Virgin coconut oil for hyperlipidemia: A systematic review

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Aim of the study/Purpose: This study focused to conduct a systematic review on experimental studies of randomized and nonrandomized control trials by investigating the association of Virgin Coconut Oil (VCO) consumptions with the changes of lipid profile in human and also the safety of consuming VCO.

Introduction in brief: Many diseases, such as cardiovascular diseases, diabetes mellitus, hypertension, and possible development of cancerous cells are the causes of Hyperlipidemia. However, results of several studies conducted on a large number of animals showed that VCO is effective and helpful to lower the lipid level, the effects of VCO to control the lipid level in human subjects are still needed to be investigated.

Procedures/Methods: In this study, a number of data-bases, including The Cochrane library, MedLINE, EMBASE, and EBCO, were utilized for searching related literatures by using the terms, such as virgin coconut oil, cardiovascular disease, lipids, and hyperlipidemia. To conduct an efficient search, various combinations of the terms were used carefully by using the Boolean terms, AND and OR. Targeted search was limited to the English language articles which were published from the year 2011 to the recent. Additional searches were also performed in Google Scholar to sort out more literatures relevant to the focused area.

Results: In this study, three non-random trials with 198 participants were included where 148 participants were received VCO as intervention group and the other 28 of the participants were included in the comparator group. One to six months are the duration period of the treatment. Three independent studies were conducted in three different places; Brazil, Philippine, and Malaysia; by focusing VCO investigation and reported different results. Study conducted in Brazil found that, VCO is effective in reducing all lipid parameters but increases High Density Lipid Profile (HDL) while decreases waist circumference and body mass index. Though, According to the Philippine study, VCO showed no major effects on the reduction of lipid profile; Malaysian study reported that VCO is able to reduce waist circumference. No studies were reported any kind of relevant differences in advert effect not even any serious adverse event.

Conclusion: Based on the results, it is suggested by the present systematic review that VCO may have positive effect on hyperlipidemia. However, it was reported by one study that mild gastrointestinal discomfort was encountered during VCO treatment. Furthermore, based on the

unpredicted risk of bias in the included studies, lack of patient-important long term outcomes, and very few articles on the effect of VCO on human subjects; no definite explanation could be concluded.

Biography



Sharifah Shafinaz is a registered nurse for 17 years and has teaching experiences for about 11 years in the nursing field. She was graduated from University of Malaya (UM), Malaysia, in Master in Nursing Sciences in 2013 and now pursuing her Ph.D. and estimated to complete in 2019. She is passionate about intervention studies and most of her works were published in the indexed journals. She had been achieved Best Paper Award by Singapore Medical Journal in 2016. Her expertise in the evaluation and improving the health and wellbeing has translated into her Ph.D. project. Believing in research as an agent to change individual paradigm and perspective, she has chosen to become a researcher and believes that her research could change health care system.
