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FOOD FOR THOUGHT

DOGS AND HEART HEALTH

Dog owners know how much warmth and comfort their canine companions add to their lives. A growing body of research shows they can do more than that.



The Harvard Medical School Health Report, *Get Healthy, Get a Dog*, discusses how having a dog can prompt you to be more active, help calm jagged nerves, and reduce feelings of isolation and loneliness. Just petting a dog can lower blood pressure and heart rate (while having a positive effect on the dog as well). A new Swedish epidemiological study in *Scientific Reports* finds it may cut your risk of death from cardiovascular disease.

Cardiovascular disease (CVD) is the leading cause of death worldwide, accounting for 45% of all deaths. Having diabetes means that you are more likely to develop heart disease and have a greater chance of a heart attack or a stroke. As well as a combination of healthy low GI eating, regular physical activity and appropriate medication (and quitting smoking, if you do), there's a growing body of evidence suggesting having a dog can be good for your heart.

Swedish scientists, who used national registries of more than 3.4 million Swedes aged 40 to 80, found that dog ownership had a dramatic effect on people who live alone, cutting the risk of death from cardiovascular disease by 36%. In households with more people under the same roof, dogs had less of a positive impact, but still lowered deaths from heart disease by 15%. (Just over 13% of those in the study had dogs.) "If you have a dog you neutralise the effects of living alone" said Tove Fall, professor of epidemiology at Uppsala University.

The researchers analysed the effects of different breeds and found that owners of dogs originally bred for hunting, such as terriers, retrievers, and scent hounds, had the lowest risk of cardiovascular disease. People who buy hunting dogs may be more physically active in the first place, because the dogs require so much exercise. The relationship may work both ways though, with livelier dogs effectively demanding that their owners do not slip into an overly-sedentary lifestyle.

“These kinds of epidemiological studies look for associations in large populations but do not provide answers on whether and how dogs could protect from cardiovascular disease. We know that dog owners in general have a higher level of physical activity, which could be one explanation to the observed results. Other explanations include an increased well-being and social contacts or effects of the dog on the bacterial microbiome in the owner. My impression is that this has to do with social support,” said Fall. One key question is whether dogs protect humans against heart disease by reducing blood pressure or through some other effect.



“It may be that dog owners like to be outdoors more, or are more organised, or more empathic,” Fall said. “There might also be differences between owners and non-owners already before buying a dog, which could have influenced our results, such as those people choosing to get a dog tending to be more active and of better health.”

A recent article in *The Conversation*, *Can pets create health in humans?* says: “A study known as the “blue zone” study has focused on factors affecting longevity for over a decade. Nine factors have been identified as increasing lifespan in the communities studied, and many of these factors are increased by pets.” They include natural everyday movement, having a sense of purpose, regular destressing activities, belonging and commitment.

The bottom line from Harvard Health: Don't add a dog to your life if you're not ready or able to take care of one, and prepared to make sure it gets enough exercise. The potential benefits for your heart health are a plus.

Read more:

- [Dog ownership and the risk of cardiovascular disease and death – a nationwide cohort study](#), (Mwenya Mubanga, Liisa Byberg, Christoph Nowak, Agneta Egenvall, Patrik K Magnusson, Erik Ingelsson, and Tove Fall, Uppsala University)
- [Four ways having a pet increases your lifespan](#) (The Conversation)
- [Get Healthy, Get a Dog](#) (Harvard Medical School Health Report)

WHAT'S NEW?

MISTAKEN BELIEFS ABOUT PET NUTRITION AND OBESITY

- Obesity in pets is at epidemic proportions.

- Obesity and overweight are an important health issue for more than half of our furry friends.



Obesity continues to be the greatest health threat to dogs and cats. It is a disease that kills millions of pets prematurely, can cause complications in almost every system in the body with conditions ranging from diabetes to osteoarthritis, creates immeasurable pain and suffering, and costs pet owners tens of millions of dollars in avoidable medical costs.

