

GI News—July 2011



- Being healthy on the inside no matter what number you see on the scales
- ‘New cure for diabetes’ shout the headlines ... Dr Alan Barclay investigates
- The scoop on loving low GI lentils
- Prof Jennie Brand-Miller on insulin sensitivity
- Reduced fat intake may reduce diabetes risk without weight loss

‘It’s what’s inside that counts’ applies to the food we eat as well as having a kind heart suggests Nicole Senior busting the myth that ‘all fat people are unhealthy’. ‘We need to put nutrition and health as a priority over the obsessive quest for ‘the body beautiful,’ she writes. We gave her space in Food for Thought to expand on this with tips on staying healthy on the inside no matter what number you see on the scales. Plus there are all our usual features in this issue including three delicious recipes from the *GI News* Kitchen to try.

Good eating, good health and good reading.

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Food for Thought

Nicole Senior on being healthy on the inside

In *Eat to Beat Cholesterol*, I wrote: ‘Some people are genetically programmed to be larger and the effort to slim down substantially is unrealistic. If this is you, be as healthy as you can. You are better off being fat and enjoying a healthy diet than being fat and eating badly. The same goes for physical activity – you are better off being fat and fit, than a fat couch potato.’

What this boils down to is that if you are larger it doesn’t mean you are – or have to be – unhealthy. As my Mum reminded me the other day, ‘It’s what inside that counts.’ Eating the right foods and exercising regularly can balance the health ledger in your favour and give you better numbers ‘on the inside’ too – your BGLs, cholesterol and blood pressure.

We also need to put nutrition and health as a priority over the obsessive quest for ‘the body beautiful’. Happiness, contentment and wellbeing are more than what size clothing we wear. Here are my tips to be healthy on the inside.

Choose top-quality fuel This simply means you give your body the fuel it needs to protect your health and improve your performance in every aspect of life. In fuel for motor vehicles, octane level is important; in fuel for people, nutrient density is the key. Nutrient-dense foods offer more ‘bang for your kilojoule buck’.

Balance the fuel mix The fuel mix you put into your body is just as important as race fuel in a Formula One car. You need it to be balanced between the food groups and nutrients to give you the right mix of power and endurance. Eating to be healthy on the inside you need to:

- Power up with protein – Lean red meat, pork, chicken, fish, seafood, eggs and legumes (beans, lentils and chickpeas).
- Re-fuel with carbs (look for the low GI ones) – Grain foods such as low GI grainy breads and breakfast cereals, pasta, noodles, low GI rice like basmati or Doongara Clever Rice and starchy vegetables like lower GI potatoes (Carisma or Nicola), orange-fleshed sweet potato, corn, carrots, butternut pumpkin and parsnips.
- Rust-proof with fruit and veg – Tomatoes, onions, broccoli, mushrooms, lettuce, capsicum, celery, zucchini (courgettes), peas, cabbage, beans and beetroot etc. Fruit and berries such as apples, oranges, bananas, pears, grapes, kiwifruit, plums, nectarines, rockmelon, papaya (paw paw), mango and strawberries etc.
- Reinforce your frame with good dairy foods – Reduced fat milk, yoghurt, cheese and custard.
- Grease the machine with the right oils – Sunflower, olive and canola oils; spreads like margarine or peanut butter; nuts and seeds, and avocado.
- Prevent overheating with fluids – Water, juice, cordial, tea and weak coffee

And remember, your body was designed to move, so move it and keep it in working order to give yourself the strength and fitness to cope with whatever life throws at you. Cars, sedentary jobs, technology and the quest for convenience have all made it easier to do very little. If you want to be active, you usually have to plan to make it happen. Apart from not smoking, being physically active is the most powerful step you can take for being healthy on the inside.

News Briefs

Little evidence that increasing soy improves BGLs

In a meta-analysis in the *American Journal of Clinical Nutrition*

(www.ajcn.org/content/early/2011/03/02/ajcn.110.007187) evaluating the effects of soy foods and supplements on glycemic control Dr Suzanne Ho and colleagues conclude that: ‘there was not a significant overall effect of soy intake on improvements of fasting glucose and insulin concentrations; however, a favorable change in fasting glucose concentrations was observed in studies that used whole soy foods.’

