



Cardiometabolic food guide

How to reduce cardiovascular and metabolic disease naturally

Who is this food plan designed for?

The Cardiometabolic Food Plan is designed for the following individuals:

- Those at risk for heart disease, also called cardiovascular disease (CVD)
- Those at risk for metabolic syndrome, type 2 diabetes, or both
- Those with CVD (e.g., high blood pressure, high cholesterol, and elevated blood fats)
- Those with metabolic syndrome (e.g., elevated blood sugar, increased waist size)
- Those with type 2 diabetes

Fortunately, diet and lifestyle changes are very effective in preventing and treating all of these conditions.





Some people may question why the same food plan is used to treat both cardiovascular and metabolic diseases. While they may seem to be different types of conditions, cardiovascular and metabolic diseases share similar causes, including inflammation, insulin resistance, and stress.

This food plan is called "cardiometabolic" because it addresses both disease states. It allows people to use food to treat the common underlying causes of cardiovascular and metabolic diseases.



Cardiometabolic eating plan

This food plan was constructed with the input of a team of physicians, nutrition professionals, and evidence from scientific studies. This comprehensive guide explains what makes this food plan ideal for those with cardiometabolic health conditions and also provides answers to common questions.

The seven guiding principles to cardiometabolic eating are:

7. EAT THE RAINBOW

Plant ("Phyto") nutrients are what give plant foods their rich colour and contain thousands of compounds that communicate with our cells to help them function. Eating a diverse range of plant based foods can have dramatic effects on the body - even in small increased amounts. Eat all the colours - red, orange, yellow, white, tan, green, blue and purple,

6. LOW IN SIMPLE SUGARS

Added sugar triggers many negative changes in the body and lays the groundwork to change the gut microbiota in a way that increases intestinal permeability, increasing inflammation. It can also contribute to overeating and obesity. Natural and artificial sweeteners in processed foods should be heavily limited or avoided.

5. MAKE IT FIBRE RICH

People living in a Western country who eat mostly processed foods are eating only 30% of the fibre their body needs for optimum function. Fibre helps the body feel full. A mix of insoluble and soluble fibre helps clean the digestive tract, improves transit time and traps toxins and cholesterol as well as providing food for good gut bacteria ensuring a balanced and healthy micro-biome.

1. MODIFIED MEDITERRANEAN APPROACH

The traditional Mediterranean diet, comprising whole foods such as fruits, vegetables, whole grains, nuts, legumes, dairy, extra virgin olive oil, spices, modest amounts of poultry and fish and low amounts of red meat. It is the combination of all these foods, rather than one of these, that is responsible for the health benefits of eating this way..

2. LOW GLYCEMIC LOAD

The goal of the Cardiometabolic Food Plan is to eat low-glycemic foods so that only small fluctuations in blood sugar and insulin levels are produced.

Foods containing refined sugars and processed grains are considered to be high glycemic, because they lead to sharp increases in blood sugar levels Many vegetables and fruits are low glycemic. Eating suggested portions of low and moderate glycemic foods helps to stabilise blood sugar throughout the day. When blood sugar is balanced, health is better overall.

3. BALANCED BLOOD SUGAR

The average meal should aim to provide up to four hours of energy before feeling the need to eat again. A balanced meal will result in feeling satisfied, clear-headed, focused, and energised.

4.EAT QUALITY FATS

Balancing your fat intake is a key factor in minimizing inflammation in the body. When it comes to fats, this plan: (1) eliminates trans fats (found in processed foods); (2) decrease intake of saturated fats and omega-6 fats from animal sources; and (3) increase intake of omega-3-rich fats from fish and plant sources. Quality sources of anti-inflammatory fats are sourced from, fish, leafy greens, nuts, avocado oil, extra virgin olive oil and seeds.



Therapeutic foods

All the foods on this plan are encouraged unless there is a known allergy or sensitivity to a specific food. However the foods below are known as Therapeutic Foods because of their benefits for heart disease, metabolic syndrome, and type 2 diabetes.

