

## GI News—February 2011



- Stocking a low GI emergency pantry
- 10,000 steps reduces diabetes risk
- BGL benefits of cinnamon and vinegar
- Green tea and satiety
- Do you need 8 glasses of water a day?

As I sat down to write this mid-January on a sunny Thursday morning in Sydney, the mopping up after the disastrous and tragic floods was underway in Queensland and around 9000 people had just been told to flee, as flooding threatens half a dozen towns in northern Victoria. Stay put they say and you could be isolated and left without any power for a week or more. It's a reminder to us all that emergencies can happen anytime or place and whether it's a natural disaster or a neighbourhood emergency, the things we take for granted (food, electricity, gas, water) could be disrupted in a flash. In Food for Thought, we suggest our top 10 tips for stocking a low GI 'emergency pantry' so you have energy to burn to take care of yourself, your BGLs and your family and in GI Symbol News, Dr Alan Barclay suggests 10 top snacks to keep you going in an emergency.

If you would like to help the disaster relief in Queensland, you can donate online to the Premier's Flood Relief Appeal at [www.qld.gov.au/floods/donate.html](http://www.qld.gov.au/floods/donate.html)

Good eating, good health and good reading.

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### Food for Thought

#### Our top 10 picks for your low GI emergency pantry

The take-home message of the last few months, with the catastrophic earthquake and aftershocks in Christchurch (NZ), the big freeze in Europe, blizzards in the US and disastrous floods in Australia, Brazil and Sri Lanka, is that preparing for an emergency is the smart thing to do. Bush fires, cyclones, tornadoes, tsunamis, floods,

earthquakes and blizzards could leave you trapped without electricity or gas. It's vital to have ready-to-eat food on hand to keep you and your family fighting fit until the disaster has passed. And this is where processed foods shine, enabling you to whip up a variety of healthy, tasty low GI meals in minutes. Opt for low(er) salt/sodium products when there is a choice and check use-by dates. Drain canned foods and rinse if you have clean water. Here are our 10 top pantry picks.

**Tip:** Because you can't depend on refrigeration after cans or jars have been opened, buy sizes that you and your family can consume at one sitting.

1. Canned beans, chickpeas and lentils (GI range 31–52) and bean dishes such as chilli beans, refried beans, lentil and pea and ham soups – OK cold but quickly heated on a camp stove
2. Canned fish –such as tuna, salmon, sardines, crabmeat, prawns, mackerel, herrings
3. Canned meats and meat dishes such as chilli beef and beans, ravioli, spaghetti Bolognese and broths (OK cold but quickly heated on a camp stove)
4. Cans and jars of fruit in natural juice (GI range 42–54); dried fruit such as apple (GI29), apricots (GI31), dates (GI39–45), fruit and nut mix (GI15), fruit straps (Sunripe School Straps GI35–40 ), peach (GI35), pear (GI43), prunes (GI41), sultanas (GI54), tropical fruit and nut mix (GI49)
5. Cans and jars of vegetables such as artichoke hearts, asparagus, bamboo shoots, beetroot (GI64), cabbage/sauerkraut, capsicum, carrots, corn kernels (GI46–48), mushrooms, peas, tomatoes
6. Nuts (not salted), seeds and mixes
7. Dry cereals such as fruit and nut muesli (Morning Sun GI49–55 ), muesli bars (Uncle Toby's GI 48–54)
8. Grainy crackers such as Ryvita crispbreads (GI46-48), oatmeal biscuits (GI55) and shelf stable flat breads such as white corn tortillas and reduced-carb wraps (Diego's and Woolworths brands GI51–53)
9. Powdered milk, small containers UHT milk, Milo powder (GI36–39 mixed with milk)
10. And if you have a heating source such as a camp stove or gas bottle barbecue, you can expand your options to include foods that don't need much water to cook such as instant noodles (GI52) and ready to eat basmati brown rice

**What to drink?** Bottled water, single-serving-sized juice that doesn't need to be refrigerated, diet soft drinks. There are some good tips on drinking water for campers, which also applies in emergency situations at

[www.foodsafety.asn.au/\\_srcfiles/camping-bushwalking.pdf](http://www.foodsafety.asn.au/_srcfiles/camping-bushwalking.pdf).

