
Journal Highlight



Volume 45, Issue 13

1 April 2024

European Heart Journal

Volume 45, Issue 13

1 April 2024

European Heart Journal, Volume 45, Issue 13, 1 April 2024, Pages 1094–1097, <https://doi.org/10.1093/eurheartj/ehad853>

<https://academic.oup.com/eurheartj/article/45/13/1094/7516124>

Ten tips for promoting cardiometabolic health and slowing cardiovascular aging



Written by Dr Chrystal Fong Chern Ying (MBBS Melb (Aus), FRACGP)

Family Physician

Date of publication: 10.4.24

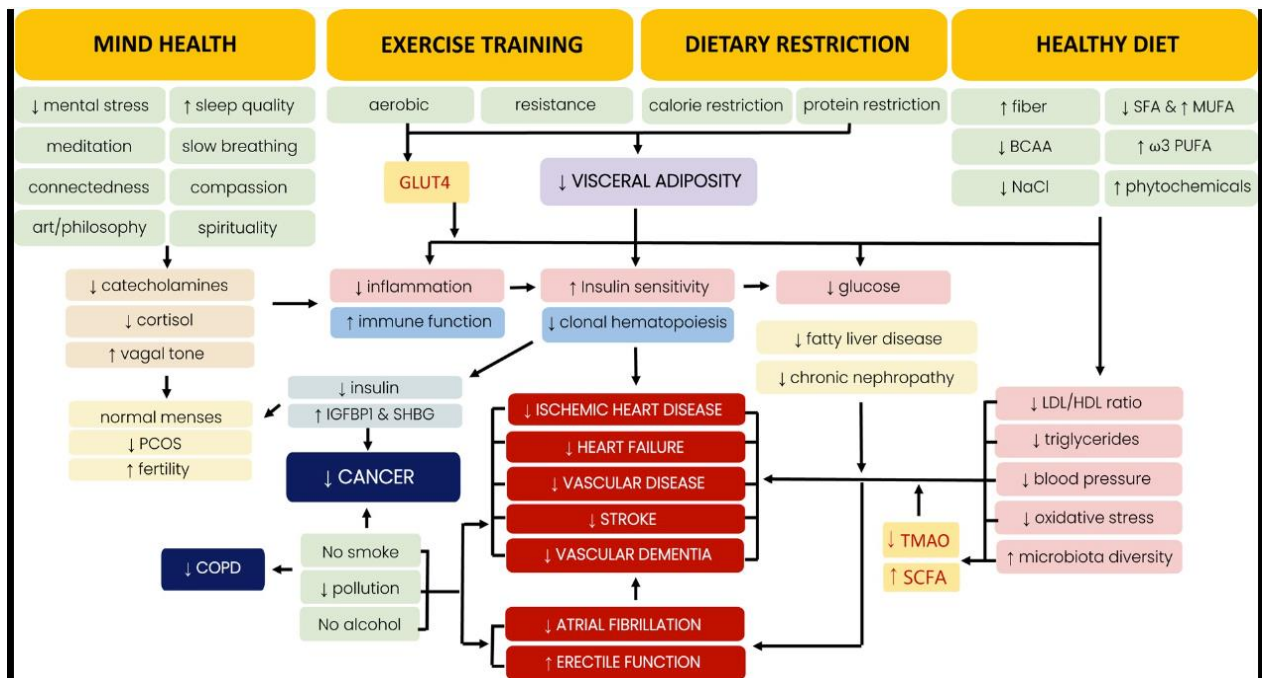
Dr Chrystal's vision is to educate and motivate the individual and population towards better health outcomes.

Her mission is to help make sense of the rich science articles that are important to health to the everyday person through her articles.

This article published in this month's European Health Journal is worth sharing on the research and recommendations to enhance our heart longevity.

Cardiovascular diseases (CVDs) are the leading cause of death globally, taking an estimated 17.9 million lives each year. CVDs are a group of disorders of the heart and blood vessels and include coronary heart disease, cerebrovascular disease, rheumatic heart disease and other conditions. More than four out of five CVD deaths are due to heart attacks and strokes, and one third of these deaths occur prematurely in people under 70 years of age. ¹

¹ https://www.who.int/health-topics/cardiovascular-diseases#tab=tab_1



Systems biology of healthy longevity and well-being.