“Pet owners and vets both agree that good nutrition can extend a pet’s life. But they differ sharply on what constitutes good nutrition. Pet owners are far more likely to think corn and other grains are problematic” writes Ted Kyle in ConscienHealth. “Many think that food labelled organic and raw diets are better. And yet, none of this is supported by good evidence. In fact, no standards exist for pet foods that claim to be organic. Or “holistic”. Or for “treats”, (the pet industry’s fastest growing segment).”

All the little extras that your dog gets everyday can add up to a lot of extra calories and unbalance the diet if you’re not careful say the veterinarians at Tufts who recommend no more than 10% of calories come from foods that are not your dog’s main pet food. Experienced dog owners tend to use them only as a training tool when teaching a dog to walk on a lead, or sit etc. – a reward for good behaviour and carrying out a command.

A report in Vet Record finds that most commercially available dog treats often exceed the recommended daily energy allowance for treats. Researchers led by Giada Morelli at the University of Padua, compared the nutrient composition of different categories of treats to see if the daily intake recommendations on the label were in accordance with WSAVA guidelines. They analysed 32 popular dog treats available in pet shops and supermarkets (five biscuits, ten tender treats, three meat-based strips, five rawhides [dry bovine skin], twelve chewable sticks and six dental care sticks).

Three out of four treats contained between four to nine ingredients, and the ingredients were not precisely described. For example, biscuits and dental sticks had ‘cereals’ listed as the first ingredient, while tenders, meat strips, rawhides and chewable sticks had ‘meat and animal derivatives’ listed first. Almost half mentioned ‘sugars’ on the label’s ingredient list and all contained varying amounts of minerals. The most calorically dense treats were biscuits, whereas the least calorically dense were dental sticks. When caloric density was expressed as kcal/treat, rawhides were the most energy-dense products, followed by chewable sticks and dental sticks.

Read more:

- [ConscienHealth](#) (Mistaken Beliefs about Pet Nutrition and Obesity)

- [Petfoodology, Clinical Nutrition Services, Cummings Veterinary Medical Center, Tufts University](#)
- [Study of ingredients and nutrient composition of commercially available treats for dogs](#) (Vet Record)

WEIGHT LOSS FOR DOGS

Researchers from the University of Liverpool's Small Animal Teaching Hospital and Royal Canin have recently completed the largest ever international weight loss trial in dogs, involving 340 veterinary practices in 27 countries across the world. All dogs received a specially-formulated high-protein high-fibre weight loss diet for a period of a three months, and the amount of weight loss was determined. In addition, owners were asked to score levels of activity, quality of life, and food-seeking behaviour throughout the trial.

The majority of dogs enrolled in the study lost weight, with the average being 11% of their starting body weight. However, differences were noted between intact and neutered dogs, with neutered dogs losing less on average. Owners also reported improvements in activity and quality of life during the study whilst, despite being on a diet, their food-seeking behaviour became less pronounced.

“While the short-term duration of the study meant that many dogs did not reach their target weight, the fact that owners observed improved activity and quality of life suggests real benefits to wellbeing,” said Professor Alex German. A spokesperson for Royal Canin added: “In addition to improvements in quality of life and activity, owners believed that their dogs begged less as the study progressed, findings that can hopefully assure pet owners that returning their pet to a healthy body condition is beneficial and worthwhile.”

Read more:

- [Success of a weight loss plan for overweight dogs: The results of an international weight loss study](#)

REIMAGINING OBESITY IN 2018

The recent *JAMA* theme issue on obesity includes a range of articles on its prevention and management. Edward Livingston notes in an accompanying editorial that: “The approach to the prevention and treatment of obesity needs to be reimagined. The relentless increase in the rate of obesity suggests that the strategies used to date for prevention are simply not working ... From a population perspective, the increase in obesity over the past 4 decades has coincided with reductions in home cooking, greater reliance on preparing meals from packaged foods, the rise of fast foods and eating in restaurants, and a reduction in physical activity. There are excess calories in almost everything people eat in the modern era. Because of this, selecting one particular food type, like SSBs [sugar sweetened beverages], for targeted reductions is not likely to influence obesity at the population level. Rather, there is a need to consider the entire food supply and gradually encourage people to be more aware of how many calories they ingest from all sources and encourage them to select foods resulting in fewer calories eaten on a daily basis. Perhaps tax policy could be used to encourage these behaviors, with taxes based on the calorie content of foods. Revenue generated from these taxes could be used to subsidize healthy foods to make them more affordable.”

