

NATURAL MENOPAUSE SUPPORT

## HEART HEALTH

Looking after your heart and blood vessels







## I DON'T MEAN TO SCARE YOU, BUT...

- Women are more likely to die from cardiovascular disease (CVD) each year than men, and the incidence of this increases dramatically in the post-menopausal years.
- 50% of deaths in women are due to CVD
- 2/3 sudden deaths occur in previously asymptomatic women
- Women are less likely to survive an acute myocardial infarction (heart attack) than men
- By the time symptoms are found, CVD is usually very advanced.
- Women with diabetes are 5 times more likely to develop CHD compared to women with normal glucose tolerance.





"Greater than half of all sudden death from cardiac causes have no history of cardiovascular disease. In fact, over 40% of all heart attack victim autopsies show clear coronary vessels. Clearly, there is much more going on than the simple "cholesterol kills" hypothesis. It is interesting to note that the first and most common sign of cardiovascular disease in post-menopausal women is death. Yes, death. In other words, there are no signs or symptoms."

Doctor Michael Lam MD





## WOMEN ARE NOT SMALL MEN

- Why are women's heart attacks being missed?
  - It's part of the whole problem regarding gender bias in medicine.

Symptoms of heart attacks are different in women to men

Men Chest pain Fatigue Dull ache

Shortness of breath Left arm pain Indigestion Rapid or irregular heartbeat Sweating – 'cold sweat' Lightheadedness possible Women Chest pain – not always Fatigue (unsual) Pain in thrat, jaw or shoulder Pain in upper back or abdomen Shortness of breath Right arm pain Nausea Vomiting Sweating Lightheadedness and dizziness





## **GET SCREENED EARLY**

- Things to look at:
  - Cholesterol levels, triglycerides
  - Blood pressure
  - Inflammation markers CRP, ESR
  - Vitamin D
  - Fasting insulin
  - Thyroid function
  - Glucose
  - HbA1c

#### Diabetes diagnostic criteria

- Random blood glucose  $\geq$  11.1 mM and symptoms
- Fasting blood glucose ≥7.0 nM
- Oral glucose tolerance test <u>> 11.1mM</u>
- If fasting blood glucose < 5.5 mM retest in 3 yrs





### WAIST MEASUREMENT AND WAIST-TO HIP RATIO

This is considered to be a predictor of development of CVD

Hip Measurement = \_\_\_\_ Waist Measurement = \_\_\_y Ratio = y / x

Risk of Metabolic Complications	Waist Circumference (cm)	
	Men	Women
Healthy	<.90	< .85
Increased	> Or = 94	> Or = 80
Substantially Increased	> Or = 102	> Or = 88

Risk of Metabolic Complications	Waist to Hip Ratio	
	Men	Women
Low	0.95 or lower	0.80 or lower
Moderate	0.96-1.0	0.81-0.86
High	1.0 or Higher	0.86 or Higher





### METAINFLAMMATION

## Drivers of

- Unresolved Infection
- Injury
- Stress





## **DENTAL HEALTH LINKED TO HEART HEALTH**

Floss daily Brush twice daily Oil pulling – sesame oil or coconut oil Regular dental checks Avoid excess sugar and acidic foods Jaw alignment Chew well







## AHOLISTIC APPROACH TO HEARTHEALTH

Everything is connected



## **A HOLISTIC APPROACH**

With heart disease being such a concerning issue we need to have a more holistic approach to heart health.

Naturopathic medicine has a lot to offer to aid in the prevention and management of heart disease. This is regardless of whether someone is diabetic, on blood pressure or cholesterol medications.