Avocado: ideal food for heart health as it contains a considerable amount of fibre, healthy monounsaturated fat, and potassium

Extra virgin olive oil: People with heart disease who incorporate more EVOO in their diet experience improved blood vessel health and reduced inflammation. When choosing olive oil, "extra virgin" is important as it contains more polyphenols and antioxidants.

Olives: there are several healthful compounds in olives. One compound - hydroxytyrosol, may prevent heart disease by reducing plaque build up and hardening of the arteries. It may also prevent damage of LDL-cholesterol

Ground flaxseed: one of the richest plant sources of anti-inflammatory omega-3 fats, ground flaxseed meal is an excellent source of fibre and the best known food source of lignans. Lignans are antioxidants and contain phytoestrogens - both help to prevent heart disease and insulin resistance.

Nuts: (especially walnuts and almonds) contain healthy fats along with phytochemicals like plant sterols (plant compounds that lower cholesterol), polyphenols, antioxidants, and fibre.

Organic & fermented soy products: (miso , tofu, tempeh) contain polyunsaturated fat, fibre, vitamins, minerals, and isoflavones, all of which make them an ideal food for heart health.

Fish: (salmon, herring, sardines) 1 to 2 servings per week of oily fish, such as wild salmon, herring, or sardines, may reduce a person's risk of heartrelated death by up to 36%.

Leafy greens: (celery, chinese cabbage, endive, fennel, kohlrabi, leek, lettuce, parsley, red beets, spinach, and arugula) One serving of a high-nitrate vegetable, like spinach, results in more nitric oxide production than what is naturally produced, leafy greens are also a good source of folate. Folate has been associated with reduced risk of stroke and heart disease. Yoghurt, fermented foods & kefir: contain live cultures ("probiotics") help in establishing healthy gut microflora which can play a role in inflammation, weight and cholesterol levels in the blood.

Onions: the best sources of anti-inflammatory and antioxidant phytonutrients, particularly quercetin. In addition, they contain detoxifying sulfur-containing compounds, which enable the body to excrete toxins more effectively.

Tomatoes: are an excellent source of lycopene, an important antioxidant. They also contain other heart-protective phytonutrients like beta-carotene and vitamin E.

Blueberries: packed with healthy phytonutrients for the heart and blood vessels, which can assist in keeping blood vessels open and lower the risk of heart attack. They may also help with blood sugar control in those with diabetes.

Pomegranate: small amounts of pomegranate juice (under 2 ounces) has been shown to help reduce blood fats, blood pressure, and plaque buildup in arteries.

Oats: contain fiber, phytochemicals, and the betaglucans that help reduce levels of both cholesterol and blood sugar. They also contain an antioxidant compounds which help prevent cellular damage within the body. Whole grains such as oats are an excellent source of magnesium, an important mineral in the regulation of blood sugar and insulin. *to be avoided if gluten intolerant

Green Tea: reduces blood pressure and blood fats (triglycerides, cholesterol, and LDL-cholesterol) and may even help with lowering blood sugar.

Cacao: helpful in keeping arteries open and protected from damage



Foods to INCLUDE

Vegetables

Artichoke Asparadus Bamboo shoots Beetroot Bok chov Broccoli Brussels sprouts Cabbage Carrots Cauliflower Celeriac root Celery Capsicum Chard Chervil Chives Cilantro Cucumbers Daikon Eggplant Endive Escarole Fennel Fermented vegetables: Kimchi, pickles, sauerkraut. Greens: Beet, collard, dandelion, kale, mustard, turnip.

Garlic Green beans Horseradish Jicama Kohlrabi Leeks Lettuce Microgreens Mushrooms Okra Onions Parslev Peppers Radicchio Radishes Rocket Spring onions Sea vegetables Shallots Snap peas Snow peas Spinach Sprouts Zucchini Tomato Turnips Water chestnuts Watercress

Starchy vegetables

Parsnip Pumpkin Potato sweet Potato white Potato red Plantain Yam

Gluten free whole grains

Gluten Free

Amaranth Buckwheat Corn Millet Oats: Rolled, steelcut Quinoa Rice Basmati, black, brown, purple, red, wild Sorghum Teff

Apricot Avocado Banana Blackberry Blueberry Cantaloupe Cherries Coconut Date Fig Grape Grapefruit Guava Honeydew Kiwi Lemon Lime Mango Nectarine Orange

Apple

Fruit

Papaya Peach Pear Persimmon Plum Pineapple Pomegranate Raspberry Strawberry Tangerine Watermelon

Phytonutrients

Cinnamon Soybeans Oats Barley Tomatoes Grapefruit Watermelon Pomegranate Garlic

A word on phytonutrients

Plant foods contain thousands of compounds that affect body function. While thousands of these compounds have been identified, it has been suggested that many more remain to be discovered.

