



**THIS MONTH:** Christmas traditions and a traditional rich fruit cake; What you need to know about a handful of nuts; Dr Alan Barclay on drinks and nibbles in the festive season; Dietitian Nicole Senior talks turkey; Dr Antigone Kouris on the traditional Greek diet; 4 festive recipes in the GI News Kitchen; Updated nutrient criteria for the GI Symbol; Low GI diets reduce risk of metabolic syndrome in overweight kids and Prof. Jennie Brand-Miller reviews a new study that suggests a healthy diet can be different for everyone.

## FOOD FOR THOUGHT

### CHRISTMAS CAKE: IT'S TRADITION

Feasts and festivities play an important part in our lives, and the traditional ways we celebrate them evolve over time. Christmas may seem like an age-old tradition, but travel back in time, and you will find it was typically a modest event for most people and, at times, a non event. England's Puritan government cancelled Christmas in 1647, forbidding traditional expressions of merriment, ordering shops to open, and churches to close. The Plymouth Colony Pilgrims worked in the fields on their first Christmas day; while over in Massachusetts Bay, Puritans outlawed Christmas between 1659 and 1681, fining anyone caught celebrating it five shillings.

Today's Christmas with its trees, cakes, cards, crackers, carols, decorations, gifts, feasting, entertainments, and wishes for peace on earth and goodwill to all men and women comes from Victorian England. 1843 is something of a seminal year with Henry Cole launching the world's first commercial Christmas cards and Charles Dickens publishing *A Christmas Carol* and putting turkey with the trimmings in prime position on Bob Cratchitt's table. And while we grow out of Santa and can pass on the cards, carols and tree, the fruit cake is a keeper. It harks back to earlier times, but not quite as we know it. It was more like porridge!

“By the Middle Ages,” says Nicola Humble in *Cake* (Reaktion Books), “porridge existed in many forms, one of which was an enriched version in which the oats or wheat were accompanied by dried fruits, suet, butter, honey and spices. This luxurious mixture had a celebratory function, and was often served at Christmas. This “plum porridge” (plum being the generic medieval name for dried fruits) eventually became so stiff with ingredients that it was more solid than liquid. It was at this stage that cooks began to boil it in a cloth, developing the glossy, round plum pudding that was later to play such a central role in the Victorian Christmas. The same mixture could also be baked, with ale barm added to raise it ... the fruit cake was much rarer than the pudding because of the rarity of bread ovens throughout the medieval period.”

Even when ovens were more common, making a fruit cake was a major undertaking. You couldn't just pop out, buy the ingredients and get baking. “Fruit was washed, dried, and stoned if necessary; sugar, cut from loaves (cones), had to be pounded and sieved; butter washed in water and rinsed in rosewater. Eggs were beaten for a long time, half an hour being commonly



Image: Cloutie Xmas Pudding (*Apple Blossom Pie*—Murdoch Books)



directed. Yeast, or barm from fermenting beer, had to be coaxed to life. Finally, the cook had to cope with the temperamental wood-fired baking ovens of that time” says Alan Davidson (*Oxford Companion to Food*)

Kate McGhie’s traditional rich Christmas cake is much easier to whip up. Kate says you can even leave out the brown sugar if you wish as the fruit and marmalade will provide plenty of sweetness. We estimate it will have a moderate GI. If you are watching your blood glucose, a thick finger-sized piece will be plenty at a sitting. It’s a concentrated source of carbs so the glycemic load will be significant if you tuck into a large piece. Makes 36 pieces.

250g (9oz) sultanas  
250g (9oz) chopped seeded raisins  
250g (9oz) currants  
125g (4½oz) chopped mixed peel  
125g (4½oz) chopped blanched almonds  
⅔ cup (160ml) brandy  
2½ cups (375g) plain (all-purpose) flour  
½ cup (75g) self-raising flour  
½ tsp ground nutmeg  
½ tsp ground cinnamon  
1 tsp mixed spice  
250g (9oz) butter  
⅔ cup firmly packed soft brown sugar (150g)  
2 tbsp marmalade or dark jam  
4 large free-range eggs, at room temperature



Put the sultanas, raisins, currants, mixed peel and almonds in a large bowl. Pour over the brandy, toss and cover. Leave for as long as you can – overnight if possible.

Preheat the oven to 150°C/300°F (fan-forced 130°C/250°F) Line a deep 20cm (8in) square cake pan with a double layer of foil and a double layer of baking paper.

Sift the flours into a bowl with the nutmeg, cinnamon and mixed spice. Cream the butter and sugar in an electric mixer (although Mum always used her hand saying it gave her a better feel of the mixture) until very pale and fluffy. Beat in the marmalade. Add one egg at a time beating until each is emulsified before adding the next. If the mixture appears to curdle add a spoonful of flour. Add the fruit and flour mixtures alternately and mix well. Fill into the prepared cake pan and smooth the top sloping it into the centre to make a slight hollow. Spritz with water. This helps create a smooth level top with no peaking or cracking. Bake for about 3½ hours or until a skewer inserted in the middle of the cake comes out clean. There must be no signs of crumbs or stickiness on the skewer as it is a rich cake and becomes moist with aging. Remove the cake to a rack and leave for at least 30 minutes or so to cool down before removing it carefully from the cake pan. Sprinkle the edges of the top of the cake with brandy, wrap tightly and store in an airtight container. If you make the cake well ahead of time, splash brandy over it once a week until Christmas, wrapping tightly after each “feed” and storing in the airtight container —*Apple Blossom Pie (Murdoch Books)*.

