

## GI News—January 2010



- Fat burning is free
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- Easy ways to renovate your recipes
- Shaping up with strength training
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- Does celery take more calories to digest than it contains?

In this issue of *GI News*, we shine the spotlight on fat burning — what you need to know about burning excess amounts of it. ‘Fat burning is free,’ says dietitian Glenn Cardwell in Food for Thought. It just requires change and a lot of hard work.’ In Food of the Month and in the GI News Kitchen, we show you how to renovate your recipes with healthier and lower fat options and Dr Joanna McMillan Price in Body Work explains why strength training is arguably the best means we have of really changing the shape of our bodies and keeping us looking younger by maintaining a strong posture and frame.

Good eating, good health and good reading.

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### Food for Thought

#### **Fat burning is free**

‘People love to hear that certain foods, exercise and tablets are fat burning,’ says dietitian Glenn Cardwell.

‘Back in the early 1990s I was in the national media because I called fat metaboliser and fat mobiliser tablets a big fat scam. The response by the tablet manufacturers was quite clever. It was nothing. Not a word. No response meant that the story was dead in 24 hours. No response also meant that the manufacturers were acknowledging that their tablets were a scam, albeit a very lucrative one, and they didn’t have a scrap of evidence to justify their existence. They still don’t.

Fat burning is such a beautiful expression, because it implies that you require some outside influence to get you into a fat burning zone. Spoiler warning. Here is the truth. If you are currently breathing, you are burning fat. Asleep? Burning fat. Sitting? Burning fat. Watching telly? Burning fat. Fat burning is easy. Just breath.

To burn up excess fat is much harder. You will need to do much more activity to burn enough fat to lose weight. For most people, that will mean 60 minutes of activity a day. Yes, one hour. There it is again – the truth. Unpleasant news, yes?

The other side of the fat burning equation is food and drink. No food or drink will burn fat. Not one. Truth. Sure, there are adverts encouraging you to buy a book with all the ‘fat burning’ foods listed, like black tea, garlic, lettuce, celery, water, apples and by now you will have realised that they are all low calorie foods.

To burn fat you must eat less kilojoules than you burn through activity. How?

1. Eat plenty of fruit, vegetables, legumes, whole grains, lean meat and very few cakes and biscuits, and eat only until you are no longer hungry (not until you are chockers). Do this all your life, not just four weeks.
2. Do more exercise. In other words, if you buy a bicycle, you must then ride it. Frequently.

As I said, fat burning is free. It requires change and a lot of hard work. Most people know this deep down, yet they prefer to buy hope and ignore the truth. However, the truth can be the best investment anyone ever made.’

Glenn Cardwell is an Accredited Practising Dietitian. Make sure you check out Glenn's website [www.glenncardwell.com](http://www.glenncardwell.com).

## News Briefs

### **Cochrane Review finds low GI diets more effective**

Not only is it hard to lose weight, there's not a lot of consensus about the best way to do it other than ‘eat less and exercise more’. But that piece of advice on its own doesn't seem to be able to deliver the necessary results for most of us – if we can stick to it. A *Cochrane Review* ([www.cochrane.org/reviews/en/ab005105.html](http://www.cochrane.org/reviews/en/ab005105.html)) published in 2007 looked at six carefully conducted randomised controlled trials running from 5 weeks to 6 months and involving 202 participants. They found that overweight and obese people lost more weight (on average 1 kilogram or 2.2 pounds

more) on low GI diets than on similar energy high GI or other conventional energy-restricted weight loss diets. Not only that, the low GI diet had heart health benefits, too. 'Low GI diets appear to be particularly effective for people who are obese,' says lead author Dr Diana Thomas, who is the Scientific Director of the Centre for Evidence Based Pediatrics, Gastroenterology and Nutrition. She went on to comment that this may be because it's easier for people to stick to low GI diets as there's less need to restrict food so long as the carbs have a low GI.

