



# HEART HEALTH

DISCOVER THE HEART  
HEALTH BENEFITS FROM  
THE ANCIENT OLIVE TREE

ROASTED  
CAULIFLOWER WITH  
TAHINI DRESSING  
RECIPE INSIDE



Olive Wellness  
INSTITUTE™

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# IS YOUR HEART CAUSING YOU ISSUES?

**With heart health being a very serious issue in Australia today, it is important to understand how to look after your heart, and what the benefits to good heart health are. In Australia, an estimated 1.2 million adults aged 18 or over have one or more conditions related to heart disease.<sup>1</sup>**

Improving the cardiovascular system can not only involve dietary changes but lifestyle changes too. Stress, medication, genetics and the environment are few of many factors that can impact your heart health. Despite the high prevalence of Australians with heart diseases, 90% of heart disease is preventable with a healthy diet and lifestyle habits.<sup>1,2</sup>

The ancient olive super tree fortunately has many nutrients that lead to helping your heart perform at its best while you live your life to its full-potential.

A group of our expert health professionals have assembled this special edition Heart health e-book to showcase the heart health benefits of the olive super tree and provide you with a delicious recipe.

We hope you enjoy learning more about the many benefits of the ancient olive tree.

**The Olive Wellness Institute Team**



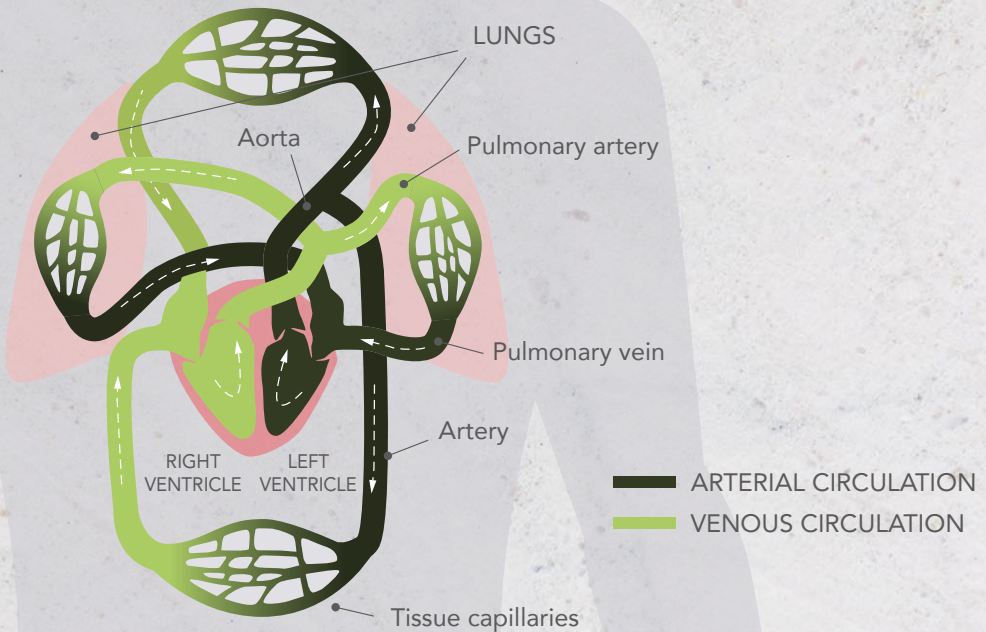
# ABOUT THE CARDIOVASCULAR SYSTEM

**The cardiovascular system** transports vital nutrients, gases and hormones throughout the body.

The cardiovascular system is made up of the heart, lungs and blood vessels.<sup>3</sup>

**The heart is a muscular organ**, about the size of a fist. It pumps blood through a network of arteries and veins.<sup>3</sup>

The heart needs its own blood supply to carry out its duties, which it receives via the left and right coronary arteries.<sup>3</sup>



## HOW THE HEART BEATS

Heartbeats start with an electrical signal generated from a part of the heart called the pacemaker, this signal travels through the nerves of the heart, stimulating the heart muscle to contract, forcing blood to move around the body. This movement of blood through the arteries can be felt as a 'pulse' in the wrist and neck.<sup>3,4</sup>

# PROBLEMS THAT CAN OCCUR IN THE CARDIOVASCULAR SYSTEM

The blood vessel walls may be weakened or blocked<sup>3</sup>

The heart muscle may not be strong enough to function properly.<sup>3</sup>

The lungs may not be working properly or receiving enough blood supply which can place a strain on the heart muscle.<sup>3</sup>

The body may not have enough quality or quantity of blood supply to function.<sup>3</sup>