**For more information**, go to [www.pantrylist.com.au](http://www.pantrylist.com.au) or Google 'emergency pantry'.

## News Briefs

### **Every step you take...**

In a five-year Australian study of nearly 600 adults averaging 50 years of age published in the *British Medical Journal* ([www.bmj.com/content/342/bmj.c7249.full?sid=dd312f57-5020-4e42-9afa-1bda36fc575c](http://www.bmj.com/content/342/bmj.c7249.full?sid=dd312f57-5020-4e42-9afa-1bda36fc575c)), walking more steps (the participants wore pedometers) was associated with reductions in body mass index, waist to hip ratio, and insulin sensitivity (a measure of type 2 diabetes risk). Sedentary people who increased their daily steps to 10,000 over the five year span saw improvement in their insulin sensitivity by three times compared to those who took only 3000 steps for five days a week. Past research has shown that walking more can decrease the risk of becoming overweight and developing insulin resistance. But the study is the first to suggest that increasing the actual number of steps you take can make a difference in your diabetes risk, researchers said.

**How many steps should you take?** According to a 2008 study on walking and maintaining a healthy weight, men ages 18–50 should take 12,000 steps a day. For men 50 and up, you'll need 11,000 steps a day. Women ages 18–40 need to take 12,000 steps a day, whereas women ages 40–50 should take 11,000 steps a day. Women in their 50s should take 10,000 steps a day, and women 60 and older should take 8000 steps a day. A rough estimate of how far you need to walk: depending on your stride, the average person takes about 1000 steps for every 0.8 kilometer (or about a half mile). To walk 11,000 steps is roughly equivalent to 8.8 km (5.5 miles).

### **Beat metabolic syndrome with a low GI diet**

The bottom line from a cross-sectional analysis of the association of dietary GI and GL with the metabolic syndrome reported in the *Journal of the American Dietetic Association* ([www.ncbi.nlm.nih.gov/pubmed/2111092](http://www.ncbi.nlm.nih.gov/pubmed/2111092)) and in the accompanying editorial is that using the GI as intended – to choose the lowest GI food within a food group/category as part of a healthy, well balanced diet (moderate in carbohydrate) – may reduce the risk of developing the metabolic syndrome (large waist circumference, high blood glucose and triglyceride levels, and low HDL (Good) cholesterol levels), which in turn is a major risk factor for heart disease, stroke, and

type 2 diabetes.

### **Cinnamon/cassia and BGLs**

A daily dose of two grams of cinnamon/cassia (*Cinnamomum cassia*, Holland and Barrett Ltd, UK) for 12 weeks was associated with improved blood pressure measures and BGLs in people with type-2 diabetes, reports a clinical study from Imperial College London. 'The two gram dose of cinnamon (cassia) administered in our study was safe and well tolerated over the 12 weeks of treatment,' wrote Dr Rajadurai Akilen and his co-workers in *Diabetic Medicine* ([www.ncbi.nlm.nih.gov/pubmed/20854384](http://www.ncbi.nlm.nih.gov/pubmed/20854384)). 'The sustainability and durability of the effect of cinnamon has not been tested, nor has its long-term tolerability and safety, both of which will need to be determined. However, the short-term effects of the use of cinnamon for patients with type 2 diabetes look promising.'

The researchers report that the cinnamon supplement over the 12 weeks was associated with a reduction in HbA1c (glycated hemoglobin) levels from 8.22 to 7.86% in the cinnamon group compared with an increase in the placebo group from 8.55 to 8.68% and a mean decrease in systolic and diastolic blood pressure of 3.4 and 5.0 mmHg, respectively.

**GI Group:** 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 *Cinnamomum cassia* 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. We covered the story in GI News in April 2009

### **Green tea and BGLs**

Research from Lund University, Sweden and published in the *Nutrition Journal* suggests that drinking a cup of green tea rather than water after eating (white bread in the study) could boost feelings of fullness, but found no evidence to support previous suggestions that it may moderate insulin sensitivity or glucose levels. You can read the whole article at [www.nutritionj.com/content/9/1/63](http://www.nutritionj.com/content/9/1/63)

### **Vinegar and BGLs**

A recent paper in the *European Journal of Clinical Nutrition* ([www.nature.com/ejcn/journal/v64/n7/abs/ejcn201089a.html](http://www.nature.com/ejcn/journal/v64/n7/abs/ejcn201089a.html)) reports that the

BGL benefit of adding vinegar to a meal (as in a dressing with your salad) is more pronounced after a high GI meal than a low one. Read more about it on Catherine Saxelby's website (<http://foodwatch.com.au/faqs-food-in-focus/q-is-it-true-that-vinegar-makes-a-meal-low-in-gi.html>).

## **Paddock2Plate**

Produce stories from our favourite food and nutrition websites that caught our eye and we think may catch yours. Fish is the flavour of the month in February.