Read more:

- [Reimagining Obesity In 2018](#)

WHAT'S THE DIFFERENCE OF HIGH AND LOW GI DIETS (IN MICE AND RATS)?

A systematic review and meta-analysis in *Nutrients* shows that male mice and rats fed high GI diets increased their body weight, body adiposity, and fasting insulin levels compared to those on low GI diets. While slowing carbohydrate digestion and absorption might be key to beneficial health effects, the low GI diets were also typically high in fibre including resistant starch which may exert mechanisms on metabolism independent of effects on postprandial glycaemia. However, the authors were not able to analyse the metabolic effect of dietary fibre as fibre content was typically not quantified in the original reporting articles, with only two papers specifying fibre content. What about female mice and rats? "There are too few studies in female animals to be confident of effects," report the authors calling for future experiments to include females given that the maternal nutritional environment is critical for the development of chronic diseases later in life.

Read more:

- [Metabolic Effects of High Glycaemic Index Diets: A Systematic Review and Meta-Analysis of Feeding Studies in Mice and Rats](#)

JOIN THE GI NEWS FACEBOOK COMMUNITY

We're excited to announce the launch of our Facebook Page where we will be posting GI News as well as additional content including the latest scientific findings on dietary fibre and carbs, blood glucose and the glycemic index. We'd love for you to like us, and get involved in the conversation and share it with your friends. Our goal is to help as many people as possible choose the high-quality carbs that are digested at a rate that our bodies can comfortably accommodate. Like us on Facebook [here](#).

PERSPECTIVES: DR ALAN BARCLAY

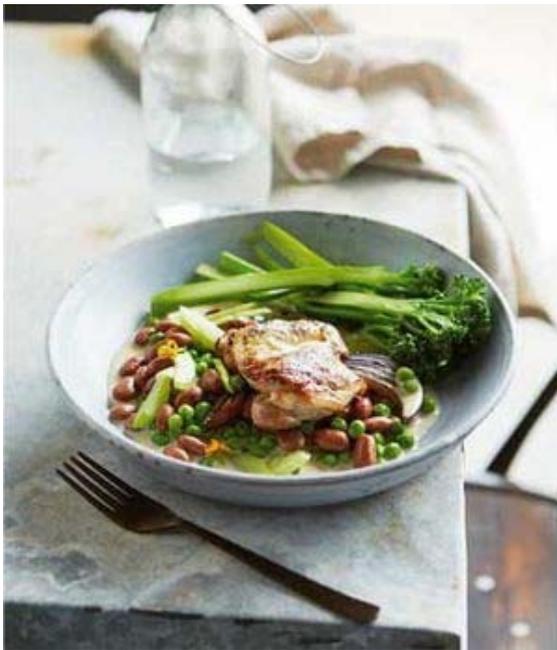
DO HIGH CARB DIETS INCREASE THE RISK OF DIABETES?

High carbohydrate diets, and as a consequence foods and drinks high in carbohydrate, are the current dietary villains. Book store shelves are lined with the latest low-carb fad diet books. Similarly, our supermarket shelves are becoming increasingly stocked with food and drinks that proudly declare that they are low, or at least lower, in carbohydrate, on their food labels and associated marketing materials. Fad diets are great for business.

The theory behind the fad is that consumption of carbohydrate (starches and sugars) increases blood glucose and insulin levels, ultimately increasing insulin resistance, and therefore making it harder for our bodies to utilise fat (from our diets as well as what's stored in our fat cells). Consequently, they make us get fatter. Because carbohydrate has the most profound effect on blood glucose and insulin levels, many people also think that reducing carbohydrate consumption may correspondingly reduce the risk of developing type 2 diabetes. However, as explained previously in [GI News](#), proteins in food can also increase insulin secretion and fats can increase insulin requirements by increasing insulin resistance. Unfortunately, both foods and human physiology are much more complicated than what is portrayed in the latest fad diets.