### **Finding out about fat metabolism**

A study published in the *European Journal of Clinical Nutrition* ([www.nature.com/ejcn/journal/v63/n12/abs/ejcn2009100a.html](http://www.nature.com/ejcn/journal/v63/n12/abs/ejcn2009100a.html)) suggests that differences in dietary GI can influence fat metabolism. The researchers looked at the effect of dietary GI on GLUT4 and FAT/CD36 gene expressions in human skeletal muscle (these are the muscles that move and support the skeleton) after a single bout of exercise. Skeletal muscle plays important role in the regulation of whole-body metabolism. In skeletal muscle, uptakes of glucose and fatty acid from circulation are facilitated by transmembrane substrate transporters (sorry we can't make it simpler) GLUT4 and FAT/CD36, respectively.

In two separate trials in this crossover study, 8 healthy men were given a high GI meal (GI 76) or a low GI meal (GI 36) immediately after a 60-minute cycling exercise at 75% maximal oxygen consumption. Both meals had similar proportions of carbs, fat and protein. Muscle samples from deep vastus lateralis were taken by needle biopsy immediately after exercise and 3 hours after exercise.

After exercise, the high GI diet produced significantly greater glucose and insulin responses compared with the low GI diet. Both diets resulted in rapid reductions in plasma fatty acid and glycerol below fasting level. GLUT4 mRNA was downregulated by both high GI and low GI diets to a comparable extent, whereas GLUT4 protein levels were not changed during this short period. FAT/CD36 mRNA and protein levels were substantially decreased with the high GI diet below baseline, but not with the low GI diet.

### **Regular cola drinking linked to diabetes in pregnancy says study**

Writing in December 2009 *Diabetes Care* (<http://care.diabetesjournals.org/content/32/12/2184.abstract>), researchers report that after adjusting for known risk factors, intake of sugar-sweetened cola was positively associated with the risk of developing diabetes during pregnancy.

‘Compared with women who consumed less than 1 serving per month, those who consumed more than 5 servings per week of sugar-sweetened cola had a 22% greater GDM (gestational diabetes mellitus) risk,’ notes Dr Chen. While the data indicated a link between GDM and sugary cola, no relationship was found for other sugar-sweetened drinks. The reason for this is not clear, but Chen said one of the explanations could be the tremendous popularity of cola in the US.

Writing in an editorial of the same issue, Dr Robert Moses and Prof Jennie Brand-Miller state: ‘Epidemiological studies have limitations and often pose more questions than they provide answers. Apart from a greater focus on the prevention of maternal obesity, and a logical presumption that a high-fiber and low-GI diet could be beneficial (and are unlikely to do harm), there is currently insufficient evidence to base any firm dietary advice about how to reduce the rate of GDM. Until that evidence becomes available, we can cautiously advise that the overall quality of carbohydrates, fats, and proteins are probably more relevant than the intake of any one single food. In this context one serving of a sweetened soda beverage even on a daily basis is unlikely to do harm.’

## Renovate your Recipes

### **Low fat evaporated milks**

When renovating recipes, one key aim is to reduce the amount (and improve the quality) of the fats and oils in your diet. This means that delectable ingredients like cream, butter, bacon, cheese and chocolate (that appear in large amounts in chef recipes these days) need to stay on the shelf and out of your shopping basket if you’re going to whip up anything approaching a hip-and-heart-friendly recipe.

It’s not all sacrifice. Cutting out cream doesn’t mean missing out on creamy sauces or creamy desserts. How come? Products like low fat evaporated milk, or just ‘Carnation’ as lots of us know it, is a good substitute for cream and full cream milk when cooking sweet and savoury dishes. It’s sometimes called ‘the cooking milk’ and it certainly adds body to soups, sauces and custards.

Evaporated low fat milk is made by heating milk to remove about 60% of the water. The processing doesn’t destroy the nutritional benefits of milk – it’s still a good source of calcium (around 30% recommended your daily intake per serve). We looked at the saturated fat savings with a couple of low fat Carnation brand products:

- The Light & Creamy Evaporated Milk has 95% less fat than cream. It's the one to use instead of cream in pasta sauces etc and for cutting back the fat in creamy desserts like cheesecakes.
- The Light & Creamy Coconut Flavoured Evaporated Milk has an average of 92% less saturated fat than regular coconut milk (an average of all coconut milks on the market, including light coconut milk) and is a substitute for coconut milk in laksas and creamy Southeast Asian curries (see Diane's Red beef and pumpkin curry recipe in this issue).

We asked the Nestle Australia Nutrition team for some tips on using evaporated milk in your cooking to get the best results.