These problems can lead to cardiovascular diseases including; coronary heart disease, heart attacks, stroke, heart failure and hypertensive heart disease.<sup>3</sup>

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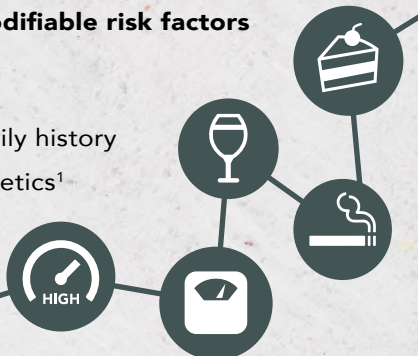
## CARDIOVASCULAR DISEASE (CVD) CAN BE CAUSED BY MODIFIABLE AND NON-MODIFIABLE RISK FACTORS.

### Non-modifiable risk factors include:

- Age
- Family history
- Genetics<sup>1</sup>

### Lifestyle choices impacting the disease include:

- Consuming a poor-quality diet, high in red meat, added sugars and highly processed foods.
- Smoking
- Sedentary lifestyle
- High LDL-cholesterol levels
- Obesity
- Excessive alcohol use<sup>1</sup>







# TIPS TO IMPROVE YOUR HEART HEALTH THROUGH DIET



## 1. CONSUME PLENTY OF POLYPHENOL RICH FOODS

- Polyphenols are found only in plant foods and they promote a healthy cardiovascular system and contribute to a diverse range of health benefits
- Good sources of polyphenols include Extra Virgin Olive Oil, fruit, vegetables and nuts and seeds.<sup>2</sup>
- High polyphenolic Extra Virgin Olive Oil has been shown to improve endothelial function according to research, including a recent study conducted by Yale-Griffin Prevention Research Centre.<sup>5</sup>



**FUN FACT:** The endothelium is a thin membrane that lines the inside of the heart and blood vessels and functions to regulate blood pressure and blood clotting (coagulation).<sup>4</sup>



## 2. LIMIT CONSUMPTION OF SATURATED FATS

- These include some highly processed foods, red meats, cakes and butter. These foods can raise LDL-cholesterol levels.<sup>1</sup>



## 3. REDUCE EXCESSIVE ALCOHOL CONSUMPTION<sup>1</sup>

## 4. INCLUDE HEALTHY FATS AND OILS

- Choosing healthy fats such as Extra Virgin Olive Oil can help increase HDL-cholesterol and blood pressure, whilst reducing inflammation<sup>2</sup>



## 5. EAT PLENTY OF VEGETABLES, FRUITS AND WHOLEGRAINS

- Naturally consuming more vitamins, minerals and antioxidants through nourishing food sources will act as a protective factor against heart disease.<sup>3</sup>
- Reducing refined grains such as white bread and swapping with wholegrains higher in fibre such as wholegrain bread can help lower the risk of heart disease.<sup>3</sup>

# OLIVE PRODUCTS AND HEART HEALTH

THERE ARE TWO MAIN PARTS  
OF THE OLIVE TREE THAT  
BENEFIT HEART HEALTH:

## THE OLIVE FRUIT

This beautiful fruit is the mainstay of the Mediterranean Diet. The freshly squeezed juice of the olive fruit creates delicious Extra Virgin Olive Oil (EVOO), which is **rich in antioxidants and other healthy compounds**. EVOO contains healthy fats and unique polyphenols that are **associated with numerous health benefits**.<sup>6</sup>

## THE OLIVE LEAF

The olive leaf is the **secret ancient ingredient** from the olive tree that is also packed with **natural olive goodness**. The leaf can be consumed as olive leaf tea, or more traditionally, as olive leaf extract – a herbal remedy that contains all the amazing polyphenols from the olive leaf.<sup>2</sup>



# EXTRA VIRGIN OLIVE OIL AND HEART HEALTH

**Extra Virgin Olive Oil (EVOO) has many benefits on the overall health of the human body when 25-50mL is consumed daily. In a recent study, 2.5 tablespoons of high quality, high-polyphenolic EVOO was seen to improve endothelial function, a marker of cardiovascular disease, whilst refined oils free of polyphenols did not<sup>2</sup>.**

A further 2020 clinical study by PhD Scholar Katerina Sarapis from La Trobe University demonstrated that consumption of 60mL per day of high polyphenol Extra Virgin Olive Oil for three weeks resulted in a significant reduction in systolic blood pressure compared to consumption of a low polyphenol olive oil in healthy volunteers<sup>7</sup>. These findings add to many previous studies conducted highlighting the health benefits of Extra Virgin Olive Oil.