LOOKING AT HEART DISEASE HOLISTICALLY To ensure good heart health we need to look at factors that not only are important for general health and wellbeing but also contribute to cardiovascular disease

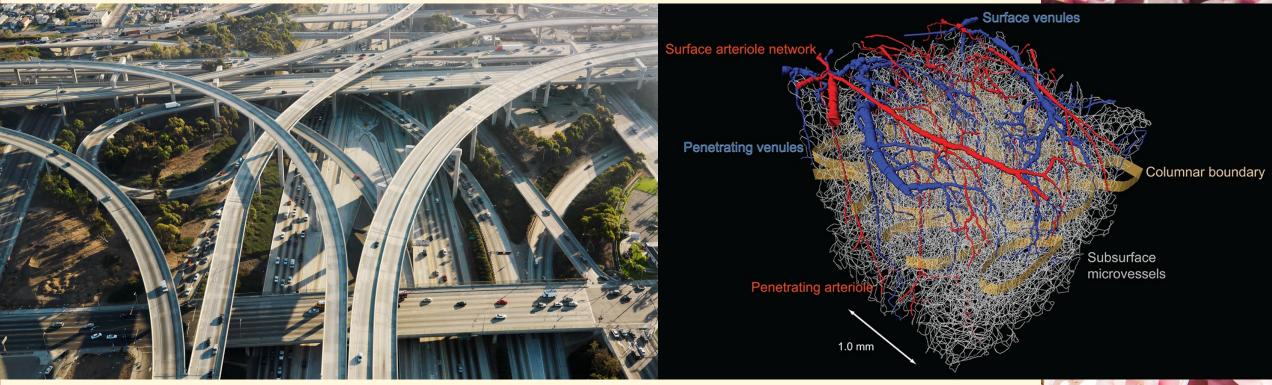
- Digestive health
- Nutrient deficiencies
  - Inflammation
    - Hormones
  - Microcirculation













## MICROCIRCULATION

- One of the first things you should look at to make sure your heart is working well is your circulation.
- Issues with microcirculation can increase risk of osteoarthritis.1
- There are theories that impaired microcirculation can cause insulin resistance.2
- 1. Findlay DM. Vascular pathology and osteoarthritis. Rheumatology 2007; 46(12): 1763-1768
- 2. Wiernsperger N, Rapin JR. Microvascular Diseases: Is A New Era Coming? Cardiovasc Hematol Agents Med Chem 2012; 10(2): 167-183





## HERBS TO ENHANCE CIRCULATION

- Spices in your diet can enhance circulation. Countries such as India have good circulation despite having high rates of T2 Diabetes.1
- Turmeric, chilli and ginger in your diet.
- Herbal medicine Gotu Kola (improve microcirculation, improve capillary health), Gingko (increases microcirculatory flow), Grape Seed extract (improves capillary strength), Garlic (microcirculatory flow), Bilberry
- Flavonoids
- Beetroot Nitric Oxide
- Omega-3
- Turmeric

1. Raman R, Rani PK, Reddi Rachepalle S et al. Prevalence of diabetic retinopathy in India: Sankara Nethralaya Diabetic Retinopathy Epidemiology and Molecular Genetics Study report 2. Ophthalmology 2009; 116(2): 311-318