Several of these, such as the bitter compounds in arugula and other green leafy vegetables, the resveratrol in grapes and the astringent compounds in green tea appear to work favorably on cells to promote heart health. The phytonutrients found in the foods listed above have been shown to support heart health by:

- Balancing blood sugar
- Protecting LDL cholesterol from damage
- Supporting blood pressure



Foods to INCLUDE continued

Proteins

Lean, free-range, grass-fed, organically grown animal protein; non-GMO, organic plant protein; and wildcaught, low-mercury fish preferred.

Plant sources

Nutritional yeast

Protein powder

Mung bean

Edamame

Spirulina

Tempeh

Tofu

Hemp

Pea

Rice

Whey

Natto

Animal sources Cheese Cottage cheese Feta cheese Parmesan cheese Ricotta cheese Egg

Fish/Shellfish

Meat: Beef, pork, kangaroo, lamb, game meats.

Poultry (skinless): Chicken, duck, turkey.

Organ meats

Legumes / beans

Adzuki beansMung beansBlack beansPeanutsBlack-eyedRunner beansPeasChickpeasBroad beansKidney beansLentilsLima beans

Nuts and seeds

Pecan

Poppy

Pistachio

Pumpkin

Sesame

Walnuts

Sunflower

Pine

Almond Brazil Cashew Chestnut Chia Flaxseed Hazelnut Hemp Macadamia

Beverages

Filtered water Sparkling/mineral water Fresh juiced fruits/vegetables Coconut water Low sugar kombucha Tea: Black, green, herbal.

Fats and oils

Avocado Butter Chocolate, dark (70% or higher cocoa) Coconut milk Coconut cream Ghee/clarified butter Mayonnaise (unsweetened) Olives Oils, cooking: Avocado, butter, coconut, olive, grapeseed, rice bran, sesame

Oils, salad: Almond, avocado, organic cold pressed canola, flaxseed, grapeseed, hempseed, olive (extra virgin), pumpkin seed, safflower (higholeic), sesame, sunflower (higholeic), walnut

Dairy & alternatives

Dairy Kefir Milk - Goat Yoghurt - Greek

Non Dairy Almond milk Rice milk

Coconut milk Macadamia milk Soy Milk Yoghurt - coconut Yoghurt - soy Yoghurt - almond

Condiments

Apple cider, rice, and balsamic vinegars Coconut aminos Organic broths (vegetable, chicken, beef) Celtic sea salt Lemon/lime juice Mustards Organic ketchup Peppercorns Red chili paste Salsa without added sugars Tahini Wasabi Wheat-free tamari

Herbs and spices

All herbs and spices hup te it s



Foods to LIMIT or AVOID

Sugar

Artificial sweeteners Agave Agave nectar Barley malt syrup Brown rice syrup Brown sugar Cane sugar Caramel Corn sweetener Fructose Fruit juice concentrate Golden syrup High fructose corn syrup Inulin Maltodextrin Maltose **Refined** sugar Treacle

In moderation Maple syrup Dried fruit Stevia

Processed foods

Microwave popcorn Chips Packaged cakes Packaged cookies Pastries Lollies Chocolate bars Bread Crumpets Pasta High sugar cereals Processed meats Packaged salad dressings & sauces

Other

Artificial colourings Additives Flavourings Gluten containing foods Preservatives Added msg

Fats

Trans fats Partially hydrogenated oils Margarine Vegetable shortenings Non-grass fed animal fats Non-organic vegetable & seed oils

Beverages

Alcohol Soft drinks Flavoured milk Caffeine Sweetened kombucha



Be sure to take into consideration foods you have a known allergy, intolerance or sensitivity to.

You may wish to list them above.



