**What is organic products?**

People start to realize how health become important recently. There is wise words says it is better to prevent before something bad occurred. Generally many nation are agreed to go on organic to create the organic world. If organic food become very popular in the world, so capable to change the people habit in eating, then a healthy life is no longer a dream to be reached.

Dr. Henry Chang, said organic food means all farming products which free from chemical manure, other chemical substances or addition substance since the beginning of the farm means all process conduct in natural process. Some example farming method including plowing land in traditional way, use natural manure or insert organism such as worm into soil to make it more fertile in natural ways. This action caused soil to be oxidized, therefore minimize land polluted, air, and water in area around the farming. Although chemical fertilizer will boost growth, improve land productivity and then give more result, but it only good in shorter time because not only the nutrient contain from food is decrease, but also the soil fertility will decrease gradually

Organic farming entails: Use of cover crops, green manures, animal manures and crop rotations to fertilize the soil, maximize biological activity and maintain long-term soil health. In other hand it also uses of biological control, crop rotations and other techniques to manage weeds, insects and diseases. An emphasis on biodiversity of the agricultural system and the surrounding environment by using rotational grazing and mixed forage pastures for livestock operations and alternative health care for animal wellbeing. The most important thing in organic is the reduction of external and off-farm inputs and elimination of synthetic pesticides and fertilizers and other materials, such as hormones and antibiotics. Finally it focus on renewable resources, soil and water conservation, and management practices that restore, maintain and enhance ecological balance.

Organic production is not simply the avoidance of conventional chemical inputs, nor is it the substitution of natural inputs for synthetic ones. Organic farmers apply techniques first used thousands of years ago, such as crop rotations and the use of composted animal manures and green manure crops, in ways that are economically sustainable in today's world. In organic production, overall system health is emphasized, and the interaction of management practices is the primary concern. Organic producers implement a wide range of strategies to develop and maintain biological diversity and replenish soil fertility.”  
*Organic Agriculture Overview*, USDA, Cooperative State Research, Education, and Extension Service (CSREES), 2007

In Australia, there are more than 300 substances which are approved for use as food additives including synthetic chemicals made from petroleum. Each of these is identified by its name and a number, and classified by the function it performs.

Food additives are used to replace the nutritional value and taste lost in processing, enhance the texture or appearance, prolong shelf life, stop food from decaying, replacing ‘real’ ingredients to enhance flavor, giving extra taste to otherwise bland products and to make junk foods more appealing.

Most of the food additives’ long term safety is untested and questionable, especially the combined effect of literally hundreds of synthetic chemicals found in food. Many have been linked to allergy, headaches, mood problems, asthma, obesity, heart disease and cancer.

Under the current legislation, manufacturers are not required to list additives if they are present in an ingredient that comprises 5% or less of the product. They also do not have to specify whether additives are natural or synthetic. The law also does not require many additives in processed foods to be labelled as such. The only way we can avoid the harmful effects of food additives is to educate ourselves and choose foods that good for ours health.

The use of food additives is restricted in organic food. They may be used only when they are essential to ensure safety of food or when required by the law. They are allowed in organic food only if the product cannot be produced or preserved without them. The total additive ingredients cannot exceed 5% mass of the final certified product excluding water and salt. They cannot be genetically modified or irradiated.

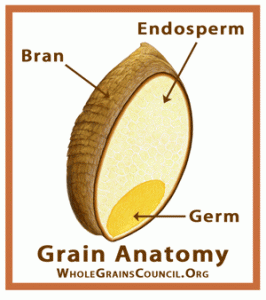
**What is whole grains?**

Organic grains are grown without the use of any synthetic pesticides or fertilizers. They are milled, processed and stored within certified organic facilities that have not been fumigated or treated with toxic chemicals.

Organic grains are processed in the most natural way possible, commonly by physical methods such as stone milling. The stone ground process is a slower, traditional method that avoids overheating and dehydration. This process ensures all the germ, bran and endosperm of the whole grain, along with the vitamins and minerals are retained and distributed evenly throughout the milled flour.

All organic bread, organic baked goods, pastas and cereals must contain at least 95% of organic ingredients, and be without any artificial preservatives or pigmentation and genetically modified ingredients. For bread to be certified organic, individual ingredients and the bakery itself must be fully certified.

All grains start life as whole grains. In their natural state growing in the fields, whole grains are the entire seed of a plant. This seed (which industry calls a "kernel") is made up of three key edible parts – the bran, the germ, and the endosperm – protected by an inedible husk that protects the kernel from assaults by sunlight, pests, water, and disease.



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

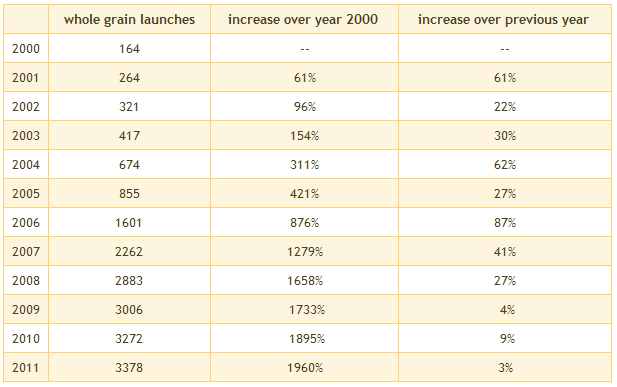
The endosperm is the germ’s food supply, which provides essential energy to the young plant so it can send roots down for water and nutrients, and send sprouts up for sunlight’s photosynthesizing power. The endosperm is by far the largest portion of the kernel. It contains starchy carbohydrates, proteins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

**Advantage of Whole Grains**

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.

**Whole grain market**

Whole grain market from 2000 to 2011. New product launches of foods making a "whole grain" claim have grown sharply since 2000. In fact, according to the [Mintel Global New Products Database](http://www.mintel.com), in 2010 almost 20 times as many new whole grain products were introduced worldwide as in the year 2000.



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