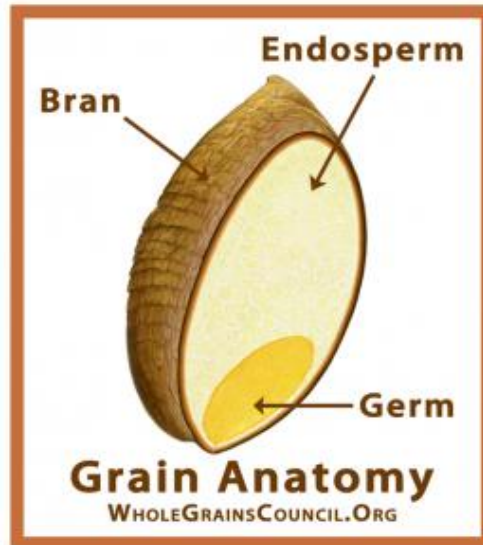


## What is whole grain?

Whole grains or foods made from them contain all the essential parts and naturally-occurring nutrients of the entire grain seed in their original proportions. If the grain has been processed (e.g., cracked, crushed, rolled, extruded, and/or cooked), the food product should deliver the same rich balance of nutrients that are found in the original grain seed.

*This definition means that 100% of the original kernel – all of the bran, germ, and endosperm – must be present to qualify as a whole grain.*



### The Bran

The bran is the multi-layered outer skin of the edible kernel. It contains important antioxidants, B vitamins and fiber.

### The Germ

The germ is the embryo which has the potential to sprout into a new plant. It contains many B vitamins, some protein, minerals, and healthy fats.

### The Endosperm

The endosperm is the germ's food supply, which provides essential energy to the young plant so it can send roots down for water and nutrients, and send sprouts up for sunlight's photosynthesizing power. The endosperm is by far the largest portion of the kernel. It contains starchy carbohydrates, proteins and small amounts of vitamins and minerals.

## Whole Grains are Healthier

Whole grains contain all three parts of the kernel. Refining normally removes the bran and the germ, leaving only the endosperm. **Without the bran and germ, about 25% of a grain's protein is lost, along with at least seventeen key nutrients.** Processors add back some vitamins and minerals to enrich refined grains, so refined products still contribute valuable nutrients. But **whole grains are healthier**, providing more protein, more fiber and many important vitamins and minerals.