- Avoid boiling evaporated milk as it may split (curdle), it's best to add at the end of cooking time and heat through.
- To whip it to a thicker consistency, leave the can in the fridge overnight before whipping.
- It's OK if you don't need to use a whole can in your recipe. It will keep in fridge for 2–3 days after opening.

If you haven't used evaporated milk in your cooking before, it's probably a good idea to check out some recipes on the manufacturers' websites to give you an idea of how to get the best results. This **Creamy Salmon and Dill** main meal pasta recipe from the Nestle Australia website will be on the table in a bit over 20 minutes. It's quite high in carbs, so if you need to watch your blood glucose levels, have a smaller serving. The recipe says serves 4 – but we think it will happily stretch to 6 with a big crispy garden salad tossed in a tangy vinaigrette dressing.

375 g (14 oz) fettucine

375 ml (14 oz) can Carnation Light & Creamy Evaporated Milk

1 clove garlic, crushed

grated rind 1/2 lemon

1½ tablespoons corn flour

½ cup grated zucchini (courgette)

1 tablespoon chopped fresh dill

Freshly ground black pepper

210 g (7 oz) can red salmon, drained and flaked

- Cook pasta according to directions on pack until al dente, drain and keep warm. Place the evaporated milk, garlic, lemon rind, cornflour, zucchini and dill in a large saucepan. Bring to the boil, stirring. Stir in the salmon. Pour sauce over pasta, gently toss to combine and serve.

*Per serving (based on 4 serves)*

Energy: 2290 kJ/ 547 cal; Protein 31 g; Fat 9 g (includes 3 g saturated fat); Carbs 80 g; Fibre 3.5 g.

## 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 [www.photosbysergio.com](http://www.photosbysergio.com).

### **Fortified scrambled eggs**

Italians don't really eat eggs for breakfast but we do, whether we are in Morristown (New Jersey) or in Nimis (Friuli). Adding in some ricotta is a terrific way to fortify eggs with calcium, making this recipe a perfect choice for a simple, wholesome breakfast. In all honesty, these eggs taste so much better when I make them in Italy. I'm sure the freshly made ricotta from the local dairy farm has much to do with it!

Servings: 4

4 large eggs

1 cup egg substitute

¼ cup light ricotta

2 tbsp grated parmigiano cheese

2 tbsp chopped fresh chives

Salt and pepper, to taste

- Whisk together all the ingredients in a medium-sized mixing bowl.
- Evenly cover a medium-sized frying pan with vegetable spray. Heat over medium flame until surface is hot. Add the egg mixture and begin to stir for about 2 minutes from the outside to the center with a wooden spoon. Lower the heat if necessary to assure uniform cooking. Serve immediately.

*Per serving (without toast)*

Energy: 613 kJ/ 146 cal; Protein 16 g; Fat 8 g (includes 3 g saturated fat and 248 mg cholesterol); Carbs 2 g; Fibre less than 1 g.

**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 Diane's Money Saving Meals - [www.moneysavingmeals.com.au](http://www.moneysavingmeals.com.au) .

### **Red beef and pumpkin curry**

Check out Asian produce stores for a genuine Asian brand curry paste – they tend to be hotter (and cheaper) than supermarket brands – 2 tablespoons was plenty. The brand you have may be milder, so check the 'serving suggestion' on the label to see how much paste to add for four people. And there are more savings. I usually make this with light coconut milk, but by using light and creamy coconut flavoured evaporated milk you boost the protein and cut the saturated fat right back.

Serves 4

1 tablespoon peanut oil

350 g (12 oz) rump steak, thinly sliced

1 onion, halved and thinly sliced

2 tablespoons red curry paste (or to taste)

2 cloves garlic, peeled and crushed

375 ml (14 oz) can light coconut milk or light and creamy coconut flavoured evaporated milk

500 g (1 lb 2 oz) pumpkin, peeled and chopped into bite-sized chunks

120 g (4 oz) green beans, trimmed, sliced in half

1 tablespoon fish sauce

1 tablespoon table sugar

1½ cups basmati or a lower GI rice

chopped peanuts or chopped coriander or both (optional)

- Heat the wok or large frying pan over high heat, add the oil and when hot (not before), stir-fry the beef in two batches for 1–2 minutes until brown. Set the beef aside in a heatproof bowl.
- Stir-fry the onion for 2 minutes then add the curry paste and garlic and stir to combine. Pour in the coconut milk, stirring until the curry paste has dissolved and bring just to the boil. Add the pumpkin chunks, cover (with a lid or foil),

reduce the heat and simmer gently for 10–12 minutes until the pumpkin is just tender (but not mushy). Meanwhile, cook the rice following the packet directions.

