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GI News is published by the University of Sydney, School of Life and Environmental Sciences and the Charles Perkins Centre. Our goal is to help people choose the high-quality carbs that are digested at a rate that our bodies can comfortably accommodate and to share the latest scientific findings on food and diet with a particular focus on carbohydrates, dietary fibres, blood glucose and the glycemic index.

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FOOD FOR THOUGHT

SWEET TALK

Hi Alan. I've still got a bee in my bonnet about oranges only getting 4½ stars when you ran them through the Australian Health Star Rating system for May *GI News* despite their being packed with good stuff like vitamin C, fibre, potassium, folate and over 170 different types of phytochemicals that have antioxidant, anti-inflammatory, and anti-cancer effects. I find it hard to believe we have a star rating system that denies an all-natural whole food that comes straight off a tree and that's been nowhere near a food manufacturing plant the full five. Next, you'll tell me breast milk only gets 4½ stars. – Cheers, Philippa

Hi Philippa. I'm going to disappoint you. Breast milk doesn't get 4½ stars. It gets three. As Jennie wrote in "Old Nutrition, New Nutrition" (*GI News*, December 2014) "If breast milk were sold in the dairy compartment, it would have at least two red marks – one for saturated fat and one for sugars – human milk, along with the milk from donkeys and minks, has the highest sugar content (i.e. per cent lactose), of any mammalian milk." – Cheers, Alan.

Hi Alan. This is heading into a classic Monty Python script. Only three stars for the food that Mother Nature designed for our babies as a perfect nutritional package with all the proteins, fats, vitamins, and minerals they need to grow and thrive and fight infection because it contains lactose? – Cheers, Philippa

Hi Philippa. Well, it's the sugars problem (as it was with oranges), but this time there's also no dietary fibre to push the star numbers up. The nub of the problem is that while the real concern is about added sugars in our food supply, we currently can't separate added sugars from the sugars naturally present in a food or drink on food labels. So current star rating systems use the total sugars which are on the labels for their ratings, and bonus-points for fibre to adjust for less-refined carbohydrates.

Some definitions. "Added sugars" according to the World Health Organisation (WHO) are all the mono- and disaccharides added to foods by food manufacturers, cooks or consumers. "Free sugars" include all those added sugars, plus all the sugars naturally present in honey, syrups (e.g., agave, maple, rice), fruit juices and concentrates. "Total sugars" are the added sugars; plus all the sugars naturally present in honey, syrups, fruit juices and concentrates; plus the naturally occurring sugars in whole foods such as fruit, vegetables, grains, seeds, milk etc. Also, it's important to remember that Australia's health star rating system (like traffic lights) is actually meant for processed packaged foods not core foods – minimally processed fruits, vegetables, legumes, nuts and seeds. One solution is to assign 5 stars to all core foods. The ratings system here is currently being reviewed to see what needs to be done to align it better with existing dietary guidelines. Australia's need updating though of course – Cheers, Alan.

Hi Alan and Philippa. The algorithms that underpin traffic lights and rating stars are based on the *old* nutrition that has long passed its use-by date. Here are some reasons why.

- The energy content (calories/kilojoules) of a food is not alone the best way to judge a food – lentils and licorice have the same energy density.
- The fat content of food is not alone the best way to judge a food – nuts have more fat and are more energy dense than French fries.
- The sugars content is not alone the best way to judge a food – fruit is full of sugars.
- The sodium content is not alone the best way to judge a food – soft drinks are low in sodium.
- They ignore micronutrients – vitamins, most minerals (other than sodium) and phytochemicals.
- They ignore one important proven attribute of foods in the new nutrition – their glycemic load per serving. This factor is proven to influence appetite and the risk of developing diabetes.

Appetite matters. Appetite is what drives our energy intake. It is not possible to balance energy intake and energy expenditure by counting calories. Firstly, no one knows how many calories they expend each day. Even if you could, the calories on the food label are not precise enough. Secondly, mathematical modelling shows that a small but persistent excess of only 7 calories or 30 kilojoules per day over and above energy requirements for 10 years underlies the current epidemic of obesity. Here in Australia, I'd like to see a food label system that:

- Focused on the positive – not just the negative.
- Tied in with our dietary guidelines (which need updating).
- Rated foods according to their contribution to desirable macronutrient and micronutrient intakes.

