Consumer Attitudes to Carbohydrate Intake.

Carbohydrate Intakes – High, Low or Irrelevant?
CSIRO Auditorium, North Ryde, Sydney 19 March 2013

Sarah Hyland
‘There is one thing stronger than all the armies in the world, and that is an idea whose time has come.’

Victor Hugo - Histoire d’un Crime (The History of a Crime) [written 1852, published 1877.]
Whole Food

vs

‘Frankenstein’d Food

It will make me fat (AGAIN)

It will make me sick

Suspicion
Distrust
Tension
Fear

Duty of Care

vs

Turning a Profit

The Highly Questionable Value of Carbohydrates & Sugars

It will make me sick

The Highly Questionable Value of Carbohydrates & Sugars

ILSI SEAR Asia (www.ilsi.org/SEA Region) and GLNC (www.glnc.org.au) - Carbohydrate intakes - high, low or irrelevant? Australia - March 2013
Avoidance is Not New

1996 Fat & Breakfast Bars
Free From.. Has No.....
Australian Product of The Year 2012

Neilsen: N ~ 11,600 households

“…and healthier versions of favourite items such as Macro Gourmet Dips, which are now also gluten and dairy-free …”
ILSI SEAR Asia (www.ilsi.org/SEA Region) and GLNC (www.glnc.org.au) - Carbohydrate intakes - high, low or irrelevant? Australia - March 2013

Beer Launch Patterns

- Low Carb launch pattern
- Average launch pattern

YR 1, YR 2, YR 3, YR 4, YR 5, YR 6
Low Carbs
High Protein

Lots of health benefits:
• Great taste
• 23g protein (38%)
• Less than 8g carbs
• Feel fuller for longer
• Low GI for slow release energy
• 5 x 25g bars in a multipack

Ingredients: protein blend 38% (whey isolate, whey concentrate, soy isolate, calcium caseinate, hydrolyzed collagen protein), high protein chocolate coating 18% (sugar, vegetable fat, soy protein isolate, cocoa powder [7%], full cream milk powder, soy lecithin, flavour), glycerine, sorbitol, cocoa powder 3%, water, polydextrose (soluble dietary fibre), soy puff (soy protein isolate, tapioca, starch, salt), flax seed meal, soy oil, soy lecithin, sweetener (sucralose), flavor, colour (155, 133).
If a food product mentions WHOLEGRAINS on its packaging, how would it influence your purchase interest?

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2011</th>
<th>Significance @ 95% confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Base:</strong></td>
<td>1,233</td>
<td>1,204</td>
<td></td>
</tr>
<tr>
<td>Much more likely to buy</td>
<td>26%</td>
<td>22%</td>
<td>Significant</td>
</tr>
<tr>
<td>Slightly more likely to buy</td>
<td>41%</td>
<td>40%</td>
<td>NS</td>
</tr>
<tr>
<td>No impact</td>
<td>26%</td>
<td>32%</td>
<td>Significant</td>
</tr>
<tr>
<td>Slightly less likely to buy</td>
<td>5%</td>
<td>4%</td>
<td>NS</td>
</tr>
<tr>
<td>Much less likely to buy</td>
<td>2%</td>
<td>3%</td>
<td>NS</td>
</tr>
</tbody>
</table>
Protein
Chiefly for satiety
To assist with fat burning
Building muscle

must always be coupled
with low carb for maximum benefits
Energy
Vitamins & Minerals (supplement)
Vegetables
Some fruits (bananas)
Eggs & meat
Carbohydrates (breakfast/sandwich for kids)
Coffee
V
Red Bull
Fear of sugar especially for children
Must be added in situ
Honey ok
Some fruits but proceed with caution
If you’ve seen one carb, you’ve seen them all.

Low GI is definitely good

But how much sugar is in there??

Fibre, vitamins rarely mentioned

Inability to discern the value of carbs

VOLUME of food consumed rarely (if ever) spontaneously mentioned.
The value of wholegrain/carbohydrates resonates most strongly at breakfast

If dieting/maintaining/trying to be good
low carb (try to minimise)
high protein
low sugar

For Children
mod – hi carb ok (+ sandwiches)
low Gl
low sugar

Fibre Who?
Unless you play sport for Australia or run marathons, you don’t need carbs.

“Elite Member”
Cheappinz on website: ironmagazine.com:

“I get stupid with low carbs..my memory goes and I have trouble with basic thinking..adding, etc.. I know this happens to others. What supps do you guys take to not be a moron? I’ve heard alcar does the trick. And I’ve heard alcar can be used either orally or im. Any experience with this?”
The Ketogenic Diet
Ketones as an acceptable alternative to fuelling the brain & body
What Should We Eat?

The health benefits of low carbohydrate nutrition

Welcome, you are invited to attend these seminars.

There will be a wide range of speakers and panel discussions on the themes of low-carb nutrition, eating healthy fats, sourcing and preparing healthy whole foods, exercise, the paleo approach and also nourishing our food producing environment in a sustainable way.