- Add the green beans and the cooked beef to the wok, and simmer for 2 minutes until everything is piping hot and the beans are tender-crisp. Add the fish sauce and sugar, a teaspoon of each at a time, to achieve a flavour balance you like.
- Spoon the rice onto four serving plates and top with the curried beef and a scattering of chopped peanuts or coriander for extra crunch and colour if you wish.

*Per serving (with rice and made with light and creamy evaporated coconut milk)*  
Energy: 1826 kJ/ 436 cal; Protein 33 g; Fat 12 g (includes 4 g saturated fat and 65 mg cholesterol); Carbs 46 g; Fibre 4 g

### **Labna**

This recipe yoghurt cheese with a creamy yet slightly sour, sharp tang is from **Lyndey Milan: The best collection**. Many cuisines have a version of labna (or labne) and it's delicious at any time of the day. Save calories and use it in place of feta in cooking. Lyndey's book is available from major bookstores or online at [www.newholland.com.au](http://www.newholland.com.au).

Makes 24 balls of cheese

1 litre low fat plain yoghurt (you can use full fat if you prefer)

1 teaspoon salt

Extra virgin olive oil

### ***To store***

Fresh rosemary sprigs

1 teaspoon coriander (cilantro) seeds

2–3 red chillies

- Mix the yoghurt with salt, stirring well to remove any lumps. Scoop the yoghurt into the centre of a double layer of damp muslin and suspend over a deep bowl for 24 hours to let the whey drip out (you may like to scrape the inside of the muslin a couple of times to facilitate draining).
- Remove the resulting 'cheese' from the muslin and crumble onto a tray lined with paper towel. Refrigerate until firm and dry to touch. Lightly oil the palms of your hands and roll into 2.5 cm (1 in) in diameter balls. Serve fresh on crusty

bread with freshly cracked black pepper or store in a jar covered with extra virgin olive oil, sprigs of rosemary and red chillies to flavour.

*Per labna ball (made with low fat yoghurt)*

Energy: 104 kJ/ 25 cal; Protein 2 g; Fat – less than 1 g (includes 2 mg cholesterol); Carbs 3 g

*Per serving*

Energy: 1350 kJ/ 323 cal; Protein 14 g; Fat 23 g (includes 5 g saturated fat and 118 mg cholesterol); Carbs 13 g; Fibre 3.5 g

In December we reported on **Christopher Marinangeli's** study from the University of Manitoba that found that banana bread and biscotti made with whole yellow pea flour produced a lower glycemic response than the same recipes baked using wheat flour. If you enjoyed the biscotti recipe last month (do tell if you tried it), here's the banana bread to try.

### **Banana bread**

Makes 9 slices

280 g (9 oz) pea flour

175 g (6 oz) sugar (Logicane low GI sugar if you can buy it)

3 tsp xanthan gum

¼ tsp salt

¼ tsp cinnamon

¼ tsp nutmeg

½ tsp baking soda

2 tbsp walnuts, lightly toasted and chopped

5 bananas, mashed

3 eggs

1/3 cup canola oil

Dash or two vanilla essence

Extra banana slices for garnish

- Preheat oven to 350°F (180°C) and place oven rack to middle position. Lightly spray the bottom and sides of a 9 x 5 x 3 in (23 x 13 x 8 cm) loaf pan and dust with a little flour.
- In a large bowl combine the flour, sugar, xanthan gum, baking powder, baking soda, salt, spices, and nuts.

- In a medium-sized bowl combine the mashed bananas, eggs, oil and vanilla. Lightly fold the banana mixture into the dry ingredients just until combined and the batter is thick and chunky – don't over mix. You don't want a smooth batter. Over mixing will make the bread tough and rubbery. Scrape batter into prepared pan and place the slices of banana on top of the batter for garnish. Bake until golden brown and a skewer inserted in the center comes out clean, about 55–60 minutes. Place on a wire rack to cool. Serve warm or at room temperature

*Per serving*

Energy: 336 kJ/ 80 cal; Protein 2 g; Fat 6 g (includes 3 g saturated fat and 14 mg cholesterol); Carbs 1 g; Fibre less than 1 g.