*Per serve* (1 piece – if you cut the cake into 36 pieces)

940kJ/225 calories; 3.5g protein; 9g fat (includes 4g saturated fat; saturated : unsaturated fat ratio 0.8); 31g available carbs ; 22g sugars and 9g starches); 2g fibre; 95mg sodium; 260 mg potassium.



## NEWS BRIEFS

Low GI diets beneficial for overweight kids' health; Dr David Katz deconstructs *Junk Food Not to Blame for America's Obesity Epidemic* claims; The benefits of a handful of nuts and why only some have a GI value.

### LOW GI DIETS HELP OVERWEIGHT KIDS

A systematic review and meta-analysis published recently in [Nutrition Journal](#) that reviewed the available randomised clinical trials (RCTs) investigating the effects of low glycemic index/low glycemic load diets in overweight or obese children and teens found evidence of a beneficial effect of these dietary approaches say the authors. Although there were no improvements in body weight, BMI, or waist circumference, there was a statistically significant and positive impact for the young people's triglycerides, beta cell function and insulin sensitivity they say. Commenting on the study, Prof Jennie Brand-Miller says: "This is A1 level of evidence. It implies that low GI diets improve the body's overall metabolism and reduce the child's risk of metabolic syndrome. Although other parameters such as weight were not different, it's important to remember it is always difficult to find differences in growing children".



### JUNK THE JUNK STUDY FINDINGS

Confused by *Junk Food Not to Blame for America's Obesity Epidemic* headlines recently? "This new study did not carry out any kind of intervention to answer the question whether or not junk food causes obesity," says Dr David Katz. "Rather, using a nationally representative sample of 5,000 adults from a federal study, researchers looked at intake of candy, soda, and fast food and found little difference between the lean and overweight members of the group. They did, however, find particularly high levels of fast food intake, and the lowest reported intake of vegetables and fruits, in both tails of the bell curve: among the heaviest of the heavy, and among the skinniest. These two traits – underweight and severe obesity – have long been strongly associated with adverse health outcomes. In those badlands, junk food prevails.

But again, across the broad middle of the bell curve, lean and obese were consuming candy, soda, and fast food at rather high levels, something we have certainly heard before. Does this then prove that fast food is unrelated to obesity, as the clamouring headlines seem to suggest? Of course not. There are, just the same, two genuinely useful messages in the new study's mix. The first is that, despite the strange cottage industry that has sprung up to argue otherwise, calories count. In a reprise of the notorious Twinkie Diet, the new study showed that some people with a very high intake of junk food were skinny, not fat. If total food and calorie intake are low relative to the body's metabolic demands for energy, the result is weight loss, not gain, no matter how bad or good the fuel in question. Conversely, studies have shown that overweight results when even high quality fuel is over consumed.

The second important message in the new study is that the BMI does not measure health. At the population level, there is a strong correlation between BMI and health outcomes, justifying the use of this rather crude measure in epidemiology. But heavy does not always mean unhealthy, any more than skinny means vital. The adverse health effects of junk food extend far beyond the BMI, and by not addressing that – the new study reminds us of it."



**Dr David Katz** is founder of the **True Health Initiative** which has been established to offer clarity over confusion by working to spread the fundamental evidence and consensus-based truths about lifestyle as medicine. You can find out more about it and join up [HERE](#).



## SUGiRS ON THE NUT TRAIL

Some of the favourite foods that appear on the Christmas table include nibbles such as dried fruits (see our November issue) and nuts which we look at here. These tasty tidbits pack a nutritional punch packed with protein, fibre, unsaturated fats, vitamins, minerals, trace elements and phytochemicals. They are rich in substances considered protective for the heart: an amino acid (building block of protein) called arginine; vitamin E, folate, copper (a mineral) and plant sterols. Most contain relatively little carbohydrate which is why most don't have a GI value and will have very little impact on blood glucose levels. Cashews, peanuts, pecans, mixed nuts and fruit and nut mix are the only products that have been GI tested and if you stick to that small handful (about 30 grams) they have a negligible effect on blood glucose.



Image:  
[www.nutsforlife.com.au](http://www.nutsforlife.com.au)

TYPICAL PORTION Per 30g/1oz shelled nuts (Nut numbers are approximate)	GI	Available CARBS	GL	FAT	ENERGY	ENERGY
		Grams		Grams	Calories	kJ
<b>Dry roasted nuts (unsalted)</b>						
Almonds (25 nuts)	•	1.5	•	17	180	750
Brazil nuts (7–8 nuts)	•	1	•	20	210	880
Cashews (18 nuts)	22	8	2	13	160	680
Hazelnuts (20 nuts)	•	2	•	18	190	800
Macadamias (7 medium/14 small)	•	2	•	23	215	900
Peanuts (40 nuts)	23	4	1	16	190	800
Pecans (15 nuts)	10	1	0.1	22	210	880
Pine nuts (4 tbsp)	•	1	•	22	200	840
Pistachio nuts (60 nuts)	•	9	•	13	170	710
Walnuts (10 whole /20 halves)	•	1	•	24	245	1015
<b>Mixes</b>						
Dried fruit and nut mix (30 g, or 1 handful)	32	12	4	9	145	600
Mixed nuts (2 tbsp)	24	3	0.25	17	190	800

**Peanut pointers:** Processed peanuts are quality-controlled for the presence of fungus that produces a toxin called aflatoxin. Because peanuts in the shell are not screened, throw away any mouldy ones. Peanut allergy is an increasingly common food allergy especially in children. One-third of all peanut-allergic people are also allergic to tree nuts such as brazil nuts, hazelnuts, walnuts, almonds, macadamia nuts, pistachios, pecans, pine nuts and cashews.