Issues that will be addressed include Overweight, Obesity, Diabetes, Digestive Disorders, Asthma, Alzheimers, and a range of other related health problems.

Melbourne – Saturday 17th November – More Information
Byron Bay – Wednesday 21st November – More Information
Sydney – Saturday 24th November – More Information
Brisbane – Saturday 1st December – More Information
STOP Carbocide – Bread is Not Your Enemy

Bread – a lot of you might have a love/hate relationship with it. They either can’t stop eating it, or are afraid to go near it at all because they have been told carbs are the enemy. Put your past and any prejudices behind you and let me tell you this – you can eat bread. You just need to choose the RIGHT type and watch your portion sizes. It can be a great source of nutrients and sustained energy.

Choosing the right bread can be really tricky, so I asked nutrition expert Dr. Joanna to help guide us through the process.

In this video, we talk about:

In the video we talk through:

- Why you should look out for ‘wholegrain’ and ‘stone-ground’ breads
- Which breads have the most nutrients
- Do the ‘bread test’ to see what types to avoid!
Q. Australian dietary guidelines recommend an adult should eat four servings of grain-based foods per day such as bread, breakfast cereals, rice and pasta. Would you say four servings of grain-based foods per day would be...?

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>15-24</th>
<th>25-34</th>
<th>35-49</th>
<th>50+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base:</td>
<td>1,204</td>
<td>674</td>
<td>530</td>
<td>127</td>
<td>343</td>
<td>306</td>
<td>428</td>
</tr>
<tr>
<td>Too many servings of grain foods for you</td>
<td>34%</td>
<td>27%</td>
<td>42%</td>
<td>31%</td>
<td>32%</td>
<td>36%</td>
<td>34%</td>
</tr>
<tr>
<td>About right</td>
<td>49%</td>
<td>53%</td>
<td>45%</td>
<td>51%</td>
<td>48%</td>
<td>48%</td>
<td>52%</td>
</tr>
<tr>
<td>Not enough servings of grain foods for you</td>
<td>6%</td>
<td>6%</td>
<td>6%</td>
<td>8%</td>
<td>7%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>11%</td>
<td>13%</td>
<td>8%</td>
<td>10%</td>
<td>13%</td>
<td>11%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Base: Respondents aged 15+
Reds & greens indicate significant differences to total at 95% CI
Barriers to grain intake.

Q. Thinking about possible barriers to your grain-based food intake, what is the main reason you may not reach the recommended four serves of grain-based foods (such as bread, breakfast cereals, rice and pasta) every day?

<table>
<thead>
<tr>
<th>Reason</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>15-24</th>
<th>25-34</th>
<th>35-49</th>
<th>50+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of knowledge of their health benefits</td>
<td>15%</td>
<td>20%</td>
<td>7%</td>
<td>22%</td>
<td>14%</td>
<td>13%</td>
<td>15%</td>
</tr>
<tr>
<td>I try to limit them to assist with weight loss</td>
<td>26%</td>
<td>19%</td>
<td><strong>35%</strong></td>
<td>31%</td>
<td>27%</td>
<td>26%</td>
<td>25%</td>
</tr>
<tr>
<td>I have coeliac disease</td>
<td>2%</td>
<td>2%</td>
<td>3%</td>
<td>1%</td>
<td>3%</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td>Concerned about preservatives/additives</td>
<td>5%</td>
<td>5%</td>
<td>4%</td>
<td>7%</td>
<td>4%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>I don’t think about including them in my diet</td>
<td>23%</td>
<td>23%</td>
<td>23%</td>
<td><strong>15%</strong></td>
<td>24%</td>
<td>22%</td>
<td>22%</td>
</tr>
<tr>
<td>None, I eat plenty of grain-based foods</td>
<td>29%</td>
<td>30%</td>
<td>28%</td>
<td>24%</td>
<td>28%</td>
<td>31%</td>
<td>31%</td>
</tr>
</tbody>
</table>

Base: Respondents aged 15+
Reds & greens indicate significant differences to total at 95% CI
What is an important factor in losing or maintaining your weight?

Eating less starch/carbohydrate

51% female

51% of respondents

41% male

41% of respondents

N = 324

47% of respondents

CB Omnibus: Sept 2012
Wheat Limitation

22% of Females limit wheat in their diet compared to 12% of Males

Limit wheat in their diet

Q. Do you limit or avoid wheat in your diet?

Base: Respondents aged 15+
Consumed product (people)
Diagnosis of wheat intolerance

15% were diagnosed by a GP, this is significantly higher for Males (21%). 6% were diagnosed by a Gastro specialist, followed by Dietician and Naturopath at 5% each.
## Diagnosis of wheat intolerance.

