly divide into muffin cups and bake 18-22 minutes, until golden brown.
4. Cool on wire rack 10 minutes.
5. Each cookie is 110 Calories, 6 gm fat, 3 gm protein and 2 gm fiber.

REFERENCES

Health.Clevelandclinic.org
Mayoclinic.org
Nutritiondata.self.com

Flaxseed Crackers

NourishEveryDay.com

These crackers are gluten-free, paleo, vegan, vegetarian and grain-free. Ground flaxseed is the “flour” and crackers can be flavored to suit your taste (garlic, basil, pepper, rosemary, etc).

Ingredients:

- 1 c ground flaxseed
- 2 Tbsp chia seeds
- 1/2 tsp salt
- 2-3 tsp dried herbs, spices of choice
- 1/2 cup water

Directions:

1. Preheat oven to 350°F. Line baking pan with parchment paper.
2. Combine all dry ingredients in mixing bowl. Slowly add water, mashing it as you go until dough forms.
3. Scoop mixture onto lined baking tray. Using back of a spoon or fingers, press and smooth mixture so it is like a giant, thin pancake.
4. Use a sharp knife to score your dough into squares.
5. Bake 30-35 minutes, checking to prevent burning.
6. Cool and break into crackers.
7. Store in airtight container up to 2 weeks.
8. Serve with hummus and vegetables.