**Glycemic Index testing by Sydney University GI Research Service** SUGiRS was established in 1995 to provide a reliable commercial GI testing laboratory for the local and international food industry. Food samples are tested in healthy volunteers according to standardised methods that have been validated against overseas laboratories. Testing of foods for their glycemic index, insulin index, satiety response, and other metabolic parameters can be assessed simultaneously. SUGiRS also works with companies to develop new low GI products or help lower the GI of existing ones. Other analyses such as in vitro GI testing and sialic acid measurement is also available. Principal researchers / consultants: Professor Jennie Brand-Miller, SUGiRS Manager Fiona Atkinson, PhD. **Contact Fiona Atkinson:** [sugirs.manager@sydney.edu.au](mailto:sugirs.manager@sydney.edu.au)



## TAKE PART IN CLINICAL TRIALS

[Sydney University's Boden Institute](#) is a joint initiative of the Faculties of Health Sciences, Medicine, and Science. The Institute is regularly recruiting participants for a range of clinical trials. The contact details for anyone interested in participating, particularly people with pre-diabetes, are:

- Email: [clinicaltrials.boden@sydney.edu.au](mailto:clinicaltrials.boden@sydney.edu.au)
- Telephone: (02) 8627 0101

## WHAT'S "NATURAL"?

The FDA is asking the American public to provide information and comments on the use of this term in the labeling of human food products. Specifically on questions such as:

- Whether it is appropriate to define the term "natural,"
- If so, how the FDA should define "natural," and
- How the FDA should determine appropriate use of the term on food labels.



The FDA is accepting public comments beginning on November 12, 2015. For further information click [HERE](#).

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## PERSPECTIVES WITH DR ALAN BARCLAY

### GUIDELINES FOR FESTIVE SEASON DRINKS & NIBBLES

You can enjoy a broad range of cold drinks and nibbles over the festive season. Careful choices from the wide variety available can ensure your risk of high and low blood glucose is minimised, and it also helps prevent unwanted weight gain.



We all know that water is the best fluid for quenching our thirst, and of course it contains no kilojoules or carbohydrate, so it should be our daily fare, but at the parties that form an important part of the festive season for many of us, we can of course enjoy something a little fancier. Luckily, we have a very wide range of alcoholic and non-alcoholic choices in the drinks department. The nibbles that accompany them need to be considered as well, as they most certainly can affect blood glucose levels and weight. Here are some practical tips for the drinks and nibbles you'll find on offer.

**Water and diet drinks** Mineral waters, soda water, diet soft drinks, and diet cordials are all good choices as they provide essentially no kilojoules or carbohydrate. Serve with ice cubes, or crushed ice, and perhaps a slice of lemon or lime to add a little bit of zing.

**Juices** Fruit juices and fruit drinks are also very refreshing, and served with ice in a tall glass and drunk through a straw, can pass off as a more glamorous cocktail (otherwise known as a mocktail). However, unlike water and other "diet" drinks, on average, fruit juices and drinks provide 400kJ (95 calories) and 22g (1.5 exchanges; 2 portions) of carbohydrate per cup (250ml/9fl oz). All fruit juices made from low GI fruit and most fruit drinks have a low GI, however a cup of most varieties has a medium glycemic load. In other words, despite their lower GI, most fruit juices will raise your blood glucose levels if you drink too much. Moderation is as always the key.

**Soft drinks** Most people would agree that regular soft drinks are better choices than hard – particularly if you intend to drive. Chances are they will be available, so you need to be able to make



an informed decision about whether you drink them or not. Like fruit juices and drinks, regular soft drinks are a source of kilojoules (calories) and carbohydrate, with an average cup providing around 440kJ (105 calories) and 27g of carbohydrate (about 2 exchanges; 3 portions). Most varieties have a medium GI, and a cup therefore has a medium-to-high glycemic load, so of course they will raise your blood glucose levels if you overdo it.