Excess weight – particularly carried around the middle (central obesity) – is a well-established risk factor for type 2 diabetes, and randomised controlled trials conducted around the globe have proven conclusively that losing at least 7% of initial body weight will prevent its development in people with pre-diabetes (elevated fasting blood glucose or impaired glucose tolerance).

One of the best examples of this can be found in the Diabetes Prevention Program, which was a large (more than 3000 people), multi-centre randomised controlled clinical trial, which commenced in the USA in the mid-1990s. Participants were over 25, had a BMI over 24 kg/m², and had pre-diabetes. They were randomly assigned to one of three groups: (1) placebo; (2) metformin; or (3) intense lifestyle.



People assigned to the intense lifestyle group were encouraged to achieve and maintain over 7% weight loss (based on their initial body weight) and were counselled to follow a reduced-energy (calorie/kilojoule), low-fat (also low in saturated fat) diet and to engage in more than 150 minutes of moderate-intensity physical activity each week. After an average of 2 years and 9 months, people in the lifestyle group had a 58% (3 out of 5) decrease in risk of developing type 2 diabetes, and due to these outstanding results, the trial was discontinued. Careful analysis of the data demonstrated that weight loss through reduced energy intake and increased physical activity was the main driver of their reduced diabetes risk.

Participants' dietary intake was estimated at the beginning of the study (baseline) and 1 year later using a validated food frequency questionnaire. At baseline, body weight was inversely associated with total carbohydrate consumption and positively associated with total and saturated fat consumption. In other words, diets higher in total and saturated fat and lower in carbohydrate were associated with increased body weight. Similarly, weight loss at 1 year was strongly associated with increased carbohydrate consumption – in particular from foods that were naturally high in dietary fibre like fruits, vegetables and legumes. Weight loss was also associated with decreases in total and saturated fat consumption.

There are several potential reasons why increasing carbohydrate from fruits, vegetables and legumes are associated with weight loss:

- High carbohydrate and high fibre foods generally have a lower energy density (Calories or kilojoules per gram of food), but are very filling.
- The dietary fibres stimulate the production of short-chain fatty acids in the colon, which may alter energy metabolism in our liver, muscles and fat tissues.

- Soluble dietary fibres from these foods slow down the passage of the carbohydrate from the stomach and intestine and slow their absorption into the blood.
- The carbohydrate and fibre provide important fuel for the microbiome, which in turn effects energy balance.

The authors overall conclusion was: “Given the widespread public perception that carbohydrates are detrimental in increasing diabetes risk and the increasing prominence of low-carbohydrate diets for weight loss, the current findings are critical to the development of evidence-based recommendations for optimal dietary approaches to prevent diabetes.”

Based on the best available evidence, dietary patterns that encourage the regular consumption of quality carbohydrates do not increase the risk of developing type 2 diabetes. Quite the contrary.

Read more:

- [A High-Carbohydrate, High-Fiber, Low-Fat Diet Results in Weight Loss among Adults at High Risk of Type 2 Diabetes](#)
- [Prevention or Delay of Type 2 Diabetes - Standards of Medical Care in Diabetes—2018](#)



Alan Barclay PhD is a consultant [dietitian](#). He worked for Diabetes Australia (NSW) 1998–2014. He is co-author of over 30 scientific publications, and author/co-author of *The Good Carbs Cookbook* and *Reversing Diabetes* (Murdoch Books), *The Low GI Diet: Managing Type 2 Diabetes* (Hachette Australia) and *The Ultimate Guide to Sugars and Sweeteners* (The Experiment Publishing, New York).

Contact: You can follow him on [Twitter](#).

KEEPING IT GREEN – EATING FOR BODY AND PLANET

WASTE NOT

According to the FAO, one-third of the food grown worldwide is wasted. That’s enough to feed all the hungry people in the world and leave leftovers. It also worsens our carbon footprint because we are wasting the water, fertiliser and energy used to produce food we throw away. Each one of us can make a difference (and save money – Australians throw away AUD\$3800 worth of food a year). Here are our favourite food and money saving tips.