## **EXTRA VIRGIN OLIVE OIL BENEFITS ON HEART HEALTH INCLUDE:**

**ANTIOXIDANT ACTIVITY** – Extra Virgin Olive Oil contains compounds known as polyphenols. Polyphenols offer protection by improving the inner lining of the heart and blood vessels.<sup>2</sup>

**ACTS AS AN ANTI-INFLAMMATORY** – Extra Virgin Olive Oil can also reduce oxidative stress, leading to reduced inflammation and improved overall heart health.<sup>2</sup>



## **PREVENTION OF OVERALL MORTALITY<sup>2</sup>**

### **PREVENTION OF CVD, CORONARY HEART DISEASE AND MYOCARDIAL INFARCTION<sup>2</sup>**

**REDUCED RISK OF PRIMARY AND SECONDARY CVD** via reduction in associated risk factors<sup>2</sup>. These include:

- Reduced blood pressure
- Improved blood lipid profile
- Reduced endothelial dysfunction
- Reduced body mass index (BMI)
- Reduced waist circumference<sup>2</sup>





# OLIVE LEAF EXTRACT AND HEART HEALTH

The olive leaf has been used as a health remedy for many centuries, dating back to ancient Egyptians. In more recent years olive leaf has become highly recognised for its clinical effectiveness to improve conditions.<sup>8</sup> Oleuropein and hydroxytyrosol are the most abundant polyphenols in olive leaf extract.

Research has found that olive leaf extract helps to improve vascular function, reduces LDL cholesterol levels in the blood and reduces daytime hypertension<sup>9</sup>.

Olive leaf extract is rich in polyphenols, much like Extra Virgin Olive Oil. A study published in the Journal of Alternative & Complementary Medicine-New York showed that olive leaf extract had one of the highest antioxidant activities of 55 medicinal herbs tested, including green tea and milk thistle.<sup>10</sup>

Olive leaf extract may provide additional benefits to health because of its polyphenol content including antimicrobial and antiviral activity.<sup>8</sup>

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## OLIVE LEAF EXTRACT HAS BEEN FOUND TO REDUCE<sup>8</sup>;

- Inflammation
- Oxidative injury and ischaemic disease
- Blood pressure<sup>8</sup>

**Olive leaf extract has also been found to improve vascular function<sup>8</sup>.**

## HOW CAN WE USE OLIVE LEAF EXTRACT TO HELP OUR HEART HEALTH?

- Consuming olive leaf extract with 51mg - 136mg of oleuropein per day can have positive effects on heart health<sup>8</sup>.
- Olive leaf extract can be easily used in smoothies
- Consider enjoying olive leaf tea.





## MEDITERRANEAN DIET AND HEART HEALTH

It's important to recognise that although individual foods and nutrients are beneficial to the cardiovascular system, the dietary pattern has a stronger overall impact on improving heart health.<sup>6</sup>

The Mediterranean diet is mostly plant based and involves regular consumption of Extra Virgin Olive Oil, fruit and vegetables, wholegrains and legumes whilst only small amounts of fish, chicken and dairy products and very little red meat and processed foods.<sup>6</sup>

Mediterranean diet has been proven to be beneficial to heart health. Extra Virgin Olive Oil is an essential ingredient in the Mediterranean diet that contributes to a high intake of monounsaturated fatty acids and antioxidant phytochemicals including: biophenols, phytosterols and vitamin E, all of which are protective factors to heart disease.<sup>6</sup>

**You can read more about the Mediterranean diet here.**

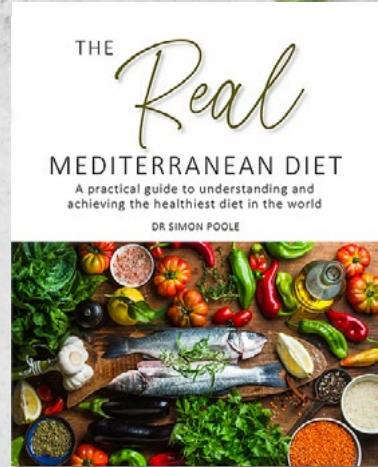
# FURTHER READING



## **THE HEART HEALTH GUIDE,** by Dr Catherine Itsiopoulos

From the bestselling author of The Mediterranean Diet and The Mediterranean Diet Cookbook, Australia's leading expert on the Mediterranean diet shows us how to improve our heart health.

**Available to purchase [here](#)**



## **THE REAL MEDITERRANEAN DIET,** by Dr Simon Poole

A practical guide to understand and achieving the healthiest diet in the world from the author of the award-winning book The Olive Oil Diet.

**Available to purchase worldwide from Amazon.**

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**ADDITION RESEARCH AND BLOG ARTICLES** are available via the [Olive Science Database](#) on our website, under the 'Cardiovascular Health' category.





