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Can the Mediterranean diet be a key to unlocking women's reproductive health?

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The traditional Mediterranean Diet (MedDiet) is consistent with a dietary pattern and time-honoured eating behaviours by populations living in the olive-tree growing areas of the Mediterranean basin before the mid-1960's. The MedDiet is described in the literature as a plant-based dietary pattern, consistent with a high intake of vegetables, fruits, nuts, legumes, wholegrains cereals, and daily use of extravirgin olive oil incorporated into all meals; moderate consumption of fish, shellfish, fermented dairy products (cheese and yogurt), and wine (typically during meals); and a low or infrequent consumption of meat and processed meat products, processed cereals, sweets, vegetable oils, and butter⁽¹⁾. Being predominately plant-based, the MedDiet is naturally low in saturated fat, and rich in several functional components, including vitamins and minerals, carotenoids, unsaturated fatty acids, and phenolic compounds, depicted by antioxidant and anti-inflammatory properties. As a result of its putative beneficial health effects, the MedDiet is one of the most widely evaluated dietary patterns in the scientific literature⁽²⁾. In both observational and intervention studies, there is a large and consistent body of evidence to support that a MedDiet is protective against chronic and inflammatory conditions, including cardiovascular disease, metabolic syndrome, management and prevention of type 2 diabetes, central adiposity, cancer, neurodegenerative conditions, and frailty⁽³⁾. The effect of the MedDiet on women's reproductive health is an emerging area in the literature. There have been a range of studies (observational and interventional) examining outcomes related to menarche, menstrual cycle, pregnancy, infertility, lactation, and menopause. The MedDiet has also been studied for the management of conditions such as polycystic ovary syndrome and endometriosis. These conditions are often associated with hormonal imbalances, inflammation, and oxidative stress, all of which can be influenced by the diet's key components. The MedDiet may be a promising nutritional strategy for promoting women's reproductive health. However, more extensive, and rigorous studies, including randomized controlled trials and longitudinal investigations, are necessary to establish a causal relationship between the MedDiet and women's reproductive health outcomes. While the adoption of a MedDiet in non-Mediterranean populations is appealing, consideration needs to be given about potential barriers and enablers towards adherence⁽⁴⁾. Furthermore, while the primary focus has been on nutritional strategies within the framework of the Mediterranean Diet, equal attention must be given to the eating behaviours and lifestyle factors associated with it.

References

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