



Grains &
Legumes
Nutrition
Council

Cultivating Good Health

What's to Gain from Grains and Legumes?

A role for staple foods in chronic disease prevention

19 September, 2012

Michelle Broom, Nutrition Manager
m.broom@glnc.org.au



Grains &
Legumes
Nutrition
Council

Cultivating Good Health



Outline



Grains &
Legumes
Nutrition
Council

Cultivating Good Health

- What's to gain from grains and legumes?
- Are Australians eating enough grains and legumes to benefit?
- Why do some people avoid grains and legumes?
- What GLNC is doing to spread the word
- How health care professionals can help

Grains and Legumes: part of a healthy diet to prevent chronic disease

Introducing Grains & Legumes Nutrition Council



Grains &
Legumes
Nutrition
Council

Cultivating Good Health

Vision - Independent voice for grains and legumes in nutrition and health

Evidence

- Nutrition science
- Consumer's attitude and behaviour

Stakeholders

- Consult to achieve support for public health messages

Health Professionals

- Communicate evidence to support public health messages

Values - Integrity, Independence, Trust

GLNC Contributors



Grains &
Legumes
Nutrition
Council

Cultivating Good Health

GRDC

Grains
Research &
Development
Corporation

Your GRDC working with you

 **Grain
Growers**
Real benefits. Real results.



Bakers Delight
We're for real.

National Research
FLAGSHIPS
Food Futures



Kellogg's



AUSTRALIAN
FOOD AND GROCERY
COUNCIL



Health Benefits of Grains



Grains &
Legumes
Nutrition
Council

Cultivating Good Health

- Eating **wholegrain** foods every day is associated with:
 - 20% - 30% reduced risk of cardiovascular disease and type 2 diabetes
 - reduced risk of weight gain
 - a lower BMI
 - reduced waist circumference

- Regular consumption of **cereal fibre** is associated with reduced risk of:
 - Type 2 diabetes
 - Bowel cancer
 - Heart disease
 - Weight gain

Grains and Legumes Health Report 2010; Australian Dietary Guidelines Evidence Summary 2011

Priebe MG et al. Cochrane Database Syst Rev 2008(1):CD006061. ; Norat T et al. BMJ 2011; 343:d6617 ; Pereira MA et al. Arch Intern Med 2004;164(4):370-6. ; Du H et al. Dietary. Am J Clin Nutr 2010;91:329-36

What's to Gain from Grains?



Grains &
Legumes
Nutrition
Council

Cultivating Good Health

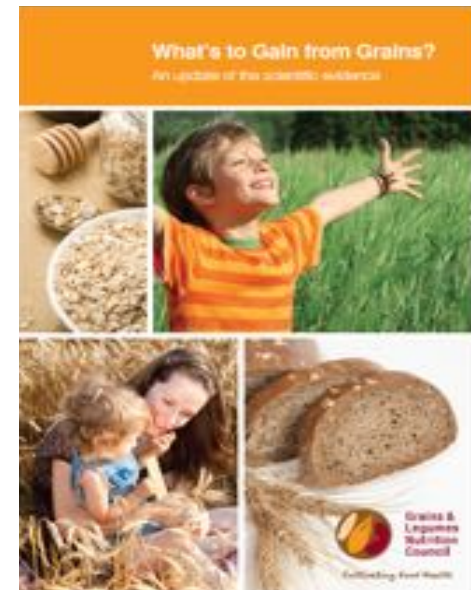
The Latest Science

■ Grains and Weight Management

- Higher protein diets \neq no carbs
- 4 serves of whole grain or high fibre grain food/day
- Swap 'extra' foods to staple grain foods

■ Grains and Digestive Health

- Variety of fibres for bowel health
- Soluble, insoluble, resistant starch
- Gut microbiome



What's to Gain from Grains?



Grains &
Legumes
Nutrition
Council

Cultivating Good Health

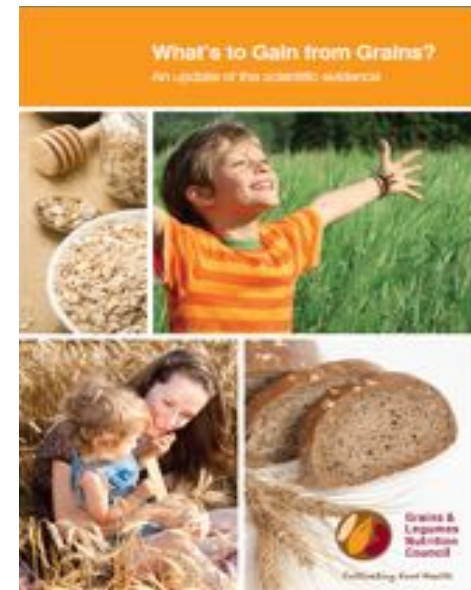
■ Grains and Management of IBS

- Low FODMAP diet 4 – 6 weeks
- Reintroduce grains and legumes



■ Refined Grains

- No increased risk of chronic disease from 50% refined grains
- Mostly wholegrain or high fibre
- One meal a day is OK