**#1 Paprika festival** Ian and Liz Hemphill of Herbie's Spices went in search of Hungary's best paprika recently and spent five rainy days in the Hungarian countryside visiting farms and factories and attending the Kolosca Paprika Festival, where groups of locals cooked up wonderful paprika-spiced specialties. 'Our favourite,' writes Liz, 'was this simple but fabulous catfish soup. It's a good fish, firm fleshed and not too bony. You might find it in Australia called silver cobbler, or just cobbler, or you could use ling.' Check out *Liz's catfish soup* at ([www.herbies.com.au/newsletter-archive/114-newsletter-summer-201011](http://www.herbies.com.au/newsletter-archive/114-newsletter-summer-201011)).

**# 2 En papillote** 'There's something delightful about receiving a parcel,' writes Inside Cuisine's Rebecca Varidel. 'It's the child-like discovery process in the opening of the parcel that delights and enchants us. This holds true also for food. Cooking in parchment paper, en papillote in French or al cartoccio in Italian, was one of the earliest cooking techniques that I experimented with as a child. Perhaps I was enchanted (then as now) with the hidden treasures of aromas and taste. When the best of the season's ingredients are folded in a pouch (of parchment, bag or aluminium foil) and then baked, the flavour is captured within and released as the parcel is opened.' Check out *Rebecca's fish en papilote* (with step-by-step photos ) at <http://insidecuisine.com/2010/01/24/en-papillote>.

## **Get the Scoop with Emma Stirling**

### **The scoop on the recipe for recovery**

What a heartbreaking time watching our sunny state of Queensland be inundated with wild weather and flooding and now to see a repeat on a smaller scale in Victoria too. But what a wonderful week to be reminded of the power of the human spirit, compassion for our fellow man and food as a cure all. Which brings me to my latest retro find that I've been longing to share with you, and it ties in nicely with a fantastic project for recovery that you'll want to know about.

Sharing first. In today's high tech hospital a dietitian plays a critical role from ICU to outpatient rehabilitation and nourishment often comes in a clinical formulation down a tube. But nutrition therapy used to be a lot simpler as this golden item – *Dainty Dishes For children, invalids and convalescents suggests*. It is a text book for Nurses' Cookery Certificate required by The Royal Victorian Trained Nurses Association by Lucy Drake and revised by Dorothy M. Giles. I'm still reading it all but there are gems like: 'A woman may be excused if she cannot make a cake, but it should be regarded as a social crime, if she is not able to prepare a good cup of beef tea or nourishing soup, and a few simple dishes, which will help, and not retard an invalid's recovery.' You can read more about gems like this on my blog ([www.scoopnutrition.com/2011/01/food-as-the-cure-all-from-retro-recipes-to-flood-relief/](http://www.scoopnutrition.com/2011/01/food-as-the-cure-all-from-retro-recipes-to-flood-relief/)).

Now for the fantastic project. This back to basics, home nourishment approach is being replicated now in Queensland with Baked Relief (<http://bakedrelief.org>). The brainchild of Danielle Crismani, teams of home cooks are preparing and delivering nourishment and encouragement to the affected areas, plus volunteers facing the enormous and heart wrenching clean up tasks. They are baking every sweet and savoury slice known to man, plus family dinners too and delivering supplies including bottled water with online co-ordination and army-like precision. I applaud everyone involved who has volunteered their time and recognise the power of food as a recipe towards recovery.

Here's how this wonderful relief network started. Separated from her boys who were with her mum (whose property was affected by flooding) and needing to do something, Danielle came up with the idea to start baking some relief for the State Emergency Services volunteers who were sandbagging around Brisbane. She put the word out about what she was doing on her blog (<http://digella.blogspot.com>) and on Twitter and Facebook and offers of help and baking came rushing in. It has just grown beyond imagining since then and Baked Relief is now in the hands of hundreds of home cooks and bakers and is reaching people who are recovering from the floods and all of those thousands of volunteers helping them.

For the most up to date information about #bakedrelief please check twitter. @BakedRelief, @digellabakes or @melkettle or search #bakedrelief at twitter.com

**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](#) – a blog by expert dietitians. Check it out for hot news bites.

## 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 ([www.eatgoodcarbs.com](http://www.eatgoodcarbs.com)). The photographs are by Sergio Burani. His food, travel and wine photography website is [photosbysergio.com](http://photosbysergio.com).

