



# Is Coconut Oil A Poison?

Dr. Bruce Fife , Coconut Research Center

Coconut oil is poisonous, so claims Karin Michels, PhD, a part-time professor at Harvard TH Chan School of Public Health. Her comments given in a talk at the University of Freiburg, Germany, sparked a media frenzy with headlines such as, “Coconut Oil is Pure Poison Harvard Professor Claims” appearing in newspapers and on the internet. What makes Dr. Michels an authority on coconut oil? She is not a physician, or a nutritionist, or even a biologist. Her PhD is in biostatistics. Her specialty is statistics—manipulating numbers—not the study of diet or fats and oils. From her profile on the Harvard website, it appears she has never published any studies on saturated fat, let alone on coconut oil. Her comments were not based on any of her own published research, but were simply her opinion based on old, outdated theories about saturated fats. Michels calls coconut oil “pure poison,” saying it was “one of the worst foods you can eat” because it is full of saturated fat, and “saturated fatty acids can clog your arteries.” She adds that “there is no study that proves significant health benefits of coconut oil.” Dr. Michels makes three general claims: 1) saturated fats cause heart disease, 2) coconut oil is a poison and one of the worst foods we could eat, and 3) there are no studies that show any health benefits to coconut oil. Let’s look at what the science actually says about each of these statements. There has never been a study published that has been able to show that saturated fats or coconut oil cause heart disease. The diet-heart disease hypothesis that has been popular for the past 6 decades basically states that heart disease

is caused by high cholesterol. Many studies have shown that some saturated fats can raise blood cholesterol, and therefore it has to be assumed that eating too much saturated fat can promote or even cause heart disease. Researchers have been trying to prove this hypothesis for over a half a century without success. In fact, many studies have seriously challenged this hypothesis and serious researchers have now moved on to studying new, more likely, causes for heart disease. Cholesterol is no longer considered the evil villain as it was once portrayed. There are many types of cholesterol, some good and some potentially harmful. Saturated fats, and in particular coconut oil, have been shown to raise HDL, the good cholesterol, that has been shown to protect against heart disease. The ratio of total cholesterol to HDL cholesterol is considered one of the most accurate and reliable indicators of heart disease risk. Coconut oil raises HDL, which lowers the cholesterol ratio, thus lowering the risk of heart disease<sup>1</sup>. It is apparent that Dr. Michels has not kept up with the current science on coconut oil or fats and oils in general. Earlier this year researchers at the University of Cambridge School of Clinical Medicine published a study on the relationship between coconut oil and heart disease risk. The researchers compared the effects of coconut oil with butter and olive oil. Butter was chosen to represent a commonly used highly saturated animal fat and extra virgin olive oil was chosen as it is generally regarded as one of, if not the healthiest of fats. The study involved 96 participants who were assigned to consume 50 mg (about 3

tablespoons) of one of each of the three oils daily for 4 weeks as a part of their ordinary diet. The researchers found that coconut oil dramatically raises the protective HDL cholesterol without affecting the LDL or so-called bad cholesterol. Coconut oil lowered the cholesterol ratio, and the risk of heart disease, more than either of the other two fats, indicating that it is even more heart-friendly than extra virgin olive oil<sup>2</sup>. In recent years numerous studies have exonerated saturated fat as a cause of heart disease and put to rest the outdated diet-heart disease hypothesis. Last year the Lancet, one of the most prestigious medical journals in the world, published a study involving a team of 37 researchers from 18 countries. They gathered data on 135,000 subjects to evaluate heart disease risk in relation to fat intake. They discovered that fat consumption protected against heart disease and increased lifespan. Those people who cut back on fats, including saturated fat, had far shorter lives than those who ate coconut oil, butter, cheese, and meats. Consuming high levels of all fats, cut early death rates by up to 23 percent. The researchers stated that they found no correlation between saturated fat consumption and cardiovascular disease and that current dietary restrictions on saturated fat should be revised<sup>3</sup>. This isn't the only study in recent years that has called for a revision on the recommendation to restrict saturated fats. A study published in the American Journal of Clinical Nutrition a year earlier investigated whether dietary saturated fat was associated with ischemic heart disease. The study involved 35,597 participants. The researchers also concluded that high saturated fat intake was not associated with increased risk of ischemic heart disease<sup>4</sup>. In 2010 a groundbreaking study was published clearly showing that saturated fats do not cause heart disease. The study published in the American Journal of Clinical Nutrition analyzed all the previous studies with data for dietary saturated fat intakes and the risk of cardiovascular disease. This meta-analysis combined the data from 21 previously published studies, involving over 347,000 subjects. The study showed that there was no connection between saturated fat consumption and heart disease. Those people who ate the greatest amount of saturated fat were no more likely to suffer a heart attack or stroke than those who ate the least. No matter how much saturated fat one ate, the incidence of heart disease was not affected. This was the most complete review of the medical research on saturated fat ever done up to this time<sup>5</sup>. Four years later, a different group of