Eat the skin You might not be game enough to eat furry kiwi skin, but where possible eat the skin from your fruits and vegetables. Not only does it waste less, but often the brightly coloured skins from fruits like apples are a concentrated source of antioxidants and fibre. Off-cuts like carrot peels, onion and tomato tops, herb stalks and celery leaves can be saved in a sealed bag in the freezer and then used later along with a chicken carcass to make homemade stock.

Keep it fresh The way that you store foods can keep them fresh for an extra few days, or weeks. Store most fruits (not bananas) and vegetables in the fridge to keep them fresh. For

fruits that ripen after picking, such as stone fruits, bring them out of the fridge to the fruit bowl a few at a time to ripen. Having them on display also encourages people to eat them. Keep leafy greens wrapped in paper towels inside bags or containers in the fridge to keep them crisp, and the slime at bay. Herbs can even be kept longer with their 'feet' in a glass or jar of water topped with a plastic bag. Wash fruits and vegetables just before you eat them, not before you store – moisture attracts mould. Freeze raw meats within a few days so you don't forget them in the back of the fridge. Freeze loaves of sliced bread to keep them fresh, and then take slices out as you need them. Store dry goods such as breakfast cereal in airtight containers (or better yet, upcycled old jars) to help keep them fresh.

Don't bin it, use it When your food is looking past its prime, don't automatically bin it, be creative and use it. Toast old bread to make croutons for soup or toss them through your salad. Freeze over-ripe fruits such as bananas and berries and use them to make smoothies. Make a quick berry jam by adding the mushy fruit and sugar in a jar and microwave until it becomes jam-like, then put it in the fridge to enjoy with yoghurt, porridge, ice cream or on wholegrain toast. Cut the bruised bits out of fruits and stew them and serve with yoghurt or custard. Rescue limp veggies out of your fridge and use them to make soups, stews, pizza toppings or homemade veggie juice. Get creative with your leftover cooked meats and use them to make toasted sandwiches, quesadillas, nachos, frittata, omelette, salads, soups, pies and casseroles.

Compost if you can Eggshells, coffee grounds, tea leaves, fruit peels (not citrus) and vegetable scraps can all be composted. This may come as a surprise, but fruit and vegetable scraps decompose differently in landfill than in a compost bin. Unlike compost, landfill is lacking in oxygen therefore the organic scraps produce methane gas – a greenhouse gas 26 times stronger as they break down than carbon dioxide.

- Worm farms are also an excellent way to dispose of food scraps and create valuable compost for the garden. For apartment dwellers,
- Bokashi bins are a clever way to get rid of food scraps if you don't have a garden.

Keeping it green, in a nutshell

- Save money and reduce your environmental footprint by wasting less food.
- To keep your food fresh, store it correctly: fresh foods in the fridge or freezer and dry goods in airtight containers.
- To minimise waste and maximise nutrition, use all your fruits and vegetable, and compost any scraps.
- Rescue food past their prime and cook them up into new dishes
- Transform your leftovers into a new meal.

Read more:

- [SAVE FOOD: Global Initiative on Food Loss and Waste Reduction](#)

Thanks to Rachel Ananin aka [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.

Nicole Senior is an Accredited Nutritionist, author, consultant, cook, food enthusiast and mother who strives to make sense of nutrition science and delights in making healthy food delicious.

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GOOD CARBS FOOD FACTS A TO Z

CHIA SEEDS



[Foodwatch](#) nutritionist Catherine Saxelby brought chia seeds (*Salvia hispanica*) to our attention in 2009. In August *GI News* that year she wrote that they: “look like tiny sesame seeds and can be black, white or grey. Like all seeds, they are high in fat especially the good fats... They are one of the richest sources of the plant form of omega-3 called ALA. They are also big on fibre. In fact, at 37% they are an outstanding source of fibre, in particular of

soluble fibre. They have the ability to absorb a high volume of liquid and become thick and gelatinous, thanks to some mucilages ... They contain 15% protein – as much as from wheat – and a variety of vitamins, minerals and trace elements including folate, phosphorus, iron, manganese, copper and potassium. Like almonds and sesame seeds, they have a surprisingly high content of calcium, usually found in dairy foods, but how well this is absorbed is debatable.”

