WHAT IS FLAX?
Flax is a grain, that when incorporated into the diet, may have some very important protective benefits against chronic illnesses such as heart disease and cancer. Flax is a blue flowering crop grown in Canada for its oil rich seeds. Flaxseeds are tiny, smooth, flat, and light brown-colored. They have a pleasant, nutty flavor and are very nutritious!

THE MAJOR NUTRIENTS IN FLAX:
Flax is one of the richest sources of Omega-3 Fatty Acid, which is considered the “good” or healthy fat because of its association with lowering the risk of heart disease. Flax also contains a high amount of mixed fiber: about 1/3rd soluble, 2/3rd insoluble fiber. It is also a rich source of lignans, which are special compounds (phytoestrogens) that may have some impressive health benefits as well.

NUTRIENT PROFILE OF FLAXSEED
Approximately 3-1/2 oz provides:
Calories >>>>>>>>>>>>>> 450
Protein >>>>>>>>>>>>>> 21g
Total Fat >>>>>>>>>>>>>> 42g
Saturated Fat >>>>>>>>>> 4g
% Saturated Fat >>>>>>>> 8%
Monounsaturated Fat >>>> 8g
Polyunsaturated Fat >>>> 30g
Dietary Fiber >>>>>>>>>> 26g

HOW FLAX CAN PROTECT OUR HEALTH:
Flax is considered a nutraceutical food. These nutraceutical foods, when eaten for a particular health benefit, are considered, in some circles to be as potent and effective as medicine. As part of a balanced diet, flax may have an effect on lowering cholesterol levels, stabilizing blood sugars, regulating bowels, as well as perhaps even preventing the growth of cancerous tumors.

Omega-3 Fatty Acids: considered the “good” fat, these fatty acids are polyunsaturated “essential” fatty acids, which means that the body can not make them…we need to get them in our diet
May protect against heart disease by:
  ▪  lowering serum cholesterol (fats in the blood) by making platelets less “sticky”
  ▪  reducing the risk of blood clots
They may protect against other illnesses such as:
- rheumatoid arthritis
- multiple sclerosis
- heart attack or angina
- high blood pressure
- inflammatory skin disorders
- even some strokes

**We may be able to achieve better health and increase the levels of essential fatty acids in our diet by:**

- reducing saturated fat and total fat in our diets - there is a lot of research linking a high saturated fat diet to numerous diseases such as cancers, heart disease, and strokes; it is recommended that we consume fewer than 30% of total calories as fat; the easiest way to achieve this is to eat less animal products and eat a more plant based diet - most plant foods, except for nuts and seeds which are high in polyunsaturated essential fatty acids (including Omega-3 fatty acids), are very low in fat
- reducing how much margarine and foods containing Trans-fatty acids or partially hydrogenated oils - during the process of making margarine, vegetable oils are hydrogenated, which means a hydrogen molecule is added and the vegetable oil is now more saturated; this process changes the structure of the natural fatty acid in the vegetable oil into many “unnatural” fatty acids that the body can not recognize; this interferes with the body’s ability to use essential fatty acids - Trans-fatty acids have been implicated in many disorders ranging from: increased cholesterol levels and abnormal sperm production to increased prevalence of diabetes and immune suppression
- Take 2-3 Tablespoons of Milled Flaxseed daily - because Flaxseed is the richest source of Omega-3 fatty acids, it is linked to possibly reducing the risk of many diseases such as heart disease, some cancers, and even some strokes

**excerpted from:** “Ask the Doctor”, Naturopathic physician, Dr. Michael T. Murray, *Flaxseed Oil*

**Soluble Fiber:**
- helps slow down digestion, keeping blood sugars more stable
- may help to lower cholesterol levels, protecting us from the risk of heart disease
- acts as a barrier to the absorption of sugar by binding with it, also keeping blood sugars more stable

**Insoluble Fiber:**
- helpful in regulating bowels
- may prevent constipation by moving the stool quickly through the colon
- like soluble fiber, acts as a barrier to the absorption of sugar

**Lignans:**
- may be helpful in relieving hot flashes associated with menopause
- helping to regulate the immune system and prevent the formation of compounds that cause inflammation
- perhaps acting as cancer blockers, especially with hormone-based cancers such as breast, prostate, and endometrium

**BUYING AND STORING FLAX:**
- WHOLE FLAXSEED - found at most health food stores, natural food stores, as well as some of your favorite larger supermarkets; can be stored at room temperature for up to one year
- MILLED FLAXSEED - found also at the above stores and tends to be more expensive than the whole flaxseed; for optimum freshness, mill whole flaxseed in a coffee bean grinder, food processor, or blender as you need it; store milled flaxseed in an opaque container in the refrigerator/freezer for up to 30 days

**HOW TO INCORPORATE FLAX INTO YOUR DIET:**

**BAKED GOODS:**
- can be used in everything from yeast or quick breads and muffins to cookies and bagels
- at home and even commercial bakers are now including flaxseed as a healthy alternative in their baking
- it adds a pleasant, nutty flavor, wonderful texture, and a lot of nutrition to your favorite recipes
- a scoopful of the *whole flaxseed* can be added to bread doughs, or cookie, muffin, and cookie mixes; or it can be sprinkled on top of these before baking to add extra crunch, taste, and eye appeal
- *milled flaxseed* to a granular, free-flowing meal can also be added to the dough of your favorite baked goods; it enhances flavor, appearance, and nutritional value of the finished product

**AS A TOPPING ON:**
- cereals
- yogurt
- salads
- toast
- ice-cream or better for you, frozen yogurt
- low fat pudding
- oatmeal/hot cereal
- fresh sliced fruit
- canned, drained fruit (not in syrup)
- stir-fries
- brown rice
- mashed sweet potatoes
- steamed vegetables
- cous cous/any favorite cooked grain
- soups

**SOME OTHER FLAX TIPS:**

**FLAXSEED IN RECIPES**
- can be used as a substitute for some or all of the oil/shortening/butter called for in the recipe
- a 3:1 ratio is recommended by cooks - 3 Tablespoons of milled flaxseed can replace 1 Tablespoon of the oil/shortening/butter
- keep in mind: when flaxseed is substituted, baked goods brown more rapidly

**VEGETARIAN BAKING**
- flaxseed mixed with water can replace eggs in certain recipes like pancakes, muffins, & cookies
- mix 1 Tablespoon of milled flaxseed and 3 Tablespoons of water in a small bowl and let sit for one - two minutes; add to recipe as you would an egg
- this substitution makes the baked good somewhat gummier or chewier and the volume is decreased
- when using this replacement...test the recipe first to see if it meets your standards in taste, texture, and appearance

**FOR MORE INFORMATION ON FLAX**
- contact by **mail**: Flax Council of Canada, 465-167 Lombard Avenue, Winnipeg, Manitoba, Canada R3B 0T6
- **phone** the Council at: (204) 942-2115
- **fax** the Council at: (204)942-1841
- **e-mail** the Council at: flax@flaxcouncil.ca
- **website**: http://www.flaxcouncil.ca
- to buy a 1 pound sample of flaxseed and have it shipped directly to anywhere in US call: 1-877-BUY-FLAX or send a check or money order for $6.00 payable to 877- BUY-FLAX and send to: 877-BUY-FLAX, P.O. Box 281525, San Francisco, CA 94128-1525 (the $6.00 includes shipping and handling)