## Busting Food Myths with Nicole Senior

**Myth: *Some foods have negative kilojoules (calories)***

**Fact: *It is impossible for a food to use more energy to digest than it contains. To create a kilojoule or calorie deficit in your body, eat a balanced diet with plenty of vegetables and be more active.***

We've all heard the stories about celery taking more energy to digest than it actually contains, but is this true? Moreover, does it make any difference in the quest for healthy weight loss? My answer is 'no' to the first, but 'maybe' to the second.

If thinking whole fresh foods such as vegetables contain negative calories helps you to eat more of them, go ahead. The health benefit of the end certainly justifies the mistaken means by which it is achieved. If, on the other hand, the overweight and vulnerable rely on a crazy unbalanced diet featuring eating these foods in large amounts to the exclusion of most others, then this myth should be nipped in the bud.

Although celery does not take more calories to digest than it contains, it naturally low in kilojoules – a helpful characteristic of most vegetables and the reason why sensible weight loss diets emphasise eating plenty of them. Not to mention their grocery list of other health benefits. Of course their low-kilojoule status is undermined by eating them with peanut butter or cream cheese on top (is there any other vegetable that better lends itself to filling up the middle with something tasty?). Although in my profession it may be cavalier to say it, celery doesn't taste that great on its own. Lower kilojoule options to 'fill the gap' are tomato salsa or chickpea dip (hummus). My favourite way to enjoy celery is sliced in a stir fry with lots of other vegetable friends and some lean chicken, beef, pork or tofu, nestled on a bed of brown rice or noodles.

At the heart of many nutrition myths is a kernel of truth, and in this case it is the notion that whole foods rather than overly processed foods take more digestive effort and in some cases hold back a little of their energy because it's too hard for the body to liberate. The extra digestive effort starts in the mouth as some foods need a lot more chewing. This is very positive because of the energy it requires, the way it slows down eating to allow the brain to register satiety (fullness), and of course the direct effect on strengthening the jaw muscles and massaging the teeth and gums. The hard and complex structure of some foods such as wholegrains, nuts and legumes actually prevent all their nutrients (and kilojoules) from being released during digestion and some simply pass straight through. This could be a reason why high fibre diets and diets containing nuts help with weight loss. Conversely, many processed foods are easy to overeat because they go down so easily. Think of fluffy white bread, donuts, cupcakes, mash potato, ice-cream and even juice. In the case of fluffy white bread and mashed potato, these low-digestive-effort foods have a high GI to boot. For many reasons, **it's worth working harder for your food.**

Back to the celery. Whenever you encounter a myth which implies doing something as simple as eating celery (or whatever) will help you lose weight, ask yourself the following reality check questions:

- Do I like eating lots of celery?
- How long can I keep eating lots of celery?
- Will eating lots of celery make me feel deprived?
- Will eating lots of celery help me feel good about myself?
- Will eating celery prevent me from over-eating other high kilojoule foods?
- Can I eat lots of celery and still enjoy social eating with family and friends?
- Will eating lots of celery encourage me to be more physically active?

If you like great recipes that are good for you, check out Nicole's books at [www.eattobeatcholesterol.com.au](http://www.eattobeatcholesterol.com.au) .

## Body Work with Dr Joanna McMillan Price

### Get with the strength

The bottom line for successful weight control is that you need to get your diet right and start strength training. Strength training is arguably the best means we have of really changing the shape of our bodies and it keeps us looking younger by maintaining a strong posture and frame.

In fact our need for strength training increases substantially the older we get – even more so for women. Research has shown that even seniors can regain some of their previous strength with correct training so it's never too late to start.

First and foremost, muscle is there to move limbs. But it is important for another reason. Muscle is active tissue and burns substantially more energy than fat every minute of the day and night. In other words of two women (or men) with the same weight but different body fat percentage, the one with more muscle and less fat burns more energy everyday than her (or his) fatter colleague. Over time this makes the person with more muscle content more likely to remain lean.