It's easy to add them to your daily diet.

- Sprinkle them on yoghurt, cereal, oatmeal, muesli, granola and salads.
- Stir them into dressings. The seeds don't form a gel in oil-based foods.
- Blend into a morning smoothie.

A recent study by GI Labs Director of Research, Dr Alexandra Jenkins, and the research team at St. Michael's Hospital found salba-chia was effective in promoting weight loss and improving obesity-related risk factors in overweight and obese people with type 2 diabetes. “Lately, there has been a lot of research interest in satiety,” says Dr Jenkins. “Acute satiety studies can be useful in selecting foods and ingredients that cause feelings of fullness and highlighting which will be best suited for weight loss studies. Weight loss studies, which typically last 6 months–1 year, can demonstrate concretely that a product promotes feelings of fullness and result in lasting weight loss. Long term studies such as these are powerful because they allow researchers to investigate the effect of these products not only on body weight, but also detect whether there are other, additional, health benefits of incorporating the product into the diet.”

Good Carbs Food Facts
★ ★ ★ ★ ★
Glycemic index (Not relevant)



Glycemic index (Not relevant)

Gluten free	
Serving size	28.4g (1oz)
Kilojoules	323
Calories	138
Protein	4.7g
Fats – Total	8.7g
--Saturated fat	1g
–Unsaturated fat	7.4g
–Cholesterol	0g
Saturated : unsaturated fat ratio	0 : 0
Carbohydrates	12g
<i>Available</i>	2g
--Natural sugars	0g
–Natural starches	2g
–Added sugars	0g
–Added starches	0g
<i>Unavailable</i>	
–Dietary fibre	10g
Sodium	5mg
Potassium	115mg
Sodium : potassium ratio	0 : 0
Glycemic load	-
Diabetes exchange	0
Ingredients: Chia seeds	

Source: [USDA](#) (figures rounded)

IN THE GI NEWS KITCHEN

STICKS, SEEDS, PODS & LEAVES



Kate contributed the recipes to Ian Hemphill's best-selling *Spice and Herb Bible*. You will find more of her recipes on the [Herbies spices website](#). Or you can follow her on Instagram ([@herbieskitchen](#)).

Kate uses Herbies spices and blends in her cooking, but you can substitute with what you have on hand in your pantry.

APPLE & ALMOND OVERNIGHT OATS WITH CHIA SEEDS

Based on a bircher muesli recipe, these oats are a delicious, ready-made breakfast to kickstart the day. *Herbie's Fragrant Sweet Spices* blend contains coriander seed, cassia, cinnamon quills, nutmeg, allspice, ginger, poppy seeds, cloves, cardamom and rose petals. Quick steel cut oats (Uncle Toby's) have a low GI (53).

- Prep time: 10 mins
- Refrigerate: 12 hours (overnight)
- Serves: 6



2 cups quick steel-cut oats
 ¼ cup white chia seeds
 1½ cups cloudy apple juice
 2 cups reduced fat milk (or almond milk)
 1 granny smith apple, grated
 1 tsp Herbies Fragrant Sweet Spices

Topping
 1 granny smith apple, cut into matchsticks
 ½ cup slivered almonds
 ½ cup flaked coconut
 Honey (optional)
 Plain Greek yoghurt

Combine the oats, chia seeds, apple juice, milk, grated apple and spices in a bowl and mix well. • Place in an airtight container and refrigerate overnight. • Serve topped with apple matchsticks, almonds and coconut, a drizzle of honey if using and a dollop of yoghurt.

Per serve (with milk)

1395kJ/335 calories; 11g protein; 16g fat (includes 4g saturated fat; saturated : unsaturated fat ratio 0.5); 32g available carbs (includes 16g sugars and 16g starches); 8g fibre; 63mg sodium; 504mg potassium; sodium : potassium ratio 0.13

CHRISSEY FREER'S FOOD WITH ADDED LIFE



As a qualified nutritionist, Chrissy's philosophy is simple: limit the amount of processed food in your diet and focus on whole foods. "By returning to eating whole foods, that is foods in their most natural state, we allow our bodies to benefit from all the available nutrients that food can provide." Steer clear of food fads and miracle cures, if it sounds too good to be true then it probably is!