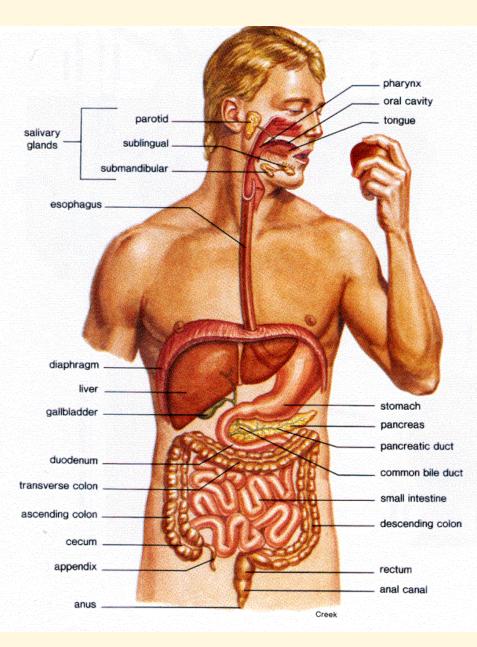
#### NATURAL MENOPAUSE

SUPPORT

# • Fibre

**DIGESTIVE HEALTH** 

- Absorption
- Gut flora
- Food intolerances
- Detoxification
- Inflammation





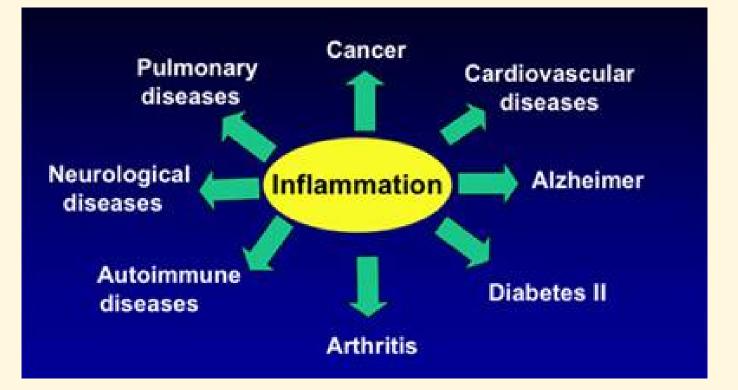
## **NUTRIENT DEFICIENCIES**

- B vitamins
- Coenzyme Q10
- Omega fatty acids
- Magnesium
- Vitamin D
- Vitamin C
- Antioxidants
- Potassium





### INFLAMMATION







### HORMONES – STRESS

Family House work Bills Debt Sch School Kids Late nights Assignments



Anxiety Body Image Work Stress Sleep Friends No Time Appointments Health Environment



## HORMONES – REPRODUCTIVE AND HRT RISKS

Oestrogen has a protective effect against insulin resistance. In menopause we have less SHBG, and that can cause an increase in testosterone, which increases insulin.

We can prolong the benefits of oestrogen by: including phyto-oestrogen foods in our diet reducing stress

being careful with HRT

- opt for 'body identical hormones'
- there's an optimal 10 year window from your last period
- Start with low dose progesterone.
- chat with your doctor about what's right for you
- consider vaginal application