- Used [Adam Drewnowski's Nutrient Rich Foods Index](#), which rates individual foods based on their overall nutritional value, as an essential component.
- Encouraged higher protein intake, particularly from plant sources like legumes.
- Distinguished effectively between naturally occurring and added sugars. – Cheers, Jennie

Read more:

- [Milk composition species table](#)

WHAT'S NEW?

WHO ADDED ALL THAT SUGAR TO MAPLE SYRUP?

Who knew that we could weave such a tangled web when we practice not to deceive, but to inform? Ted Kyle of ConscienHealth reports on Vermont maple producers and legislators protesting an FDA requirement to label all the sugar in maple syrup as added sugar.

Vermonters are ticked. It's time to implement the new Nutrition Facts label and they're afraid it will give their beloved maple syrup a black eye. The label calls out added sugar. And pure maple sugar is what their syrup is all about. Natural is good, right? But added sugar is bad. So, which will it be? All natural or loaded with added sugar? There's no doubt in the minds of Vermonters. Congressman Peter Welch summed it up: There are no added sugars. Maple is a pure product. Consumers want pure products. Nothing is more pure than maple syrup. That sounds simple. But the countervailing view is that this lovely syrup has only one purpose. For adding sweetness – in the form of maple sugar – to your food. It's 67% maple sugar. So, it's nothing but a source added sugar for your diet.

According to Welch, consumers think that added sugars are the bad stuff, like corn syrup, that big food companies add to unhealthy junk food. So, consumers might think something unnatural has been added to maple syrup if we start telling them it has added sugars. And by the way, honey producers aren't too happy with this situation, either. The American Honey Producers Association says: "Honey is a pure sugar with no need for added sugars. So, this will mislead the consumer." By this logic, pure cane sugar would have zero added sugars as well. A tangled web indeed.

Read more:

- [The Ultimate Guide to Sugars and Sweeteners](#)
- [Maple Syrup: Healthy or unhealthy?](#)
- [ConscienHealth](#)

THE GOLDILOCKS SOLUTION: TOO MUCH, TOO LITTLE, JUST RIGHT

There's considerable concern about the overall quality of our diet, especially the amount of "free sugars" (see Food for Thought for a definition) in the foods we are eating. This is a pretty technical paper, but it makes a useful point: when we go too high (over 25 per cent free sugars) or too low (under 5 per cent) we risk missing out on key nutrients. The researchers found for example, that those following a stringent less than 5% free sugars diet showed a drop in key micronutrients including folate and calcium. Peak intake for most micronutrients, report the researchers, was found in adults consuming between 5% and 15%. They also found that when "core food" intake (that's the basics such as minimally processed fruits, vegetables, legumes, nuts, seeds, and dairy foods) went down and

discretionary foods (that's treats) went up there was an increase in free sugars intake. No surprises there because that's how we define a discretionary food (a just-so story).

For his 2014 book, *The Ultimate Guide to Sugars and Sweeteners* (with Philippa Sandall and Claudia Shwide-Slavin), Alan Barclay put together a couple of diet plans to show what 5 per cent and 10 per cent added sugars look like in an overall healthy 2000-calories (8000 kilojoule) diet. In the nutritional analysis for these plans he includes the amount of added sugars and total sugars (that's free sugars plus the naturally occurring sugars in whole foods – fruit, vegetables, grains and seeds).

Read more:

- [Intake of free sugars and micronutrient dilution in Australian adults \(abstract\)](#)
- [What do 5 percent and 10 percent added sugars look like in an overall healthy 2000-calories \(8000 kilojoule\) diet](#) (reproduced with permission of the publisher of The Ultimate Guide to Sugars and Sweeteners, The Experiment Publishing Co)

JUST AS TASTY, BUT MORE FILLING

Thirty-two teenagers (average age 15) who volunteered for a randomized, crossover, controlled pilot feeding study rated the low 5% added sugar diet they were given to eat for one week as being just as tasty as the high 25% added sugar diet they tucked into for a second week. (The diets were calorie matched and there was a 4-week washout period in between.) They also reported that they found the low added sugar diet with its adequate fibre intake more filling compared with the high added sugar low fibre diet. Despite this, participants remained weight stable, and there was no difference in weight change between diet conditions.

