

## GI News—October 2008



- 40 new GI values
- Spices protect against high blood glucose
- Why isn't the weight coming off my waist?
- Is there a GI number I should strive for each day?
- Camomile tea and diabetes
- Can you die of a 'broken heart'?

For a whole range of reasons we tend to classify foods as being 'good' or 'bad'. Dietitian Glenn Cardwell suggests we treat ourselves to a reality check in Food for Thought. The new Canadian Diabetes Association Clinical Practice Guidelines have been published and one of the three key nutrition messages is 'Replacing high-glycemic index carbohydrates with low-glycemic index carbohydrates in mixed meals. Read all about it in News Briefs along with reports on preventing type 2 diabetes and milk and muscle recovery. In Food of the Month, Catherine Saxelby looks at mushrooms and a new study on how they can help with weight loss. There are all our usual features too, including two low GI recipes and 40 new GI values from North America and Australia.

Good eating, good health and good reading.

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## Food for Thought

### All food is good

For a whole range of reasons we tend to classify foods as being 'good' or 'bad'. Dietitian Glenn Cardwell suggests we change our way of thinking about food and drop the guilt trip. It's about the ratio not the food he says in his new book, [Getting Kids to Eat Well](#). Here's an extract.

"How can all food be good for you? It doesn't make sense and let's face it, trustworthy friends, family and the media constantly remind us that there are bad foods that will harm us and our children. Ask yourself this, however: 'If I eat potato chips or French fries once a month will it shorten my life or increase my chance of heart disease or getting fat?' I suspect most of you will say 'No'. What if you ate the same food five days a week? Your answer will probably be 'Yes'.

We have been conditioned to think that food is either 'good' or 'bad'. If I ask you to name a few

good foods you are likely to list: fruit and vegetables, wholegrain cereals and bread, lean meat, legumes, reduced fat milk or soy drink, and with a little more thought you might include nuts (unsalted, of course), peanut butter, rice and pasta and some of your famous home-made custard or pesto.

If I ask you to name the bad foods, your list might seem to be endless: fast foods, deep fried foods, soft drinks, confectionery, anything with caffeine, crisps, snack foods, coloured bits in breakfast cereals, candy floss, chocolate biscuits, hundreds and thousands ... Be honest with yourself – aren't some of those 'bad' foods also your favourite foods? Think about hot pizza on a cold Sunday evening when you couldn't be bothered cooking, or chocolate melting over your tongue, or a cappuccino and croissants from that great café down the road overlooking the park?



How do you feel when you eat these foods? Guilty? Worried that the food is going to laugh maniacally, bypass your digestive system and leap onto your bottom to remain forever? It is common to feel 'bad' after eating 'bad' food.

How do you feel when you eat 'good' food? Pleased with yourself? Happy you have control over your food and your life? A glow from nourishing your body well?

How you classify food will determine how you feel after eating that food. Classifying food as 'bad' just means you feel bad after eating it. Calling it 'bad' has given that food a huge amount of power, a power it hardly deserves. Nature is designed such that you should feel grateful and happy after every repast. Feeling guilty or uncomfortable after eating is neither natural nor healthy.

Try spinning it all around. Start labelling a 'bad' food as a 'good' food. Now, the 'bad' foods will lose their emotional power. It can no longer make you feel bad or guilty. When you call a food 'good' instead of 'bad', the power actually returns to you. Here's the tricky bit: it is now up to you to eat all foods in amounts that are good for your health and well-being.

Like you, I enjoy eating good quality food and feel much better for it. Indeed, one reason I like to make 90% of my food very nutritious is so I have some flexibility with the other 10% to enjoy, without guilt, some pizza, black jelly beans or corn chips. They may be high in saturated fat, sugar or salt, but as they comprise only 10% of the diet they have little chance to cause harm.

This 90:10 mix works for me. You can even eat a nutritious diet based on a 80:20 mix, which is the common blend that most people can enjoy. If you go to a 70:30 mix then you will likely be getting too much fat, sugar and salt in your diet.

As a counter-point, I don't think there is much benefit in trying to get a 100:0 ratio as you are likely to become food obsessive, striving to reach something called the 'perfect' diet. Nothing in life is perfect. Enjoying a treat is absolutely normal and makes life interesting. There is not a scrap of evidence that the occasional chocolate, bowl of premium ice cream or croissant ever led to anyone's early demise."