Muscle also plays a very active role in metabolism, particularly of glucose. Muscle takes up glucose from the blood and is the major store of glucose (as glycogen). The more muscle you have, and the more exercised those muscles are, the more efficient this process. This means that fit, strong people are far less likely to develop insulin resistance and type 2 diabetes.

***How to start strength training:*** Strength training can be done using weights, resistance bags, your own body weight or makeshift weights such as bags of rice. Lifting weights is undoubtedly one of the best ways to do it, so it is well worth considering joining a gym where a qualified instructor can design you an individualised program. Most gyms and leisure centres also run strength training group fitness classes which are an excellent and fun way to strength train under expert guidance.

***The lower body workout:*** Do 20 of exercise 1 and 2 to begin with, hold exercise 3 for the designated time, and aim to complete the sequence 2–3 times a week (and not on consecutive days). Once you can do this easily add a second set of 20 with a brief rest between sets. The speed is important and generally the slower you go the better – you have more control and it gives the muscle time to work properly recruiting more muscle fibres. Try counting 4 seconds to contract and 4 seconds to release.

Stand with your feet hip width apart and your arms outstretched at shoulder height. As if you are going to sit on a bench behind you, slowly sink your hips back keeping your chest 'proud' and arms level, until your thighs are almost parallel to the floor. Return, equally as slowly, to standing so that the muscles continue to work on the return movement.

### ***Lunge with upright row – Works legs, bottom & shoulders***

Keep a hold of the ends of the band and move one foot to the centre of the band. Step the other foot well back behind you, keeping your feet hip width apart. Maintain your weight between your two feet by keeping your back heel raised and your hips square. Lower your knee towards the floor until you have almost a right angle at each knee and the shoulder, hip and knee are aligned. At the same time pull your hands up towards your chin, leading with your elbows. Return slowly to the start position as before.

Come down onto your elbows and link your hands. Lift up onto your toes until your body is flat like a plank while pulling your navel towards your spine – think of narrowing your waist or pulling in your belt another notch. If this feels tough to start with, lower your knees to the floor and hold the 3/4 position. Hold for 30 seconds to start with and gradually increase the time until you can hold for 1–2 minutes.

**Dr Joanna McMillan Price** is a registered nutritionist and accredited practising dietitian with a PhD from the University of Sydney. She is also a trained fitness leader and has taught group exercise classes for over 15 years. She has written several books and is a co-author of *The Low GI Diet* and *The Low GI Diet Cookbook*.  
[www.joannamcmillanprice.com](http://www.joannamcmillanprice.com).

### **GI Symbol News with Dr Alan Barclay**

#### **Make reducing the overall GI of your diet one of your New Year resolutions.**

The easiest way to do this when shopping (in Australia and New Zealand) is to look for **the GI Symbol**. There are now approximately 150 different items carrying the GI Symbol in Australian and New Zealand supermarkets and grocery stores including breads; breakfast cereals; cracker biscuits; fresh and canned fruit, juice and fruit straps; dairy foods like milk, yoghurt and frozen dairy desserts; pasta, noodles and couscous; rice; snacks; and sweeteners.

#### ***7 tips for reducing the GI of your diet for breakfast, lunch and dinner and those snacks in between.***

1. Replace those high GI crunchy breakfast flakes that spike your blood glucose and insulin levels with smart carbs like natural muesli or traditional (not instant) porridge oats or one of the lower GI processed breakfast cereals that will trickle fuel into your engine.
2. Swap your bread. Choose a really grainy bread where you can actually see the grains, granary bread, stone-ground wholemeal bread, real sourdough bread, soy and linseed bread, pumpernickel, fruit loaf or bread made from chickpea or other legume based flours.
3. Make your starchy staples the low (or lower) GI ones. Look for the lower GI rices like Basmati, Doongara Clever Rice or Moolgiri medium grain rice, serve your pasta al dente, choose less processed foods such as and intact grains such as barley, buckwheat, bulgur, quinoa, whole kernel rye, or whole wheat kernels and opt for lower GI starchy vegetables like lower GI potatoes (Nicola or Almera), parsnip, orange fleshed sweet potato, or butternut pumpkin.
4. Learn to love legumes – home-cooked or canned. Add chickpeas to stir fries, red kidney beans to chilli, a 4-bean salad to that barbecue menu, and beans or lentils to a casserole or soup.
5. Develop the art of combining. Combine high GI carbs with low GI tricklers to achieve a moderate overall GI. Lentils with rice, rice with beans and chilli, tabbouli tucked into pita bread, baked beans on toast or piled on a jacket-baked potato for classic comfort food.
6. Tickle those tastebuds and slow stomach emptying – try vinaigrette (using vinegar or lemon juice) with salads, yoghurt with cereal, lemon juice on vegetables like asparagus, sourdough bread.
7. Go low GI when snacking. Grab fresh fruit, dried fruit and nut mix, low fat milk and yoghurt (or soy alternatives), fruit bread etc.

