GI News–April 2009

- Sweeten your life with low GI sugar (GI 50)
- Can cinnamon reduce the blood glucose rise after eating?
- Lupin - dream ingredient or allergy nightmare? Catherine Saxelby investigates
- Mythbuster Nicole Senior looks at vegetarian diet health claims
- Prof Trim checks out how much protein you actually need

Want to feel fuller on fewer calories, cut your appetite, boost your fibre, slash your blood pressure and cholesterol? Then look out for lupin products boasting this line up of health benefits says Catherine Saxelby in Food of the Month. Always on the lookout for the latest food being hyped, she took a closer look at lupin for GI News – the claims, the science-based evidence and the products. There are all our usual features in this issue too, plus two new recipes for you to try.

Good eating, good health and good reading.

GI News Editor: Philippa Sandall
Web Design and Management: Scott Dickinson, PhD

Food for Thought

Can cinnamon reduce the blood glucose rise after eating?
In recent years, lab research has suggested that CASSIA cinnamon, which contains around 5% of coumarin, may make body cells more sensitive to insulin. Small studies in healthy people and people with diabetes have also shown that this type of cinnamon (Cinnamomum cassia to give it its proper botanical name) can reduce the blood glucose rise after eating. But the jury is still out – some results have been promising but it’s too early to say that cinnamon cassia definitely does have beneficial health effects for people with type 2 diabetes. A recent meta-analysis in Diabetes Care found no significant benefits of a cassia cinnamon supplement on either glycated haemoglobin (A1C) or fasting blood glucose. The authors do acknowledge that their meta analysis may have been underpowered. What’s needed is a well planned, well controlled, long-term clinical trial.

No study has shown any adverse effects of taking cassia cinnamon daily but there are no long term trials either. So, while it’s still too soon for anyone to recommend that people with diabetes rely on this spice to steady their blood glucose levels, there’s no reason not to add it to your armoury of tools for managing your blood glucose levels. There are a few provisos, however.
If you want to give cinnamon cassia a go, have a chat first with your GP, dietitian or diabetes educator and be a bit scientific about it, too. For example, why not have your HbA1c tested prior to starting? Then have it checked again after at least 6 months, while not changing any lifestyle or medication use if possible to see if there is a change (unless advised by your diabetes management team). And if you get some interesting results, we would love to hear about it.

Make sure that you are using the right stuff. We wrote about the difference between cinnamon cassia (Cinnamomum cassia) that comes from China, Vietnam or Indonesia and 'true' cinnamon (Cinnamomum zeylanicum) from Sri Lanka in August 2007 GI News. We know that McCormicks cinnamon is cinnamon cassia. You can also buy cinnamon cassia from Herbies Spices.

In many of the cinnamon (cassia) studies to date they have used supplements. Simply adding this wonderful culinary spice to food seems a smarter and simpler and tastier and probably cheaper option to us. We asked spice guru Ian Hemphill to suggest some simple ways to include it in your meals throughout the day.

**Breakfast**

- **Add** 1 teaspoon (that’s about 3 g) of cinnamon (cassia) to porridge (made with traditional oats of course) while it is cooking.
- **Sprinkle** a teaspoon of cinnamon (cassia) over your muesli or granola.
- **Add** 1 teaspoon of cinnamon (cassia) to a pancake batter and serve with berries.

**Lunch**

- **Mix** 1 teaspoon of turmeric with 1 teaspoon of cumin and 1 teaspoon of cinnamon (cassia) and a pinch of salt if you like. Sprinkle on chicken pieces, pan fry, slice and toss through a green salad.
- **Add** 1 teaspoon cinnamon (cassia) while mashing a banana or add to a banana smoothie.
- **Sprinkle** 1 teaspoon cassia and 1/2 a teaspoon of ground star anise through approximately 250 g (9 oz) of stir-fried chicken.

**Dinner**

- **Make** a tasty tagine by coating beef cubes with 2 teaspoons of paprika, 1 teaspoon of cumin, and 1 teaspoon of cinnamon (cassia) before slow cooking.
- **Add** 1 teaspoon of cinnamon (cassia) to apple pie or fruit compote.
- **Mix** 1 teaspoon of turmeric with 1 teaspoon of cumin and 1 teaspoon of cinnamon (cassia) and a pinch of salt and rub on to lamb cutlets before grilling or barbecuing.