### **My traditional winter minestrone**

Fresh homemade vegetable soup shows up on Italian kitchen tables all year long. Whatever fresh vegetables are already in the fridge, or growing in the vegetable garden or are the seasonal choices at the greengrocer's is what constitutes that day's 'minestrone' or large pot of soup. These days we can easily find zucchini in the winter and broccoli in the summer, but I stick pretty much to the traditional winter/spring/summer/fall vegetables. Here's how I make my minestrone during the winter months. Choose a lower GI potato if you can. Serves: 8 (1½ cups each)

1 large leek, white part only, thinly sliced  
1 large potato (240g/8oz), peeled and diced  
2 celery stalks, sliced  
3 medium carrots, sliced  
wedge (180g/6oz) butternut pumpkin (squash), peeled and diced  
180g/6oz cauliflower or broccoli, broken into small florets  
120g/4oz fresh spinach, coarsely chopped  
4 large peeled canned tomatoes, seeds removed, chopped  
4 sprigs flat leaf parsley  
30g/1oz parmigiano cheese rind, scrubbed and cut into small pieces (optional)

**Prepare** the vegetables, parsley and cheese and add them and all at once to a large soup pot with a little salt to taste. Pour in 10 cups cold water, cover and bring to a boil on high, then reduce the heat to low and simmer for approximately 1 hour.

**Allow** the soup to cool down a bit to prevent splattering. Using a handheld immersion mixer or a food blender, pulse the vegetables in batches to attain a chunky, semi-pureed texture. Heat before serving. (If preferred, the cooked vegetables can be left intact and served directly from the pot.)

*Per serving*

Energy: 365kJ/ 87cals; Protein 4g; Fat 1g (includes less than 1g saturated fat and 2mg cholesterol); Available carbs 16g; Fibre 4g

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 **Money Saving Meals author Diane Temple**. For more recipes check out the Money Saving Meals website ([www.moneysavingmeals.com.au](http://www.moneysavingmeals.com.au)).

### **Tuna and chickpea salad from the low GI emergency pantry**

Use a flavoured tuna (like chilli) if you want more zing. To give it some crunch, serve with grainy crackers such as Ryvita crispbreads or make wraps with white corn tortillas. Ship chives or spring (green) onions over the top for a little extra colour and flavour if you have some in the fridge or garden. Serves 4

280g jar char-grilled vegetable antipasto

185g can tuna, drained

400g can chickpeas, drained and rinsed

125g can corn, drained and rinsed

2 tablespoons oil from antipasto jar

1 tablespoon red wine vinegar

**Roughly chop** the antipasto vegetables and set aside the oil from the jar to make the dressing.

**Flake** the tuna in a large bowl using a fork. Add the chickpeas, vegetables and corn and stir to combine.

**Whisk** together the oil and vinegar to make a dressing, pour over salad and stir lightly to combine.

*Per serve*

Energy: 1230kJ/ 294 cals; Protein 20g; 16Fat g (includes 1g saturated fat and 25mg cholesterol); Available 26carbs g; Fibre 6g

**Feedback:** We would love to hear what you have stocked in your emergency pantry and what you whip up to feed the family in times of crisis when, for whatever reason, you don't have water or power.

## Busting Food Myths with Nicole Senior

***Myth:* Everyone should drink 8 glasses of water a day.**

***Fact:* Most adults need around 2–2½ litres of fluid daily but not all this fluid needs to be water. Fluid needs vary greatly according to climatic conditions, physical activity, body size, diet and your health status.**

Eight glasses of water a day is eight metric cups (or eight 8 ounce glasses), or 2 litres. Some experts say there is absolutely no scientific foundation for this oft given advice. This puzzled me because I thought there were principles and guidelines to calculate a person's fluid requirements and they roughly equate to this 8-glass rule of thumb. Are these guidelines I've been using based on good scientific evidence? Before you throw your water bottle against the nearest brick wall, here's more information to 'fill out' the story of how much water we should drink.

Everyone knows we can't survive long without water. For the more morbid among you, survival time is around 1 week but can be as little as a few hours for a marathon runner experiencing catastrophic heatstroke. Water is essential for life and needed for temperature regulation, digestion, metabolism, absorption of nutrients and excretion of waste. About half the water needed each day goes to sweat and water vapour in our breath. Water accounts for 50–80% of our lean body mass; men have slightly more than women, and the proportion goes down as we age. Replacement of lost water is vital to maintain normal functioning.

The Nutrient Reference Values (NRVs) for Australia and New Zealand acknowledge it is difficult to experimentally derive Estimated Average Requirements (EAR) for water because of individual variation. Because of this, they established an Adequate Intake (AI) based on the median intake of the population. This is a roundabout way of saying they came up with a best guess: 2.1 litres (8 cups) for women and 2.6 litres (10 cups) for men, with clear caveats that people living in hot climates or very physically active need more. You can see how the 8-glass a day rule is starting to sound plausible. Of interest is no Upper Limit (UL) has been set because over-hydration causing hyponatremia (dangerously low electrolyte sodium levels) is unlikely in normal circumstances.