This is just a small pilot study, but it does clearly suggest that if you have kids with hunger pangs and hollow legs, they won't mind if you cut back the snacks and foods with added sugars (and we would add added refined starches to this) and boost their fibre intake with the good high-quality carbs – whole fruit, veg, beans and grains.

- [Adolescents perceive a low added sugar adequate fibre diet to be more satiating and equally palatable compared to a high added sugar low fiber diet in a randomized-crossover design controlled feeding pilot trial](#)
- [What do 5 percent and 10 percent added sugars look like in an overall healthy 2000-calories \(8000 kilojoule\) diet](#) (reproduced with permission of the publisher of The Ultimate Guide to Sugars and Sweeteners)

CALM DOWN WITH A CUPPA

This small study aimed to find out if there was a difference drinking tea sweetened with sugar or sucralose or stevia (non-nutritive sweeteners) on people who were stressed. There was a difference. Having a cuppa sweetened with sugar had a calming effect on consumers with acute stress; a cuppa with a non-nutritive sweetener didn't. The researchers think the reason for the effect may not be sugar's taste, but its calories.

Read more:

- [Tea-induced calmness: Sugar-sweetened tea calms consumers exposed to acute stressor](#) (abstract)

RUN RODENT

Because there are biological similarities, research scientists find rats and mice valuable trial subjects. However, here at *GI News* we are wary of publishing the results of rodent studies because they should only be used to back-up and complement the results of human studies, not for scare-mongering. A rodent's carbohydrate requirements are very different to ours. In particular, they evolved to eat raw seeds, not ripe fruit. Here are two recent studies. We leave you to make up your own mind on their relevance.

#1 BURP While the sugars added to fizzy drinks are in the firing line, until now, no one thought to look at the added carbon dioxide gas. In this small study, the researchers show that rats downing fizzy drinks over a year gain weight at a faster rate than rats who drank flat soda or tap water. The weight gain was associated with increased production of the appetite hormone ghrelin, which is produced by both rodents and humans. In a parallel study, they also found that the ghrelin levels grew in 20 healthy young men drinking carbonated beverages compared to those who didn't.

As an aside, did you know rats can't burp. They can't vomit either, and they don't experience heartburn. Rats can't vomit for several related reasons. They have a powerful barrier between the stomach and the esophagus. They don't have the esophageal muscle strength to overcome and open this barrier by force, which is necessary for vomiting.

Read more:

- [Carbon dioxide in carbonated beverages induces ghrelin release and increased food consumption in male rats](#)

#2 GULP The findings of a University of Sydney study published in *Physiology and Behaviour*, that modelled an added sugars to diet beverage switch in rats suggested swapping to artificially sweetened beverages may help improve metabolic and cognitive impairments that result from too much added sugars. The study included two experiments designed to assess the effect on female rats of switching to either water or a non-nutritively sweetened saccharin-based solution following unlimited access to a sucrose-based sugar solution. Although the results can't be directly applied to humans the researchers suggest the study is important because it replicates the switch from sugar to non-nutritive sweetener, which is how sweeteners like saccharin are marketed. The authors also highlight a couple of study limitations:

- Saccharin is a non-nutritive sweetener commonly reported in animal studies to promote weight gain and development of diabetes, but it is not as commonly consumed by humans as other sweeteners such as aspartame, sucralose and stevia, which may have different effects on metabolism.
- Previous studies with male rats have not come up with similar results.

The study has other limitations. The amounts of sugar-sweetened beverages and saccharin were unrealistic because it was way higher than anything people consume. They were fed:

- Between 33–51% of energy from sugar-sweetened beverages for 4–8 weeks, which works out at 5–7 cans of regular sugar-sweetened soft drink a day over 10–20 years in human terms.