FAQs

My treatment notes are advising Dairy Free and Egg free but this guide says to include them?

Depending on your health picture, your practitioner may have suggested certain foods or food groups to be excluded from your diet.

Dairy and eggs, as well as gluten, are known as the most common foods to cause allergy, sensitivity or intolerance so often it is a good idea to eliminate or reduce them in your diet if you have been advised.

How much protein should I be eating?

Protein stabilises blood sugar and should be included in every meal. In fact, unless there are medical restrictions, protein should provide about one-third of the daily calories. Yet in the average Western person's diet, protein comprises only about onefifth of the total calories. Choose oily fish which are high in anti-inflammatory fats and low in mercury, such as anchovies, herring, mackerel, salmon, sardines, and trout. Additional protein options include legumes, lean meats, like poultry, hard cheeses, and free-range eggs. The Therapeutic Foods in this category are fish and soy containing proteins like miso, tofu, tempeh, and soy protein.

What about alcohol?

Alcohol is a form of sugar and added calories as well as being a toxic burden on the liver, furthermore it is associated with many types of cancer and chronic disease. Ask your practitioner to help determine whether moderate or occasional use of alcohol would be appropriate and consistent with your health goals.

It is wise to be across the latest Australian guidelines around alcohol consumption: <u>https://www.cancer.org.au/about-us/policy-and-advocacy/position-</u> <u>statements/alcohol-and-cancer</u> and <u>https://www.nhmrc.gov.au/health-advice/alcohol</u>

Isn't red wine healthy?

Research has shown drinking modest amounts (1 glass with a meal and having alcohol free days) of red wine may reduce cardiovascular risk. The phytonutrients in red wine, such as resveratrol can relax the blood vessels, increase good cholesterol and bring blood sugar into balance.



FAQs continued

Do coffee or tea have any benefits?

Studies have shown that caffeine tightens blood vessels, causing short-term, unfavourable changes in blood pressure. Also, caffeine increases cortisol, a stress hormone, which may lead to feeling more wired and "on edge." If you are sensitive to caffeine, it can cause a fast heart rate and abnormal heart rhythms.

On the flip side, coffee contains important phytonutrients like chlorogenic acid and caffeic acid, which may help the liver process blood sugar.

Needs, preferences, and sensitivities will vary from person to person so discuss these factors with your practitioner.





For those who enjoy the taste of coffee, a solution might be switching from caffeinated to decaffeinated (go for the low tox, swiss water method) coffee with no added sugar. A small amount of caffeine between 5-50mg can be found in decaffeinated coffee, so there would still be some effect.

Coffee may be a good choice for some, but green tea may be a better drink for most people. It contains caffeine, but not as much as a typical cup of coffee, and it can be purchased in noncaffeinated varieties.

Green tea contains anti inflammatory and antioxidant phytonutrients. Drinking both green and black teas has been associated with a reduction in the risk of heart disease and stroke by 10 to 20 percent. Three cups per day appears to be the best amount for the most benefit overall.



FAQs continued

So it's true, food is medicine?

Yes! Your quality of life is largely based on how well your body can work, move, and act. By providing the body with fuel of the highest quality, we ensure that our bodies are able to function well and keep all of the body systems optimised.

What we eat is also a source of information for the body. With every bite we eat, food has the ability to turn on or off genes that control disease risk, lifespan, and metabolism. Certain foods can impact blood sugar, or even trigger allergic reactions, inflammation, or autoimmune responses.

Nutrigenomics is the new science that studies the impact of food choices on gene expression, that is proving the old adage of "You are what you eat" to be true.

The key is making an effort to choose nutrient-rich foods that send the right healthy signals to the body for positive gene expression and optimal health.



Tips on getting started

- Explore your local organic, health food store and farmers markets
- Take time to check in with your health goals and your 'why' behind wellbeing
- If you over-indulge or eat food you didn't plan to, forgive yourself and get back on the wagon :)
- Be prepared take snacks with you when you leave the house
- Cook double batches so that you aren't having to cook all of the time making a big evening meal will give you leftovers for lunch the next day
- Learn to read labels and choose 'better' processed food
- Engage the support of your health coach!