If you want to know more about cinnamon (cassia), check out Ian’s *Spice and Herb Bible* (*Spice Notes & Recipes* in Australia) and try his to-die-for ‘Spiced Duck Breast with Cassia Glaze’. If you make it with the new LoGiCane™ sugar, it’ll be low GI too!
Is it finally the end of fad diet wars?
It’s not the type of diet that makes a difference it’s cutting back on the calories that counts. This is the principal finding of a study in the prestigious *New England Journal of Medicine* that compared four heart-healthy, weight-loss diets. Consisting of similar foods, the diets replaced saturated with unsaturated fat and were high in whole cereal grains, fruits and vegetables. All participants were encouraged to include at least 20 g of dietary fibre per day in their diet and low GI carb-rich foods were recommended.

All four diets were equally successful in promoting clinically meaningful weight loss and the maintenance of weight loss over the course of 2 years. The take-home message is that giving people who want to lose weight a reduced calorie diet that's specifically tailored to fit in with their personal and cultural food preferences is likely to be the best way to give them a real chance for long-term success.

The researchers randomly assigned 811 overweight adults who were very keen to lose weight to one of four diets with a 750 calorie reduction a day that emphasised different amounts of carbohydrates, fat, and protein. The participants were also asked to do 90 minutes of moderate exercise a week. ‘Among the 80% of participants who completed the trial, the average weight loss was 4 kg (8.8 lbs); 14 to 15% of the participants had a reduction of at least 10% of their initial body weight.’ All the diets reduced risk factors for cardiovascular disease and diabetes.

The study also showed that the participants who regularly attended counselling sessions lost more weight than those who didn’t. Lead author Prof. Frank Sacks said: ‘These findings suggest that continued contact with the participants may be more important than the micronutrient composition of their diets.’

The good news: If you want to lose weight, see a registered dietitian.
The bad news: It's unlikely that such science-based evidence from Harvard researchers will stop the flow of fad diet books, magazine stories or miracle weight-loss programs, pills and potions.

**Helping kids beat the obesity gene**
‘Although our genetic make-up does have an influence on our health, it’s certainly not the only defining factor. Those with high risk genes can, in some cases, resist their genetic lot if they alter
their lifestyle in the right way – in this case, their diet,’ says lead author Dr Laura Johnson from University College London (UCL) talking about a new study published in March 2009 issue of the online journal *PloS One*.

Children who carry the FTO gene, strongly associated with obesity, could offset its effect by eating a low energy density diet. The UCL and University of Bristol researchers found that children with a more energy dense diet (more calories per bite) tended to have more fat mass three years later and also confirmed that those carrying the high risk gene had greater fat mass overall.

When the researchers looked at whether children with the FTO gene had a stronger reaction to an energy dense diet than children with a lower genetic risk they found that they did not. These results indicate that if a child with a high genetic risk eats a diet with fewer calories per bite, they may be able to offset the effect of the gene on weight gain and so stay a healthy weight.

Eating a diet rich in energy-dense foods increases the risk of obesity for adults, as they tend to eat the same amount of food, regardless of its energy density. That’s not true for kids, Johnson notes. When younger kids eat energy-dense foods, they generally eat less at the next meal. As they get older, though, they get more and more like adults. ‘This is an important finding because it provides evidence that … adopting a diet with more bulk and less energy per bite could help people avoid becoming obese regardless of their genetic risk. Obesity is not inevitable if your genes give you a higher risk because if you change the types of foods you eat this will help curb excessive weight gain.’

How? By replacing high-fat foods with low-fat foods and giving kids more fruits and vegetables. See [January 2009 GI News](#) for more on low energy density ‘feel full’ foods and [February 2009 GI News](#) for tips on ‘Changing the way we eat, drink and move.’