researchers from Cambridge University published another meta-analysis. This time the researchers combined the data from 72 previously published studies involving more than 600,000 participants from 18 countries. The researchers basically combined all the highest quality studies on fats and diet that had been done for the past several decades and analyzed them together. The results confirmed the previous meta-analysis—there is no connection between saturated fat intake and heart disease<sup>6</sup>. The studies are clear, neither saturated fat nor coconut oil cause or even promote heart disease. Because they raise good HDL cholesterol and lower the cholesterol ratio, if anything, they help to protect against it. Coconut Oil Is a Poison and One of the Worst Foods We Could Eat Dr. Michels calls coconut oil a “pure poison.” She claims it is not just a poison, but a “pure” poison; the connotation is, that it is extremely dangerous at even the smallest dosage. What is a poison? According to the English Oxford Living Dictionary, poison is defined as, “A substance that is capable of causing the illness or death of a living organism when introduced or absorbed.” Does coconut oil fit this definition? Not hardly. Coconut oil has been a major part of the diet of millions of people for thousands of years. In all that time it has never been known to cause any illness or kill anyone. On the contrary, there are many plants that are poisonous such as hemlock, belladonna (deadly nightshade), and death cap mushrooms. Consuming any of them, even in small amounts, will bring about sudden illness and quick death. Coconut oil, on the other hand, can be consumed daily in relatively large quantities without any ill effect. I know some people who consume as much as 12 tablespoons (180 ml) a day and are in excellent health. According to the United States Food and Drug Administration (FDA) coconut oil is perfectly harmless. It is included among the FDA's exclusive GRAS (Generally Regarded as Safe) list of food substances. To be included on this list requires rigorous testing to confirm that the item is safe. Coconut oil is given a GRAS classification of “1,” which is the highest or safest category within the GRAS list. According to the FDA this means that all available studies and historical data have shown that there is “no evidence” that shows or even “suggests” that coconut oil is harmful in any way<sup>7</sup>. It is ironic that Dr. Michels calls coconut oil a poison, because it has proven to be not only harmless, but highly effective in saving the lives of people who have ingested actual poisons. The medical literature has described numerous instances in which coconut oil

has been used in hospital settings as an antidote to otherwise fatal poisonings. For instance, the use of coconut oil has become a routine practice in some hospitals in the treatment of aluminum phosphide poisoning<sup>8</sup>. Aluminum phosphide is a common poison used for rodent control. There is no other known antidote and poisonings are almost always fatal unless treated with coconut oil. Using coconut oil to nullify the effects of poisons is not that unusual. Researchers have known for many years about the detoxifying properties of coconut oil. Numerous animal studies have shown that coconut oil blocks the deleterious effects of a number of different chemical toxins. Coconut oil has been shown to alleviate the effects of at least 36 known toxins ranging from industrial solvents to aflatoxin<sup>9</sup>. Calling coconut oil a pure poison only illustrates Dr. Michels' lack of knowledge about coconut oil, which makes anything she says about it totally unreliable. There Are No Studies That Show Any Health Benefits to Coconut Oil One of the most common arguments given in an attempt to discredit coconut oil is to claim that there is no evidence proving coconut oil has any health benefits. When a doctor or professor makes this statement, he or she is inferring that there are no studies to support the use of coconut oil as a healthy fat. They are counting on the listener to take their word on this simply because they are considered an expert. In reality, what they are doing is exposing their own ignorance and lack of knowledge on the subject. When someone makes this type of statement it means they have not bothered to make even the slightest effort to find the facts. If they had, they would have found an abundance of information and research on coconut oil describing its many health benefits. Currently, there are over 10,000 studies on coconut oil listed in the medical literature. Most of these studies can be easily accessed on the internet.

If you go to my website, [www.coconutresearchcenter.org](http://www.coconutresearchcenter.org) and look under the heading "Medical Research," you will find a listing of hundreds of studies. Here you will find references to an abundance of published studies showing the therapeutic or beneficial effects of coconut oil on cardiovascular health, immune function, cancer, diabetes, liver and kidney health, digestive function, weight management, and much more. To say that there is no evidence for the health benefits of coconut oil is totally wrong and indicates that the speaker is either woefully ignorant, too lazy to do any research, or lying. If you want to know the truth about saturated fats and coconut oil you should not listen to professors who have no idea what they are talking about, instead listen to researchers who have actually researched the topic. One of the reasons why Dr. Michels' comments received such notoriety is because of her association with Harvard. Being a Harvard professor gives a person some air of authority. However, there are other Harvard professors who are far more qualified than Dr. Michels on this subject, who have studied and published works on the health effects of coconut oil. One group of Harvard researchers that includes George L. Blackburn, MD, PhD, Edward Mascioli, MD, and Vigan K. Babayan, PhD state, "Coconut oil has an important medical role to play in nutrition, metabolism, and health care. Indeed, properly formulated and utilized, coconut oil may be the preferred vegetable oil in our diet and the special hospital foods used promoting patient recovery." These researchers made this statement after having spent years studying the health effects of coconut oil and other fats. Their comments hold far more authority than a biostatistician who apparently has never even bothered to do even an internet search on the subject. ■

