Fish oil supplements may improve heart health

Regularly taking fish oil supplements may be linked to a lower risk of death and cardiovascular disease (CVD) events, such as heart attack and stroke, according to an analysis of data from the UK Biobank study, **published in *The BMJ***. The analysis included 427 678 men and women aged 40–69 years who did not have CVD or cancer, were enrolled in the study from 2006 to 2010, and completed a questionnaire on supplements use. Estimates of all-cause mortality, CVD deaths, and CVD events, such as heart attack and stroke, to 2018 were based upon death certificates and hospital records. At the start of the study, almost one-third of participants (31%) reported taking regular fish oil supplements. The researchers found that fish oil supplements were associated with 13% lower risk of all-cause mortality, 16% lower risk of CVD mortality, and 7% lower risk of CVD events (388 fewer all-cause deaths, 124 fewer CVD deaths, and 295 fewer CVD events per 100 000 people; median follow-up, 9 years). The association between fish oil use and CVD events was stronger for people with high blood pressure. These favourable associations remained after correcting for traditional risk factors, such as age, sex, lifestyle, diet, medications, and other supplement use. Mechanisms that could explain the findings include the fact that omega-3 fatty acid supplements have known benefits for blood pressure, cholesterol levels, and heart rate, all of which would reduce the likelihood of CVD events. Despite the large sample size, this observational study cannot establish causation, and the lack of information on the dosage, duration, and side effects of fish oil use limit their interpretation.

https://www.bmj.com/content/368/bmj.m456

Moderate egg intake not associated with increased cardiovascular disease risk

A study **published by *The BMJ*** adds to evidence that moderate egg consumption (one egg per day) is not associated with increased cardiovascular disease (CVD) risk. To evaluate the effect of egg consumption on CVD risk, diet and lifestyle factors must be repeatedly assessed over an extended period, and the effect of eggs on CVD risk in the context of other animal and plant-based foods considered. US researchers investigated the link between egg intake and CVD (non-fatal heart attack, fatal coronary heart disease, and stroke) by analysing repeated measures of diet over as long as 32 years, starting from 1980. Their findings are based on data from three large cohort studies — the Nurses' Health Study (NHS), the NHS II, and the Health Professionals' Follow-Up Study (HPFS) — that respectively included 83 349 female nurses aged

30–55 years, 90 214 female nurses aged 25–44 years, and 42 055 male health professionals aged 40–75 years, all free of CVD, type 2 diabetes, and cancer at the start of the study. During the follow-up period, there were 14 806 cases of CVD, including 9010 of coronary heart disease and 5903 of stroke. Most people ate one to five eggs per week; those with a higher intake had a higher mean body mass index and greater red meat consumption, and a smaller proportion was being treated with statins. After adjusting for age, lifestyle and dietary factors, no association was found between egg intake and risk of CVD. The estimated risk of CVD was higher when the researchers statistically replaced one whole egg a day with one serving of processed red meat (15%), unprocessed meat (10%) or full fat milk (11%), but not with fish, poultry, legumes, cheese, or nuts. An updated meta-analysis of 28 observational studies further supported the overall lack of an association between egg intake and CVD risk. However, in contrast to US and European studies, moderate egg consumption was associated with a slightly lower CVD risk in Asian studies, perhaps because eggs are included in a variety of Asian dishes, whereas in Western countries eggs are often eaten with red and processed meats and refined grains. As an observational study, causation could not be established, and findings regarding health professionals may not be reflective of the general population.

https://www.bmj.com/content/368/bmj.m513

doi: 10.5694/mja2.50555

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Calcium supplements have little place in modern medical practice

Total votes = 152

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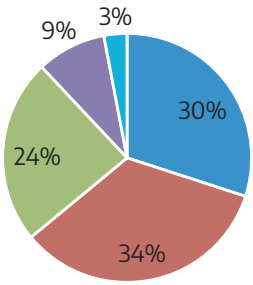

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MJA PODCASTS

Dr Bruce Powell is a specialist anaesthetist who was involved in a catastrophic cycling accident in 2018 which transformed him from a confident practitioner to a scared patient. He discusses the view from "the other side", to accompany his reflection published online on 23 March 2020.

Dr Claire Brolan is a Research Fellow at the Centre for Policy Futures at the University of Queensland. She talks about the inclusion of the right to health in Queensland's Human Rights Act and the challenges entailed. The podcast accompanies her perspective published online on 30 March 2020.

Professor Andrew Lloyd is Head of the Viral Immunology Systems Program in the Kirby Institute, the National Centre for Cancer Survivorship and the UNSW Fatigue Clinic. His discusses chronic fatigue syndrome and its diagnosis and management, to accompany his co-authored narrative review published online on 6 April 2020.

Mrs Sharon Sitters is a Lecturer of Medical Imaging at the Unitec Institute of Technology in Auckland, New Zealand. Her interest in the connection of modern slavery to our health care systems and the response of health care professionals in Australasia led her to write a letter which is published in this issue of the *MJA*.

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Sandler et al; doi: 10.5694/mja2.50553

6 *Podcast:* Professor Andrew Lloyd, Head of the Viral Immunology Systems Program in the Kirby Institute, the National Centre for Cancer Survivorship and the UNSW Fatigue Clinic, talks about chronic fatigue syndrome

6 *Podcast:* Mrs Sharon Sitters, a Lecturer in Medical Imaging at the Unitec Institute of Technology in Auckland, talks about slavery's role in the production of medical supplies

MARCH

30 *Perspective:* Queensland's new Human Rights Act and the right to access health services
Brolan; doi: 10.5694/mja2.50558

30 *Podcast:* Dr Claire Brolan, a Research Fellow at the Centre for Policy Futures at the University of Queensland, talks about the challenges of making the right to health law

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Tse et al; doi: 10.5694/mja2.50524

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Kistler et al; doi: 10.5694/mja2.50551

23 *Reflection:* The other side
Powell; doi: 10.5694/mja2.50532

23 *Podcast:* Dr Bruce Powell, an anaesthetist from Perth, talks about how the cycling accident that almost cost his life and ended his clinical career gave him a new perspective on medicine

16 *Narrative review:* Antidepressant-induced sexual dysfunction
Rothmore; doi: 10.5694/mja2.50522

16 *Podcast:* Mrs Jody Rothmore, Senior Clinical Pharmacist at the Drug and Therapeutics Information Service, Southern Adelaide Local Health Network, discusses antidepressant-induced sexual dysfunction

16 *Consensus statement:* Cardiovascular disease risk assessment for Aboriginal and Torres Strait Islander adults aged under 35 years: a consensus statement from ACDPA, RACGP, CARPA and NACCHO
Agostino et al; doi: 10.5694/mja2.50529

9 *Research:* Impact of corticosteroid treatment in patients with coronavirus disease 2019
Zha et al; preprint publication

9 *Research letter:* Isolation and rapid sharing of the 2019 novel coronavirus (SAR-CoV-2) from the first diagnosis of COVID-19 in Australia
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9 *Perspective:* An outbreak of a new coronavirus: what we know so far
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9 *Podcast:* Professor Allen Cheng, Director of the Infection Prevention and Healthcare Epidemiology Unit at Alfred Health, discusses the latest updates on COVID-19