I'll like to highlight the **Healthy Longevity heart code**.

Table 1 Healthy longevity heart code

1. Reduce waist circumference and increase muscle mass

- Take action to reduce your waistline with endurance exercise and moderate calorie restriction, ensuring you consume the right amount of nutrient-rich calories for optimal functioning.
 - Increase or maintain skeletal muscle mass with resistance exercise.
-

2. Adhere to a minimally processed Mediterranean-like diet

- Eat a wide range of vegetables, whole grains, legumes, nuts, and fruits. Avoid refined carbs.
 - Eat mostly proteins from plants (legumes, nuts, and whole grains), alongside fish, seafood, and low-fat dairy; if opting for meat and poultry, choose lean cuts on occasional basis, and avoid processed meat.
 - Avoid ultra-processed foods and beverages, rich in 'empty' calories, sugars, and unhealthy fats.
 - Choose and prepare foods with little salt; use iodized salt to promote thyroid health.
 - Use cold-pressed extra-virgin olive oil in moderation, while abstaining from animal fats (butter, cream), tropical oils (coconut, palm) and partially hydrogenated fats.
-

3. Intermittent fasting and time-restricted feeding

- If overweight, stop eating at 80% satiety; eat only non-starchy vegetables and legumes salads once or twice weekly.
- Try to eat all your food within a window of 8–10 h, refraining from between-meal snacks. Emphasize mindful eating, preferably shared with others.

4. Be physical active every day

- Commit to at least 30–60 min of daily physical exercise, alternating between aerobic, strength, flexibility, and balance exercises.
 - Minimize sitting time, and move as often as possible integrating enjoyable, friend-oriented activities into your daily routine.
-

5. Avoid or limit alcohol consumption

- If you do not drink alcohol, do not start.
 - If you choose to drink, minimize intake to prevent cancer, atrial fibrillation and heart disease.
-

6. Do not smoke

- Do not use any form of tobacco, including e-cigarettes and vaping.
-

7. Prioritize quality sleep

- Set a bedtime that is early enough for you to get between 7–9 h of sleep.
 - Establish a consistent sleep schedule, creating a sleep-friendly environment, and turn off electronic devices at least 30 min before bedtime.
-

8. Nourish and protect your mind

- Practice stress reduction through mindful meditation and slow deep breathing.
 - Stimulate your mind daily with activities like learning new skills or engaging in artistic pursuits for enhancing cognitive function and brain health.
 - Adopt a lifelong mindset of self-awareness and personal growth, seeking new knowledge, experiences, and perspectives for intellectual and spiritual vitality, and human flourishing.
-

9. Cultivate friendship, altruism, and compassion

- Nurture deep connections with family and friends through empathetic communication and forgiveness.
- Practice daily altruism and compassion to reinforce synaptic networks of peace and eudemonia.

10. Minimize pollution exposure and connect with nature

- Reduce exposure to pollution, including air, water, and noise.
- Immerse yourself in nature as often as possible. Exercising in unpolluted environments, particularly in parks and wooded areas, confers cardioprotective and psychological benefits.

Let's seek to understand more on certain points of the heart code:

Optimization of body composition and muscle function

Prioritizing optimal body composition over mere weight control is crucial for cardiovascular health. Integrating moderate calorie restriction with regular endurance and resistance exercise training forms the cornerstone of mitigating the age-related accumulation of harmful visceral and ectopic fat, while **enhancing muscle mass and function, particularly of the large metabolically active gluteofemoral muscles** (the buttock, hamstrings and quadriceps- known as the buttock and thighs).

Consumption of a predominantly plant-based Mediterranean-like diet

Consuming a primarily **plant-centric fibre-rich diet enriched with fish and low-fat dairy products.**

Intermittent fasting and time-restricted eating

For individuals fighting with obesity, alongside regular exercise and cessation of eating at 80% satiety, incorporating intermittent vegetable fasting or time-restricted eating (8- to 10-h window) on nutritionally balanced feasting days may offer complementary strategies for weight management and improved metabolic health.

