

COCONUT MILK, HEALTHY IF CONSUMED IN MODERATION

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It is often said that curries cooked with coconut milk are bad for health. New research, however, a vital ingredient in the traditional cuisine of Southeast Asia, can be part of a healthy diet when consumed in moderation as it does have positive functions, according to French nutritional biochemist Professor Philippe Legrand who was in Kuala Lumpur recently.

He reckoned that as a heritage ingredient in local cuisine, it would be a shame to lose the culinary tradition of using coconut, but said that it is important to draw up guidelines on the consumption of coconut milk so that people know the limit. In a paper he co-wrote with Vincent Rioux entitled “New Data, New Approach and New Guidelines for Saturated Fatty Acids (the case of coconut lipids)”, it was stated that the observational studies have shown that a high intake (more than 15 percent of daily energy intake) of saturated fatty acids (SFAs) is positively associated with



Coconut Milk

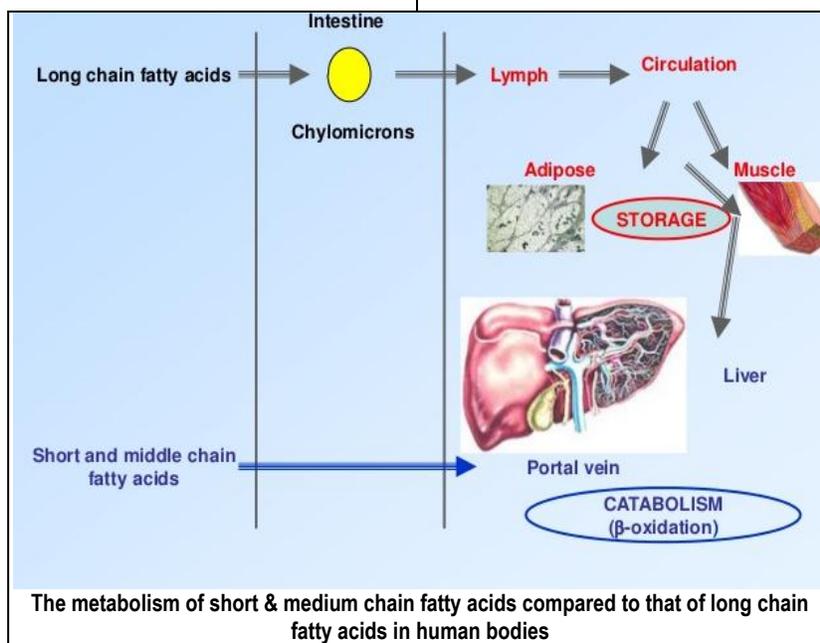
increased levels of blood cholesterol and high coronary heart disease mortality rates.

Among the SFAs, myristic acid is said to be most responsible for the increase in blood cholesterol level in animals and humans when provided at a high level, followed by lauric acid and palmitic acid.

At moderate levels, there was no evidence for the deleterious effects of SFAs and especially myristic acid. The researchers found that in many countries, the recommended dietary intake of total saturated fat has cautiously been set at less than 8 percent to 10 percent of the daily energy intake.

“Coconut Milk (which has dietary saturated fatty acids) suffers from many misconceptions. With deeper study we begin to understand more about the role of different fats in the human diet and how they impact on health,” said Legrand, chairman of the Laboratory of Biochemistry and Human Nutrition in the Agronomic University of Rennes (Agrocampus), France. He is also chairman of the French Guidelines Committee for the fatty acid dietary recommendations in the Food Safety Agency.

Legrand was in KL as part of the Asian tour to share research on fatty acids, including the revised



French nutritional recommendations.

“There are health benefits in short and medium chain fatty acids in coconut milk that were previously overlooked or not properly understood,” he said. Dietary saturated fatty acids such as coconut milk are usually associated with negative consequences for health when consumed in excess because of their impact on atherosclerosis biomarkers, said Legrand.