Reduced fat intake may reduce diabetes risk without weight loss

‘What is important about this study (www.ajcn.org/content/94/1/120.abstract?sid=7ee511d0-5df7-486f-bf23-2b2a09e60074),’ says Prof Barbara Gower, ‘is that the results suggest that diet quality, not quantity, can make a difference in risk for type 2 diabetes.’ The researchers provided 69 healthy overweight individuals with one of two calorically identical diets for eight weeks – either a reduced carbohydrate, higher fat diet (43% carbohydrate, 39% fat), or a standard diet of 55% carbohydrate and 27% fat. At the end of the study, those on the lower-fat diet had significantly higher insulin secretion and better glucose tolerance and tended to have higher insulin sensitivity. The researchers took into account any minor fluctuations in weight during the study, and provided participants with the amount of food necessary to maintain weight.

Tossing and turning? You may need to up your high GI carbs

Eating high GI and high GL meals increased the availability of tryptophan in healthy volunteers reports a study in the *British Journal of Nutrition*

(<http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=8279341>).

‘These findings may have clinical relevance for management of conditions where increased serotonin production is considered beneficial, primarily for promotion of sleep in patients with insomnia). Specific research would be required to assess the risk–benefit of using high-GI meals to promote sleep against current strategies for clinical management of insomnia,’ conclude the authors. ‘It’s still early days,’ says Prof Jennie-Brand-Miller, ‘and needs to be confirmed by larger, long-term studies before recommending people with sleep problems, many of whom may well have diabetes or pre-diabetes, start experimenting with high GI meals.’

Does it matter where your protein comes from?

‘In the small amount of literature available there is no striking evidence that the one protein source is preferable to another in weight-reducing programs. However, animal proteins, especially those from dairy, seem to support better muscle protein synthesis than plant proteins. This could potentially enhance energy expenditure, but no conclusion can be drawn from the scant evidence. Some studies, but not all, demonstrate the higher satiating effect of whey and fish proteins than other protein sources.’ *Nutrition, Metabolism & Cardiovascular Diseases* (www.ncbi.nlm.nih.gov/pubmed/21565478).

Enjoy pears

Juicy, sweet pears are one of the world’s most loved fruits (we are all fans here) and this year’s Australian crop is a bumper one. ‘The past few seasons have brought anguish for many growers with the Black Saturday bushfires, flooding and inclement weather almost decimating crops,’ says fourth generation grower Gary Godwill. ‘To get pears to harvest this year we battled rain and flooding, and had our pickers wading through water just to get to the trees. However, we’ve been rewarded with the early Williams’ pear crop up by 60% compared to last year and the current Packham’s harvest expected to be large and one of best quality crops we’ve ever seen.’

Pears (GI38) are a healthy snack rich in fibre and vitamin C. They have a low GI because they are high in fibre and most of their sugar is fructose. Although the flavour of a fresh pear on its own is hard to beat, here are some tips to up your intake:

- Poach or bake them in a light syrup or red wine with a touch of cardamom.
- Think outside the square by baking them with spices, roasting them with meat, or adding them to bruschetta.
- Toss firmer pears in salads with walnuts and greens (witlof and rocket go well).
- Pop softer pears into a soup or smoothie for added flavour.

Bookshelf: *The CSIRO and Baker IDI Diabetes Diet and Lifestyle Plan*

CSIRO and Baker IDI joined forces with Julie Gibbs’ ever-creative team at Penguin Australia to produce this attractive guide to managing type 2 diabetes (or reducing your risk of getting it). They offer two dietary approaches – Option 1 is a higher protein plan; Option 2 has a little less protein and a little more carbohydrate – and four kilojoule-restricted plans. To get you started, there are 6-week (6500kJ) plans for both Option 1 and Option 2 and around 80 recipes, many photographed.