Source: <https://www.apccsec.org/>

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References 1. Assuncao, ML, et al. Effects of dietary coconut oil on the biochemical and anthropometric profiles of women presenting abdominal obesity. *Lipids* 2009;44:593-601. 2. Khaw, KT, et al. Randomised trial of coconut oil, olive oil or butter on blood lipids and other cardiovascular risk factors in healthy men and women. *BMJ Open* 2018;8:e020167. 3. Dehghan, M, et al. Associations of fats and carbohydrate intake with cardiovascular disease and mortality in 18 countries from five continents (PURE): a prospective cohort study. *Lancet* 2017;390:2050-2062. 4. Praagman, J, et al. The association between dietary saturated fatty acids and ischemic heart disease depends on the type and source of fatty acid in the European Prospective Investigation into Cancer and Nutrition-Netherlands cohort. *Am J Clin Nutr* 2016;103:356-365. 5. Siri-Tarino, PW, et al. Meta-analysis of prospective cohort studies evaluating the association of saturated fat with cardiovascular disease. *Am J Clin Nutr* 2010;91:535-546. 6. Chowdhury, R, et al. Association of dietary, circulating, and supplement fatty acids with coronary risk: a systematic review and meta-analysis. *Ann Intern Med* 2014;160:398-406. 7.

<https://www.fda.gov/Food/IngredientsPackagingLabeling/GRAS/SCOGS/default.htm>. 8. Singh Baiwa, SJ, et al. Management of celphos poisoning with a novel intervention: a ray of hope in the darkest of clouds. *Anesth Essays Res* 2010;4:20-24. 9. Fife, B. *Ketone Therapy: The Ketogenic Cleanse and Anti-Aging Diet*. Piccadilly Books, Ltd.: Colorado Springs, CO; 2017. ■

**Horticulture Commissioner and Former Chairman, CDB refutes  
the statement of the Harvard Professor - Coconut oil is pure poison.**

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DO No.:1-1/2018-HC

Dated: the 28<sup>th</sup> Aug., 2018

Dear Dr. Williams,

Published on Jul 10, 2018 posted on YouTube in the talk, titled 'Coconut Oil and other Nutritional Errors,' professor Karen Michels (the director of the Institute for Prevention and Tumor Epidemiology at the University of Freiburg and a professor at the Harvard TH Chan School of Public Health) described coconut oil as "pure poison" and "one of the worst foods you can eat". She made some controversial comments concerning coconut oil in her lecture. Additionally, the comment function under this video is disabled. This made me to write to you directly to safeguard the Indian coconut farmers. In India, the coconut sector plays a significant role in poverty alleviation and employment generation especially among the weaker sections of the society. The industry provides livelihood to about more than 12 million farm families. In India, Coconut has a tradition dating back several thousands of years and is unique in being revered as the "Tree of Life".

Contrary to the claims that there is no study showing significant health benefits to coconut oil consumption, mere googling pulled out 1,91,00,000 general results and 4,11,000 scholarly articles indicating the benefits of using coconut oil. Dr. Michels' statements are unsubstantiated and inconsiderate. Moreover there is no evidence that Coconut oil consumption is linked to heart disease, inflammatory diseases and rather, contemporary studies have shown that coconut oil is healthy.

Based on the evidence based scientific studies, I can put forth the top 10 health benefits of coconut oil. 1. Improves memory and brain function 2. Boost and regulate our metabolism 3. Help in detoxification - removal of toxic materials that have accumulated in the body. 4. Strengthens the immune system. 5. Anti - microbial and anti - fungal property. 6. Prevents gum disease and tooth decay (oil pulling) 7. An effective moisturizer on all types of skin 8. improves skin issues 9. Effective deep cleansing and make-up remove and 10. Helps in healthy growth of hair and gives hair a shiny quality

The diet that is right for us is the diet of our ancestors over millions of years rather than the diet advice of organisation run by paid skills. If someone wants to stir up controversy among those natural health lovers, try calling coconut oil "pure poison" and that is what has happened. I hope that you will take corrective measures by retracting the statement and come out clean by accepting the circumstances that compelled her for the negative statements against the revered crop of billions.