Engagement in daily physical exercise

Regular physical activity is pivotal for cardiovascular health, leading to reduced visceral adiposity and improvements in glucose metabolism, insulin sensitivity, blood pressure, and lipid profile. **Alternating diverse exercise modalities, including aerobic, high-intensity**

interval training, strength, flexibility, and balance training, for at least 30–60 min daily is recommended for a comprehensive approach to enhancing physical fitness and metabolic outcomes. Incorporating regular 3- to 5-min breaks to counter prolonged sitting can further enhance insulin and lipid metabolism, reducing cardiovascular mortality independently of structured exercise training.

Alcohol abstinence: a prudent choice for cardiovascular health

Contrary to common belief, accumulating evidence shows that **alcohol is not beneficial for cardiovascular and cerebrovascular health.** It elevates the risk of hypertensive heart disease, cardiomyopathy, atrial fibrillation, flutter, and stroke while promoting cognitive impairment. Moreover, even in small quantities, alcohol consumption can raise cancer risk due to acetaldehyde, a carcinogenic ethanol metabolite. Thus, if you do not drink, it is best not to start, and if you do, keep alcohol intake to a minimum.

Reduce exposure to pollution

Air pollution, even at low levels of fine particulates like PM2.5, is linked to increased cardiovascular, respiratory, and cancer mortality. Exposure to PM2.5 and ozone reduces heart rate variability, activates the immune system, and heightens oxidative stress, leading to endothelial dysfunction in both the vasculature and brain.

Prioritization of restorative sleep

Insufficient sleep duration and disrupted sleep patterns are emerging risk factors for the onset and progression of hypertension, atrial fibrillation, ischaemic heart disease, and dementia. **Poor sleep quality** contributes to chronic inflammation, insulin resistance, heightened oxidative stress, increased sympathetic activity, and disruptions in various hormonal factors, including leptin and ghrelin. Ensuring a **bedtime for 7–9 h of sleep**, maintaining a consistent sleep schedule, creating a sleep-friendly environment, and switching off electronic devices 30 min before bedtime are important strategies for promoting quality sleep and sustaining cardiovascular health.

Final Thoughts:

The next time you have your health screening done, spare a moment to reflect on your lifestyle habits and discuss with your doctor on ways to improve the above towards a better heart health.

'Towards better health outcomes'

Dr Chrystal Fong Chern Ying (MBBS Melbourne, FRACGP) is currently practicing as a family physician at Asia HealthPartners under the subsidiary of Singapore Institute of Advanced Medicine (SAM) Holdings, located at Lucky Plaza, Orchard, Singapore.

Dr Chrystal Fong is listed on the editors list of health screening providers on Health365, a healthcare, wellness and aesthetic medicine publishing agency in Asia. She has a special interest in health prevention and incorporates sports psychology and lifestyle medicine principles in her health screening and advocacy in health promotion.

She will be featured in the Britishpedia's upcoming 6th edition of 'Successful People in Malaysia and Singapore'.

She is an active sports person who has keen interests in lifestyle medicine, medical technology and longevity themed medical care. She takes personal pride in living the lifestyle medicine pillars herself and advocating through her sports communities and social media platforms.

Her personal mantra being 'The world is changed by your example, not your opinion.'

She incorporates her consultations with health coaching methods and inspires behavioural change with sports psychology angles.

She is a member of the Society of Behavioural Health, Singapore and the College of Family Physicians, Sg. She is also a certified personal trainer.

<http://www.asiahealthpartners.com/>

<http://www.asiahealthpartners.com/wellness-health-screening-packages.html>

<http://www.asiahealthpartners.com/wellness-health-screening-multi-cancer-early-detection.html>

<https://www.health365.sg/editors-list-where-to-go-for-health-screening/>

<https://www.health365.sg/trusted-healthcare-information-singapore/>

 www.linkedin.com/in/dr-chrystal-fong-7b3ba6100