- Saccharin intake for the rats was an average of 136mg of saccharin per kg body weight in experiment 1, and 298mg per kg body weight in experiment 2. The Acceptable Daily Intake (ADI) of saccharin for humans is 5mg per kg body weight. So, the rats were fed between 27–59 times the ADI, or around 25 to 60 times more than is considered safe for human consumption.

Read more:

- [Metabolic and cognitive improvement from switching to saccharin or water following chronic consumption by female rats of 10% sucrose solution](#)

YOU CAN'T FOOL A BIRD BRAIN

Everything about hummingbirds is rapid. It takes only three quick licks to reject water when they expect nectar. The birds pull back their beaks, shake their heads, and spit out the tasteless liquid. They are not fooled by the sugar substitutes in diet sodas. Their preference for sweetness has long been plain, but scientists can now understand the complex biology behind their taste for sugar. In a paper in *Science*, the team showed how hummingbirds' ability to detect sweetness evolved from an ancestral savory taste receptor that is mostly tuned to flavors in amino acids. The research underscores how much remains to be learned about taste and other senses says Harvard's Stephen Liberles. "Sensory systems give us a window into the brain to define what we understand about the world around us," he said. "The taste system is arguably a really direct line to pleasure and aversion, reward and punishment, sweet and bitter. Understanding how neural circuits can encode these differentially gives us a window into other aspects of perception."

Read more:

- [Evolution of sweet taste perception in hummingbirds by transformation of the ancestral umami receptor](#)

PERSPECTIVES: DR ALAN BARCLAY

Juiced?

We have been juicing fruits for a long time. Here's a short summary. Wine is fermented grape juice – the fermentation process is a way of preserving the fruit– and it looks like we've been making it for about 8000 years. Archeologists have found that the people living at Gadachrili Gora and a nearby village 20 miles south of Tbilisi, Georgia, were the world's earliest known vintners—producing wine on a large scale as early as 6000BC. Now skip a few millenia. Lemonade became popular in the 1500s, and orange juice in the 1700s and we preserved them by adding sugar (sucrose) which in the right amount inhibits bacterial growth (a good thing). Louis Pasteur's pasteurization process (1864) preceded the development of fresh (unfermented) 100% fruit juices in 1868. In 1930, the first commercial juicing machine was invented and around this time electric refrigeration became affordable. Home juicing became popular in the USA in the 1970s, thanks to affordable home juicers.

Today, people enjoy 100% fruit juice worldwide and it's a nutritious choice as the analysis of commercial unsweetened orange juice shows. (And if you are wondering why orange juice rates five stars while a whole orange picked straight from the tree only rates 4½, it's because Australia's star rating system currently uses different algorithms for solid foods and for beverages)

100% orange juice	
★ ★ ★ ★ ★	
Glycemic index 42	
Gluten free	
Serving size – 1 cup (250ml) orange juice (262 g/9oz)	
Kilojoules	362
Calories	87
Protein	1.6g
Fats – Total	0.3g
--Saturated fat	0g
–Unsaturated fat	0g
–Cholesterol	0g
Saturated : unsaturated fat ratio	0.0
Carbohydrates – Total	19.5g
<i>Available</i>	18.6g
--Natural sugars	18.6g
–Natural starches	0g
–Added sugars	0g
–Added starches	0g
<i>Unavailable</i>	0.8g
–Dietary fibre	0.8g
Sodium	13mg
Potassium	394mg
Sodium : potassium ratio	0.03
Vitamin C	137mg
Folate	47mcg
Glycemic load	8
Diabetes exchange	1
Ingredients: Oranges	

The [American Dietary Guidelines](#) consider 1 cup (240ml) of 100% fruit juice as being equivalent to one serve of fruit, but they also recommend that at least half our recommended serves of fruit should come from whole fruit, which generally contains more dietary fibre and less calories.

What about the sugars? The carbohydrate in fruit and fruit juice is in the form of sugars (fructose, glucose and sucrose principally). Some people point out that fruit juices can provide nearly as much sugars as some sugar sweetened beverages, which nutrition epidemiological studies have associated with weight gain and risk of type 2 diabetes. Do 100% fruit juices pose the same risk? Fortunately, there is now a relatively large body of evidence that can help answer this important question.