**Hard drinks** Along with the taste, the amount of alcohol, carbohydrate and kilojoules (calories) in alcoholic beverages are all important factors to consider. The number of standard drinks is listed on all alcoholic beverages sold in Australia and many other countries, but unfortunately the amount of kilojoules and carbohydrates currently aren't on most varieties (some Australian beers have recently introduced Nutrition Information on their labels). Let's take a look at the alcohol, carbohydrate and kilojoule content of some of Australia's favourite drinks to help you make an appropriate choice:

Alcoholic beverage	Alcohol (g)	Carbohydrate (g)	Kilojoules	Calories
<b>A middy (285ml/10fl oz) of beer</b>				
Regular beer	11.1	5.7	433	103
Low carb beer	9.7	2.6	345	82
Low alcohol beer	2	3.2	121	29
<b>A glass (100ml/3½ fl oz) of wine</b>				
White wine	9	1.1	276	66
Red wine	9.5	0	282	67
Dessert wine	8.5	10	410	98
Reduced alcohol wine, white	5.2	1.1	170	40
Reduced alcohol wine, red	5.2	0	153	36
<b>A glass (250ml/8 ½ fl oz) of cider</b>				
Apple, dry	9.3	7.8	403	96
Apple, sweet	9.3	17.3	553	32
Pear	10.0	13.8	488	116
<b>A shot (30ml/1fl oz) of spirits</b>				
Gin	8.8	0	256	61
Rum	8.8	0	255	61
Vodka	8.8	0	255	61
Whisky	8.8	0	254	61

**Healthy nibbles** Look for the healthy (or healthier snacks). Some examples include:

Savoury snacks	Vegetables and fruits	Dips and sauces
Ryvita Vita Wheat Pita and other flat breads (cut into strips or wedges) Authentic sourdough (cut into strips or bite-sized squares) Nuts and seeds	Fresh vegetable sticks (carrot, celery etc.) Salads Pickled vegetable Baked vegetables Fruit platters Fresh fruit salad Dried fruit (e.g. dates, apricots, figs, etc)	Hommous Salsa-based dips Flavoured cottage cheese Soy based sauces (e.g. oyster, teriyaki, etc.) Chilli, tomato or barbecue sauce



**Alan Barclay PhD** ([LinkedIn](#)) is a consultant dietitian and Chief Scientific Officer at the Glycemic Index Foundation. He worked for Diabetes Australia (NSW) from 1998-2014 and is a member of the editorial board of Diabetes Australia's health professional magazine, *Diabetes Management Journal*. Alan has authored or co-authored over 30 scientific publications, is co-author of *The Low GI Diet: Diabetes Handbook*, *The Low GI Diet: Managing Type 2 Diabetes*, and *The Ultimate Guide to Sugars and Sweeteners*, and presents at conferences around the globe. Contact: [alan.barclay@gisymbol.com](mailto:alan.barclay@gisymbol.com)



## NICOLE SENIOR'S TASTE OF HEALTH

### TASTE OF HEALTH: TURKEY

**Potted history** Turkeys have been domesticated for some 2000 years or more. In *America's First Cuisines* (written to highlight and celebrate the contribution made by the original inhabitants of the New World to the world's food supply), anthropologist and food historian, Sophie D. Coe, tells us that the Aztecs had five domesticated animals: the turkey, the Muscovy duck, the dog, the bee, and the cochineal insect. By the sixteenth century, the number of turkeys the Aztecs raised was phenomenal. She quotes Motolinía, a Franciscan missionary who arrived in New Spain in 1524, who reports that "the market of Tepeyacac, just one of several suburban markets around Tenochtitlan, sold eight thousand birds every five days, and this all year round."



According to Coe, the first actual evidence of turkey raising however, is in Maya territory. "The earliest bones of turkeys that could be considered domesticated were found in Tehuacan and date from between 200 BC and AD 700," she writes. "Their use must have spread rapidly, because by the time the Europeans came exploring, turkeys seem to have been available beyond their natural range. Columbus may have brought them back from the islands on his first voyage, or perhaps he first saw them when he landed in Honduras on his fourth voyage. By 1511 the king of Spain was ordering every ship returning to Spain to bring back ten turkeys, five males and five females. It was one of the most rapid successes as far as the adoption of New World foodstuffs goes, speedily replacing the tough, stringy peacock as a spectacular dish for banquets." – *America's First Cuisines*, University of Texas Press, 1994.

**The new bird on the block Downunder** When I was a child turkey was a very unusual food. I can't remember ever eating it, although I knew about it from US TV shows when perfect TV families carved a whole one at Thanksgiving. Since then, the turkey industry has progressed leaps and bounds and turkey meat has really come home to roost in Australia. And besides the whole bird to roast at Christmas, you can buy a variety of cuts all year. I once used a turkey leg in a slow cooker – à la lamb shanks – but it was so large I had to hack off the end of the leg bone before it would fit! I remember it was really cheap so my family got dinner and a show for a bargain! I now find myself using turkey mince and even turkey steaks on a semi regular basis as another white meat option. And it's nutritious too: as well as being lean and rich in protein, turkey is high in vitamin B12 needed for growth, development and healthy blood; a source of iron and zinc (especially the darker coloured cuts); and a source of selenium that has an antioxidant function. And forget about that myth you may have heard about the tryptophan in turkey making you sleepy (by making serotonin in the brain); the reason you feel sleepy after turkey is you've eaten too much (also known as a food coma). And you know the cure for that...

**Gobble gobble gobble** I did wonder about the origin of the word 'gobble' (as in, to gulp quickly). It's the same word we use to describe the sound a turkey makes. I've since learned that the two words are unrelated. One is derived from the word *gob* (mouth) and *gobben* (to drink greedily). And while we read children books in which the turkey says "gobble, gobble, gobble", apparently turkeys can make many different sounds and arguably some of them sound a bit like "gobble". Whatever noise they make, they taste terrific especially when enjoyed with those you love at special times of the year. Happy holidays!

