



CARDIOVASCULAR HEALTH AND CANCER RISK ASSOCIATED WITH PLANT BASED DIETS: AN UMBRELLA REVIEW IN PLOS ONE. 2024. WITH EXPERT REVIEW FROM JESSICA RIGUTTO

Capodici, A ; Mocciano, G ; Gori, D ; Landry, MJ ; Masini, A ; Sanmarchi, F ; Fiore, M ; Coa, AA ; Castagna, G ; Gardner, CD ; Guaraldi, F
PloS one. 2024;19(5):e0300711

TAKE HOME MESSAGE: The results of this umbrella review should be read with caution due to the low strength of evidence and the myriad of confounding factors that cloud interpretation.

Cardiovascular diseases (CVD) and cancer are leading causes of morbidity and mortality worldwide. This umbrella review sought to synthesise evidence from existing systematic reviews and meta-analyses describing the effect of plant-based diets on the incidence of CVD and cancer, and related morbidities globally. This was an umbrella review, with 49 papers included in the final analysis. Findings showed that vegetarian and vegan diets appeared to reduce or improve: total and LDL cholesterol; fasting glucose and HbA1c; bodyweight/BMI; inflammation. General results from three meta-analyses suggested favourable outcomes for cancer, though when analyses were stratified by cancer type, results were inconsistent. Though some studies scored well in the AMSTAR-R rating for some points, reporting was poor elsewhere. An overall low quality of the included publications was accorded, which lowered the strength of evidence and reduced external validity of findings.

PROLONGED EGG SUPPLEMENT ADVANCES GROWING CHILD'S GROWTH AND GUT MICROBIOTA.

Suta, S ; Surawit, A ; Mongkolsucharitkul, P ; et al.
Nutrients. 2023;15(5)

Inadequate protein intake results in reduced growth and an immune system that is susceptible to disease and infection in early life. It has also been shown to affect school performance and intelligence status. Recent research shows that malnutrition has been associated with intestinal dysbiosis by altering the healthy and pathogenic microbiota that efficiently processes foods or produces vitamins.

The aim of this study was to investigate the effects of prolonged egg supplementation on growth, blood biochemical indices, and gut microbiome in school-aged Thai children. Results showed that long-term whole egg supplementation significantly increased growth and improved important biomarkers in young school-age children without adverse effects on blood cholesterol levels. Furthermore, it also promoted intestinal microbial diversity by maintaining an intestinal microbiota composition that benefits health.

Authors conclude that long-term whole egg supplementation is a feasible, low-cost, and effective intervention. However, further research is needed on the mechanistic effects of egg consumption on gut microbiota and growth.



EXAMINING THE ASSOCIATION BETWEEN COFFEE INTAKE AND THE RISK OF DEVELOPING IRRITABLE BOWEL SYNDROME: A SYSTEMATIC REVIEW AND META-ANALYSIS.

Lee, JY ; Yau, CY ; Loh, CYL ; Lim, WS ; Teoh, SE ; Yau, CE ; Ong, C ; Thumboo, J ; Namasivayam, VSO ; Ng, QX
Nutrients. 2023;15(22)

"Irritable bowel syndrome (IBS) is a highly prevalent disorder of brain-gut interaction with a significant impact on quality of life and social functioning. Diet has been implicated in the pathophysiology of IBS as well as disease flares. A significant proportion of IBS patients experience food-related symptoms associated with consuming or eliminating certain foods. This study's aim was to determine if there is an association between coffee intake and the likelihood of developing IBS. This study was a systematic review and meta-analysis of eight studies with 432,022 participants. Results showed that coffee drinkers (any intake) may have a decreased risk of developing IBS compared to controls. However, these findings must be interpreted in light of several shortcomings. Authors concluded that future studies should (1) prioritise high-quality prospective cohort studies with well-documented coffee consumption (and exposure) and track the development of incident IBS in previously healthy individuals over time, and (2) investigate biological mechanisms.

WILD BLUEBERRY (POLY)PHENOLS CAN IMPROVE VASCULAR FUNCTION AND COGNITIVE PERFORMANCE IN HEALTHY OLDER INDIVIDUALS: A DOUBLE-BLIND RANDOMIZED CONTROLLED TRIAL.

Wood, E ; Hein, S ; Mesnage, R ; Fernandes, F ; Abhayaratne, N ; Xu, Y ; Zhang, Z ; Bell, L ; Williams, C ; Rodriguez-Mateos, A
The American journal of clinical nutrition. 2023;117(6):1306-1319

The risk of developing both cardiovascular and neurodegenerative diseases increases with ageing. Growing evidence from epidemiological and human intervention trials indicates that (poly)phenols may have cardioprotective properties as well as the ability to improve cognitive function.

The aim of this study was to investigate the effects of daily wild blueberry (WBB) (poly)phenol consumption on vascular function and cognitive performance in healthy older individuals. This study was a randomised, double-blinded, placebo-controlled parallel design study. A total of 61 healthy older individuals were recruited and randomly assigned to one of the two arms; placebo intervention or blueberry intervention group.

Results showed that long-term consumption of a dietary achievable amount of wild blueberry enhanced vascular and cognitive function in older adults. Authors conclude that gut microbiota and vascular blood flow may play important roles in mediating the cognitive benefits shown by the consumption of (poly)phenol-rich foods.