[Auerbach and colleagues](#) investigated the association of 100% juice consumption with body mass index (BMI) in prospective cohort studies of children. The overall conclusion was that

while consumption of 100% fruit juice is associated with a small amount of weight gain in children ages 1 to 6 years, the amount is not clinically significant. (Controlling for total energy intake, they reported that one 180–240ml (6–8oz) serve of 100% fruit juice a day is associated with a 0.087 unit increase in BMI in children aged 1 to 6 years, but not in children aged 7 to 18 years.) Similarly, [systematic reviews of the evidence](#) in adults show no detrimental effects of consuming moderate amounts of 100% fruit juice.

[Murphy and colleagues](#) investigated the effect of 100% fruit juice on blood glucose and insulin levels in randomised controlled trials which included a range of people including those who were overweight/obese and/or had diabetes. They found that 100% fruit juice had no significant effect on fasting blood glucose, fasting blood insulin or HbA1c. The overall conclusion was that 100% fruit juices have a neutral effect on glycemic control, and they noted that these findings were consistent with findings from observational studies suggesting that consumption of 100% fruit juice is not associated with increased risk of developing type 2 diabetes.

Sugars (e.g., glucose, fructose and sucrose) and other fermentable carbohydrates (i.e. maltodextrins and starches), provide food for oral bacteria, which lower our plaque and salivary pH, and in turn promote tooth demineralization. This is the main reason why the World Health Organisation recommends we limit our consumption of free sugars to less than 10% of energy – 100% fruit juices are a source of free sugars. However, most of the studies that make up the evidence base for the WHO guideline are based on added sugars – not juices. So, what does the evidence say about 100% fruit juice?

A recent clinical trial by [Issa and colleagues](#) found that a range of solid and juiced fruits (e.g. apples, oranges, grapes and tomatoes) could contribute to tooth demineralisation, but there were no significant differences between solid and juiced foods. A review by [Touger-Decker and van Loveren](#) found that many factors in addition to free sugars affect the risk of tooth decay, including the form of food or fluid, the duration of exposure, nutrient composition, sequence of eating, salivary flow, presence of buffers, and your personal oral hygiene. In particular, they noted that polyphenols such as tannins in cocoa, coffee, tea, and many fruit juices may reduce the cariogenic potential of foods and drinks. In addition, in a series of experiments in young adults that included fruits and juices (e.g. apples/juice, dates, bananas, orange juice, raisins), [Edgar and colleagues](#) found that while juices had a higher acidic potential than whole fruits, they only moderately increased risk compared to sugar-sweetened beverages and confectionery, which conferred a high risk. In summary, 100% fruit juices are not as likely to cause tooth decay as sugar-sweetened beverages or confectionery.

So, overall, the evidence we currently have supports the American Dietary Guidelines allowance of up to 1 cup of 100% juice a day as part of a healthy balanced diet.



Alan Barclay PhD is a consultant [dietitian](#). He is author of *Reversing Diabetes* (Murdoch Books), and co-author of 30-plus scientific publications, *The Good Carbs Cookbook* (Murdoch Books), *Managing Type 2 Diabetes* (Hachette Australia) and *The Ultimate Guide to Sugars and Sweeteners* (The Experiment Publishing). Follow him on [Twitter](#) or check out his [website](#).

KEEPING IT GREEN – EATING FOR BODY AND PLANET

ORGANIC – IS IT THE GREENER CHOICE?

Organic foods are generally perceived to be healthier and better for the environment. But do they live up to this perception?

“Organic” generally refers to plant and animal products grown or raised without artificially made fertilisers, pesticides, growth regulators and other chemicals. Instead they may use natural fertilisers such as compost or manure and manage pests using techniques like crop rotation. The USDA (United States Department of Agriculture) regulates the term “organic” and defines standards that “integrate cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity.” In Australia, the government does not regulate the use of “organic”, so you have only the grower’s or manufacturer’s word for it. However, a “certified organic” product is regularly audited by an independent certifying body and must meet their particular requirements, some being stricter than others.