**Carbohydrate withdrawal: is recognition the first step to recovery?**

In [February 2009 GI News](#), we reported on an article that explored the idea in that addiction could be an important factor causing the obesity epidemic. Lead writer Dr Simon Thornley claimed that although there’s no basis for this in the medical literature to date, it’s possible that obese persons may experience a withdrawal syndrome (after abstinence from high GI foods) with symptoms such as craving and low mood similar to those associated with other drug dependencies. In a recent letter to the *NZ Medical Journal*, Thornley reprints correspondence (with permission) from a 38-year-old woman from Wisconsin, USA.
“For the first 3 weeks I cut all processed sugar and flour from my diet and suffered mood swings with extreme tension and depression, even a sense of hopelessness at times, I had horrible stomach pains, all my joints and muscles throbbed, and I had the shakes constantly. I don't even know how to describe the horrible headaches that went along with all this. People who knew me started thinking I was hiding a drug problem. The worst physical symptoms have been gone for about 2 weeks now, and the cravings are finally starting to subside … I look at birthday cake today and all I see is myself curled up in the fetal position crying in bed … The worst part of the addiction lasted 3 weeks. The first 3 days were normal, but then on the fourth day the worst cravings began. All I could think about was ice cream, chocolate, and cheesecake. The cravings started to subside after the third week, but once I started feeling better I [thought] about food less. The shakes and the headaches really were the worst part!”

Thornley says: ‘Although this case does not prove our hypothesis, it may explain why obese people find it difficult to adhere to advice to reduce intake of refined carbohydrates. Her description is similar to an opiate withdrawal syndrome (craving, aches and pains and muscular spasm or twitching). The time course – worst in the first weeks and resolving with continued abstinence within 4 weeks – again concurs with a withdrawal syndrome. Further work may indicate if these symptoms can be reliably measured and mapped over time in obese subjects that limit their intake of high GI food.’

**Foodwatch with Catherine Saxelby**

**Lupin – dream ingredient or allergy nightmare?**

I have to say right up front, lupin looks promising but the jury is still out. Here’s the story so far. Research from Western Australia published in the *American Journal of Clinical Nutrition* found that a bread with 40% added lupin kernel flour lowered both systolic and diastolic blood pressure in 74 overweight men and women over 16 weeks. Compared to a standard white bread, the lupin-enriched bread dropped blood pressure by 3.0 and 0.6mm Hg respectively while their pulse pressure also decreased.

In a 2006 *American Journal of Clinical Nutrition* study, researchers reported that eating lupin flour-enriched bread at breakfast resulted in higher ‘feel full’ (satiety) scores and a lower overall food intake (488 kJ less) at lunch than eating white bread.

It makes sense. Both protein and fibre are things dieters already utilise to help them keep hunger pangs away. It significantly reduces total food intake and surprisingly cuts down on their intake at the following meal.

**What is it?** Lupin (*Lupinus angustifolius*) is a legume (bean), high in protein (over 40%) and fibre (around 30%), most of which is the soluble type. It’s also low in fat, which is mainly polyunsaturated with some omega-3, so it most closely resembles soy beans. In fact it’s been earmarked as the next major competitor to soy beans as a high protein ingredient in vegan sausages, noodles, breads, muffins or breakfast cereal.
The fat also is rich in lecithin, which is good for the heart. It contains natural antioxidants such as carotenoids (which account for its golden-yellow colour) and tocopherols which are converted into vitamin E.

**What can it do for you?** Eating foods contain lupin flour can help cut your food intake without going hungry thanks to the fibre and protein content. It is an excellent alternative to both wheat flour and soy products. It has a higher lysine content than cereals and is rich in the amino acid arginine which is a precursor of nitric oxide, a vasodilator in blood vessels. Like other legumes, it is gluten free and its starch is slowly digested, so as an ingredient it would help lower the GI of a food such as bread.

**Lupin allergy is the downside.** Major food manufacturers, however, are holding back from using lupin flour due to the likelihood of it provoking a severe allergic reaction like peanut (botanically a legume). It appears that people with peanut sensitivity may have cross-reactivity with lupin or the allergy may arise for no known reason.

Currently, food producers are not required to label lupin as a potential allergen unlike gluten or soy. Even though it’s not widely available, already two reports – in the *Medical Journal of Australia* and a case report in *The Lancet* (April 2005; no abstract) – describe four cases of anaphylaxis that can be traced back to hidden lupin. Immunologists suggest that allergic patients be tested for lupin sensitivity before eating it.

**Where do you get it?** At present, not many lupin-based products exist. In Australia, Bodhi’s *Slimmers Choice* bread is made with 40% lupin kernel flour. This was the bread used in both studies but it’s only available in Western Australia and some outlets in South Australia and Victoria. Website: [www.bodhi.com.au](http://www.bodhi.com.au).