# ROASTED CAULIFLOWER WITH TAHINI DRESSING

THIS RECIPE IS A GREAT HEART HEALTHY DISH THAT CAN BE VERY VERSATILE AND COMES TOGETHER VERY EASILY. IT CAN BE ENJOYED BY ITSELF BUT IS GREAT AS A SIDE DISH TO YOUR SUNDAY ROAST OR EVEN WITH A FREEKEH SALAD.



Serves 6  
as a side salad



Prep time  
15 minutes

## INGREDIENTS

### TAHINI DRESSING

¼ cup of Extra Virgin Olive Oil

¼ cup tahini

¼ cup of boiling water

3 tablespoons of lemon juice

2 teaspoons of Dijon mustard

Pinch of sea salt

Pinch of pepper

### CAULIFLOWER

1 head of cauliflower

1 tablespoon of Extra Virgin Olive Oil

1 teaspoon of cumin

1 teaspoon of smoked paprika

1 tablespoon of fresh rosemary

1 tablespoon of parsley - finely topped for garnish

### METHOD:

- 1 Combine all the dressing ingredients into a blender, and combine until a dressing is formed, adding more hot water if necessary/ to reach desired thickness. Set aside for serving.
- 2 Pre heat oven to 200°C (fan forced).
- 3 Gently break cauliflower florets into pieces and combine in a large bowl with cumin, paprika, oil and rosemary.
- 4 Evenly place onto a baking tray and place into the oven, roast for approximately 20 minutes, then toss and place back into the oven for a further 5 minutes or until edges are golden.
- 5 Serve immediately, garnished with parsley and the tahini dressing on the side or drizzled over the top.





## REFERENCES:

1. National Health Survey: First results, 2017-18 financial year [Internet]. Australian Bureau of Statistics. 2021 [cited 3 May 2021]. Available from: <https://www.abs.gov.au/statistics/health/health-conditions-and-risks/national-health-survey-first-results/latest-release>
2. Health Benefits of Extra Virgin Olive Oil, Olive Wellness institute. 2021 [cited 3 May 2021]. Available from: <https://olivewellnessinstitute.org/extra-virgin-olive-oil/health-benefits-of-extra-virgin-olive-oil/>
3. Cardiovascular System, Intensive Care NSW, Agency of Clinical Innovation 2021 [cited 3 May 2021]. Available from: <https://www.aci.health.nsw.gov.au/networks/icnsw/patients-and-families/patient-conditions/cardiovascular-system>
4. Circulatory system, Health Direct 2021 [cited 3 May 2021]. Available from: <https://www.healthdirect.gov.au/circulatory-system>
5. Valentine Njike, Rockiy Ayettey, Judith Treu, Kimberly Doughty, and David Katz , Post-Prandial Effects of High-polyphenolic Extra Virgin Olive Oil on Endothelial Function in Adults at Risk for Type 2 Diabetes: A Randomized Controlled Crossover Trial. *International Journal of Cardiology* 2021. Available from <https://doi.org/10.1016/j.ijcard.2021.01.062>
6. Olive Wellness Institute. (2021). The Mediterranean Diet. Retrieved from <https://olivewellnessinstitute.org/olive-science/the-mediterranean-diet/>
7. Sarapis K, Thomas C J, J Hoskin J, George E S, Marx W, Mayr H L, Pipingas G K A, Willcox J, Prendergast L A, Itsiopoulos C, Moschonis G. The Effect of High Polyphenol Extra Virgin Olive Oil on Blood Pressure and Arterial Stiffness in Healthy Australian Adults: A Randomized, Controlled, Cross-Over Study. *Nutrients* 2020, 12, 2272; available from: doi:10.3390/nu12082272
8. Olive Leaf Extract, Olive Wellness institute. 2021 [cited 3 May 2021]. Available from: <https://olivewellnessinstitute.org/olive-leaf/olive-leaf-extract/>
9. Breakspear, I.; Guillaume, C. A. (2020). Quantitative Phytochemical Comparison of Olive Leaf Extracts on the Australian Market. *Molecules*, 25(18), 4099. <https://doi.org/10.3390/molecules25184099>
10. Wojcikowski, K., Stevenson, L., Leach, D., Wohlmuth, H., & Gobe, G. (2007). Antioxidant capacity of 55 medicinal herbs traditionally used to treat the urinary system: a comparison using a sequential three-solvent extraction process. *Journal of alternative and complementary medicine* (New York, N.Y.), 13(1), 103–109.



For more information on the health and wellness benefits of the olive tree, visit

**[www.olivewellnessinstitute.org](http://www.olivewellnessinstitute.org)**

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