

## Nutz About Coconuts

By Alan Surrey

People are passionate about a lot of things in life. Film, opera, fashion - even fishing. But coconuts? Heini Joensen, a six-foot two, 65 year-old Dane who drives a 250 cc Yamaha is passionate about coconuts - more specifically, the lauric acid, rich, natural oil that is extracted from coconuts.

Lauric acid is a unique fatty acid with anti-microbial and anti-viral properties, found only in coconut oil and in the milk passed from mother to child during breast feeding.

Heini, a mechanical engineer by profession, owns *Tropical Nutrition*, a Thai-based company that processes fresh coconuts into Virgin Coconut Oil, a product that if the research is anything to go by, has miraculous healing properties.

*Tropical Nutrition*, a single-story, two tone, blue, brick building is located 80 kms south of Hua Hin, amongst the tranquil palm and pineapple groves close to the community of Nikom.

“Every cook knows that to prepare the finest food, you start with the best ingredients available” he said as he showed me the latest delivery of coconuts being processed into crystal clear virgin oil. “The RBD mass produced coconut oils use low grade often rancid coconuts. The finished product is refined, bleached and deodorized. Here we only use the best quality coconut, organically grown by small scale, local farmers.”

The plant is a highly efficient operation clearly designed by an engineer to preserve the integrity of the finished product. The coconuts are delivered already de-husked. The coconut is then washed in sterile water before it is shredded into flakes. The flakes are then ‘cold pressed’ separating the solid fibre from the coconut emulsion.

Traditionally, the opaque liquid is allowed to stand for several hours as the pure oil separates from the water layer. Heini uses advanced centrifugal technology to speed up the process, simultaneously eliminating any danger of environmental contamination. The pure, natural, unrefined and highly stable coconut oil is then put through a further process of filtration.

What is left still contains approximately 0.3% water which could shorten the shelf-life of the coconut oil. (2 years). Heating the residue to remove the water would irreparably damage the molecular structure of the oil. Heini used his knowledge of science and practical experience as an engineer to solve the problem.

“If you heat a pan of water at sea level it will begin to boil at 100 degrees centigrade. If you heat the same pan of water sitting on top of say, Mount Everest, it will boil at a much lower temperature due to the decrease in air pressure.”

Heini designed a pressure tank which stores the oil in a vacuum – allowing the remaining water content to boil and evaporate at ambient room temperature. The engineers at the company that built the vacuum tank from Heini’s precision drawings, were astonished that it actually worked.

Used as cooking oil, coconut oil has been part of the stable diet in tropical climates for thousands of years. It was also a major ingredient in processed food in the west until supplies were

disrupted during World War II. American growers and producers developed the now familiar polyunsaturated fats such as canola, soybean, safflower and corn oils as an alternative.

As is now common knowledge, cholesterol and saturated fat were identified as significant factors in the rise in coronary thrombosis related mortality rates. In the 1980s, the plant based oils were promoted as 'heart healthy,' saturated fats, and the animal and dairy products associated with cholesterol were demonized.

Here is where it begins to get interesting. Coconut oil is a saturated fat. And yet a wide body of interdisciplinary research dating back to the 1930s, (Dr. Weston Price), discovered that populations whose diet consisted in some cases of as much as 60% coconut oil, lived long healthy lives free of obesity.

Researchers Ray Peat, Ph.D. and Mary G. Enig, Ph.D. state "People who live in tropical climates and who have a diet high in coconut oil are healthier, have less heart disease, cancer, colon problems...than unsaturated fat eaters." They cite studies carried out in Melanesia and the Yucatan as evidence. .

Coconut oil was included in the "Tropical Grease Campaign" launched in the United States when growers and producers of polyunsaturated oils sought to protect domestic consumption from the cheaper imported oils available in developing countries. Those who promote the health benefits of coconut oil feel as a result, it has been much maligned

So what makes it so special?

Research indicates that coconut oil reduces the risk of atherosclerosis, heart disease and cancer. It helps prevent bacterial, viral, and fungal

infections, due to its antimicrobial component, lauric acid. Lauric acid destroys the lipid membrane of enveloped viruses such as HIV, measles, Herpes simplex virus (HSV-1), influenza and cytomegalovirus (CMV).

Lita Lee, Ph.D. cites the anti-aging, thyroid stimulating, effects of coconut oil and as a direct result, weight loss. Eat fat and get thin? Apparently. U.S. Ranchers in the 1940s fed their cattle coconut oil to fatten them up before slaughter – they all lost weight and for cows, became mysteriously 'active.'

However, go-to, online medical guru Dr. Andrew Weill, while admitting coconut oil does have some unique properties is not convinced. He believes "The benefits of coconut oil in the diet, if any, are likely to be minimal, and until we have more and better evidence about coconut oil's effect of metabolism and potential role in promoting weight loss, I do not recommend using it."

Back in his office sipping coffee, Heini states "It is not a debate about saturated or unsaturated fat, coconut oil is rich in MCTs."

The reported key to health and weight loss associated with coconut oil is related to the length of the fatty acid chains which are part of its molecular structure. Coconut oil contains what are called medium chain fatty acids, or medium chain triglycerides (MCTs). Once ingested, these medium chain fatty acids metabolize differently from the more common longer chain fatty acids or triglycerides (LCTs) found in other plant-based oils. LCTs must be emulsified by the digestive system and are typically stored in the body as fat. MCTs are absorbed directly through the portal vein into the liver where they are quickly burned as energy.

Skeptic Dr. Weil concedes, "Some research from McGill University in

Canada suggests that this is true; MCTs also boost metabolism and satiety, and therefore may promote weight loss when they replace LCTs in the diet.”

Just as we now know there is good cholesterol, is it possible that in the case of Virgin Coconut Oil, not all saturated fat is bad for you?

Heini is currently working with researchers at King Mongkut University in Bangkok to further develop his company’s bi-products. The dried coconut flakes which are currently used as cattle feed are being milled into flour. He also plans to allow local growers to use his facility to produce their own brand of Virgin Coconut Oil, a move enthusiastically endorsed by the faculty at King Mongkut University.

You can find out more information about *Tropical Nutrition* and Virgin Coconut Oil at [www.cocowel.com](http://www.cocowel.com).

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