Why Whole Grain Foods

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Food is one of the topics that have always been discussed among the society. This is because food is the basic necessity for the well-being of human. Recently, food production has been prepared based on the advancement of modern science and technology. There are several ingredient sources which have been used in the production of food products including grain-base. Muslims are encouraged to investigate their food and meal because awareness to eat halal and good food are mentioned in the Quran in the following versus (al-Baqarah 2:172):



Meaning: "O you who have believed, eat from the good things which We have provided for you and be grateful to Allah if it is [indeed] Him that you worship".

CHOOSE THE BEST FOR YOUR BREAKFAST



If you are given few choices of breakfast meal, why do think having cereal is much better than Malaysian favourite, nasi lemak, and fried noodles to start your day? Do you know what is so special about breakfast cereal? This is because most of breakfast cereal are made from grains. What is grain?

Grains are small, hard, dry seeds from a plant, with or without an attached hull or fruit layer, harvested for human or animal consumption. There are two main types of commercial grain crops, which are cereals and legumes.

Cereal refers to crops harvested for dry grain only such as maize (corn), barley, rice, oat and wheat. While, legumes includes all types of beans and peas as well as soybean, peanut, chickpea, and lentil. We need to know the different between grain and wholegrain products since they provide different nutrients to our body.

Basically, all grains start life as a whole grains or 100% grain components because they contains entire seed or kernel of a plant including bran, germ and endosperm of a plant. Eating whole-grains and its product such as whole-

meal flour, wholemeal bread, brown rice, pop corn, and barley will provide more natural-occurring nutrients and dietary fibre to our body as compared to refined or processed grains. Milling process used to produce refined grain removes germ and bran from the original components.

Beside looking on "wholemeal" and "whole-grain" label on the packaging, another simplest way to compare between grain and whole-grain products is by looking at their colour and texture.



Most of us preferred white colour rice and finer texture of flour rather than brownish colour rice and fibrous texture of flour. Actually, we are trained since our childhood to choose refined grain rather than whole grain. In fact, these refined grain lost quarter of the protein and many of the nutrients during bleaching process leaving the grain a lower nutrient content. Whole-grain products possess the original elements:

- Bran (outer shell), contains fibre, B vitamins, magnesium and zinc
- Germ (plant embryo), contains phytochemicals and B vitamins
- Endosperm, contains carbohydrates, protein and relatively few vitamins, minerals, fibre, or phytochemicals are located in the endosperm fraction.

Refined white flour, white bread and white rice refers to grains that missed one or more of their key parts such as bran, germ, or endosperm. The major component in refined grain is carbohydrate which comes from endosperm. This endosperm surrounds the germ and supplies food to grow the germ contains the plant embryo. In the other hand, bran is outer layer that protect kernel from uncontrollable environmental factors, including the weather, insects, moulds, and bacteria.

Even though we believe that eating good food will promote a good health, the practices are not easy. We tend to choose good taste product which only energy-dense and nutrient-poor rather than nutrient-dense like whole-grain products that provide beneficial to our health. Consuming whole-grain products can help to provide plant protein, reduce the risk of cardiovascular, Type-2 Diabetes Mellitus, cancer, and prevent chronic diseases.

A study has done by Nutrition Society of Malaysia (NSM) in 2004 to assess whole-grain intakes and dietary source in Malaysian children and adolescents. The results shows only 25% of children and 19% of adolescents were whole-grain consumers. Mean daily intakes in the total sample were 2.3g/day in children and 1.7g/day in adolescents and in the consumer's only sample, mean intakes reached 9.1g/day and 9.2g/day respectively. It shows whole grain consumed by only a minority of Malaysian children and adolescents and even among consumers, intakes are well below recommendations.

According to Malaysian Food Guide Pyramid, grain-based products formed as the pyramid's base with the highest portion of Recommended Nutrient Intake (RNI) about 4-8 servings daily. This is because, it consists an excellent energy foods for humans with 60% to 70% starch content. Besides, a healthy human diet must also should include 20 to 30 g/day of dietary fibre, which can easily achieved through eating whole-grain and its product. This shows that Malaysian government committed in guiding citizens to practise a healthy eating habits.

You are what you eat. In order to inculcate good eating habit, it should start from our early stage. Good eating habit nurture from childhood can promote a good eating culture, promote healthy lifestyle, and to sustain well-being country.