‘Feel great – lose weight’ is the claim on the Lupin8 label. You add this yellow powder (made from a blend of lupin kernel flour, corn flour maize, oat bran, rice meal and psyllium husks) to food or cooking to reduce hunger pangs. It says it has a low GI on the label, but I haven’t seen any published test results, and there’s only 3 g carbs in a 9 g serving (about a tablespoon). You can buy it from pharmacies and health food shops in Australia and the manufacturer says it will be available in NZ and USA from March/April. Website: [www.lupin8.com.au](http://www.lupin8.com.au).

Want more information? The WA Department of Agriculture has a really excellent [PDF](http://www.lupinflour.com.au) on lupins generally and lupin research and background; and you can find out more about lupin flour at [www.lupinflour.com.au](http://www.lupinflour.com.au).

**Catherine Saxelby** is an accredited dietitian and nutritionist and runs the Foodwatch Nutrition Centre. For more information on lupin and healthy eating, visit [www.foodwatch.com.au](http://www.foodwatch.com.au).
Low GI Recipes of the Month

American dietitian, Johanna Burani invites *GI News* readers to try recipes from her Italian kitchen (photographed by Sergio Burani).

**Vanda’s baked frittata**
Vanda is my good friend and a fabulous cook. She lives in Friuli, northern Italy, in a small town very close to mine. She espouses to the freshest ingredients in her cooking. Her dishes are simple, wholesome and usually picked directly from her vegetable garden. This recipe is a great example of her delicious home cooking.

Serves 4

2 medium zucchini (approx. 10 oz/300 g)
4 eggs
2 tablespoons sundried tomatoes, minced
55 g (2 oz) part skim ricotta
½ cup (60 ml) fat free milk
½ teaspoon salt
1 tablespoon grated cheese
1 tablespoon plain breadcrumbs

- Preheat oven to 180C (350ºF). Cover the bottom of a 22 cm (9 in) square baking pan with parchment paper or non-stick vegetable spray.
- Wash the zucchini, trim the ends and cut them into thin horizontal slices. Cook 5–6 minutes in a non-stick pan stirring frequently.
- Whisk the eggs in a medium bowl. Add the sun-dried tomatoes, ricotta, milk and salt and continue to whisk until ingredients are well combined. Gently fold in the cooked zucchini. Pour the mixture into the baking pan. Sprinkle the breadcrumbs and cheese over the top. Bake for 20 minutes or until the top turns golden brown. Allow to cool slightly. Cut into four diagonal pieces.

*Per serve*
Energy: 370 kJ/ 88 cals; Protein 9 g; Fat 8 g (includes 2 g saturated fat and 218 mg cholesterol); Carbs 5 g; Fibre 1 g
Dietitian Dr Joanna McMillan-Price shares this deliciously low GI recipe from her new book *Inner Health, Outer Beauty*. It’s available from bookshops in Australia and New Zealand and online from [www.greatideas.net.au](http://www.greatideas.net.au).

**Quinoa, mackerel and spinach kedgeree**

Smoked and canned fish are a convenient way to boost your omega-3 intake. Smoking fish and meat is one of the oldest methods of food preservation but you won’t find the Heart Foundation Tick on these foods because of the large amount of salt used in the smoking process. Despite this, I still recommend using it, in the context of a wholesome natural food diet. If you don’t eat many processed foods then your overall salt intake will be within healthy limits despite having smoked fish once a week or so. Read the ingredients list to be sure the product has only fish and salt, and no other additives. This recipe is quite high in fat, but it is mostly unsaturated fats from oily fish including omega-3 fats beneficial to health.

Serves 4 to 6

- 50 g olive oil
- 2 teaspoons brown mustard seeds
- ½ teaspoon cumin seeds
- 1 cinnamon stick
- 1 large onion (200 g) sliced thinly
- 1½ teaspoons garam masala
- ½ teaspoon ground turmeric
- 1½ cups (270 g) quinoa
- 2 cups (500 ml) water
- 1 teaspoon sea salt
- freshly ground black pepper
- 400 g (14 oz) smoked mackerel
- 3 free-range or organic eggs, hard-boiled and peeled
- 100 g (3 ½ oz) baby spinach leaves
- ¼ cup coarsely chopped parsley

- Heat the oil in large heavy-based frying pan with a lid. Add the mustard seeds, cumin and cinnamon and cook 1–2 minutes or until mustard seeds pop.
- Add the onion and ground spices, cook until onion has softened and started to lightly brown.
- Add the quinoa, water and season with salt and pepper. Cover with the lid and cook for 10–15 minutes or until the quinoa is tender.
- Meanwhile, flake the fish into large chunks and cut the eggs in half. Stir the fish, spinach and parsley into the quinoa and mix gently until the spinach wilts. Serve topped with eggs and some Worcestershire or sweet chilli sauce.