With kind regards,

Yours Sincerely,

  
(Dr. BNS Murthy)

To: Dr. Michelle A. Williams, ScD, Dean of the Faculty, Harvard T.H Chan School of Public Health Kresge Building, 10th Floor, 677 Huntington Avenue Boston MA 02115, USA **Copy to** Dr. Karin Michael, Adjunct Professor of Epidemiology, Harvard T.H. Chan School of Public Health Boston MA 02115, US

**Harvard University disowns the statement of Dr. Karin Michael**

Dear Dr. Murthy,

Thank you for your correspondence. We are aware of media coverage of Dr. Michels giving a talk in which she mentioned coconut oil. Media reports have referred to Dr. Michels as a "Harvard professor." This is misleading. She has an appointment as an adjunct professor, which she retains because she will be mentoring a student. In any case, it is our

policy not to comment on the research or individual comments of faculty associated with the School in any manner as they are speaking on behalf of themselves and their research findings and not on behalf of the institution. We believe this policy is critical to maintaining an environment that supports the free expression of ideas and encourages debate.

Dear Dr. Williams,

Thank you very much for your reply to my earlier email exhorting to retract the controversial statement made by Dr. Karin Michel calling Coconut oil as PURE POISON. While, appreciating the policy of the University not to comment on the research and individual comments made by faculty associated with the School, I conclude the situation fortifies using name of the prestigious University to contradict time tested and well documented evidence based research findings of the benefits of using Coconut and its products for ulterior gains.

I am happy that Harvard University finally disowned the imprudent statement made by Dr. Karin Michel calling it as individual's (speaking on behalf of herself; a thorough Google Scholar bibliographic search brings out absolute zero research articles in her name to testify the claims) and not of the Institution. This move will keep the sanctity and the image of the Harvard University at highest level as I have perceived.

With high regards.

Dr. Murthy Horticulture Commissioner DAC &FW,  
Govt Of India New Delhi.

## Coconut Oil – It's a Functional food and not Poison

Dr.C.Mohankumar, Director, SCMS Institute of Bioscience & Biotechnology, Cochin

Dear Prof. Karin Michel

This is a clarification for your recent controversial claim, coconut oil as poison in human body. As the professor of Harvard, an international reputed Institute, your comment on coconut oil seems biased and it creates great anguish and despair among the scientists who were involved in coconut research especially on the chemical characteristics of coconut oil. With respect to the lipid profile of coconut oil at molecular level, your statement was purely unscientific and absurd. We are wondering about real source of this false remark on coconut oil. As you know confusion is worse than death.

The passion for maintaining good health is a privilege of every human being. So all of them are very specific in selecting foods. In other words food as medicine has been identified as a vision of modern pharmaceuticals and nutraceuticals. In the tropical belt of this planet, coconut palms are growing more than 90 countries in an area of 12 million hectares approximately. As an oleaginous crop, the lipid profile of coconut oil is unique and specific compared to all other vegetable oils globally. Hence its nutritional and therapeutic properties deserve special attention at industrial scale.

Based on key hypothesis put forward by Dr. Ancel Key in 1960s, and the moral support by American Heart Association (AHA), majority of the clinical doctors have considered as a dictum that saturated fats are the prime factor of cholesterol synthesis. Thus Key hypothesis happened to be a strong evidence for generalizing the role of saturated fats in cholesterol formation. Perhaps this upper hand gained for Keys formula in the clinical therapy decades back, still remains as a nightmare for suppressing the quality

of coconut oil. Today the involvement of saturated fats in cholesterol synthesis is a frozen concept because the molecular size of the fatty acids, fats are digested and metabolized differently. So the story relates to coconut fat has something different to say to the public.

Of course coconut oil has saturated fats but all saturated fats are not involved in cholesterol synthesis. As per the classical concept, fats involve in the lipid metabolism through fatty acids and they are the building blocks of triglycerides for the formation of Cholesterol. But all the saturated fatty acids, released in the body are not engaged in Triglyceride (TGA) and Cholesterol (CHL) synthesis. Only long chain saturated fatty acids (LCFA) were the substrates for TGA & CHL formation and in coconut oil it is less than 30% in which Myristic acid- C14 is almost 18%. Since coconut oil is rich in medium chain fatty acids (MCFA) i.e. C6 to C12, and they are not processed by the body in the same manner as LCFA like palmitic and stearic (C16 & C18). Normally LCFA taken in to the body must be mixed with bile released from the gall bladder before it can be broken down. In coconut oil MCFA comes to the level of 65%. During the digestion, MCFAs go directly to the liver which biochemically converts to ketones by bypassing bile. The liver immediately releases the ketones to the blood stream as a fuel substituting glucose. The pathway of developing ketones from MCFA in coconut oil is one of the main reasons for substantiating the therapeutic value of coconut oil for curing Alzheimer's disease. So the earlier concept of saturated fats in CHL synthesis did not match with the chemistry of coconut oil which remains unique from all other vegetable oils.