For more information, check out [www.glenncardwell.com](http://www.glenncardwell.com)

## News Briefs

### **Canadian Diabetes Association announces new Clinical Practice Guidelines**

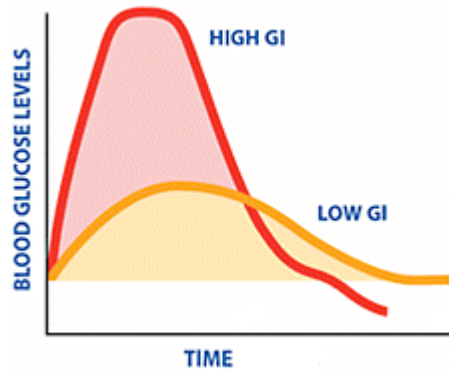
One of three key nutrition messages of the new guidelines is 'Replacing high-glycemic index carbohydrates with low-glycemic index carbohydrates in mixed meals has a clinically significant effect on glycemic control in people with type 1 or type 2 diabetes.' The other two key nutrition messages:

- 'Nutrition therapy can reduce glycated hemoglobin by 1.0 to 2.0% and, when used with other components of diabetes care, can further improve clinical and metabolic outcomes.'
- 'Consistency in carbohydrate intake, and spacing and regularity in meal consumption may help control blood glucose and weight.'



### **Type 1 kids and postmeal glycemia – does GI matter?**

Insulin pump therapy offers kids with type 1 diabetes the possibility of tailoring insulin delivery to what's in the meal they are about to eat. So, where does GI come in and does it matter? Yes. Taking account of a meal's GI along with the type of premeal insulin bolus makes a significant difference to postprandial glycemia according to the findings of the latest study from the Royal Children's Hospital Melbourne published in [\*Diabetes Care\*](#). Their findings show that both the GI of the meal and the type of premeal insulin bolus can have important modifiable effects on postprandial glycemia. The authors conclude: 'Our data reinforce the beneficial postprandial glycemia impact of choosing low GI rather than high GI foods with relevance to commonly eaten mixed meals.'



### **Preventing type 2 diabetes**

Lifestyle changes, not drugs, should be the main focus for preventing type 2 diabetes was the conclusion of a lively debate at the European Association for the Study of Diabetes 2008 Meeting. Diabetes experts witnessing the contest, declared lifestyle interventions the clear winner, on the grounds that they tackle the root cause, rather than the consequences, of glucose abnormalities.

### **Add spice and reduce blood glucose**

When you add herbs and spices to food, you get more than great taste. Herbs and spices are rich in antioxidants and a new University of Georgia study suggests they are also potent inhibitors of tissue damage and inflammation caused by high levels of blood glucose. Researchers reporting in the current issue of the [Journal of Medicinal Food](#), tested extracts from 24 common herbs and spices. In addition to finding high levels of antioxidant-rich compounds known as phenols, they revealed a direct correlation between phenol content and the ability of the extracts to block the formation of AGE compounds that contribute to damage caused by diabetes and aging. When blood glucose levels are high, a process known as protein glycation occurs in which the glucose bonds with proteins to form advanced glycation end products, also known as AGE compounds. The researchers found a strong and direct correlation between the phenol content of common herbs and spices and their ability to inhibit the formation of AGE compounds. Controlling blood glucose and the formation of AGE compounds can decrease the risk of cardiovascular damage associated with diabetes and aging.

### **Milk helps the body recover after exercise**

Gulping down a glass of milk rebuilds muscles after they are damaged during physical activity according to findings published in [Applied Physiology, Nutrition and Metabolism](#). The study carried out at Northumbria University in Newcastle showed that semi-skimmed milk and milk-based supplements helped preserve more muscle than sports drinks or water when consumed immediately after muscle-damaging exercise. According to the researchers, milk limits the effects of exercise induced muscle damage by providing protein and carbohydrate, which may stop the protein from being broken down. This is the first study to show that it may actually reduce muscle damage.

### **Eggs for brekkie help weight loss**

Eating a couple of protein-packed eggs for breakfast, as part of a reduced-calorie diet, helps overweight adults lose more weight and feel more energetic than those who eat a bagel breakfast

of equal calories according to a report in the [International Journal of Obesity](#). The researchers also found that blood levels of HDL and LDL cholesterol, as well as triglycerides, did not vary compared to baseline cholesterol blood levels in subjects who ate either the bagel or egg breakfasts.