*Per serve* (based on 6 serves)

Energy: 2166 kJ/ 516 cals; Protein 23 g; Fat 34 g (includes 7 g saturated fat l); Carbs 30 g; Fibre 4 g
Myth: Vegetarian diets are healthier

Fact: Vegetarian diets can lack essential nutrients

My latest book, *Heart food* (with Veronica Cuskelly) has a picture of mouth-watering steak on the front cover. A couple of people expressed surprise at this choice, and couldn’t believe meat was healthy. Of course a balanced diet including lean meat can be healthy and heart friendly, but meat often gets a bum rap – much of it deserved because our portions are too large and our meat choices too fatty. But is going meat-free the true path to wellness? Well, a vegetarian diet can have a few holes in it as well and lack key nutrients such as iron, zinc, B12 and omega-3 DHA. I thought I’d address a number of commonly held views about vegetarianism.

Vegetarians live longer: While it’s true the Seventh Day Adventist vegetarian community in Loma Linda California are one of the most long-lived in the world, under the cold light of science this can’t be fully explained by their vegetarian diet. This community also don’t drink alcohol, are physically active, and have strong religious faith and social connectedness. There are equally long-lived communities elsewhere in the world that do include animal foods in their diet, such as the people of the Nicoya Peninsula of Costa Rica, Sardinia in Italy and the people of Okinawa in Japan. Interestingly, while they do eat meat, their diets are based on plant foods (as are heart-healthy diets today). The take-home message is, if you eat meat make sure you eat plenty of vegetables, exercise and pray!

Vegetarian dishes in restaurants are healthier options: In my experience, this is the exception rather than the rule. Unfortunately vegetarian dishes tend to be heavy on cheese, cream and pastry (e.g. vegetable quiche, bean nachos), and thus heavy on kilojoules (calories) and artery clogging saturated fat and salt. Unless the chef is clued up on matters vegetarian, you end up with a meat-free version of an existing dish (e.g. vegetable pasta) rather than a well-balanced meal with suitable meat-alternatives such as legumes and nuts. Teen girls please note: throwing the meat out of your burger does not make it a vegetarian meal! You need to research a restaurant guidebook or the web to find suitable vegan dishes (containing no animal products at all). More education about healthy meatless meals is needed.

There is enough iron in plant foods: I recently saw a bumper sticker on the back of a cattle farmer’s truck that said, “7 days without meat makes one weak”. Very clever, but is there any truth to it? Maybe when you consider plant foods such as whole grains, legumes and nuts contain non-haem (or non-heme) iron of which only 5% is absorbed. Added to this, vegetarian diets contain very high levels of phytates and oxalates that inhibit iron absorption. Eating vitamin-C rich foods can enhance the absorption of non-haem iron, but never reaches the bioavailability of haem iron. The haem-iron in meat, chicken, pork and fish is much better absorbed, and in a mixed meal the haem-iron enhances the non-haem iron absorption as well. Many vegetarians do fine without meat because their iron needs are lower, but children, teenagers, pregnant women and athletes need more and risk going short. Low iron can cause poor energy levels and fatigue, and delayed cognitive development in children.

Sure, meat-lovers would do well to take a leaf out of the vegetarian book by including more
protective plant foods, but vegetarian diets have their hazards as well. The take-out message is that avowed carnivores and vegans are dietary extremes while health is so often found in the happy medium. Vive l'omnivore!

If you’re interested in having your steak and eating it, while still looking after your cholesterol and heart health, check out Nicole’s books at www.eattobeatcholesterol.com.au

Move It & Lose It with Prof Trim

How much protein is enough?
The recommended dietary allowance (RDA) of a nutrient is an estimate of the minimum average dietary intake level that meets the nutrient requirements of nearly all (around 97% that is) healthy individuals. Based on this recommendation, the RDA for protein in the diet is 0.8 grams per kg of body weight per day. So a 100 kg (220 pound) man should be eating about 80 g (3 oz) of protein (about the amount in a good piece of steak) per day. Athletes on the other hand are advised to eat up to 3g per kg of body weight per day – around 300 g (11 oz) for a 100 kg man – because of their extra muscular needs.