Do organically grown foods taste better? It depends. For example, exotic heirloom fruit and veg can be grown on smaller farms, and produce may be smaller or have lower moisture content therefore intensifying the flavour. The taste of organic meats may reflect a more diverse diet. However, there are other factors at play including the freshness of the produce, the soil and the climate. And a regular apple purchased fresh from the farm generally tastes better than an organic apple that has sat around for weeks in a cold store.

Are organic foods healthier? The jury is still out on this. For example, organic ingredients don’t add health benefits to highly processed foods. An organic cookie is still a “sometimes” food and typically just as high in calories/kilojoules as a regular cookie. For fresh whole foods, the picture is more complicated. [A recent scientific review](#) reports that while some organic crops may have slightly higher antioxidant levels the authors conclude that it’s not actually possible to quantify to what extent organic food consumption may affect human health as “there is virtually no published data from (1) long-term cohort studies focusing on chronic diseases (e.g. cardiovascular disease, diabetes, cancer, and neurodegenerative conditions) and (2) controlled human dietary intervention studies comparing effects of organic and conventional diets.”

So, if you want to eat better, buying organic is not the logical first step. The bigger picture is many of us eat too many highly processed “discretionary” foods for which the organic label is irrelevant. Most of us don’t eat enough vegetables, period. As organic veggies are generally more expensive, eating enough conventional vegetables (five-a-day) would have a greater nutritional impact than buying fewer organic vegetables.

As for food safety, all food, both organic and conventional, must meet food safety regulations of the country in which it is sold. For example, FSANZ (Food Standards Australia and New Zealand) regulates all foods sold in Australia to ensure any chemical contaminants are in amounts below the [maximum residue limit](#); this limit is set well below the level that could pose a safety risk to consumers.

Are organic farming methods more sustainable? While the answer to this question might seem instinctively “yes”, the scientific jury is still out. According to a recent [meta-analysis](#), organic agricultural systems use 15% less energy. This is possibly because organic systems don’t rely on synthetic fertilisers and pesticides that require a lot of energy to produce. On the other hand, they noted conventional foods use less land (less deforestation) and had a lesser impact on nearby water ecosystems (which means less algal bloom and aquatic dead zones). The same study found that both organic and conventional systems had similar greenhouse gas emissions and comparable impacts on soil acidity (an adverse effect that reduces plant growth).

There is no clear winner when it comes to sustainability and more research still needs to be done. Moreover, organic agriculture is less intensive and therefore is unable to support our population growth projected to be nine billion people by 2050. We can’t feed the world with organic food, but a hybrid approach might work; combining aspects of organic farming methods such as composting and crop rotation with conventional farming to reduce energy usage.

Should I spend extra on organic?

- **Safety:** All foods, organic or conventional, must meet food safety regulations.
- **Nutrition:** For a nutritional boost, just eat more veggies (conventional or organic).
- **Environment:** Organic and conventional methods both have their pros and cons. You would have a [greater impact](#) by reducing food waste and eating more plant-based protein options instead of excessive amounts of meat.
- **Get what you pay for:** choose certified organic foods to ensure they really are organic

Thanks to Rachel Ananin aka [TheSeasonalDietitian.com](https://www.theseasonaldietitian.com) for her assistance with this article.



In this series we explore how you can reduce your ecological impact through your food choices. We’ll help you do your bit for the environment, one mouthful at a time.

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GOOD CARBS FOOD FACTS A TO Z

PEAS

Eating the youngest, most tender peas shelled straight after picking is a truly sweet experience. Peas are easy to grow and in the right spot with appropriate TLC are generous

providers from late spring through the summer months. You keep picking, they keep providing. Most of us outsource the growing and shelling and buy frozen peas – we are busy; they are there. They are just as nourishing, so make the most of this family friendly veg as a side dish or rolled into the spotlight in soups, salads, stir-fries, fritters, frittatas, rice dishes and more. Look for bright pea green unwrinkled pods in season with no splits or blemished. Avoid prepacked trays of shelled peas. Snap frozen peas are a great standby to have in the freezer and are just as nutritious. Check the use-by or best-before date.

Peas are tricky when it comes to table manners. They can shoot all over the place like little green bullets. Being from British stock we were never allowed to do what seemed the sensible thing to do to a child, turn the fork over and scoop. We had to find a way to squash the peas on to the back of the fork which we eventually discovered we could do if “pre-loaded” with a little mashed potato or pumpkin. We are delighted to see that *Debretts* now tells us it is OK to “scoop with an upturned fork in more casual or solitary situations”.