**Nicole Senior** is an Accredited Nutritionist, author and consultant who strives to make healthy food taste terrific. You can follow her on [Twitter](#), [Facebook](#) or checkout her [website](#).



## WHAT I EAT: ASSOCIATE PROFESSOR ANTIGONE KOURIS

Nicole Senior talks to Associate Professor Antigone Kouris, an Accredited Practising Dietitian with over 28 years experience with a PhD, Bachelor of Science and Diplomas in Dietetics and Botanic Medicine. She worked with Professor Mark Wahlqvist for 20 years in the Department of Medicine at Monash University where she conducted pioneering research on the Mediterranean diet and longevity.

**What is your cultural background?** I was born in Melbourne Australia, but lived in Athens for 5 years as a teenager and finished a British secondary school there. My parents migrated to Australia in the 1950s. My father is from Crete, famous for the Seven Countries study in the 1950s, which was the first study to report the health benefits of the Cretan Mediterranean diet. My mother is from Athens, but her mother was originally from the spice capital Constantinople (now known as Istanbul) when many Greeks lived there during the Byzantine era and Ottoman empire prior to the 19<sup>th</sup> century.

### What does a typical day's food look like in your culture?

First generation Greeks in Australia have retained many aspects of their traditional food habits from Greece. This is what I discovered when I interviewed nearly 200 elderly Greek Australians for my PhD in the early 1990s and who were deemed one of the longest lived populations in the world at the time. In contrast, second and third generation Greek Australians are consuming a more multi-cultural diet.



Image: Haricot bean soup (fasolada).

### A traditional Greek diet consists of:

**Breakfast:** Sourdough wholemeal (wheat/barley/corn) bread or rusks, olive oil, olives, tomatoes and sometimes cheese (usually fetta) or yoghurt and herb tea (sage or sideritis). Milk was rarely consumed by adults in Greece in the 1950s.

**Mid-morning:** Fruit, nuts.

**Lunch:** This was the main meal of the day. Meat was typically consumed only once a week or less (usually on a Sunday), chicken/pork once a week or less, fish (especially oily fish) or seafood (especially squid) about once a week (or more if one lived near the sea), meatless meals twice a week usually made with legumes (especially as soup in winter) or just vegetables (stewed in lots of tomato and oil) but served with cheese. The main meal was always served with either a salad or stewed vegies in tomato or boiled wild greens (chickory, endive, amaranth), bread and a glass of wine. Rice, pasta or potatoes were consumed with meals a few times a week.

**Afternoon:** Siesta for 1 hour and then fruit and Greek coffee.

**Dinner:** Light meal usually consisting of strained Sheep yoghurt, walnuts and honey.

**Supper:** Herb tea such as sage or sideritis or chamomile with a rusk or plain sweet biscuit.

**Greek religious fasting:** The traditional Greek diet is also beneficially influenced by the Greek Orthodox religion. The religion recommends vegan eating for up to 200 days of the year (during Easter, Christmas, Assumption of Mary) and Wednesday and Friday of every week. Many first generation Greek Australians are continuing the practice of vegan eating 2 days a week where only legumes, fruit, vegetables, nuts and bread are consumed. Could this be the secret to their longevity? Our PhD student and dietitian Tania Thodis at La Trobe University is exploring the role of Greek religious fasts and health.

**What is your favourite dish?** Haricot bean soup (fasolada). This soup (and not souvlaki) is considered to be The National Dish of Greece! This highlights that the traditional Greek diet is a plant-based diet.





**What are 3 ingredients this cuisine couldn't do without?** Extra virgin olive oil, onions, tomato. However, oregano, dill, mint, garlic and lemon are also critical ingredients giving many dishes their characteristic flavours. Cretan dishes also feature rosemary and fennel. Unfortunately spices do not feature in many Greek dishes (except dishes prepared by Greeks originally from Asia Minor/Constantinople like my mother!) I believe Greek dishes can be made even healthier by spicing them up a little!

**Can you suggest a hero ingredient?** Haricot beans



**Associate Professor Antigone Kouris** is currently a member of the Department of Dietetics at La Trobe University where she is involved in setting up an on-line course in Nutritional and Herbal Medicine for allied health professionals. She has over 40 published papers, has co-authored 5 university text books (including a book on integrative medicine) and 3 of her own books (including a cook book on spiced up Greek dishes!) Recently she turned her expertise to the development of healthy low fodmap gluten free cookies (Skinnybiks) using novel ingredients like spelt and lupin after being challenged by one of her patients. Find out more about Skinnybiks here:

[www.skinnybik.com](http://www.skinnybik.com)

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## IN THE GI NEWS KITCHEN THIS MONTH

We offer some suggestions for the Christmas table – and if you aren't "doing" Christmas, we think you will enjoy these recipes anyway.