The recipes don’t come with a familiar nutritional analysis, instead they tell you the units (based on kilojoules) of protein, vegetables, ‘bread’ (by this they mean starchy vegetables

and grains), fats, dairy and fruit per serve. If you find counting your carbs the best way to manage your BGLs and spread your carbs evenly over the day, you'll find this approach novel as the 'bread', 'dairy' and 'fruit' units are based on kilojoules not that familiar 10–15 gram carb exchange.

We asked Alan Barclay if this would matter. 'It's not that different in the real world to 10–15 gram carb exchanges – and probably both models would achieve similar results. But it won't work for those counting grams of carbs of course, like those using insulin pumps.'

[Get the Scoop with Emma Stirling](#)

The scoop on low GI lentils

It's easy to forget about the little guy at times. For a little legume, lentils pack as powerful a nutrition punch (and are more convenient) as bigger members of their family like beans and chickpeas.

If you have diabetes, back this little guy. Rich in protein, high in fibre and packed with nutrients like B vitamins, folate and minerals, all fresh and canned lentils have a low GI. Although opting for handy canned convenience increases the GI somewhat, lentils are still a very smart carb choice ... just take a look:

- GI26 (red, home cooked)
- GI30 (green, home cooked)
- GI52 (green, canned)

A serving is $\frac{3}{4}$ cup cooked lentils.

How to prep and dress? So you like the idea of backing the little guy, but you're really not sure how to get dried lentils ready for action? Shop around for a variety of colours from red, orange, green and brown. You can purchase lentils whole, split or skinned depending on variety. Whole lentils lend themselves better to salads and sides, whereas split are commonly used in soups, but there are no hard and fast rules and all are easy on the budget.

Measure out your required quantity of dry lentils – as a rule of thumb they will more than double in volume once cooked as they soak up liquid from the cooking broth, water or dish. Wash your lentils well to remove dirt and check that there are no little stones hiding in your measured serve. Laying washed lentils on a clean tea towel is an easy way to check for grit. Dried lentils will keep fresh in an airtight container for months.

Easy as peasy meal ideas The best thing lentils have going for them is that they do not require soaking overnight like many other pulses and are quicker to cook, within 15–30 minutes and you're done (just check the cooking time on the pack). Adding lentils is as easy as adding frozen peas to a dish during the cooking process (you just have to allow a bit more time). There are many authentic recipes and side dishes designed around lentils, like Indian dhal, but you can simply keep them on hand and toss in to your existing recipes. You may like to give the little guy a go and:

- Transform a simple pot of vegetable soup into something substantial by adding a cup or two of lentils.

- Extend a stew or casserole with a cup or two of lentils. Great to help the leftovers feed the whole family.
- Add a sprinkle of canned lentils into your meat ball or burger base to up the dietary fibre.
- Thicken sauces and salsas with pureed lentils. If it's a new taste sensation for your family, add just a little for starters until their palates adjust to the slightly earthier flavour.

Once you start searching around you'll uncover more about this little guy than you ever imagined. Lentils really are the quiet achiever, just like in this stunning recipe for Ocean Trout with Lentils (<http://ginews.blogspot.com/2011/01/in-gi-news-kitchen.html>). We know you'll soon be a lentil lover too, or perhaps you already are? Love to hear your tips and recipe links below.

Emma Stirling is an Accredited Practising Dietitian and health writer with over ten years experience writing for major publications. She is editor of The Scoop on Nutrition (www.scoopnutrition.com) – a blog by expert dietitians. Check it out for hot news bites and a healthy serve of what's in flavour.

[In the GI News Kitchen](#)

American dietitian and author of *Good Carbs, Bad Carbs*, **Johanna Burani**, shares favourite recipes with a low or moderate GI from her Italian kitchen. For more information, check out Johanna's website at www.eatgoodcarbs.com. The photographs are by Sergio Burani. His food, travel and wine photography website is photosbysergio.com.

Zucchini in agrodolce

Nothing beats early homegrown summer squash fresh grown. Zucchini are tender and lusciously filled with the flavors of the fertile earth they grow out of. This is an old traditional Sicilian recipe whose sweet and sour (agrodolce) flavors “ripen” a few days after it is made. Other herbs can be used: basil, flat-leaf parsley, rosemary, sage, thyme. Makes six ½ cup servings.