***What's our New Year's resolution?*** We aim to expand the range of foods carrying the GI Symbol throughout the world with a special focus on the European and North American markets. Significant investment in the development of new and innovative foods over the past couple of years will see the introduction of healthy low GI choices in a number of new categories in 2010.



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

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### **GI Update**

#### **GI Q&A with Prof Jennie Brand-Miller**

##### **Can you explain to me how low GI diets work for weight loss?**

The most important reason is likely to be the effect on day-long insulin levels – low GI foods result in lower levels of insulin over the course of the whole day. The hormone insulin is not only involved in regulating blood glucose levels, but also plays a key part in fat storage. High levels of insulin mean the body is forced to burn carbohydrate rather than fat. Thus, over the day, even if the total energy burnt is the same, the proportions of fat to carbohydrate are different. Oxidising carbohydrate won't really help you lose weight, but burning fat will.

Dr Emma Stevenson's research which we have reported on in *GI News* over the years has demonstrated over and over that, compared with healthy conventional meals, low GI meals were associated with greater fat oxidation during episodes of gentle exercise in overweight volunteers.

People who are overweight have been shown to have high glycogen (carbohydrate) stores that undergo major fluctuations during the day. This suggests that glycogen is

a more important source of fuel for them. If glycogen is being depleted and replenished on a regular basis (before and after each meal, for example), it is displacing fat from the engine. Each meal restores glycogen (especially if the food has a high GI value) and the cycle repeats itself. Carbohydrate 'balance', as it's called, is turning out to be one of the best predictors of future weight gain.

The benefits of a low GI diet for weight control go beyond appetite and fat burning. When you first begin a diet, your metabolic rate drops in response to the reduction in food intake, which makes weight loss slower and slower. Research shows your metabolic rate drops much less, however, on a low GI diet than a conventional diet. If your engine revs are higher, you'll not only lose weight faster, you'll also be much less likely to regain it.

### **New GI values with Fiona Atkinson**

#### **Blue Diamond Almond Breeze beverages**

The new values this month were tested by our colleagues in Toronto at Glycemic Index Laboratories. These unsweetened, non dairy beverages are low calories (and carbs) in a typical serving, lactose and casein free, contain no trans fats or cholesterol and are a good source of calcium and vitamin A. You can use enjoy them as a snack, on your breakfast cereal, in your cooking, for making smoothies or sauces or for adding to a cup of coffee.

#### **Almond Breeze® Original: GI 25**

Per 8 fl oz (240 ml cup) serving you'll get 40 cal (168 kJ), 1 g protein, 3 g fat, 2 g total carbs (includes 1 g fibre)

#### **Almond Breeze® Unsweetened Vanilla: GI 25**

Per 8 fl oz (240 ml cup) serving you'll get 40 cal (168 kJ), 1 g protein, 3 g fat, 2 g total carbs (includes 1 g fibre)

#### **Almond Breeze® Refrigerated Unsweetened Vanilla: GI 22**

Per 8 fl oz (240 ml cup) serving you'll get 40 cal (168 kJ), 1 g protein, 3 g fat, 2 g total carbs (includes 1 g fibre)

#### **Almond Breeze® Unsweetened Chocolate: GI 22**

Per 8 fl oz (240 ml cup) serving you'll get 45 cal (189 kJ), 2 g protein, 3.5 g fat, 3 g total carbs (includes 1 g fibre)

Raw almonds have a GI of 25. For more information, check out the Blue Diamond Growers website - [www.bluediamond.com](http://www.bluediamond.com) .