CHIA-CRUSTED SALMON WITH STIR-FRIED ASIAN GREENS & TAMARI DRESSING

Chia seeds are a great alternative to breadcrumb crusts (and are gluten free). Combining them with and salmon ensures this meal is packed with essential fatty acids. It's also packed with the goodness of Asian greens. Stir frying or lightly steaming these greens is the best way to preserve their nutrients and flavour. Prep: 10 minutes • Cook 10 • Serves 4

2 tbsp white chia seeds
2 tbsp black chia seeds
4 x 150g (5oz) skinless salmon fillets
2 bunches choy sum, washed and trimmed
2 tbsp sunflower oil
3cm (1½in) piece ginger, peeled and julienned
2 garlic cloves, thinly sliced
Tamari Dressing
2 tbsp oyster sauce
2 tbsp tamari
1 tbsp Chinese rice wine
1 tsp caster sugar



Combine white and black chia seeds on a plate. Press each salmon fillet in the chia seeds to evenly coat one side, then set aside. • Remove the stems from the choy sum, cut in half if long and reserve. To make the tamari dressing, put all the ingredients in a small bowl and stir to dissolve the sugar. • Heat 1 tablespoon of the oil in a large non-stick frying pan over high heat. Cook the salmon, chia side down, for 2–3 minutes or until golden. Turn and cook for a further 2 minutes (for medium), or until cooked to your liking. Set aside and keep warm. • Meanwhile, heat the remaining oil in a large wok or frying pan over high heat. Add the ginger and garlic and stir fry for 30 seconds. Add the choy sum stems and stir fry for 1–2 minutes, then add the choy sum leaves and stir fry for 1 minute more or until almost wilted. Add half the dressing and toss to combine. • To serve, divide the choy sum between serving plates, top each with a piece of salmon and drizzle over a little of the remaining dressing. • Serve with steamed noodles or rice.

Per serve (without rice or noodles)

1919kJ/457 calories; 38g protein; 30g fat (includes 5g saturated fat; saturated : unsaturated fat ratio 0.56); 5g available carbs (includes 5g sugars and 0g starches); 4g fibre; 560mg sodium; 630mg potassium; sodium : potassium ratio 0.89

INDIAN SCRAMBLED EGGS

Delicious for breakfast or brunch, spicy scrambled eggs with mushrooms makes a tasty light meal any time of day. Portabella mushrooms (sometimes spelled Portobello) are larger than the regular white mushroom with an almost meaty texture and the perfect partner topping scrambled eggs on low GI Burgen toast. As dietitian Glenn Cardwell reminded us in [GI News](#), “mushroom eaters get many health benefits (one serve provides more than 20% of our daily needs of the essential nutrients riboflavin, niacin, pantothenic acid, biotin, copper and selenium)”. Recipe courtesy Total Wellbeing Diet’s new [Protein Balance program](#). Prep 5 mins • Cook 10 mins • Serves 1

1 tsp olive oil
2 Portabella mushrooms, sliced
(60g/2oz)
2 garlic cloves, sliced (optional)
cooking oil spray
2 x 60g/2oz eggs
¼ cup milk
1 tsp turmeric
½ teaspoon cumin seeds
25g (¾oz) cheddar cheese
1 tbsp coriander leaves
1 slice low GI Burgen bread,
toasted



Heat olive oil in a small frypan over medium-high heat. Cook mushrooms and garlic for 2–3 minutes or until golden. Set aside. •Whisk together eggs and milk in a jug. •Heat a small frypan over medium heat and spray with cooking oil. Add turmeric and cumin seeds and toast for 1 minute or until fragrant. Pour in egg mixture and grate over cheese. Once eggs are set around the edges, begin to fold egg mixture over itself until almost cooked. • Serve scrambled eggs and mushrooms on toast topped with coriander leaves.

Per serve

1884kJ/451 calories; 33g protein; 26g fat (includes 9g saturated fat; saturated : unsaturated fat ratio 0 : 53); 14g available carbs (includes 5g sugars and 9g starches); 4g fibre; 464mg sodium

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