2 small cloves garlic, minced
 3 tbsp olive oil, divided
 900g (2lb) zucchini/courgettes (about 6 large)
 1 tsp sugar
 1/2 cup (125ml) red wine vinegar
 6 leaves fresh mint

Heat barbecue grill (indoor or outdoor).

Combine the garlic and 2 tablespoons of olive oil in a large mixing bowl. Set aside. Wash and pat dry the zucchini. Cut off the ends. Cut the zucchini lengthwise into ½cm/¼in diagonal slices. Add slices to the mixing bowl and, with your hands, toss to coat them with the oil-garlic mixture.

Place the slices on the grill for 6–10 minutes, turning once. Do not overcook. The grilling time will depend on the heat of the grill. An indoor grill takes about 10 minutes. When done

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Place the zucchini in a mixing bowl. Sprinkle the sugar, vinegar and remaining olive oil over the slices. Gently toss, spoon the mixture in a shallow serving dish and sprinkle with small,

hand-ripped pieces of mint. Serve cold or at room temperature. Best if served after 1–2 days in the fridge.

Per serve (1/2 cup)

Energy: 400kJ/95cal; Protein 2g; Fat 7g (includes 1g saturated fat); Available carbohydrate 6g; Fibre 2g

Cut back on the food bills and enjoy fresh-tasting, easily prepared, seasonal, satisfying and delicious low or moderate GI meals that don't compromise on quality and flavour one little bit with our **Money Saving Meals** recipes. For more recipes check out the Money Saving Meals website (www.moneysavingmeals.com.au).

Spicy Moroccan chickpea & lentil soup

This soup will thicken slightly on standing. You can replace the chickpeas with soy beans or any kind of white bean. This soup is also delicious topped with low fat natural yoghurt. It was originally published in *The Low GI Vegetarian Cookbook* (Hachette) Serves 6

1 tbsp olive oil
1 large onion, finely chopped
3 garlic cloves, crushed
2.5cm (1in) piece fresh ginger, finely grated -- (1 in)
3 tsp ground coriander
2 tsp ground cumin
1/2 tsp chilli powder
1/2 tsp saffron threads soaked in 2 tablespoons boiling water
400g (14oz) can Italian chopped tomatoes
4 cups good-quality vegetable stock
4 cups water
1 cup (250g) red lentils, rinsed well
2 x 400g (14oz) cans chickpeas, drained
1/3 cup chopped coriander
1/3 cup chopped flat-leaf (Italian) parsley, plus extra to serve
salt and freshly ground black pepper
low-fat natural yoghurt to serve

Heat the oil in a large heavy-based saucepan over medium heat. Add the onion and cook, stirring occasionally, for 6–7 minutes or until softens. Add the garlic, ginger, coriander, cumin and chilli powder. Cook, stirring, for 1 minute.

Add the saffron threads and soaking liquid, tomatoes, stock, water and lentils to the pan. Cover and bring to a simmer and cook gently, uncovered, for 30 minutes. Add chickpeas and cook for a further 10 minutes.

Remove the pan from the heat and stir in the coriander and parsley. season to taste and serve with a dollop of yoghurt and extra chopped parsley.

Per serve

Energy: 1222kJ/ 292cal; Protein 19g; Fat 7g (includes 1g saturated fat); Available carbohydrate 33g; Fibre 2g

Manfredi at Bells chef, **Stefano Manfredi**, is recognised as one of Australia's leading exponents of modern Italian cuisine. Since the 1980s, he has owned and operated restaurants

in the Sydney area, written on food and cooking (these days a weekly food column for the *Sydney Morning Herald's Spectrum*), published four books, presented master classes and made television appearances. He also leads a cooking tour annually to Italy and enjoys making salami and sausages with his friend Pino. This month he shares a tagine with *GI News* readers.

Lamb and lentil tagine

As the days cool a little, appetites grow keener for foods that give warmth and comfort. The cook senses this change and thoughts turn to ingredients that require slower cooking. To my mind, lentils are the perfect comfort food – soothing, flavoursome and able to absorb many other flavours.

