

Coconut oil: The new super food? Not likely

According to recent popular press, coconut oil is the latest miracle food. The claims regarding coconut oil are that it boosts brain function in people with Alzheimer disease; improves thyroid and heart disease; and helps with weight loss, cancer, and HIV.

The fat in virgin coconut oil is approximately 86% saturated fat—the highest amount of saturated fat in any fat. Coconut oil contains 47.3% lauric acid and 15.8% myristic acid, which are medium-chain triglycerides (MCTs). MCTs are metabolized differently in the body compared with long-chain fatty acids found in the other types of vegetable oils.

Medium-chain triglycerides are not new to medicine. Since the 1950s when MCTs were introduced for treatment of lipid absorption disorders, they have been used as a component of total parenteral nutrition and hyperalimentation. MCTs in therapeutic use are obtained from highly processed coconut oil with the fatty acids fractionated and esterified.

Diets rich in MCTs from organic virgin coconut oil are promoted as having weight-loss benefits because MCTs are easily absorbed and are more directly metabolized by the liver to produce energy, rather than being stored as body fat. For the treatment of Alzheimer disease, the theory is that the breakdown of MCTs yields ketone bodies that can supply energy to brain cells as an alternative source to glucose.¹ In Alzheimer patients, it is suggested that there is a decreased ability to use glucose in some areas of the brain.

Lauric acid, the main saturated fat

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in coconut oil, has also been credited with bacterial, antimicrobial, and antiviral properties. Claims have been made that lauric acid, the main fatty acid in coconut oil, can treat a variety of viral, fungal, and bacterial infections.

Advising patients to switch from saturated fats to unsaturated fats by using vegetable oils like soy bean, canola corn, or olive oil is still the best advice.

At this time, however, there is insufficient evidence to recommend coconut oil or MCT-rich diets for weight loss or to reduce body fat. In addition, more evidence is needed before recommending coconut oil for treatment of Alzheimer disease, diabetes, GI conditions, or infections.

Proponents of coconut oil claim that it is a good fat (despite being high in saturated fat) and that it can improve blood cholesterol levels and lower the risk for heart disease. Proponents also claim that populations who consume coconut oil do not have a higher risk of heart disease.

The main medical concern related to dietary fats is their role in the development of coronary artery disease, as well as obesity and cancers. However, our understanding of the relationship between fat intake and health outcomes continues to evolve and in some areas remains unclear. Populations with a higher total fat intake do not always have more heart disease.² Current evidence suggests that the type of fat consumed may be

considerably more important than the total fat intake. Trans fats should be avoided. Substituting polyunsaturated for saturated fats appears to lower cardiovascular risk, whereas substituting carbohydrates for saturated fats does not appear to reduce risk and may cause excess weight gain. In cross-cultural studies, Mediterranean populations that consume high amounts of monounsaturated fats appear to be protected against heart disease.³ More research is needed to understand how different fatty acids influence atherogenesis.

The bottom line is that coconut oil is a source of saturated fat that should be limited in the diet. Advising patients to switch from saturated fats to unsaturated fats by using vegetable oils like soy bean, canola corn, or olive oil is still the best advice. With unsubstantiated claims of the benefits of coconut oil, patients should be encouraged to obtain the best nutritional value for their food dollar. One litre of organic coconut oil costs \$40 compared with canola oil at \$2 or olive oil at \$9.

Dietary patterns associated with dramatic reduction in the lifetime risk for chronic disease are composed mostly of vegetables, fruits, beans, lentils, nuts, seeds, and whole grains, with or without fish, seafood, lean meats, eggs, and dairy. These diet patterns are naturally low in saturated and trans fats and refined and added sugars. They are high in omega-3 and monounsaturated fats and dietary fibre, vitamins, minerals, and antioxidants.

Focus should be on the whole diet, rather than specific foods or nutrients. If we encourage a variety of foods, fruits and vegetables, and less-processed foods, the specific nutrient components will balance out.

If patients have more questions about coconut oil and nutrition they can be referred to HealthLinkBC's registered dietitians at 8-1-1.

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College Library: A support for retirement

Retirement from professional life is a growing phenomenon as the baby boomer bulge comes face to face with advancing age. In this issue of the *BCMJ*, Dr Bob Vroom also addresses the topic in his editorial "Retiring gracefully" on page 426. Retirement for physicians means changes on many levels; however, access to the College Library can remain unchanged.

For \$100 per year, retired physicians can continue with the same level of library service and access to the resources they came to expect during clinical practice. For instance, retired College registrants who subscribe to library services may receive an unlimited number of expert literature searches, request books and copies of articles, be informed of new clinical advances through the Cites & Bytes newsletter (www.cpsbc.ca/library/cites-bytes), and explore electronic resources (online articles, e-books, and point-of-care tools) through the College website (www.cpsbc.ca/library).

With retirement may come an interest in digging deeper into the lit-



erature than a busy practice afforded, and the Finding Medical Evidence workshop (ubccpd.ca/course-group/fme) presented by College librarians in association with UBC CPD will help to improve efficiency and effectiveness with literature searches.

Physicians looking to begin scaling back their practice may be interested in articles about retirement itself. A simple approach would be to search through the PubMed link on the College Library's website to maximize access to full-text articles (www.cpsbc.ca/library/search-materials/databases). PubMed is very accommodating to natural language searching, so try "retirement and physicians," for example. Articles such as the following will be quickly found: "Personal finances for the physician: A primer on maintaining and protecting your earnings" (*J Orthop Trauma* 2014;28(7S):S50-58), "We need to get another life after retirement" (*BMJ* 2013;347:f7173), and "Prolonging a sustainable working life among older rural GPs: Solutions from the horse's mouth" (*Rural Remote Health* 2013;13:2369).



Best of all, when retired, you'll have time to find articles and read them too.

—Karen MacDonell
Director, Library Services

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