However, what the 8-glass rule fails to recognise is you don't have to drink all your fluid requirements. There is a lot of water already in food, especially fruits and vegetables as well as the obvious liquid and semi-solid foods like soups, yoghurt and

custard. According to Australia's last national nutrition survey, the intrinsic water in food contributed 700–800ml per day. Water is also a by-product of metabolism: around 250ml (1 metric cup) per day is produced this way. So more accurately, the 8-glass a day rule should be more like 4–6 glasses.

What about thirst? I've heard the human thirst mechanism is a poor indicator of our fluid needs and we should drink even though we aren't thirsty, but is this true? A perusal of the scientific literature suggests this is only true in athletes because their fluid needs are high, and the elderly because their thirst mechanism is poor. For the rest of us, our thirst serves us well.

So, drink when you feel thirsty and don't feel you have to gulp down 8 glasses of water a day. For many, 4–6 glasses is probably enough. And remember tea, milk, juice and even coffee all contribute valuable fluids, just go easy on the sweetened drinks to prevent kilojoule/calorie blow-outs

Thirsty for more? You can find more great information on eating (and drinking) for health at Nicole's website ([www.eattobeatcholesterol.com.au](http://www.eattobeatcholesterol.com.au)).

## GI Symbol News with Dr Alan Barclay

### **Snacking to keep your energy up and your BGLs down in an emergency**

People in Queensland and Victoria here in Australia have been faced with real emergencies this summer. It has been fantastic to see an organisation like Baked Relief cooking their hearts out to help victims and rescuers alike keep going. When faced with an emergency that isolates us, we need nutrient-dense snacks to keep us going and also to provide us with the sustained energy we need for the extra physical activity these situations often require –you may have to clamber onto the roof to be winched to safety by helicopter. Snacks can be just as important as meals in situations like this. You need foods that will keep safely at room temperature for prolonged periods (so you can store them away) and you can eat with minimum preparation (clean, safe water may be scarce, and you may have no gas or electricity).

**Our top 10 snacks:** The following list (in alpha order) includes foods from our emergency pantry as well as what you may have on hand to help you get through the long days of isolation (and clamber onto the roof if you have to):

1. Canned fruits (in fruit juice) like apple, apricots, peaches or pears
2. Chocolate

3. Dried fruit like apples, apricot, dates, peaches, pear, or prunes, and 100% dried fruit bars like Sunripe® School Straps
4. Fresh fruit like apples, grapefruit, mandarin, orange or pears
5. Fruit and nut mix
6. Mixed nuts
7. Plain UHT (Long-life) milk Like Dairy Farmers Light White or mixed with Milo®
8. Quality breakfast cereals that can be eaten dry like a natural style muesli (e.g., Morning Sun®)
9. Ryvita® Sunflower Seeds & Oats or Pumpkin Seeds & Oats
10. Uncle Toby's® Chewy Muesli Bars or Crunchy Muesli Bars



### **For more information about the GI Symbol Program**

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### **GI Update**

#### **Professor Jennie Brand-Miller answers your questions**

*I have PCOS and have been told that if I eat a low GI diet it will help me lose some weight and maybe even help me get pregnant. I have tried diets before and never seem to stick to them. Have you got any tips – I*

***really want to succeed this time round.***

There are four tips we usually suggest when people want to change their diet and create new eating habits they can stick to.

- 1.** Aim to make changes gradually. Don't try and change everything overnight. Start with a few small changes and add more as you achieve these. Keep in mind that it takes about 3 months for a new change to become a habit.
- 2.** Attempt the easiest changes first. Nothing inspires like success, so increase your chances by picking something simple to get you going on the right track like eating a piece of fruit as a snack every day.
- 3.** Break those big goals into a number of smaller goals. A big goal such as wanting to drop a couple of dress sizes is unlikely to happen quickly. Smaller more specific goals such as limiting fast food to once a week or making sure you eat a low GI breakfast are much more achievable.
- 4.** Be prepared for setbacks. You are only human. But if you have a lapse, don't beat yourself up, just get back on track the next day.

Good luck. And if you need more help and support, it is a good idea to see a registered (accredited practicing) dietitian.

– From the revised and updated edition of the *Low GI Diet for Polycystic Ovarian Syndrome*, Prof Jennie Brand-Miller, Dr Kate Marsh and Prof Nadir Farid (Hachette).