Gently heat 1/3 cup of extra virgin olive oil in a tagine base or heavy casserole pot, and add a pinch of saffron, a teaspoon of powdered turmeric and 1 tablespoon of grated fresh ginger. Lightly fry for a minute then add a chopped onion, 2 chopped carrots and a chopped celery heart (including the tender celery leaves). Stir well and lightly fry for 2–3 minutes. Add 1 cup of well-washed lentils and a lamb shoulder cut into 2cm (1in) pieces. Mix well and add enough water to just cover all the ingredients. Season with salt and pepper, stir, and place the lid on. Place the tagine (or casserole) into a preheated 180°C/350°F oven for 50–70 minutes until the lamb and lentils are thoroughly cooked. Once out of the oven, roughly chop a bunch of coriander and squeeze in the juice of a lemon. Check for seasoning and serve.

You can see the final result at www.smh.com.au/news/interactive-cook/steve-manfredi-lentils/2006/04/13/1144521442138.html.

– For more of Steve’s recipes, go to: www.manfredi.com.au

Busting Food Myths with Nicole Senior

Myth: *Fat people are unhealthy.*

Fact: *You can be ‘fit and fat’. No matter what your weight, you can improve your health and reduce your risk of disease by being physically active and eating a healthy diet.*

Last month we heard from Professor Steven Blair about his research showing even obese people can be healthy provided they are physically active. Describing himself as ‘short, fat and bald’ but physically fit made me laugh endearingly but also added ‘weight’ to his argument: he is a man who literally ‘walks the walk!’ You can be healthy at any size provided you are physically active but what you eat also matters.

Did you know heavier people have lower risk of osteoporosis? Being heavier puts more pressure on your bones and your body toughens them up to take it – especially if you are physically active: chalk one up for the fatties! Being thin actually increases your risk of osteoporosis for the same reason, but exercising regularly and eating enough calcium rich foods can even up the score. When it comes to bones, exercise and food are important for everyone.

Think about Morgan Spurlock in the film ‘Supersize me’ who overate (one time to the point of throwing up) every day for a month on fatty burgers, fries and shakes. Even though he was not obese at the end, his blood test results read like the ‘wreck of the Hesperus’ because he had overdosed on ‘sometimes foods’ full of saturated fat and low in fibre. Both fat and thin

people can eat badly and have high cholesterol levels, and equally anyone can achieve normal cholesterol levels by eating a cholesterol-lowering diet with the right balance of fats; that is, mostly unsaturated fats from oils, spreads, nuts, seeds and fish, along with plenty of fibre from vegetables, fruits and wholegrains.

Fat people can have normal blood pressure as well provided they eat little salt and enough vegetables, fruits, wholegrains and low fat dairy foods (and exercise). Overweight people can also have healthy blood glucose levels and protect against type 2 diabetes by enjoying a balanced diet low in saturated fat, high in fibre, and including low GI foods and being physically active.

What we eat matters at any size. We all need to set nutrition and fitness goals that are realistic and right for us. We can't all do 2 hours a day in the gym, and there's no shame in that. We also need to put nutrition and health as a priority over the obsessive quest for 'the body beautiful'. Happiness, contentment and wellbeing are more than what size clothing we wear. It's unfortunate that bigger people attract such negative perceptions because this can lead to low self esteem and poor eating habits; why take care of yourself with good food if you think you're unworthy?

Good self-acceptance is important for engaging in healthy behaviours. It's like my mother always said, 'It's what inside that counts' and this applies to the food we eat as well as a kind heart.

For more great information and delicious recipes for staying healthy on the inside, check out Nicole's website at eattobeatcholesterol.com.au.

[GI Symbol News with Dr Alan Barclay](#)

A new cure for diabetes?

A new study in the *Lancet* (www.thelancet.com/journals/lancet/article/PIIS0140-6736%2811%2960679-X/fulltext) has crunched the numbers and tells us that in just under 30 years, the number of adults with type 2 diabetes has more than doubled from 153 million in 1980 to 347 million in 2008 . Most due to increasing numbers of larger, older people. It's thought that risk factors like obesity, lack of physical activity and poor diets account for the rest.

