







MTHFR: The Role in Cardiovascular Disease

Optimal Diet and Lifestyle for a Healthy Cardiovascular System

Keep It Fresh

Ensuring whole and unprocessed foods make up the majority of your diet automatically begins to crowd out any processed or junk foods that can create imbalances or inflammation within the body. It is much easier to say goodbye to unhealthy food when you are full on nutritious whole food!



Organic Butter

Avoiding processed vegetable oils, transfats and hydrogenated oils (found in foods such as margarine) is fantastic for cardiovascular health and reducing levels of inflammation in the body. Switching margarine for full fat organic butter provides your body with a nutrient dense food source that will not cause cardiovascular or heart disease.



For optimal cardiovascular health, consider the points below: Antioxidants

- Are vital for combating the free radicals that are constantly forming in our bodies due to oxidation.
- Free radicals damage the cells in our bodies, and an imbalance of free radicals causes oxidative stress, which can cause grave disturbances in cell metabolism.
- By curbing the activity of free radicals in your body, you can slow down the processes that cause disease and ageing, and live a longer, healthier life.

Our bodies gain antioxidants from two sources:

- Our body's main in-house antioxidants are superoxide dismutase, catalase and glutathione.
- Dietary antioxidants come from food such as fruit, vegetables, nuts and grains, with the more colourful the better.

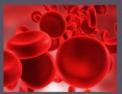
Inflammation

- Caused by food, lifestyle or oxidative damage to the cardiovascular system can be counterbalanced by consuming a diet high in antiinflammatory foods, whilst also decreasing the foods that create this inflammation.
- High inflammation foods are high in refined carbohydrates (white bread etc), sugar, caffeine, gluten, dairy, preservatives and additives.
- Anti-inflammatory foods are vegetables (especially green), fruits, nuts, seeds and whole grains.

A Heart Healthy Diet and Lifestyle:

- 1. All foods to be fresh and organically grown/fed whenever possible
- 2. Higher nutritional value, lower in toxins, hormones and pesticides
- 3. Do not overcook. Do not use a microwave oven for cooking or defrosting
- 4. Look for what's in season & stick with eating those fruits and vegetables
- 5. Eat locally grown product. Ask where your food is coming from when buying.









Eating Enough Protein?

You should aim to consume one gram of protein per kilo of your body weight per day.

e.g. a 60kg person should aim to eat 60gm of protein.

This level increases if you are exercising regularly, so talk to your holistic practitioner to ensure you are receiving enough for your needs.



Carb Cravings

Cravings for sweet foods and carbohydrates usually denote a diet containing too many carbohydrate dense foods, leading to a blood sugar level that continually spikes and falls.

Consuming a diet focusing on protein & good fats, with vegetables and wholegrains making up your carbohydrate intake is excellent for a healthy cardiovascular system, and prevents any inflammation/ elevations of cholesterol within arteries.



Diet and Lifestyle Considerations for Cardiovascular Health:

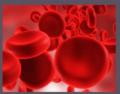
Healthy Fats

- Avoid toxic nonorganic saturated fats, which disturb prostaglandin, hormone and nutrient balance.
- 2. **Avoid trans and hydrogenated fats,** which are highly processed, inflammatory, bleached and dyed. E.g. potato chips, processed/ prepackaged foods and margarines.
- 3. **Avoid fried food** this is proinflammatory. Stir fry is ok. Cook with minimal amounts of sesame oil, grapeseed oil, organic butter or coconut oil. These are monounsaturated fats and will not saturate on heating.
- 4. Use **cold pressed plant based oils** on salads (extra virgin olive, flaxseed, nut oils). These oils are high in essential fatty acids and should not be heated.
- 5. **Store out of the light** (in dark containers) in the fridge (except olive oil which is fine at room temp)
- 6. Add lemon/pepper/garlic and/or herbs to a cold pressed oil to make homemade salad dressing.
- 7. **Good fats** in the diet switch off the brain to say you are full.

