Global food nutrition trends driving pulse consumption

Australian Pulse Conference
13th September 2016
Grains & Legumes Nutrition Council

Independent authority on the nutrition and health benefits of grains and legumes

Health Promotion Charity and non-profit organisation

Promote grains and legumes as part of a balanced diet through evidence-based information
GLNC Contributors
• Global Trends Changing Food Patterns
• The Pulse Gap
• Building Greater Demand
• The Future is Bright
Global Mega Trends

Triple challenge on the global food supply

1. Ensuring enough food
2. Producing food within a changing environment
3. Producing healthy food to mitigate the chronic disease burden whilst still addressing malnutrition

Pulses can help address the triple challenge

CSIRO. Our Future World: Global Mega Trends Report
Combatting Chronic Disease

**Longevity**
Strongest dietary predictor of longevity

7-8% reduction in risk of death for every 20g increase in daily pulse intake

**Obesity**
People who eat pulses are more likely to be a healthy weight and have smaller waist circumference

1-2 serves of ½ cup pulses per day may help weight loss
Pulses Address the Challenges

Combatting Chronic Disease

**Heart Disease**

100-200g of pulses per day reduces the risk of heart disease risk factors

- Lowers blood pressure
- Reduces total cholesterol
- Reduces LDL cholesterol

½ cup pulses 4 x per week reduces the risk of heart disease

**Cancer**

4 servings of pulses per week decreases the risk of colorectal cancer
Reduce Diabetes Risk
Eating pulses lowers blood glucose levels after a meal

Assist with Diabetes Management
½ cup of pulses per day for at least 4 weeks reduces fasting blood glucose and insulin levels

Substitution of red meat with legumes three days per week decreases blood glucose, insulin, triglycerides and LDL cholesterol

DIABETES IS ON THE RISE
422 MILLION adults have diabetes

THAT'S 1 PERSON IN 11
Pulses meet many of the top trends

- Flexitarian eating – the rise of the vegan
- Plant protein alternative to soy
- Locally grown
- Sustainability
- Clean label, natural and simple

Source: New Nutrition Business

10 Key trends in Food, Nutrition and Health
The Pulse Gap

International Recommendations

Taiwan

Korea

China

India
Why aren’t Australians consuming pulses?

- Lack of knowledge on how to prepare them
- Poor understanding of health benefits

2 out of 3 Australians don’t think to include pulses in their diets
The Pulse Gap

Asian Food Consumption Trends

Source: ABARES model output
Familiar Foods with Benefits

Development of value-added products with pulses is on the rise

Addition of pulse flours to cereal-based foods:
• Increases fibre and protein
• Reduces rapidly digested carbohydrate
• May help:
  • Control appetite
  • Reduce blood pressure,
  • Improve glycemic control

Studies are underway to determine effects of pulse flours and best milling methods
Pulses are on Trend in Food Industry

PULSES, SEEDS, AND GRAINS

Inclusion of pulses in processed food grew the fastest, says Pulse Canada

By Adi Menayang

22-Jun-2016
Last updated on 22-Jun-2016 at 18.44 GMT

Beans, peas, lentils, chickpeas: The hottest ingredients in the snack developer’s toolbox?

By Elaine Watson

29-Jun-2016
Last updated on 29-Jun-2016 at 10.57 GMT

The Good Bean rides bean-based snacking wave in the Year of the Pulse

By Elaine Watson

31-May-2016
Last updated on 31-May-2016 at 17.24 GMT

The Good Bean — a Berkeley-based snack brand built around the garbanzo bean (chickpea) — more than doubled its sales in 2015 and expects to do so again in 2016 as pulse-based snacking (beans, peas, lentils) gains momentum.

Related tags: Bean snacks, The Good Bean, Beans, Beanitos

Food Industry Picking up Pulses

**Pulses are still on beat**
A variety of pulses are being used in diverse categories due to their many health attributes, as well as their versatility.

**Pulses are a health plus for U.S. snacks**
...increase in U.S. snacks category product launches containing pulses (2015 vs. 2014).

**Ample growth for popular pulses**
Growth in global product launches containing leading pulses (2015 vs. 2014)

- **Broad bean**: +34%
- **Chickpea**: +28%
- **Lentil**: +21%
- **Black bean**: +20%
- **Lupin**: +16%

**Pulses are still strong for NPD**
Growth for global product launches containing pulses (2011-2015)

- 2011: 3,000 products
- 2012: +48%
- 2013: +40%
- 2014: +5%
- 2015: +3%
Building Greater Demand

Comprehensive Approach

Industry: Be ambassadors of pulses as food

Research: extending research into health benefits to allow claims

Government: greater emphasis on pulses, including quantified recommendations

Food Manufacturers: increased product innovation to incorporate pulse ingredients

Public health bodies: communicate the nutrition and health benefits of the regular pulse consumption
Beyond 2016

Excellent opportunities exist for these Australian crops to be positioned as superior quality human foods for both domestic use and for export.

Supporting demand growth requires:

• Consumer communication
• Research collaborations on value-added products
• Assurance for manufacturers of a safe, consistent supply of raw product to promote investment in new food technologies
Thank you

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Health Benefits of Pulses

Australian Research

**Adults**
100g per day

**Children**
75g per day

Higher intake of fibre, protein, iron, magnesium, zinc and folate

Less likely to be overweight or obese

Smaller waist circumference

Vegetables and legumes/beans
1 serving = ½ cup or 75g

Meat and alternatives
1 serving = 1 cup or 100g

Minimum two servings per week

Global Consumption Trends

- Global pulse consumption is estimated to rise 23% from 2009 to 2030 (24% in Asia)
- There is a shift in consumption to value-added products

Clancey. World Pulse Outlook: Report to Saskatchewan Pulse Growers. 2009
GLNC Building Greater Demand

Influencing Consumers

Proactive Communication 2014 – 2016 reach - 70 million

Website 30,000 unique visitors per quarter

Facebook Audience – 46,000

Twitter 3,000 followers

Balance eNews Subscribers = 3,000

Influencing Guidelines

Building the Evidence Base

Encouraging the Food Industry
Pulses Address the Challenges

Providing Nutrition

Compared to cereals

- Higher in protein
- Higher in fibre
- Higher in folate, iron, potassium,
- Lower in carbohydrate

Compared to animal protein

- Lower in saturated fat
- Contain fibre
Global Mega Trends

Trends changing food consumption

1. **More Food from Less Resources**
   
   Our global population is expanding: 7.3 billion today to an 9 billion in 2050

2. **Planetary Pushback**
   
   Many of the world's natural habitats, plant species and animal species are in decline or at risk of extinction.

3. **Silk Highway**
   
   Growing Asian middle class with changing diet

4. **Forever Young**
   
   Living longer and living with disease

CSIRO. Our Future World: Global Mega Trends Report
Global Mega Trends

Undernutrition and Overnutrition

- 800 million people chronically undernourished
- UN Decade of Action on Nutrition from 2016 to 2025

But...

- 1.9 billion people overweight or obese
- Lifestyle-related diseases responsible for more than 70% of all deaths
- 80% of these deaths could be delayed with improved lifestyle