### **Camomile tea and diabetes**

“Daily consumption of chamomile tea with meals could be potentially useful in the prevention and self-medication of hyperglycemia and diabetic complications,” write researchers from the University of Toyama (Japan) and the Institute of Grassland and Environmental Research reporting in the [Journal of Agricultural and Food Chemistry](#) the findings of their experimental laboratory study looking at the effects of camomile tea and its chemical components on cells in the laboratory and in a rat model of diabetes.

**Reality check:** [NHS Choices](#) provides a useful guide to the science that hits the headlines says: ‘Although this study provides an insight into the effects of camomile and its components on rats and cells in the laboratory, the extrapolation of these findings to humans is very premature. In particular, the experiments relating to their effects on diabetic complications only are at a very early stage and should certainly not be taken as proof that camomile tea could prevent or improve these very serious conditions. People with diabetes should continue to follow their doctor’s instructions about diet, exercise and treatment, and should only drink camomile tea if they like it, not in the hope that it will alleviate their diabetes.’

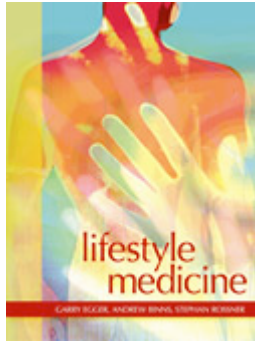
### **What's new?**

#### **Lifestyle Medicine**

Edited by Prof Garry Egger (aka Prof Trim), Dr Andrew Binns and Prof Stephan Rossner

Published by McGraw Hill

This practical book written by an impressive team of renowned experts, ranges from disease prevention to modifying risk factors and rehabilitation. It was written to provide general practitioners, practice nurses, clinicians and health professionals with an invaluable resource, but its highly practical and accessible format means that it can be read by anyone who is concerned about their health or community health issues. The comprehensive text summarises aspects of lifestyle medicine by examining the causes, measurement, and management of a range of modern health problems (including diabetes, heart disease and obesity) with predominantly lifestyle-based aetiologies. It presents the latest research findings and includes practice tips, key points and professional resources. For more information, check out: [www.lifestylemedicine.net.au](http://www.lifestylemedicine.net.au)



### **JDRF UK launches a new website for kids with type 1 diabetes**

JDRF stands for Juvenile Diabetes Research Foundation, an international organisation searching for the cure for type 1 diabetes. This [new UK website for kids](#) explains how kids with type 1 can help find the cure. It's also packed with info to help kids with type 1.

### **World Vegetarian Day: October 1**

To combine the basics of healthy vegetarian or vegan eating with the benefits of low GI carbs, check out Kate Marsh's *Low GI Vegetarian Cookbook*. It's packed with delicious recipes and mouth-watering photography.

## **Food of the Month with Catherine Saxelby**

### **Want to lose weight? Add more mushrooms**

Mushrooms add a rich deep savoury flavour for very few calories and are almost as indispensable as onions in cooking. Think of the difference mushrooms make to stroganoff, risotto, omelet, stir-fries, salads and of course stuffed mushrooms. It's all due to their high content of glutamate, the naturally occurring version of the flavour enhancer monosodium glutamate or MSG. They also have significant quantities of another key flavour compound, salicylate.

At only 23 calories (96 kJ) per 100 grams, mushrooms have what's called a low 'energy density' – they means that they have few calories for their weight or their volume, a big plus these days when so many of our snack foods and take-aways have a high 'energy density'

When it comes to nutrition, there are even more bonuses. They have no fat but heaps of B vitamins, especially riboflavin, niacin and pantothenic acid, which, along with some vitamin D if they have been briefly exposed to sunlight, sets them apart from other vegetables. If they are grown on a compost of horse or chicken manure, they add some vitamin B12 which is often difficult for strict vegetarians to obtain. Being a fruit of a fungus and not a true vegetable, they have little vitamin C or beta-carotene, but are rich in the mineral potassium.



**Watching your weight?** A recent US study published in *Appetite* [LINK] found mushrooms to be an ideal way to cut calories without losing out on flavour or a sense of fullness. You eat well and eat less!

