

What is KrustaVita?

KrustaVita is artisan bread based on old Scandinavian traditions. It is a delicious, moist, dark rye bread with chewy, whole kernels of rye, barley, sunflower seeds and flaxseeds, leavened by natural sourdough. KrustaVita is named after its many health benefits and is Latin for "Bread of Life."

What is rye?

Rye is a cereal grain, known scientifically as *Secale cereal*, which looks like wheat but is longer and more slender. Rye's color varies from yellowish brown to grayish green. Rye contains less elastic gluten than wheat, and breads made with rye flour are denser and more compact, as it holds less gas during the leavening process. Many rye breads are therefore mixed with wheat.

Rye grows wild in Turkey and was largely unknown in most of Europe until after the Roman era. One Roman writer (Pliny the Elder) dismissed it as "a very poor food (which) only serves to avert starvation". Nevertheless, it has gradually become a staple food for many European people, partly because it grows reliably in relatively cold conditions and on poor soils, and partly because of its subtle natural sweetness and flavor.

Today, the majority of the world's rye comes from the Russian Federation. Poland, China, Canada and Denmark are among other countries that grow rye commercially. In the US rye consumption has consistently decreased over the last forty years. As of 2006 Americans consumed an average of half a gram of rye per day versus 118 grams of wheat per day according to the US Department of Agriculture's Economic Research Service.

How is rye different from wheat?

The dietary fiber content of typical rye bread is about three times higher than that of white wheat bread, and appears to be more effective than fiber from wheat in the overall improvement of digestive health. KrustaVita contains 6 grams of fiber per serving. Also, rye has a higher content of soluble fiber than wheat, which may play an important role in reducing the risk of coronary heart disease.

Rye is known among the cereals to have the highest content of plant lignans (naturally occurring chemicals) which belong to the group of phyto-estrogens. Through conversion in the colon these lignans may inhibit the development and growth of hormone-dependent cancers, such as prostate and breast cancer, but no conclusive evidence has been established to date.

Is KrustaVita organic?

Organic ingredients have been used to produce KrustaVita where possible.

Is KrustaVita wheat-free?

Yes. But it is produced in a facility that utilizes wheat flour and may contain traces of wheat.

Is KrustaVita gluten-free?

No. Rye contains gluten although in less quantities than wheat.

Is KrustaVita all natural?

Yes. KrustaVita is based on the highest quality ingredients with no added fats or preservatives.

I am vegan. Is KrustaVita dairy free?

Yes. KrustaVita is free of dairy ingredients.

Does KrustaVita contain commercial yeast?

No. KrustaVita is leavened only by natural sourdough; a process that takes up to 18 hours.

Will I grow tall, blond and skinny from eating KrustaVita?

You will not grow tall and blond, but you might become skinnier. The high content of fiber in KrustaVita is very satiating, so when you eat the bread you will feel full longer and may not be tempted to overeat. Weight Watchers in Finland have approved whole meal rye bread in the diet as a "free" item. This means that a person following a Weight Watchers diet in order to lose weight is allowed to eat rye bread during breakfast, lunch and dinner as an extra dish, which does not count in the basic diet.

I am not used to eat a lot of fiber, should I load up on KrustaVita from day one?

If your digestive system has been on a free ride for years, it might protest over too much fiber too soon. Some people may initially experience gas, bloating or even constipation, when they begin consuming more fiber. However, once your digestive system adjusts to a healthier diet rich in fiber, your digestion will improve and you should feel better. The best way to introduce more fiber into your diet is to start slowly with half a slice of bread a day, and then gradually add more servings. Drinking plenty of water – one to two glasses extra per day – will help the fiber to expand and getting processed through your system. Adding yoghurt may also be helpful.

How do I store and prepare KrustaVita?

Refrigerating KrustaVita preserves the moisture and helps retain its freshness. KrustaVita will stay fresh for a long time when refrigerated thanks to the sourdough and its low PH. For best result before eating, toasting the slice of bread or giving it a few seconds in the microwave is recommended. KrustaVita also freezes very well.