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
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<th>Female</th>
<th>15-24</th>
<th>25-34</th>
<th>35-49</th>
<th>50+</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Base:</strong></td>
<td>193</td>
<td>85</td>
<td>108</td>
<td>16</td>
<td>62</td>
<td>57</td>
<td>58</td>
</tr>
<tr>
<td>Gastro intestinal specialist</td>
<td>6%</td>
<td>2%</td>
<td>9%</td>
<td>9%</td>
<td>9%</td>
<td>6%</td>
<td>2%</td>
</tr>
<tr>
<td>GP</td>
<td>15%</td>
<td>21%</td>
<td>11%</td>
<td>0%</td>
<td>12%</td>
<td>20%</td>
<td>19%</td>
</tr>
<tr>
<td>Dietitian</td>
<td>5%</td>
<td>8%</td>
<td>3%</td>
<td>18%</td>
<td>6%</td>
<td>2%</td>
<td>4%</td>
</tr>
<tr>
<td>Naturopath or similar</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>0%</td>
<td>3%</td>
<td>10%</td>
<td>4%</td>
</tr>
<tr>
<td>Self</td>
<td>35%</td>
<td>34%</td>
<td>35%</td>
<td>30%</td>
<td><strong>43%</strong></td>
<td>26%</td>
<td>29%</td>
</tr>
<tr>
<td>Other</td>
<td>34%</td>
<td>29%</td>
<td>38%</td>
<td>43%</td>
<td>26%</td>
<td>36%</td>
<td>43%</td>
</tr>
</tbody>
</table>

Base: Respondents aged 15+
Consumed product (people)
Reds & greens indicate significant differences from total sample

Q. If you have an intolerance to wheat, were you diagnosed as intolerant by...?
Nutritionist guidance for managing wheat intolerance.

Of the 16% of Australians that are limiting the wheat intake in their diet, only 17% have sought the guidance of a dietician or nutritionist.

Males are more likely than Females to seek professional guidance from a dietician or nutritionist at 28% and 10% respectively. This is a significant difference.

Those aged 35-49 years are also most likely to seek guidance for managing their wheat intolerance.

<table>
<thead>
<tr>
<th>Group</th>
<th>% Seeking Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (n=193)</td>
<td>17%</td>
</tr>
<tr>
<td>Male (n=85)</td>
<td>28%</td>
</tr>
<tr>
<td>Female (n=108)</td>
<td>10%</td>
</tr>
<tr>
<td>15-24 (n=16)</td>
<td>16%</td>
</tr>
<tr>
<td>25-34 (n=62)</td>
<td>15%</td>
</tr>
<tr>
<td>35-49 (n=57)</td>
<td>23%</td>
</tr>
<tr>
<td>50+ (n=58)</td>
<td>16%</td>
</tr>
</tbody>
</table>

Q. If you limit or avoid wheat, do you seek the guidance of a Dietitian or Nutritionist to ensure you are following a balanced diet?
ILSI SEAR Asia (www.ilsi.org/SEA Region) and GLNC (www.glnc.org.au) - Carbohydrate intakes - high, low or irrelevant? Australia - March 2013

Gluten/Wheat Free for Health & Well Being
Nocebo Effect.

‘In a curious study, a team of Italian gastroenterologists asked people with and without diagnosed lactose intolerance to take lactose for an experiment on its effects on bowel symptoms. The participants received glucose, which does not harm the gut. 44 percent of people with known lactose intolerance and 26 percent of those without lactose intolerance complained of gastrointestinal symptoms.’
Hypothesis: Nocebo Effect

• How is eating this food likely to make me feel?

• Jittery, sick, sluggish, bloated?

• 2008/2009

• Self diagnosis of intolerance to…
Hypothesis: Self-diagnosis & 'borrowing' from illnesses...

- I'm special (I'm a 'glutard')
- It's harder for me
- An each way bet:

*If I lose weight, it was a success; I beat 'fatness'*

*If I lose too much weight, I have a condition*

*If I fail, I have an untreatable condition*

- Either way, it's not really my fault

"I am a coeliac. Why would anyone choose to eat like this full time?"
February 25th

COMPLAINT #586

Ugh. The only vegetarian options at this ski resort are all so carby.

-Whine by Kelly
The sceptical nutritionist is worth a read before you do your dough getting dietary advice from a corporate lawyer.

His clients include: Goodman Fielder and Kellogg Australia.

Experts thought asbestos was tremendous, put radium in watch faces and prescribed thalidomide. Often it’s the lawyers who can see through the research paradigm far more quickly than those who are too close to it.
New simpler food labelling system

crap

heart attack

Shit
tooth rot

Instant death
Liver failure

Shove!

Australia - March 2013
Sucessful Communication?
Simple changes make a difference.... But how to measure?

Beyond kg

Food is not the enemy.
Self empowerment with respect to hunger drive management, satiety and hence volume of food

Trust the scientific process.
Extremes disappoint long term whilst pleasure is curtailed
‘Paradigms gain their status because they are more successful than their competitors in solving... problems. The success of a paradigm... is at the start... largely a promise of success...’

Thomas Kuhn, The Structure of Scientific Revolutions.
Thanks.