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### 4 RECIPES FOR THE CHRISTMAS TABLE

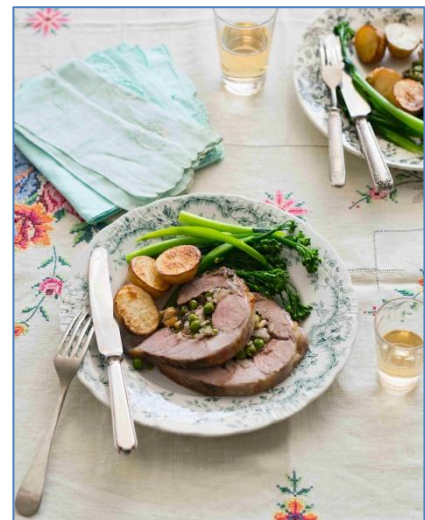
#### Rolled lamb with pea and mint filling

This recipe is from Kate McGhie's new book, *Apple Blossom Pie* (Murdoch Books). Kate says the pea filling needs to be generous but if any mixture is left over roll it into balls and cook them alongside the lamb for the last 20 minutes. If using frozen peas bring them to room temperature before using.

Start to finish: about 2½ hours

Serves: 10

About 2.5kg (5lb 8oz) boned leg of lamb  
2 cups (310g) freshly shelled peas  
2 cups (290g) diced sourdough bread (crusts removed)  
1½ cups (30g) loosely packed mint leaves  
1 medium brown onion, finely chopped  
1 teaspoon ground cumin  
2 free-range eggs, whisked  
½ cup (80g) pine nuts  
2 garlic cloves, crushed  
Salt flakes and freshly ground white pepper



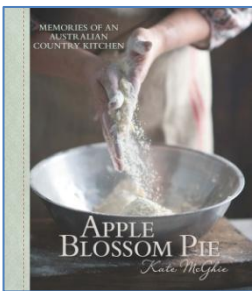
Preheat the oven to 200°C/400°F (fan-forced 180°C/350°F). • Lay the lamb flat out on chopping board skin side down. Slash the thick parts of the meat to flatten and to make the piece roughly all the same thickness. • Put the peas, bread, mint, onion, cumin, egg, pine nuts, garlic, salt and



pepper in a bowl. Using your hands clump the mixture together to combine and then spread it over the meat. Carefully roll the meat up from the longest side into as tight a roll as possible. Tie securely with string. • Place the meat on a shallow rack in a roasting dish and pour in about 1 cup (250 ml/9 fl oz) of water. Roast for 20 minutes and then reduce the temperature to 180°C/350°F (fan-forced 160°C/315°F) and roast for about a further 1 hour 25 minutes or until the juices run a pale bluish pink colour when tested with a metal skewer. This will give you slightly pink lamb. Cook for 10 minutes more for well done. Remove the meat from the oven, cover with foil and leave to cool completely.

*Per serve*

523 cal/2190 kJ; 58g protein; 24g fat (includes 7g saturated fat; saturated to unsaturated fat ratio = 0.41); 17g available carbs (includes 3g sugars and 14g starch); 4g fibre; 456mg sodium; 1041mg potassium (sodium : potassium ratio 0.44)



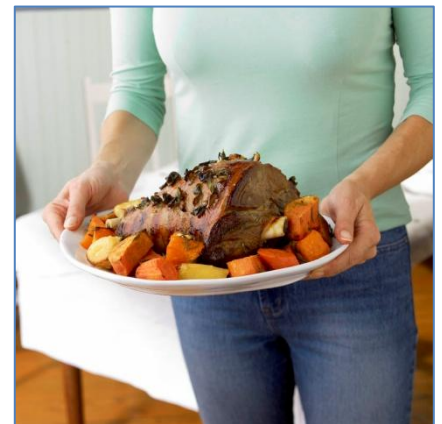
*Apple Blossom Pie* by Kate McGhie is packed with recipes, stories and memories of an Australian country kitchen. It is published by Murdoch Books and available in bookshops and online.

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## Vegetable roasties

Anneka Manning's roasted veggies from *The Low GI Family Cookbook* (Hachette Australia) have featured in *GI News* before. We love them and think they will make the perfect partner for Kate's rolled lamb with peas. All you need to complete the meal are some crispy salads and lots of green vegetables. Serves: 6

- 3 Carisma (or other lower GI) potatoes
- 1 medium orange-fleshed sweet potato (about 500g)
- 2 medium parsnips (about 400g)
- 2 medium carrots (about 250g)
- ½ medium butternut pumpkin (about 700g)
- 3 tsp olive oil
- Pinch salt (optional)
- Freshly ground black pepper
- 4 sprigs rosemary, thyme or oregano, leaves removed from stems



Preheat the oven to 200°C/400°F and line a roasting pan with non-stick baking paper. • Peel all the vegetables, deseed the pumpkin and cut the vegetables into 2.5cm (1in) chunks. Place them in the prepared roasting pan, drizzle with the olive oil and a tiny sprinkle of salt (if using), pepper and herbs. Use your hands (clean of course) to toss the vegetables to coat with the oil and seasonings. • Bake for 1 hour, or until golden and tender, tossing the vegetables about 3 times during cooking so that they brown and crisp evenly. Serve immediately.

*Per serve*

225 cal/940 kJ; 7.5g protein; 3g fat (includes 0.5g saturated fat; saturated to unsaturated fat ratio = 0.2); 37g available carbs (includes 17g sugars and 20g starch); 8g fibre; 245mg sodium; 1380mg potassium (sodium : potassium ratio 0.18)

## Baked stone fruits & berries

Veronica Cuskelly's delicious dessert is from her book (with Nicole Senior) *Eat to Beat Cholesterol* (New Holland). You can pop it into the oven while you are enjoying your main course and it will be ready to serve when you are ready to enjoy it. The frozen berry mix Veronica used contained bilberries, blackcurrants and wild blueberries.