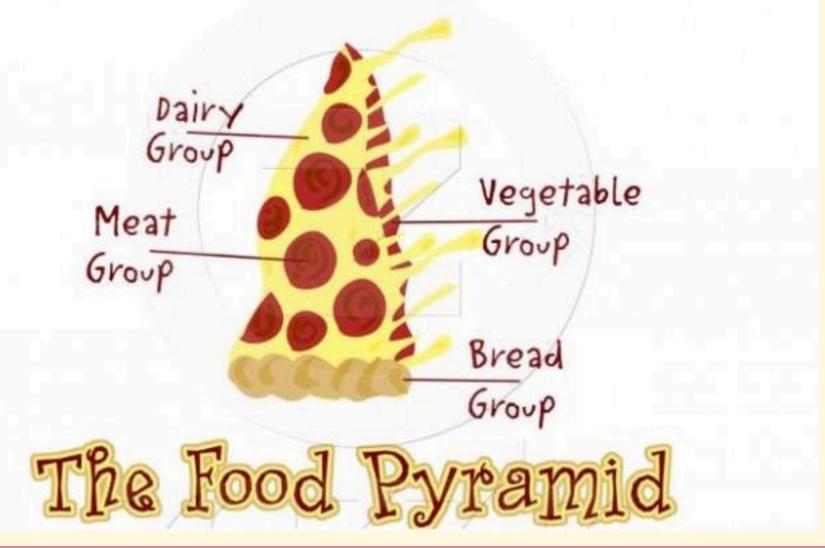
## DET TIPS FOR A HEALTHY HEART

## Eat 6 small meals a day

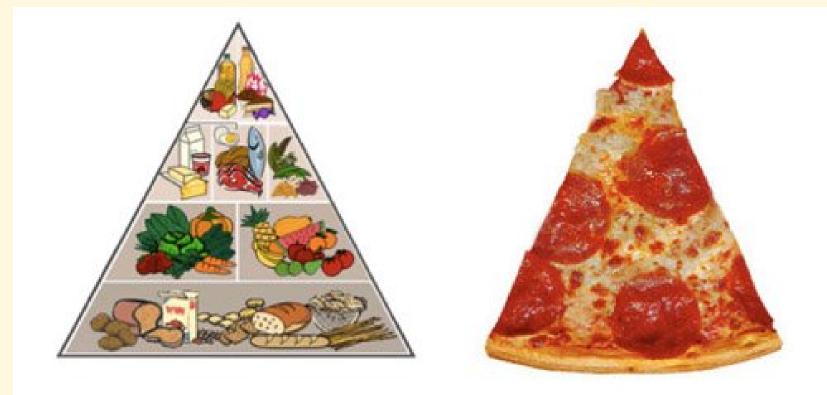




## EAT A VARIETY OF FOODS







# CLOSE ENOUGH.





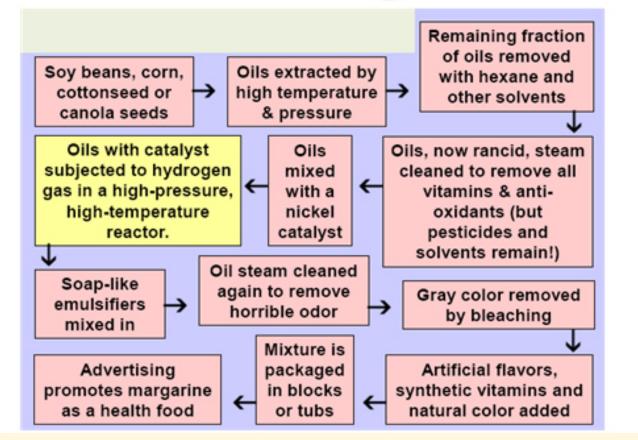
## Eat fresh, whole foods!







## Margarine Manufacturing Process





#### **AVOID OVER-EATING CARBOHYDRATES**

#### this much PASTA (200g)



#### this much SUGAR (150g)



#### AVOID PROCESSED AND PRE-PACKAGED FOOD -

## IT CONTAINS ADDED SALT AND SUGAR





## EXERCISE BENEFITS WOMEN DURING MENOPAUSE IN SEVERAL WAYS INCLUDING

- Improve sleep and reduction in disturbances experienced
- Improved mood
- Improved weight control
- Increased/maintained bone density and strength
- Reduced incidence of chronic disease (i.e. type 2 diabetes and heart disease)
- Improved quality of life
- Enhanced mental health
- Reduced stress
- Improved balance and helps with fall prevention





#### EXERCISE

- Ideally, aim for 30 minutes of activity 5 days per week. That is, a total of 150 minutes per week to meet the National Physical Activity Guidelines for Australian Adults. Start small and build up from there. Your body will thank you for it!
- A study looked at activity level of retired men between the ages of 61 and 81
  - They were followed for more than 10 years and divided into two groups: one group walked less than one mile per day; the other group walked more than two miles per day
  - The group that walked more than two miles per day had almost 50% fewer deaths during that period than those who walked less than one mile per day.

https://exerciseright.com.au/wp-content/uploads/2019/01/ESSA-Exercise-Womens-HealtheBook.pdf





## CHOLESTEROL

What it does, When and How to Balance It



## CHOLESTEROL...

- Though vilified, cholesterol is one of the most important substances in the human body.
- Almost 80% of circulating cholesterol is made in the liver, and 20% comes from dietary sources.
- Cholesterol is found in the bloodstream and virtually every cell in the body.





## **FUNCTIONS OF CHOLESTEROL**

- 1. Cholesterol is used to form cell membranes; without it, cells lose their ability to function properly.
- 2. Cholesterol is a building block for Vitamin D and for many hormones, including cortisol, testosterone, progesterone and oestrogens.
- 3. Cholesterol is vital for proper neurological function, playing a role in memory and uptake of hormones in the brain.





## CHOLESTEROL...

- Cholesterol travels from the liver and into your circulation by hitching a ride on protein molecules such as low-density lipoprotein (LDL), often called 'bad' cholesterol.
- It is carried away from tissues and back to the liver aboard high-density lipoprotein (HDL): ("good" or "protective" cholesterol).
- The more LDL you have, the more cholesterol is in circulation, and the greater your risk of heart disease.