Proteins

- 1. Include a source of protein at least 3 x day/ with every meal.
- 2. **Plant protein:** combining of any two of the food groups below will give you a complete protein source i.e.:
 - a. Nuts
 - b. Grains/seeds
 - c. Legumes/pulses
- 3. **Farmed fish** are battery hens of the sea. Avoid farm raised fish, choose wild ocean fish. Farm raised fish contain chemicals. The best fish to eat in Australia are: snapper, whiting, ling, herring, garfish, and wild barramundi.
- 4. **Chicken and eggs** must be certified organic only. Free range does not mean organic. Chemical free does not mean organic. Try other birds like duck, goose, quail and turkey. Grass fed is better and contain more omega 3.









Coffee Alternatives

Green tea (excluded for those with COMT), black tea and dandelion root tea can be good coffee replacements if you are attempting to decrease your coffee intake.

Talk to your local naturopath or holistic practitioner about your adrenal function and/or support if you rely on several cups of coffee to make it through the day.



Fructose and Fruit Juice

If you want to consume juice, fresh really is best. All supermarket bought juices are either heated upon bottling (destroying majority of the nutrients), are made from concentrates or are full of large amounts of sugar.

Vegetables juices are lower in fructose, the sugar that causes us to gain weight and disrupt our appetite control. They're also incredible nutrient dense and full of natural folate!



- 5. **Dairy** must be organic and preferably non homogenized, especially for CBS mutations. As unprocessed as possible. Full fat and not low fat. Avoid soy milk at all cost. Nut milks and grain milk (oat, quinoa) homemade are great.
- 6. **Red meats** eat in moderation and certified organic. Avoid delicatessen meats: they are high in fats, offal content and toxic sulphates/nitrites.

Carbohydrates:

- 1. 80% from plants:
 - a. Salad
 - b. Vegetables: 75% raw, 25 % cooked
 - c. Fruit: no more than 2 pieces per day
- Legumes: aim for one cup per day (phytic acid does bind with minerals such as calcium, phosphorous, iron and zinc). Soak grains and legumes before cooking.
- 20% from whole grains, preferably gluten free. Keep to one cup cooked per day
- 4. 0 % from sugar.

Beverages

- 1. 2 litres of clean, filtered water each day
- 2. Naturally sparkling is ok
- 3. Limit to 1 coffee a day
- 4. Limit tea to 1-2 cups per day
- 5. Drink herbal tea freely
- 6. **No fruit juices**.
- 7. Alcohol
 - a. 2 standard drinks per day = 2 small stubbies, 150ml glass wine,
 single shot of spirits
 - b. More than this leads to increases in BP and higher risk of strokes





Weight

An increase in body weight naturally creates an increased number of blood vessels needed to supply tissue with oxygen and nutrients. Weight loss is one of the most imperative steps toward a healthy cardiovascular system, as it ensures the heart can easily pump blood around the body, without having to increase the force of its contractions or the pressure of the blood.



Stress

Refer to our stress handout for more tips on stress reduction, such as the importance of taking time for yourself to relax, unwind and do things you enjoy. Whether this means reading a book, playing a sport, having a bath, meditating daily or treating yourself to a massage.



Lifestyle factors:

1. Stress

 Modulate stress – uses up methyl groups which are needed for healthy Nitric Oxide (NO) levels and endothelial health

2. Exercise

- Exercise: supports healthy endothelial NO function makes NO more bioavailable
- Need to exercise everyday as the positive effects on NO dissipate within weeks of stopping
- How much aerobic exercise, 30 minutes per day walking, running, cycling, rowing

3. Weight

 Ensure you are in a healthy range for BMI, increased weight related to high blood pressure, high cholesterol, metabolic syndrome.

4. Smoking -

 We are all aware of the detrimental impact smoking has on all parts of our body, more so when there is risk of heart and cardiovascular diseases