

Promotion of Whole Grain Consumption for Health in Australia

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As a professional in the grains industry, how many days a week do you stop and count the number of servings of whole grain foods you have eaten that day? You may do so once a week, and as grains industry professionals you are more often than not thinking about grains and grain-based foods every day. So how do we communicate to the community to eat at least half your servings of grain foods as whole grains and have them embrace whole grain foods every day? This paper presents an overview of the work of the Grains & Legumes Nutrition Council (GLNC) in Australia, the independent voice for grains in nutrition and health.

To set the scene, Australians eat more cereal and cereal-based foods than any other food group (1). In fact, we eat more than 21 billion servings a year, which are worth close to A\$7 billion at the retail level. Over 80% of these foods are wheat-based.

The *Australian Dietary Guidelines* (7) and the *Australian Guide to Healthy Eating* (2) recommend, “Eat plenty of cereals—breads, breakfast cereals, rice, pasta, noodles, preferably wholegrain.”

Males and females should eat at least four servings of cereals a day.

In Australia, a serving of grain food is

- 2 slices of bread
- 1/2 cup muesli
- 1 cup porridge
- 1 1/3 cups of breakfast cereal or 2 wheat flake biscuits
- 1 cup cooked rice, noodles, or pasta

For simple messaging we term breads, breakfast cereals, rice, pasta, and noodles as “core” grain foods, and those foods containing higher levels of saturated fat, added sugar, and salt as “extra foods” or “non-core” grain foods.

Australian national nutrition surveys confirm grain based foods are primary contributors of fiber, thiamine, folate, magnesium, and iron (1,3). In fact, Australians get more fiber from grain foods than they do from fruit and vegetables.

The Dietary Guidelines tell us how much grain we should be eating each day, but how much are Australians actually eating? In the absence of recent national nutrition survey data, GLNC conducted a study to understand attitudes and behaviors to-

wards grain foods in 2009 and 2011 (8). The results (Table I) show that in 2011 Australians were not eating enough core grain foods or whole grain foods and there was a significant decrease in intake from 2009 to 2011. Correspondingly, there was a significant increase in intake of noncore grain foods. The attitudinal questions uncovered misconceptions and a general lack of knowledge about grain foods which GLNC has hypothesized contributed to the decline in consumption from 2009 to 2011.

The primary contributors were:

- lack of awareness of the health benefits of grains and the importance of grain foods in the diet
- the limiting of grain foods to assist with weight loss
- the limiting or avoidance of wheat based foods

Counter to this feedback, Australians said whole grain messaging was compelling at the point of purchase: 62% of Australians said they would be more likely to purchase a product that mentioned whole grains on the pack.

When you analyze the headlines in the print and electronic media, there are a number of conflicting views being presented by “experts.” The benefits of whole grains in the diet are the most prevalent; however, these important messages are competing with negative messages on gluten, carbohydrates, and specific diets such as the Paleo Diet. It is not hard to understand why Australians are confused and hold a number of misconceptions.

Whole Grain and Health Promotion Initiatives.

To combat these negative messages GLNC has undertaken a program of evidence-based reviews and messaging activities targeted to key stakeholders and health professionals. Following is a summary of each of GLNC’s recent whole grain and health promotion initiatives.

Whole Grain Daily Target Intake of 48 g (6) per Day for Adults and Children Over Nine Years of Age. The target is widely referenced on packaging, advertising and websites.

Table I. Australian grain food intake, 2009 vs. 2011

	2009	2011
Total grain servings/day	5.2	4.4
% non-core grain foods	22	28 ^a
Core grain servings/day	4.1	3.2 ^a
Whole grains servings/day	1.4	1.1 ^a

^a significant difference 2011

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Grains and Legumes Health Report. A review of the science (4) found:

- 2–3 servings of whole grain foods a day is associated with a reduced risk of cardiovascular disease, type 2 diabetes, and certain cancers by 20–30%
- Eating 2–4 servings of whole grain foods a day can reduce the risk of heart disease by as much as 40%
- Consumption of whole grain foods can reduce the progression from impaired glucose tolerance to type 2 diabetes by up to 58%
- Whole grain foods can help to lower blood pressure
- With more than 60% of adults and 25% of children overweight or obese in Australia, a diet high in whole grains is associated with a lower body mass index (BMI), waist circumference, and risk of being overweight

Key findings from the report have been extensively shared with stakeholders, health professionals, and the grain industry. The report was distributed to dietitians and received national media coverage. A copy of the report can be found at www.glnc.org.au.

What's to Gain from Grains (5)? This was an update on the scientific evidence that has just been published. The report examines the latest science on:

- Grains and weight management—whole grain foods can be included in an effective weight loss diet and can aid long-term weight management
- Grains and digestive health—a combination of fibers in your diet is key to gut health
- Grains and the management of irritable bowel syndrome (IBS)—15% of Australians have IBS. Dietary manipulation of certain carbohydrates (FODMAPs) for 6–8 weeks is the first line of therapy. Research shows that a FODMAP diet is not a long-term diet because of the potential “prebiotic” effect of these carbohydrates.
- Grains and heart health—evidence from intervention studies from the last 10 years indicates the protective effect of whole grains may also work through impacts on blood pressure, inflammatory status, endothelial function, and prebiotic effects. Emerging evidence suggests whole grain wheat might play a role in controlling blood pressure.
- The role of refined grain foods in a healthy diet—a review of the evidence found limited association between refined grain intake and adverse health outcomes. The study indicated people could choose up to one half of their grain foods from refined grains.

The publication was distributed to dietitians and supported

by a webcast. A copy of the report and webcast can be found at www.glnc.org.au.

Wheat Avoidance—Who Is Avoiding and Why Are They Doing It? GLNC has just partnered with CSIRO Food Futures National Research Flagship to understand the drivers behind wheat and or grain avoidance and, specifically, those drivers associated with intolerance in Australia. GLNC aims to understand the following:

- The profile of the people reducing their grain intake
- Which types of foods people are avoiding (e.g., gluten, wheat, grains, and carbohydrates)
- Reasons why they are avoiding
- How they have adjusted their diet—which foods they are not eating and what foods they are eating instead (e.g., other grain foods, other core foods, or noncore foods)
- The nutritional adequacy of the diet of avoiders of gluten, wheat, carbohydrates, and grains.

In addition to conducting research and reviewing the scientific literature, GLNC summarizes key findings and messages for dietitians and related health professionals to share with patients and the broader community. Examples of GLNC fact sheets can be found at www.glnc.org.au.

With the knowledge of the extensive health benefits of grain foods, and whole grain foods in particular, in the diet, GLNC will continue to review the science and understand Australian consumers' attitudes and behaviors toward grain foods, consult with key stakeholders, and communicate to health professionals.

References

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