Not to worry. There's a 'cure' shout the headlines a few days later when a new two-month 'extreme diet' that 'offers a hope of a cure for type 2 diabetes' was published in *Diabetologia* (www.diabetologia-journal.org/Lim.pdf). Cure? Let's take a look.

Eleven obese people with type 2 diabetes were put on a very low calorie diet (600 cal/2500 kJ a day). It consisted of three sachets of Optifast a day plus non-starchy vegetables (salad greens, onions, capsicum/peppers).

After eight weeks they lost an average of 15.3 kg/34 lbs (around 15% of their body weight) and their BGLs and triglyceride levels returned to normal, their pancreatic and liver fat levels decreased, and their livers became sensitive to the effects of insulin again. A big improvement – but what happened next?

Most of the stories neglected to mention that three months later, the weight came back: there

was an average weight re-gain of 3.1 kg (7 lbs) when the participants were ‘provided with information about portion size and healthy eating’ and 3 out of the 11, or 27% of participants ‘had recurrence of diabetes’. No details on the ‘healthy eating’ advice was given.

A new cure? Not really. What the study shows is that if you go on a very low calorie diet your symptoms of type 2 diabetes will go into remission if you are obese (not everyone with type 2 diabetes is obese of course). However, remission is the key word. Because type 2 diabetes is a metabolic disease – it’s not something you catch – your symptoms will return if you slip back to your old lifestyle.

It's not possible to live your life on Optifast or similar products. So, the essential ingredient is what healthy eating plan should you follow after you have lost that initial 15% of your body weight to prevent weight re-gain and a return of diabetes symptoms – and that part of the study was sadly neglected...

Regular readers of *GI News* will recall that the Diogenes study (<http://ginews.blogspot.com/2010/12/gi-symbol-news-with-dr-alan-barclay.html>) we covered last year found that a moderately high protein, low GI diet was the best plan for longer-term weight loss maintenance. Interestingly, the first phase of this study also involved use of a very low calorie diet like Optifast. This successful combination (very low calorie diet followed by a moderately high protein, low GI diet) may help some people with type 2 diabetes put their diabetes in to remission and keep it that way for a much longer period of time.



For more information about the GI Symbol Program

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GI Update

Professor Jennie Brand-Miller answers your questions

Many of the studies you write about in GI News talk about ‘insulin resistance’ and ‘insulin sensitivity’. Can you explain these terms?

Insulin is a hormone that plays several critical roles in our health and wellbeing. It’s been called the MASTER hormone because it regulates so many things, including our blood glucose levels. When we eat carb-rich foods like bread, breakfast cereals, pasta, rice or noodles, starchy vegetables like potatoes and fruit, our body converts them into a glucose (a sugar) that is absorbed from the intestine and becomes the main fuel that circulates in our blood. When glucose levels in the blood rise after a meal, the beta cells in the pancreas shoot insulin out into the blood to drive the glucose into the cells so it can be put to work either as an immediate source of energy or converted to glycogen (a stored energy source), or to fat.

If you require relatively normal or low levels of insulin to process your BGLs (blood glucose levels), you are what’s called ‘insulin sensitive’ – a good thing.

Insulin resistance, on the other hand, means that the body does not react in a normal way to insulin in the blood. It is insensitive, or ‘partially deaf’, to insulin. Think of it like this: just as we may shout to make a deaf person hear, the body makes more insulin in an effort to drive glucose where it’s supposed to go. So moving glucose into cells necessitates the release of large amounts of insulin.

A healthy low GI diet plus physical activity are the most powerful ways you can optimise your insulin sensitivity and decrease insulin levels over the whole day. The latest paper from the Diogenes study published in the *New England Journal of Medicine* (www.ncbi.nlm.nih.gov/pubmed/21591241) shows that an ‘increase in dietary protein and a reduction in GI content over a 6-month ad libitum dietary intervention are related to a lower drop-out rate and produced favourable effects on glycaemic control and insulin sensitivity in overweight/obese subjects after an initial body-weight loss.’