Preparation time: 10 minutes

Cooking time: 20 minutes

Serves: 2

Oil spray

2 yellow peaches, stone removed and sliced

2 yellow nectarines, stone removed and sliced

1 cup (150g) frozen berry mix

1–2 tsp finely grated lemon zest

2 tsp brown sugar

¼–½ tsp allspice

½ cup (125g) low-fat yoghurt

1 tsp honey



Preheat oven to 180°C (350°F/Gas Mark 4), and spray a flat ovenproof dish with oil. Arrange the peaches, nectarines and berries over the base of the dish. Sprinkle over the lemon zest, sugar and allspice. • Cover the dish with foil and bake for 15 minutes. Remove foil and stir and continue to cook for a further 5 minutes. • Serve warm topped with yoghurt and drizzled with honey

*Per serve*

Energy: 690kJ/165 calories; Protein 7g; Total fat 0.5g; Fibre 7.7g; Carbohydrate 32g

## Apples with scrunched filo & maple glazed brazils

Break with tradition and serve Veronica Cuskelly's apple scrunchies from *Eat to Beat Cholesterol* (New Holland) for a light and fruity finish – you may find you even have room for coffee and a small piece of Christmas cake if you do. Just double or triple the quantities to scale up.

Preparation time: 15 minutes;

Cooking time: 40 minutes;

Serves: 2

2 cooking apples

2 tsp salt-reduced margarine spread

4 tsp 100% pure maple syrup

2 tsp lemon juice

¼ cup (60 ml) water

6 small brazil nuts

1 sheet commercial filo pastry, chilled

A little icing sugar for sifting (about ¼–½ tsp)



Preheat oven to moderate 180°C/350°F and line a baking tray with baking paper. • Peel, core and slice each apple into 12 wedges. • Heat the margarine spread in a non-stick frying pan over a low heat and arrange the apples in the pan in a single layer. Pour over 2 teaspoons of the maple syrup and the lemon juice. Cook the apples, moving them around to cook evenly and turning only once,



for 35 minutes or until golden and tender. Add a little water during cooking if needed. • Place the water and the other 2 teaspoons of maple syrup in a small non-stick pan over a medium heat and bring to the boil. Add the brazil nuts and continue to boil until the sauce has almost evaporated (be careful not to let it boil dry) and the nuts are glazed, 2–3 minutes. Set aside. • Cut the sheet of filo pastry in half and scrunch each half up roughly. Place on the prepared baking tray and sift a little icing sugar on to each pastry piece. Bake for 1–2 minutes or until the filo is light golden. • Arrange the apple on serving plates with the filo and brazil nuts on top.

*Per serve*

Energy 997kJ/238 Cal; 11g fat (includes saturated fat 2g; saturated to unsaturated fat ratio = 0.22); 4g fibre; 3g protein; 35g carbohydrate

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## GLYCEMIC INDEX FOUNDATION NEWS

### WHY GI SYMBOL PRODUCTS ARE A HEALTHIER LOW GI CHOICE

The Glycemic Index Foundation is a not for profit health promotion charity whose main purpose is to provide education and tools to improve people's health through scientifically backed low GI eating principles.

One of the ways we go about this is to work with manufacturers (mainly in Australia and New Zealand to date) to have the low GI Symbol on packaged goods. By doing this we hope to make it easier for the consumer to choose good quality carbohydrate products when in the supermarket aisle. The consumer can trust that those foods have been tested low GI by an accredited laboratory and have met what we call our nutrient criteria that includes limits on energy (Calories/kilojoules), total and saturated fat, sodium (salt), and where appropriate fibre and calcium. I spoke with our Chief Scientific Officer Dr Alan Barclay about the origins of the nutrient criteria and if they have evolved to keep up with the latest scientific evidence and forever changing food supply.

“The Glycemic Index Foundations (GIFs) Product Eligibility and Nutrient Criteria (PENC) were originally developed with representatives from Diabetes Australia, University of Sydney and the Dietitians Association of Australia.

The PENC have been compared to Food Standards Australia and New Zealand's Nutrient Profile Scoring Criterion for general and high level health claims and the Federal Governments Health Star Rating (HSR) system. More than 85% of foods carrying the GI Symbol are eligible to make a general or high level health claim, and the average score for the HSR system is 3.7 out of 5 stars, and the minimum score is 3.5 out of 5.

Our understanding of human nutrition continues to expand, and the food supply has evolved. For example, in the 1990s, an absolute reduction in saturated fat intake was thought to be the best way of improving blood cholesterol levels, but more recent research has determined that the ratio of saturated : unsaturated (e.g., mono and polyunsaturated) fats provides a better indication of the effect of a food on health, and a ratio of 1 : 2 is now [recommended](#). Also, the glycemic load (GL), the mathematical product of a foods GI and the amount of (available) carbohydrate per serve was invented in the late 1990's and research has determined that it is a powerful and complementary tool to the GI. For the average Australian adult consuming 8,700 kJs (2,070 Calories), an average daily GL of less than 100 units is recommended to help reduce the risk of developing chronic conditions such as [type 2 diabetes](#).