Health Benefits of Legumes

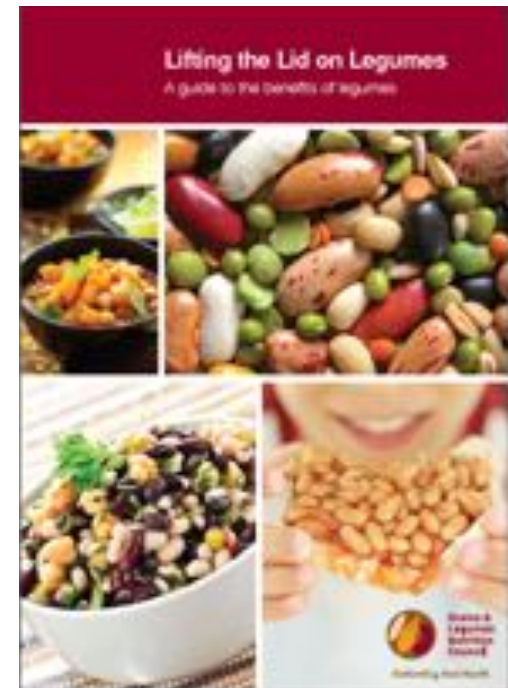


Grains &
Legumes
Nutrition
Council

Cultivating Good Health

- Regular consumption of legumes can help:
 - reduce cholesterol
 - manage blood glucose

- A diet rich in legumes is linked to reduced risk of:
 - Type 2 diabetes
 - Heart Disease
 - Bowel cancer



Dietary Recommendations



Grains &
Legumes
Nutrition
Council

Cultivating Good Health

Australian Dietary Guidelines / Australian Guide to Healthy Eating



**Eat plenty of cereals -
breads, breakfast cereals, rice, pasta, noodles
'preferably wholegrain'
at least four serves each day**

**Eat plenty of vegetables, legumes and fruit
Include lean meat, fish, poultry and / or alternatives**

2 serves vegetables / legumes each day

½ -2 serves meat, legumes each day

Are we eating enough grains to benefit?



Grains &
Legumes
Nutrition
Council

Cultivating Good Health

Consumption Study - 2009 and 2011

- n=1200, nationally representative sample, 5-80yrs
 - 11% sample rural, 22 members of GrainGrowers
- 2 day food diary (self reported), and online survey
- 75 grain-based foods and legumes
- Thanks to Grain Growers Limited for their support with 2011 study



Australians are not eating enough.....



Grains &
Legumes
Nutrition
Council

Cultivating Good Health

Recommend Australians eat **4+** serves a day, 'preferably wholegrain'

	2009	2011
total grain serves /day	5.2	4.4
% non core grain foods ^	22	28
core grain serves /day	4.1	3.2 ▼
wholegrain serves / day	1.4	1.1 ▼

Rural residents are less likely to know:

- Recommended number of grain serves / day
- Recommended daily intake of fibre
- Daily Target Intake of whole grain

Declining consumption due to misconceptions



Grains &
Legumes
Nutrition
Council

Cultivating Good Health

- **Lack of awareness of the health benefits of grain foods and importance of grains in the diet**
 - 15% total population
 - 9% rural population
 - 20% males
- **Limit grain food consumption to assist with weight loss**
 - 26% total population
 - 21% rural population
 - 35% females



Declining consumption due to misconceptions



Grains &
Legumes
Nutrition
Council

Cultivating Good Health

■ Do you limit or avoid wheat in your diet?

- 16% of total population
- 22% females

■ Diagnosis

- 35% self diagnosed
- 43% 25 – 34 yr olds



The rural perspective...

Same level of reported wheat intolerance

Those in rural areas less likely to seek guidance.

Are we eating enough legumes to benefit?



Grains &
Legumes
Nutrition
Council

Cultivating Good Health

- 23% population consumes legumes
- Users consuming 1.9 serves each day
- Decline in baked beans and soy bean consumption from 2009
- Barriers to consumption
 - Lack of awareness of health benefits – 12%
 - Uncertainty about how to prepare and cook – 15%
 - Perceived side effects – 11%
 - Rural population: 43% 'don't think about including legumes in the diet'



GLNC's Actions

Definition Wholegrain Food

- Help people achieve 48g/day whole grain
 - contains whole grain
 - high in whole grain
 - very high in whole grain
- International alignment
- Research characterisation of whole grain



GLNC's Actions

Legume research

- Collaborate with international groups
- 2013 research project:
- Post-hoc analysis of Melbourne Collaborative Cohort Study
- Association between legume intake and chronic disease in an Australian population
- Publish and present findings



GLNC's Actions



Grains &
Legumes
Nutrition
Council

Cultivating Good Health

Carbohydrate avoidance

- Wheat avoidance research
 - Joint project with CSIRO Food Futures Flagship
 - Consumer research
 - 3 day weighed food record
 - Nutritional adequacy
 - Reasons and sources of information
 - Publish and present findings
- PR campaign to address carb avoidance
 - Target personal trainers
 - Carbs as part of weight management
 - The benefits of grain and legumes



How can health care professionals help?



Grains &
Legumes
Nutrition
Council

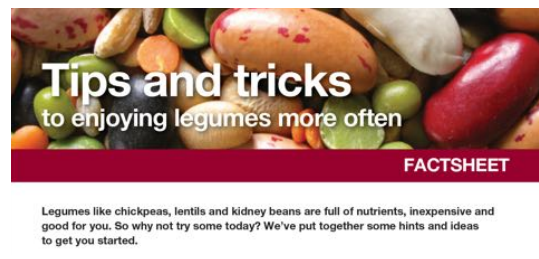
Cultivating Good Health

Communicate the benefits:

- GLNC Free Fact Sheets
- GLNC website resources www.glnc.org.au

Keep up-to-date:

- GLNC E-newsletter
- Follow us on Twitter @grainslegumesNC
- GLNC Facebook GrainsLegumesNC





Grains &
Legumes
Nutrition
Council

Cultivating Good Health

Thank You

Grains and Legumes: part of a healthy diet to prevent chronic disease



Grains &
Legumes
Nutrition
Council

Cultivating Good Health