However, as pointed out in a recent issue of the *Journal of the American Medical Association*, the term “recommended dietary allowance” is often misleading as it is misinterpreted as being the “optimal” rather than the “minimal” dietary requirement. But protein recommendations for those wanting to lose weight have now been put at around 25% of total energy intake, so for a 10 man needing about 3,500 calories (14,700 kJ) per day, this would translate into a protein content of around 200 g (7 oz)/day, which is obviously more than the RDA, and closer to the athlete level. So who is right?

Because loss of body muscle during an energy restricted diet is counter-productive for good weight loss, the higher level (even up to 35% of intake from protein is more likely to be effective. Are there any risks at this level? Those with kidney problems or potential kidney problems do need to be managed differently, but for the others, there seems to be little risk. As hunter-gatherers, humans often took in as much as 30% of their diet as protein on a regular basis. Hence, it’s likely that we are attuned to a higher protein intake than is current. Of course the other point of concern is that the source of the protein should be lean meats or vegetable proteins. Higher fat varieties (e.g. such as feed-lot farmed animals) are likely to reduce the benefits by
increasing the fat (and hence energy) content of the diet.

For more information on weight loss for men, check out Professor Trim.

Curly Questions

Is there a difference between naturally occurring sugars and refined sugar?
We are often asked this. Not in GI terms. Naturally occurring sugars are those found in milk and other dairy products and fruits and vegetables, including their juices. Refined sugar means added sugar, table sugar, honey, maple syrup, or corn syrup. Both sources include varying amounts of sucrose, glucose, fructose and lactose. Some nutritionists make a distinction between them, because natural sugars are usually accompanied by micronutrients such as vitamin C.

The rate of digestion and absorption of naturally occurring sugars is no different, on average, from that of refined sugars. There is, however, wide variation within food groups, depending on the food. The GI of fruits varies, from 25 for grapefruit to 76 for watermelon. Similarly, among the foods containing refined sugar, some are low GI, some high. The GI of sweetened, low fat yoghurt is only 26 to 28, while a Mars Bar® has a GI of 62 (lower than bread).

Remember, a food’s GI alone doesn’t make it good or bad for you. The nutritional benefits of different foods are many and varied which is why we always suggest that you base your food choices on the overall nutritional content along with the amount of saturated fat, salt, fibre and of course, the GI value, which is why bread is a better option than a Mars Bar.

Why do dietitians and nutritionists recommend starchy foods over sugary foods?
Sugar has an image problem that stems largely from research with rodents using unrealistic amounts of pure sugar. It’s also seen as a source of ‘empty kilojoules’ (energy without vitamins or minerals) and concentrated energy. But much of the criticism doesn’t stand up to actual research findings.

Most starchy foods have the same energy density as sugary foods and even a soft drink has the same kilojoule (calorie) content per gram as an apple. Starchy foods, such as wholegrain cereals can be excellent sources of vitamins, minerals and fibre, but some pure forms of starch and modified starches are added to foods that are ‘empty kilojoules’.

So there really isn’t a big difference between sugars and starches, either in nutritional terms or in terms of the glycemic index. Our advice is to use sugar to your advantage by adding it to nutritious foods (such as a little sugar on porridge or a smear of jam on low GI bread) to make them taste even better.

Email your curly question about carbs, the GI and blood glucose to: gicurlyquestions@gmail.com
‘Words cannot describe how thrilled I am with this low glycemic eating plan!’ – Barbara
On April 30, 2008, when I found out I was pre-diabetic, I was shocked and scared. As far as I knew it wasn’t in the family and I did not want it. If I had to diet to get my blood sugar normal, I would. At first, I thought I could educate myself. Wrong! I changed my diet immediately and I did start losing weight. Yet I felt I needed to see a nutritionist. There was only one whom my doctor would recommend.

By the time I saw Johanna Burani for the first time on June 2, I had lost 15 lb (7 kg). I was going on a cruise in 6 days and not liking what I thought I’d have to eat. She eliminated all my fears by designing a meal plan that would work just for me. I also read her book, Good Carbs, Bad Carbs and tried out some of the recipes I found there. This also made my new low GI lifestyle so easy to follow.

Seven months have passed since I started choosing low GI carbs and I still love my plan. My blood glucose has normalised with the diet alone; I take no medication. I’ve lost 43 lbs (20 kg) – and now weigh 15 lbs (7 kg) less than on my wedding day, 44 years ago! I’m so confident that this way of eating is for life that every piece of clothing that gets too big finds a new home!