New product categories including breakfast biscuits and liquid breakfasts, for example, have been introduced into the Australian food supply since the launch of the GI Symbol Program. The



ingredients used to make existing foods have also changed, with increasing government and industry focus on product reformulation to reduce in particular the addition of added fats, sugars and salt, changing the nutrient profile of the foods that we consume.

The 2015 edition of the GIFs [Product Eligibility and Nutrient Criteria](#) have therefore been updated to reflect the changes to our understanding of the health effects of dietary fats, and a total carbohydrate criteria has been added to limit the glycemic load of the foods and beverages that we commonly consume. In addition, new carbohydrate-containing food categories have been added to reflect what is now commonly found in our local supermarkets.”

For those of you outside of Australia and New Zealand, please feel free to use these criteria when shopping for healthier low GI choices as they are also in line with International Dietary guidelines.

If you are a manufacturer and want to understand how you can go about applying to have the GI Symbol on your products and what countries are eligible please contact Dianna Crisp on [info@gisymbol.com](mailto:info@gisymbol.com)



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## Q&A WITH PROF JENNIE BRAND-MILLER

“New research in [Cell](#) based upon differences in how individuals metabolise their food suggests that a healthy diet differs from one person to the next. The authors continuously monitored week-long glucose levels in an 800-person cohort, measured responses to 46,898 meals, and found high variability in the response to identical meals, suggesting that universal dietary recommendations may have limited utility. What are your thoughts on this and is the glycemic index still relevant?”

I welcome this study showing a connection between post prandial glucose responses (PPGR) and alterations in the microbiome (and therefore many, many other pathways). This group have amply demonstrated that blood glucose responses in healthy people without diabetes really make a difference to the risk factors associated with chronic disease. It drives home the medical relevance of high glucose levels within the so-called normal range.

But I think that the researchers draw a long bow in dismissing current dietary advice and other metrics for predicting blood-sugar responses.

Like any study, it has strengths and weaknesses which need to be weighed up.

### Strengths

To my knowledge, it's the first study of its kind. It shows for the first time that median post prandial glucose assessed in “real time and real life” in people without diabetes is highly predictive ( $r = 0.49$ ) of glycated hemoglobin (a long term measure of average blood glucose levels) and other risk factors, including Body Mass Index, Blood Pressure, ALT (a liver test) and CRP (a marker of inflammation) and – this is very new – the microbial flora. All this suggests very strongly that high ambient post prandial glucose in normal individuals is a risk factor we can't ignore.

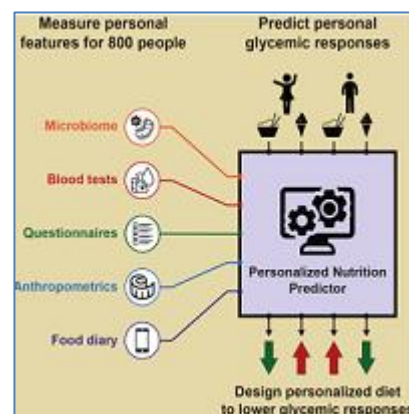


Image: Zeevi et al: Personalised Nutrition



They have in fact nicely validated the concept of GI in a realistic day-to-day living situation (although the beer finding is a bit odd as we recently showed it had a very high GI).

In many ways, this paper verifies what we already know but it pushes science forward.

## Weaknesses

Nutrition expertise does not appear to be a strong point – the authors are mathematicians and clinicians. They seem surprised that glucose responses to the same food vary from person to person. We've known this is true for a long time and that's why an oral glucose tolerance test is the standard way to assess pre-diabetes and diabetes. We also know that glucose tolerance varies from day to day for all sorts of reasons. But high within-person and between-person variability in PPG doesn't mean one person's healthy diet is another person's sin bin. What's more the dietary intervention was very short (one week) – not enough time to alter risk factors for chronic disease.

The authors assume that reducing/minimising PPG is always a good thing. I'm not convinced of that. We know protein will increase insulinemia and thereby reduce post prandial glucose yet diets with a high protein-low carbohydrate ratio are linked to high mortality. In the current study, the authors showed that dietary fibre predicted higher glycemia, and yet it also reduced glycemia the next day – so is fibre beneficial or not?

The authors seem a little confused between the high variability between persons and the consistent differences among foods. In fact, the RANKING of different foods with respect to post prandial is much the same on any given day no matter what the environment (e.g. lack of sleep, a lot of exercise).

In their paper, the authors don't disclose which predictor factors were most important in their algorithm e.g. for most people, was carbohydrate content far more important than lack of sleep?

It's not correct to say that there is no method of predicting the degree of PPG in response to food. - One of our studies ([Bao et al](#)) shows that glycemic load is a very good predictor of the RANKING of post prandial glucose response. The authors are aware of this study and cite it.

## What next?

I look forward to seeing further studies from the group and would hope that they are able to collaborate with us.



**Professor Jennie Brand-Miller** (AM, PhD, FAIFST, FNSA, MAICD) is an internationally recognised authority on carbohydrates and the glycemic index with over 250 scientific publications. She holds a Personal Chair in Human Nutrition in the Boden Institute of Obesity, Nutrition, Exercise and Eating Disorders and Charles Perkins Centre at the University of Sydney. She is the co-author of many books for the consumer on the glycemic index and health.



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