## CHOLESTEROL...

- For every 1% drop in LDL levels, theres a 2% drop in the risk of heart attack.
- For every 1% increase in HDL, the risk of heart attack drops 3-4%.
- A lot of doctors don't make a big deal about HDL, because statins don't affect HDL.





### LP(A)

- An even worse form of LDL is lipoprotein (a), or Lp(a).
- It looks like LDL, but has an additional molecule of an adhesive protein, called apolipoprotein. This makes it much more likely to stick to the artery walls.





### **STATINS**

- Statins work by inhibiting an enzyme in the liver that manufactures cholesterol.
- Annual sales of statins exceed \$25 billion in the US
- Possible side effects of statins include:
  - Liver problems and elevated liver function
  - Interference with the manufactor of coenzyme Q10
  - Breaking down of muscle tissue
  - Nerve damage is 26 times more likely in statin users
  - Impaired mental function after prolonged use
  - Increased risk of cancer and heart failure





### WHEN SHOULD STATINS BE USED?

- There is some small evidence that statins prevent secondary heart attacks.
- One study showed men with CVD who took a statin for five years reduced their chance of death only slightly: from 15% to 13%.<sup>1</sup>
- About 75% of prescriptions for statins are written for people with no clinical evidence of CVD.

1. Heart Protection Study Collaborative Group, "MRC: BHF Heart Protection Study of Cholesterol Lowering with Simvastatin in 20,536 High-Risk Individuals: A Randomised Placebo-Controlled Trial," *Lancet* 360 (2002): 7-22.





### WHEN SHOULD STATINS BE USED?

- There is disappointing evidence that statins prevent primary heart attacks or stroke.
- Several large evaluations of studies of people with no history of a heart attack or stroke who took statin drugs and lowered their cholesterol have shown they did not live any longer than the people in the placebo groups.<sup>2,3,4</sup>

- 2. P. Thavendiranthan, A. Bagai, M. A. Brookhart, and N.K. Choudhry, "Primary Prevention of Cardiovascular Diseases with Statin Therapy: A meta-Analysis of Randomized Controlled Trials," *Arch Intern Med* 166(21) (November 2006): 2307-2313.
- 3. Cholesterol Treatment Trialists' (CTT) Collaborators, "Efficacy and Safety of Cholesterol-Lowering Treatment: Prospective Meta-Analysis of Data from 90,056 Participants in 14 Randomised Trials of Statins," *Lancet* 366 (2005): 1267-1278.
- 4. M. Vrecer, S. Turk, J. Drinovec, and A. Mrhar, "Use of Statins in Primary and Secondary Prevention of Coronary Heart Disease and Ischemic Stroke: Meta-Analysis of Randomized Trials," *Int J Clin Pharmacol Ther* 41(2) (2003): 567-577.





### SOME PROBLEMS WITH LIPID METABOLISM

- 1. Diabetes
  - Decreased conversion of VLDL to LDL
  - High insulin stimulate lipoprotein lipase in adipose tissue, increasing triglycerides in blood
- 2. Hypothyroidism
  - Decreased activity of lipoprotein lipase and decreased breakdown of LDL
- 3. Kidney disease

MENOPAUSE

- Blocks lipoprotein lipase, and cause loss of HDL
- 4. Liver/gallbladder dysfunction.
  - If cholesterol isn't broken down into bile, this leads to a build up of LDL in bloodstream which blocks HDL production.
- 5. Deficiency of the lipotropic nutrients
  - Leads to liver dysfunction with causes problems with cholesterol metabolism.
    - Choline, inositol, methionine, B vitamins, EFAs