Researchers from Johns Hopkins Bloomberg School of Public Health found they could drop the calorie content of a lunch meal by half if they substituted ground (minced) white button mushrooms for beef mince in familiar dishes like lasagna, ‘sloppy Joe’ (a kind of savoury mince) and ‘chili’ (as in con carne). When asked about palatability, appetite, satiation (post meal fullness) and satiety (general fullness), the study participants didn’t rate the mushroom meals any differently from the beef meals. And despite consuming fewer calories with the mushroom meals, they didn’t compensate by eating more later in the day.

Don’t know about you but I’d certainly be happy to double the amount of mushrooms I add and cut back on the meat or chicken or pasta – and save 20 g of fat and all those calories without feeling any pain. I wouldn’t want a dish composed entirely of mushrooms, but a 50:50 mix of beef and mushrooms in my beef casserole certainly sounds appealing.

Dietitian and popular nutrition communicator, Catherine Saxelby, is the author of *Zest and Nutrition for Life*

For more information on super foods and healthy eating, visit Catherine’s website: [www.foodwatch.com.au](http://www.foodwatch.com.au)

## Low GI Recipes of the Month

### **Mushroom and asparagus noodle soup with sprouts and chilli**

With mushrooms the flavour of the month, we asked Veronica Cuskelly to share one of her recipes from her new book (with Nicole Senior), *Heart Food*. Veronica says: ‘Don’t be dismayed by the length of the ingredient list. The flavours combine to create a truly mouth-watering soup! Why not make double quantity and freeze half in suitable portions for those days when there’s no time to cook.’

Makes 4 serves • Each serving contains 3 serves of vegetables



1 tablespoon peanut oil  
3 large cloves garlic, chopped  
4 cm/1½ inch piece ginger, chopped  
½ cup (30 g) sliced green onions (shallots)  
1 cup (125 g) thinly sliced carrot  
1¼ cups (180 g) thinly sliced red capsicum  
1½ cups (100 g) sliced flat mushrooms  
1½ cups (100 g) sliced shitake mushrooms  
4 cups (1 litre) water  
1 bunch asparagus, trimmed and sliced  
100 g/3½ oz rice vermicelli noodles  
3 teaspoons oyster sauce  
2 teaspoons brown sugar  
2 teaspoons lime juice  
1 cup tightly packed mint leaves  
100 g/3½ oz snow pea sprouts  
2 small red chillies, sliced

- Heat the oil in a heavy based saucepan over a medium–low heat. Add the garlic, ginger and onion and cook, stirring, for 1–2 minutes. Add the carrot, capsicum and mushrooms and stir for 2–3 minutes. Add the water, cover and bring to the boil, then reduce the heat and simmer for 10 minutes. Add the asparagus and continue cooking for a further 1–2 minutes or until the asparagus is cooked. Stir the oyster sauce, sugar, lime juice and mint leaves into the soup.
- Meanwhile, place the vermicelli in a large bowl. Cover with boiling water and leave to stand for 2–3 minutes. Stir to separate the noodles. Drain.
- Ladle noodles and soup into bowls and top with sprouts and chilli.

*Per serve*

Energy 933 kJ/223 cal; Protein 9 g; Fat 5 g (includes 1 g saturated fat); Carbohydrate 34 g ( 2 exchanges) ; Fibre 7 g ; Sodium 195 mg

### **This month from Johanna’s kitchen: Vinaigrette asparagus with eggs**

American dietitian, Johanna Burani, has a home in Friuli, in north-eastern Italy, which she visits frequently – always in pursuit of new recipes. In *GI News* she shares her totally simple and simply delicious low GI Italian fare.

Vinaigrette asparagus with eggs is a simple, inexpensive, wholesome dish is a definite crowd pleaser, and a typical part of an evening meal in several Mediterranean countries. Ready to eat in a flash, it is the perfect antidote to drive-through or take-out meal temptations. (Adapted with permission from *Good Carbs, Bad Carbs*, Da Capo Lifelong Books, New York). Food photography Sergio Burani.



Makes 3 serves



350 g/12 oz fresh thin asparagus (about 15 spears per person)  
3 hard boiled eggs, shelled and quartered  
Salt and pepper to taste  
¼ cup grated parmiggiano-reggiano cheese

*Vinaigrette dressing*

1 tablespoon extra virgin olive oil  
1 teaspoon red wine vinegar (not balsamic)  
Salt and pepper to taste

- Cut or break off 5 cm/2 inches from the bottom of the asparagus spears. Wash and place them in a steam basket and then in a saucepan with 2.5 cm/1 inch of water. Cover and steam on low heat until tender, approximately 3 minutes. (If using thicker asparagus, allow 10 minutes.)
- In the meantime, in a small bowl, mash the eggs with the back of a fork until crumbled; add salt and pepper to taste. Set aside.
- Place cooked asparagus in a deep, oblong serving dish. Whisk together the dressing ingredients and toss with the asparagus and grated cheese.
- Arrange the crumbled eggs over the asparagus and serve warm.