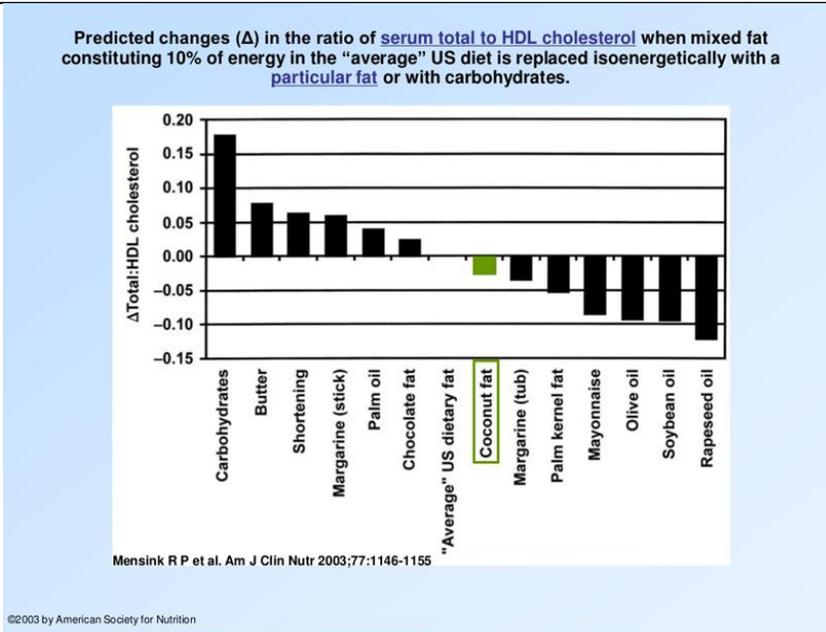
Atherosclerosis is the hardening of the arteries which occurs when fat, cholesterol and other substances build up in the walls of arteries. The saturated fats found in coconut milk and dairy products are short and middle chain fatty acids (C₄-C₁₀), plus lauric acid (C₁₂). Other long-chain fatty acids are more prevalent in meat and common plant sources like palm oil.

A few decades ago, animal studies demonstrated that LCFAs were more likely to end up as fat deposits in the body and vessels compared with MCFAs, which were quickly metabolized by the liver.

Differentiating Saturated Fatty Acids

“A large review of saturated fatty acids functions suggests that they cannot be considered as a single cup anymore in term of structure, metabolism and functions, including health considerations,” Legrand said. For more than 30 years, he has performed research on the fundamental aspects of fatty acid synthesis and metabolism. He had studied the role of delta-(9) desaturase in adiposity and obesity in animals and humans.

“Saturated fatty acids exhibit metabolic and physiological specificities, which differ between the different saturated fatty acids. Some of them have



specific properties and important biochemical functions,” he said. With saturated fatty acids, Legrand felt **it was important to differentiate between the subgroup of lauric, myristic and palmitic acids as these have traditionally been considered the ones that should not be consumed in excess.**

New Approach to Fatty Acid Intake Guidelines

The French Food Safety Agency recently published the adult French population reference intake for fatty acids using a different approach of assessing each type of fatty acid as essential, “conditionally essential” or if the body can synthesize the acid itself. The underlying goal is to help build a diet which aims to maintain good health that corresponds to primary prevention of diseases.

Legrand said: “The innovative nature of this guideline lies in the fact that the ‘approved intake’ of each fatty acid studied has been established from minimum physiological requirements and physiopathological aspects.” Since 1998, he has been

chairman of the French guidelines committee for the fatty acid. Dietary recommendations in the Food Safety Agency where he proposed a new approach for considering saturated fatty acids. He is a member of different scientific societies including the International Society for the study of Fatty Acids and Lipids.

At the event, Chef Kang Tian from T-Garden Cooking School in Cheras, Kuala Lumpur, cooked a fish curry, a pandan chiffon cake and *bubur cha cha* in two versions – one using coconut milk and the other with milk. Three volunteers from the media took up the challenge to differentiate between coconut milk and milk in the dishes. We all passed the test and could tell the two versions apart.

Members of the media who were present at the event were later invited to a sampling and asked for opinions on the use of coconut milk and milk in cooking. The majority favored the delicacies cooked with coconut milk and said they had better flavor and taste.

Source: *The Jakarta Post*, 17 February 2014 Issue; and www.slideshare.net/