



Here's what you need to know about barley and whole grains

The Dietary Guidelines for Americans 2010 continue to put a major emphasis on eating whole grains. What is a whole grain? Is barley considered whole grain? How can you tell? Here's a quick rundown of what you need to know:

What is a whole grain?

In its natural state, a whole grain is considered the entire seed or kernel of the plant. The seed or kernel is made up of three parts, the bran, germ and endosperm. Whole grain products contain essential parts and the naturally occurring nutrients of the seed or kernel.

Bran

This is the outer skin of the kernel. The bran is typically a tougher layer that's designed to protect the rest of the seed or kernel. The bran layer usually contains important antioxidants, B vitamins and fiber. It's important to note that for many grains, fiber is only found in the bran layer. Barley differs from many grains in that fiber is found throughout the entire barley kernel and not just in the bran layer.

Germ

This layer is actually the embryo of the seed or kernel. The germ layer typically contains B vitamins, some protein, minerals and healthful fats.

Endosperm

This is the germ's food supply and is the largest portion of the kernel. The endosperm contains starchy carbohydrates, proteins and small amounts of vitamins and minerals.

Why are whole grains considered an important part of a healthful diet?

Whole grains naturally contain many key nutrients that are essential for good health. These include fiber, protein, important vitamins and minerals, and disease-fighting phytochemicals and antioxidants.

If a grain is processed, can it still be considered whole grain?

A seed or kernel that is processed (such as cracked, crushed, rolled or extruded)

may be considered whole grain if the end product contains essentially the same balance of nutrients that are found in the original seed or kernel.

Is barley considered whole grain?

Yes, specific types of barley are considered whole grain. These include hulled barley (in which the kernels are minimally processed to remove only the tough inedible outer hull) and hulless barley (a type of barley in which the tough inedible hull is loosely adhered to the kernel and requires minimal to no processing). Hulled barley may be purchased in several forms including kernels (berries), cut (grits) and ground (meal and flour). Both hulled and hulless barley products are in more limited supply, but may be found in some health food stores and in the natural sections of some supermarkets.

What about pearled barley?

Pearl barley refers to covered barley that has been processed to a greater degree than hulled barley. Because pearl barley undergoes more processing, some insoluble fiber, trace minerals and micronutrients may be lost. Pearl barley is not considered whole grain. However it's important to note that pearl barley (even heavily pearled barley) retains significant amounts of fiber, particularly heart-healthy soluble fiber. This is because, unlike some other grains, barley contains fiber throughout the entire kernel and not just in the outer bran layer. Very heavily pearled barley typically retains at least 8% fiber content. Even though pearl barley is not considered whole grain, it offers many important nutrients necessary for a healthful diet including heart-healthy soluble fiber, vitamins and minerals.