### SUMMARY

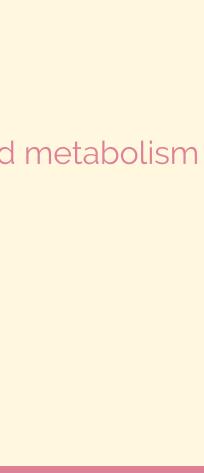
- CVD affects every 1 in 6 Australians
- The first and most common sign of cardiovascular disease is death
- Look at holistic factors that affect cardiovascular health: Digestive health, Nutrient deficiencies, Inflammation, Hormones
- Look after your circulation and your micro-circulation with nutrient dense diet and helpful herbs





### NATURAL WAYS TO LOWER CHOLESTEROL

- Liver herbs such as Globe Artichoke, St. Mary's Thistle, Dandelion Root, Guggal Gum
- Metabolic herbs such as Coleus
- Liver nutrients
- Fibre, such as psyllium husks, slippery elm
- Phytosterols
- Herbs to support other factors which affect lipid metabolism







### NATURAL WAYS TO SUPPORT HEART HEALTH

- CoQ10
- Exercise
- Lipoic acid
- Magnesium
- Fibre
- Omega fatty acids evening primrose oil
- Herbs : Hawthorn, Dan Shen, Tilia, Valerian, Mistletoe, Coleus
- Stress management
- Arginine
- Proline



### **DIET SUMMARY**

- Eat 6 small meals a day vs Intermittent Fasting
- Avoid trans fats
- Keep salt to a minimum
- Avoid over-eating carbohydrates
- Eat a variety of whole, fresh foods





### **SO REMEMBER...**

- It's not just about cholesterol.
  - Statins may reduce risk in those who have already had a heart attack or stroke
  - Statins don't show any benefit in those with no history of CVD

Support your heart health holistically, focus on prevention with diet and lifestyle and use natural methods with minimal side effects prescribed by a qualified naturopath, nutritionist or herbalist.





## HERBAL MEDICINE

For a healthy heart



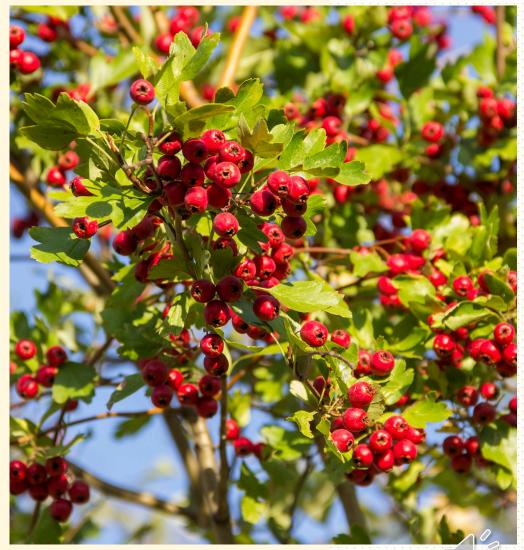
### HAWTHORN

**Chief Heart Herb** 

Works on the large vessels of the heart and the heart tissue, and the small capillaries.

- Rich in anti-oxidants: flavonoids, procyanidins, which act on the capillaries to reduce wear and tear.
- Lowers bad cholesterol
- Reduces blood pressure
- Improve capillary health
- Improves circulation through the health
- Makes oxygen utilisation of the heart more efficient
- Improves strength of the heart tissue
- Well suited for age related degeneration of the heart. Helps to heal after a heart attack.
- Helps to regular heart rhythm

Energetically – helps to reduce irritability, anxiety and anxiety that often accompany heart conditions, and can soothe those with a 'broken heart'. 'Gladdens' the heart.





### LIME FLOWERS/ LINDEN *Tilia spp.*

Mild sedative effect, calms anxiety Often used for children with hyperactivity Indicated for heart palpitations, hypertension especially when caused by stress Calming heart tonic Moistening, cooling and relaxing Also used for coughs, mucous in the trachea and lungs, fever and colds, especially fever with profuse sweat that does causes no relief from fever.







### OLIVE LEAF *Olea europaea.*

Antiinflammatory Anti-oxdant Antihypertensive Hypolipidaemic, anti-atherogenic Hypoglycaemic, antidiabetic

Astringent and bitter Indicated for relaxed and depressed tastes

Antiviral, antibiotic, antifungal, antiparasitic.