*Per serve*

Energy 693 kJ/165 cal; Protein 5 g; Fat 11 g (includes 5 g saturated fat and 11 milligrams cholesterol); Carbs 165 g; Fibre 2 g

Visit Johanna's website for more recipes: [www.eatgoodcarbs.com](http://www.eatgoodcarbs.com).

## Busting Food Myths with Nicole Senior

### **Myth: You can't die of a broken heart**

**Fact:** Yes you can, but heart-friendly food shared with loved ones might well be the cure.

A broken heart may well be the stuff of romantic novels and sonnets, however modern medicine is now shining a light on the connection between the wellbeing of the human spirit and the physical health of the heart. While the traditional risk factors such as smoking, high cholesterol levels, high blood pressure, being too fat and not getting enough exercise are all too familiar, being depressed or socially isolated are now also accepted as significant risk factors for coronary heart disease.

Depression has been described as the most disabling illness in Australia, and the World Health Organization describes it as a leading cause of disability worldwide. Can food help? There are a number of reasons to think that it can. Firstly, there are nutritional factors that can help the function of the brain, and secondly food and eating can be a very positive influence on our well-being.

The primary fuel for the brain is glucose so it's good to eat regular meals and keep the fuel supply going by eating low GI carbs. Porridge for breakfast, dense grainy bread for lunch and pasta at dinner may well deem these 'happy meals'. Carbohydrates are well known for their ability to boost serotonin levels and help us feel calm – hands up who gets cranky after too long without food? While the term 'fat-head' is a bit sad, the brain is in fact made up almost entirely of fat and the fat you eat is important for being happy. Eating more long chain omega-3 fatty acids found in oily fish may help re-wire the brain for better mood. Interestingly, countries that eat less fish have a higher incidence of depression (and vice-versa).

The term 'breaking bread' encompasses the idea that cooking and sharing good food can bring us closer together. While in today's hectic lifestyle shopping and cooking can be seen as a chore, perhaps we could see them more as affirmations of love and care – for ourselves and others. Perhaps the path to a happiness and enlightenment starts in the kitchen? Maybe we all need to take a little more time for what we think is important, and what could be more important than the food we eat?

So it seems you can eat to beat cholesterol all you like, but if it ain't heart food shared with those you love, it's just not as good. To start this kitchen-led happiness revolution, try Veronica Cuckelly's recipes in *Heart Food* available from [www.greatideas.net.au](http://www.greatideas.net.au) (and whistle while you cook!)

For more information on cholesterol and eating for a healthy (and happy) heart, check out *Eat to Beat Cholesterol* by Nicole Senior and Veronica Cuskelly: [www.eattobeatcholesterol.com.au](http://www.eattobeatcholesterol.com.au)

## Healthy Kids with Susie Burrell

### **Lifestyle Lesson 3: Table talk matters (with the television off)**

For many modern families, the idea of sitting down together to enjoy a home-cooked meal at 6 pm each weeknight is a pretty unfamiliar scenario. Long working hours with even longer commutes, both parents at work and an increasing number of single parent families are just some reasons why the family meal seems to be going the way of dinosaurs. It's becoming clear, however, that the simple act of enjoying a meal together as a family a few nights each week delivers a lifetime of health and psychological benefits.



Teens who sit down to eat family meals at least four times each week are significantly less likely to have weight issues or become trapped in disordered eating behaviours. Furthermore, they do better at school, can manage stress better and are less likely to abuse tobacco and alcohol. Pretty convincing stuff! As yet we can't explain exactly why this is so, but when families sit around the dinner table, they talk and listen and scientists believe that it's this communication that supports kids' emotional needs, helping them become resilient and develop coping skills that they can use at school, in the playground and in social situations. Family meals also give Mum and Dad an opportunity to make sure their kids are getting the right stuff to grow and thrive and to eat their greens too – thus giving their kids a great example to follow.

So, even if you can only manage to make a date to dine with your family once or twice each week, start making an effort to do so; the rewards will repay you. And make sure that you turn the television off to let the conversation flow ...