How thick of a slice should I eat to get one serving of whole grains?

A half-inch thick slice is approximately equivalent to one 2 ounce serving of whole grains. The USDA recommends you eat at least three servings of whole grains per day. KrustaVita has 100% whole grains per serving.

KrustaVita tastes salty, but it says it is low in sodium?

The perceived "salty" taste is due to the sourdough. The sourdough lowers the PH so that the bread becomes acidic. This also helps the bread to stay fresh longer than bread based on commercial yeast.

I am trying to lose weight. Is it really OK to eat carbohydrates?

The carbohydrates in KrustaVita are defined as "complex" carbohydrates. This means that it takes your body more time to convert the carbohydrates into glucose, because they are whole or intact grains and not refined. The rye flour used in KrustaVita is still relatively coarse because it is very difficult to separate the bran, which contains fiber and minerals, from the endosperm of rye. The longer it takes your body to convert the carbohydrates into glucose, the longer you will feel full. In addition, during the fermentation process sourdough lowers the carbohydrate level by transforming them into lactic acid, which also may prevent your glucose from increasing too fast.

I am diabetic/pre-diabetic. How does KrustaVita affect my blood glucose?

At this point of time, KrustaVita has not been studied in diabetics. However, there is scientific evidence in both humans and animals showing that whole grain rye bread has a beneficial effect on blood glucose, and may have a positive effect on the prevention of diabetes. Similarly, smaller studies have shown that sourdough based breads seem effective in reducing the blood glucose response to insulin compared to that of non-sourdough based breads.

What is KrustaVita's glycemic index?

The Glycemic Index was established in 1981 by nutrition scientist, David Jenkins, MD, Ph.D, to measure the effect of carbohydrates on blood sugar. The lower the index the less impact the carbohydrates have on the blood glucose. The glycemic index for KrustaVita has not yet been established. However, based on the glycemic index for other rye breads and sourdough breads there is reason to believe, that KrustaVita has a low to intermediate glycemic index.

Does rye protect against heart disease as effectively as other whole grains?

A 1996 study published in the renowned, scientific journal of *Circulation* suggests that consuming rye bread reduces the risk of dying from heart disease. According to the study, elderly Finnish men who consumed 10 grams or more of fiber a day cut their risk of dying from coronary heart disease by 17% compared to those in the study who consumed less fiber. Researchers credited fiber, especially the rye itself (which they dubbed "the wonder grain"), for being good for the heart.

Will KrustaVita lower my cholesterol?

KrustaVita has not been studied in the lowering of cholesterol. According to a Finnish study published in the *Journal of Nutrition* 2000, a diet high in rye fiber has been shown to have positive effects in reducing serum total and LDL cholesterol in men with elevated serum cholesterol. The reduction of cholesterol was greatest among men that had consumed large amounts of rye bread (195-240 g rye bread/day). White wheat bread did not have a cholesterol lowering effect.

Serving Suggestions

Try a slice of KrustaVita for breakfast with a fried or scrambled egg, garnished with fresh tomatoes and chives or cilantro. For the busy morning person, simply put a slice of your favorite cheese on top of a thick slice of KrustaVita, it will keep you full and make you stay focused throughout the morning. To add a little sweet, try jam or honey.

For lunch, any type of deli meat makes a delicious sandwich. Try tuna with a dab of low fat mayo, cucumber and a sprig of baby dill. Even vegetables like potato or tomato tastes great on top of a slice of KrustaVita.

KrustaVita is great as an appetizer – it fills you up, so you will not overeat at dinner. Cut a slice of KrustaVita into smaller pieces and simply dip in olive oil or hummus. KrustaVita is also the perfect choice for any kind of salmon preparation, such as salmon pate, smoked salmon or lox.

There are no limits to how you can prepare KrustaVita. Email or twitter me your favorite KrustaVita creation to: krustavita@royalrye.com (coming soon!)

Want to know more?

Go to www.krustavita.com (coming soon!)

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