This was never about dieting to be thin. I wanted to eat to be healthy. It’s been fun to finally know that I can be thinner and not feel like I’m on a diet. When an apple is more appealing to me than a brownie, I know I have really changed! By the way, my husband has also lost 32 lbs (14.5 kg) eating the way I was now eating. He didn’t know he was on a diet! Another bonus: he is off all his high blood pressure medication.’

Johanna says: ‘Barbara is an up-beat, energetic hairdresser and grandmother of three who enjoys cooking her traditional Hungarian meals which include butter, sour cream and fatty meats. When she discovered she was pre-diabetic, she tried to compensate for her typical calorie-laden meals by eliminating carbohydrates as much as possible. But Barbara is also an outstanding baker so she was having trouble figuring out how to make her current diet meet the needs of her new health concerns. That’s when she made an appointment for nutritional counselling with me.’

‘I have lost 1 stone in weight. How good is that!’ – Richard
‘I am 55 and have type 2 diabetes. I have been following a low GI diet and during the 18 months my average blood glucose level (HbA1c), which is checked every 6 months by blood test, has fallen from 6.1 to 6.0 to 5.9%. I seem to be going in reverse. Also I have lost 1 stone (14 lbs, 6.4 kg) in weight.’

‘This website has helped me control my glucose level.’ Biresswar
‘I am from India. I was diagnosed as having diabetes because I had a huge weight loss. I reduced my blood glucose level immediately using medication in consultation with my doctor. But my intention was to control my blood glucose by lifestyle changes instead of living my whole life on medicines. This website has helped me a lot to do this. My glucose level is always normal and
this I do by exercise and good eating habits. Walking is undoubtedly the best form of exercise for diabetics. Also I do the breathing exercise (pranayam), yoga regularly.

**GI Symbol News with Alan Barclay**

**New low GI sugar**

A low GI sugar made from 100% sugar cane is now available for those who like a little sweetness in their life – or in their tea or coffee. The new sugar has the same taste and colour as regular sugar and can be used in baking in the same way, but because of the innovative manufacturing process (raw cane sugar is sprayed with a molasses extract, a natural by-product of sugar cane manufacture), it retains most of the nutrients from the sugar cane, like minerals and antioxidant polyphenols. The GI Foundation has certified LoGiCane™ as a healthier low GI choice within the sweetener category.

Added sugars and high sugar foods like jam, marmalade and syrup are among the top five contributors of glycemic carbohydrate in the Australian diet, and this is similar in the US and the UK. We know from dietary modelling that substituting LoGiCane™ (GI 50) for regular sugar (average GI 65) will lower the GI of the diet of older Australians by approximately one percentage point – and help reduce the GI of the Australian diet from its current high 55–60 down to around 45. We know from research that the average GI of your daily diet needs to be around this low level to reduce the risk of developing chronic disease including type 2 diabetes and heart disease.

What about the calories? The jury is still out on this one. There is some early evidence that Logicane™ has less kilojoules/Calories, and is less likely to cause tooth decay than regular sugar (due to its polyphenol content), but more research is underway to confirm this.

Does this mean you can have more sugar. Not at all. Horizon Science (the research group behind LoGiCane™) and the GI Foundation fully back current dietary guidelines that recommend only moderate consumption of added sugars as part of a balanced healthy diet. LoGiCane™ with its low GI is simply a better choice for your long-term health that should be used instead of regular sugar in (let me repeat) moderate amounts.
What’s moderate consumption? About a teaspoon of sugar in a cup of tea or coffee, a couple of teaspoons on a high fibre, low saturated fat breakfast cereal, or a tablespoon or so in a baked product like a fruity muffin. The total should be no more than about 6–10 teaspoons a day which includes all sources of refined sugar you consume – what’s already in the foods you eat as well as what you add yourself.

LoGiCane™ is currently available in Australia and NZ. For more information email: alan@gisymbol.com

Contact
Dr Alan W Barclay, PhD
CSO, Glycemic Index Ltd
Phone: +61 2 9785 1037
Mob: +61 (0)416 111 046
Fax: +61 2 9785 1037
Email: mailto:alan@gisymbol.com
Email: alan@gisymbol.com
Website: www.gisymbol.com.au