Indicated for stage-1 hypertension and vasoconctriction, angina, diabetes, diarrhoea, fever, oral mucositis Useful for infections of many forms

#### Fresh extract of leaf best







#### GARLIC Allium sativum

- Galen called garlic theriaka resuticana (village panacea) because it is widely available and useful
- Properties warming and mildly moistening, making it useful for conditions that are cold and dry
- Contains sulphour properties that are stimulating, detoxifying and antimicrobial.
- A 'selective' antimicrobial, so not harmful to our good bacteria.
- Well documented benefits to the cardiovascular system
  - Anti-microbial properties are important because systemic infections but especially infections in the arteries can cause heart disease
  - Relaxes the arties
  - Supports healthy cholesterol balance
  - Indicated for artheroscleoris (hardening of the arteries)
- Best used fresh.





### **OTHER HERBS**

MENOPAUSE

- *Gingko biloba* antioxidant, improves circulation
- *Leonurus cardiaca*. Motherwort is a cardiotonic, reduces palpitations
- Actaea racemosa Black cohosh good for hormonal support but also in drop doses considered a blood vessel relaxant, may assist in reducing hypertension and supporting healthy cholesterol levels
- *Valeriana officinalis –* Valerian can be helpful in those who are very tense, and this stress is causing high blood pressure
- Taraxacum officinalus folia Dandelion leaves are a diuretic and good source of nutrients. Enjoy as a food, tea, or consume as an extract
- *Gymnema sylvestre –* Gymnema, also known as 'the sugar killer' can reduces high blood glucose and cholesterol
- *Zanthoxylum clava-herculis* (Prickly Ash) supports circulation gently



### PLEASE NOTE....

If you are on medication seek advise from your health care professional before commencing any treatment.





### **KITCHEN MEDICINE**

- Turmeric
- Ginger
- Cinnamon
- Holy basil
- Green/white/black tea
- Blueberries/bilberries
- Pomegranate
- Tart cherries
- Cacao/dark chocolate
- Garlic and onions (best raw)

- Rosemary
- Chilli/cayenne
- Rooibos
- Hibiscus
- Artichoke
- Grapefruit
- Pickled/fermented vegetables
- Fibre rich vegetables
- Mushrooms
- Fenugreek



SUPPORT

# LIFESTYLE

For a healthy heart



### **BENEFITS EXERCISE FOR HEART HEALTH**

- Cardio reduces insulin resistance and supports mood, but less important than strength training now
- Strength training reduces insulin resistance, boosts metabolic rate and improves body composition
- Interval training increase cardiovascular health, decreases waist circumference and improves BMI
- Core strength improves posture and aids injury prevention
- Yoga/pilates/stretching/ walking increase flexibility, limit cortisol, increase calorie burn per day





### **GET STRONG EARLY**

- The earlier you can start building muscle the better you will fare
- Talk to your doctor before starting exercise if you are in poor health. If you have heart disease you may need to start slowly.







### **EXAMPLE EXERCISE REGIME**

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Walk for 45 minutes at a brisk pace	Rest	Pilates or Strength Training	Walk for 45 minutes	Pilates or strength training	Stretch class	Walk or Rest

#### Beginner Strength training example

Complete this round without a rest.

- 10 squats
- 16 step ups onto a sturdy stool (alternate legs)
- 16 reverse lunges (step backward)
- 8 push ups on knees
- 30 second side plank each side
- 10 glute bridges

Have two minute rest, then repeat this round 3 more times.



NATURAL MENOPAUSE SUPPORT

### MANAGE STRESS

- Reducing your stress levels will help to reduce risk factors for heart disease
- Links between stress and heart disease and inflammation
- More info in stress module, but you can start by doing some deep belly breathing every day for 5 minutes





### **GET PLENTY OF SLEEP**

- Good sleep hygiene
- Blue blocking glasses
- Melatonin is protective for your heart
- More information in sleep module





# COMPLETE YOUR WORKSHEET

Next Module: Bone Health