Susie Burrell is a specialist Weight Management Dietitian at The Children's Hospital at Westmead. In her private practice, she balances her clinical work with writing for print and electronic media. For more information check out: [www.susieburrell.com.au](http://www.susieburrell.com.au)

## Move It & Lose It with Prof Trim

**‘Help! I’m losing off the arms and shoulders, but it doesn’t seem to be coming off the waist.’ – Jim**

Fat cells on the male upper body are all similar i.e. they’re large and lipolytic meaning that they give up their fat as energy easily. The waist, for most men, is where they store reserves of fat last – it’s a good, readily accessible store which can be accessed easily in hard times, such as famine.

But this doesn’t mean fat isn’t also stored elsewhere. It’s a bit like blowing up a multi-shaped balloon. Different balloons pop out in different places when you blow. But ultimately all will expand totally if you blow hard enough. Because men typically store fat on the waist last, this tends to be the first place it comes off. But in some cases there will be losses off the arms, chin, chest etc., as well as the waist (usually there will be a corresponding decrease in waist). The idea is to keep at it. Eventually it will come off the waist as well.

If you need to lose weight, here’s a tip you won’t find in the women’s mags: Weight loss is not a linear process. You’re unlikely to lose a steady 1 or 2 kilograms per week until you get down to where you want to be. This is because weight loss is a dynamic process. Change one thing (e.g. food or exercise), and the body changes other things (e.g. metabolism, the rate at which you burn energy, etc.) to make sure that you don’t disappear.

## Curly Questions

**"I am a type 2 diabetic who tracks my carbs with the GI; however, I was wondering about how the GI should actually be used when other foods that are high in protein, but contain the proper amount and type of fat too, are eaten knowing this slows the digestive process and helps regulated the glucose level of the body?"**

The GI was introduced to rank the glycemic nature of the carbohydrate in individual foods. The purpose was to exchange one carbohydrate source with another in mixed meals or snacks. People often ask about the effect of extra protein and fat in the food on GI and blood glucose response. Eaten alone, protein and fat have little effect on blood glucose levels, but that’s not to say they won’t affect your blood glucose response when combined with a carb-rich food. This is because protein and fat both tend to delay stomach emptying, thereby slowing the rate at which carbohydrate can be digested and absorbed. So a high fat meal will have a lower glycemic effect than a low fat meal even if they both contain the same amount and type of carbohydrate.

More importantly, a meal’s GI value doesn’t make it good or bad for you. You need to base your food choices on the overall nutritional content along with the amount of saturated fat, salt, fibre and of course, GI value. We have found that people who simply substitute a low GI food for a high one in their everyday meals and snacks (especially with their choice of breads, breakfast cereals, starchy vegetables) reduce the overall GI of their diet, gain better blood glucose control and lose weight.



## Your Success Stories

**‘I’m having fewer hypos, I am on low doses of insulin and I feel much better.’ – Sarah**  
‘About six months ago I was diagnosed with gestational diabetes, which I managed with insulin. I read lots of handouts about how to manage diabetes with diet, but the focus was very much on reducing sugar in my diet and little about low GI foods. As a result, I continued eating breads with high GI, lots of potatoes and so on and my BGLs were all over the place. Six weeks after having my baby I found out that the diabetes was actually late-onset type 1! It was recommended that I try a low GI diet; I did lots of reading, including *The New Glucose Revolution (The Low GI Handbook* in Australia) and incorporated their recommendations into my diet. I have found that my BGLs are much more stable, I’m having fewer hypos, I am on low doses of insulin and I feel much better. My partner is also on the low GI diet and he feels more energetic, particularly in the mornings when he used to feel lethargic and unmotivated.’

### Inspire Others - Share Your GI Story

*If healthy eating the GI way has made a difference to your life by helping you achieve blood glucose control or lose weight, please share your success with readers of GI News. It's the real life success stories that give people the motivation they need to get started and help them appreciate that they are not alone. Just click anywhere in this text box to share your story. As a thank you, we will send you a copy of "Shopper's Guide to GI Values 2008" if your story is published in GI News*

## GI Symbol News with Alan Barclay

### Can you count on the carbs?

A reader recently asked about the accuracy of the carb count (in grams) on food labels. It's an excellent question and there isn't a simple answer. Under most national 'food laws,' two 'carb counting' methods are allowed.