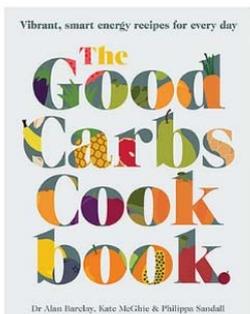
Good Carbs Food Facts	
Green peas	
★ ★ ★ ★ ★	
Glycemic index 42	
Gluten free	
Serving size – Half a cup (about 80 g or 2¾ oz) cooked fresh green peas	
Kilojoules	200
Calories	48
Protein	4g
Fats – Total	0g
Includes:	0g
--Saturated fat	0g
–Unsaturated fat	0g
–Cholesterol	
Saturated : unsaturated fat ratio	0.0
Carbohydrates – Total	9g
<i>Available</i>	5g
Includes:	2g
--Natural sugars	3g
–Natural starches	0g
–Added sugars	0g
–Added starches	
<i>Unavailable</i>	4g
Includes:	
–Dietary fibre	4g
Sodium	1mg
Potassium	112mg
Sodium : potassium ratio	0.001
Glycemic load	2
Diabetes exchange	1/3

Ingredients: Peas

Source: [The Good Carbs Cookbook](#)

IN THE GI NEWS KITCHEN

THE GOOD CARBS COOKBOOK



[The Good Carbs Cookbook \(by Alan Barclay, Kate McGhie and Philippa Sandall\) published by Murdoch Books](#)

helps you choose the best fruits, vegetables, beans, peas, lentils, seeds, nuts and grains and explains how to use them in 100 refreshingly nourishing recipes to enjoy every day, for breakfast, brunch, lunch, dinner and dessert. The recipes are easy to prepare, (mostly) quick to cook, long in flavour and full of sustaining goodness, so you feel fuller for longer. There is a nutritional analysis for each recipe and tips and helpful hints for the novice, nervous, curious or time-starved cook.

OMELETTE WITH GARDEN PEAS, FETA AND MINT

There are times when the yearning for an omelette is overwhelming, but for some reason, many cooks shy away from this gloriously simple light meal. Practice makes perfect, but don't be too fussed about how it looks when turned out. The refreshing, lively filling makes up for any imperfection in the looks department. Ring the filling changes as you fancy: cooked prawns, flaked cooked fish, diced fresh tomato and plenty of fresh chopped herbs are all delicious options. And if you are a family of smaller eaters, it will easily serve three people as a light meal with a slice of grainy bread and a garden salad with ripe-red tomatoes. Preparation time: 15 minutes • Cooking time: 8 minutes • Serves: 2

⅔ cup (100g/3½oz) cooked peas
1 tablespoon olive oil
1 teaspoon finely grated lemon zest
2 spring onions (scallions), finely sliced
6 eggs (60g/2oz eggs)
Salt flakes and freshly ground pepper
2 tablespoons butter
½ cup (60g/2oz) crumbled feta
3 tablespoons shredded mint leaves

Put the peas in a bowl with the oil, lemon zest, and spring onions. • Whisk the eggs with salt and pepper in a bowl. Heat the butter in a large non-stick pan over medium heat. When the butter foams and turns nut brown, add eggs and gently cook, without stirring for about 3 minutes or until large curds form. Reduce the heat to medium-low and using a broad spatula gently push the eggs around in the pan until they are almost set. Spoon the pea mixture, feta and mint over the top, and with the aid of the spatula, gently roll the omelette up and over the filling. This is easier if you hold the pan at a slight angle to assist the rolling. Cook for 1 minute more and then slide the omelette onto a plate. Divide into two and serve topped with extra mint and spring onion if you wish.

Per serve

2350kJ/560 calories; 28g protein; 47g fat (includes 21g saturated fat; saturated : unsaturated fat ratio 0.81); 6g available carbs (includes 2g sugars and 4g starches); 4g fibre; 740mg sodium; 310mg potassium; sodium : potassium ratio 2.4

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