- The amount of carbohydrate listed on the food label can be determined by 'difference' – the amount of protein, fat and fibre is measured, and whatever is left over is called available carbohydrate.
- Alternatively, carbs are measured by 'direct analysis', where each of the different sugars and starches in a food are measured and the totals are given.

Not surprisingly, carb counts based on difference will be intrinsically less reliable than those from direct analysis. But direct analysis is time consuming and rather costly, so the carb counts you see on food labels in the supermarket are typically calculated by the difference method.

Although measuring seems to be the way to go for accuracy, there's a fair bit of natural variation in most foods we eat: they are grown in the ground, not produced under strict controls in a laboratory, so the carb count in a food can typically vary from variety to variety, crop to crop, batch to batch ...

So, back to the food labels. While it is difficult to give a reliable estimate for carb quantities in packaged foods, variations of up to 20% are not unusual. That means for most of us, there's little justification for counting carbs to the nearest gram – the values on most food and drink labels simply aren't that accurate. However, some people (like those with diabetes) clearly need a practical system for estimating the amount of carbohydrate in foods so they can match their insulin or oral hypoglycaemic agents to what they eat. What's the most practical tool they can use to help them do this reasonably accurately without fuss and a calculator?

Research has proven that carbohydrate exchanges (an average of 15 grams of carbohydrate per typical household serve of food, with an allowance for variation of 12–18 grams per serve) or portions (10 grams of carbs per serve) provide equally satisfactory estimates of the amount of carbohydrate in food to enable most people with diabetes manage blood glucose levels satisfactorily.

Of course, the amount of carbohydrate in a food is only one part of the equation when it comes to good health – the GI is equally important for all of us. Email us for more information:  
[alan@gisymbol.com](mailto:alan@gisymbol.com)

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## **The Latest GI Values with Fiona Atkinson**

### **Woolworths Select pasta meals and instant noodles**

Alfredo Pasta & Sauce GI 57  
Cracked Pepper & Cheese Pasta & Sauce GI 48  
Four Cheese Pasta & Sauce GI 55  
Macaroni Cheese Pasta & Sauce GI 48



Sour Cream & Chives Pasta & Sauce GI 50  
Creamy Bacon Carbonara Pasta & Sauce GI 54  
Instant Noodles (Beef, Chicken and Oriental) GI 52

**The Latest GI Values from GI Testing in Canada**

President's Choice ® Blue Menu ™ breads and cereals

Oatmeal Loaf GI 63  
Whole Grain Oatmeal Bagel GI 58  
Whole Grain Multi-Grain Flax Bagel GI 52  
Whole Grain Cinnamon Raisin Bagel GI 55  
Whole Grain Jalapeno Corn Tortilla GI 35  
Whole Grain Chipotle Red Pepper Tortilla GI 47  
Lavash Whole Grain Flatbread GI 43  
Omega-3 Granola Cereal GI 51

**President's Choice ® Blue Menu ™ cookies, cake, muffins & bars**

Fruit & Nut Whole Grain Soft Cookie GI 56  
Oatmeal Double Chocolate Soft Cookie GI 42  
Oatmeal Raisin Whole Grain Soft Cookie GI 49  
Apple Crisp GI 48  
Cinnamon Coffee Cake GI 62  
Two-Bite Brownie GI 39  
Whole Grain Banana & Prune Muffin GI 53  
Whole Grain Carrots, Dates, Pineapples & Walnuts Muffin GI 55  
Fruit & Nut Mixed Berries & Almonds Chewy Multi-Grain Bars GI 63

**President's Choice ® Blue Menu ™ pasta**

Fettuccini GI 54  
Tricolour Linguini Sun-Dried Tomato, Basil and Original Nest GI 42  
Tricolour Linguini Sun-Dried Tomato, Basil and Original Nest GI 52  
Whole Grain Lasagna Sheets GI 59  
100% Whole Wheat Spaghetti GI 45  
100% Whole Wheat Penne Rigate GI 51  
100% Whole Wheat Lasagna GI 46

**President's Choice ® Blue Menu ™ convenience meals**

9-Vegetable Vegetarian Patty (frozen) GI 54  
Whole Grain Pizza Kit GI 65  
Tomato & Herb Chicken with Vegetables GI 29  
Chicken & Rotini Soup GI 38

**COBS Bread Higher-Fibre Low GI**

White Block Loaf GI 46  
White Block Loaf Small GI 46  
White Roll GI 50