



THE TRUE FACTS ON PALM OIL & HUMAN HEALTH



CSPI: Dying or a cookie?

CSPI certainly knows how to dramatize a “dying” cause. CSPI has grudgingly acknowledged the versatility of palm oil and why this has become the major attraction for the food industry at a trying time when they are faced with the urgent need to reformulate traditional foods to be trans fatty acid (TFA) free. Nature in its wisdom, has endowed palm oil with physical and chemical characteristics that makes it suitable for applications in many foods systems across many culinary practices. Technology has simply enhanced this. A process called fractionation allows palm oil to be further separated into a solid fat (palm stearin) and liquid oil (palm olein). Fractionation simply takes advantage of the inherent properties of palm oil and by temperature manipulations (and without the addition of any chemicals) this separation is effected. So there is your contrast with TFA-rich fats, which undergo hydrogenation in the presence of a chemical catalyst and generate mostly unnatural geometric isomeric fatty acids that are a true problem for human health. Palm oil on the other hand stays TFA-free throughout these processing stages.



Nutrition Facts			
Serving Size 1 cup (22)			
Servings Per Container			
Amount per serving			
Calories 350			
Total Fat 12g			
Saturated Fat 3g			
Trans Fat 1.5g			
Cholesterol 30mg	10%		
Sodium 470mg	20%		
Total Carbohydrates 31g	10%		
Dietary Fiber 0g	0%		
Sugar 5g			
Protein 5g			
Vitamin A	4%		
Vitamin C	2%		
Calcium	20%		
Iron	4%		
<small>*Take Generous 1/2 cup or 1/4 cup daily on an empty right stomach. Pour 250ml of water, juice, soy, rice or almond milk into cup.</small>			
	Calories	2,000	2,500
Total Fat	Less than	60g	60g
Total Fat	Less than	20g	20g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrates		300g	300g
Dietary Fiber		25g	25g

The FDA requires that food labels contain trans fat content from 1st January 2006

Despite the increasing awareness and food legislations aimed at minimizing the content of TFA in the foods Americans consume, hydrogenated fats (containing TFA) remain a mainstay in North America. It is no secret that CSPI has openly championed a TFA-free campaign and actually profited from it. We remain grateful and congratulate CSPI for championing the need to legislate against TFA in the United States. The Malaysian government, through its palm oil related agencies has undertaken various human dietary trials in the United States, locally and elsewhere to compare palm oil against TFA in humans, to understand and establish scientific evidence that sought a direct comparison between TFA and palm oil. Had science suggested that the health effects of palm oil were equal to or worse than TFA, we would have initiated changes in the composition of the oil for the overall benefit of our global consumers. Scientific evidence published in peer-reviewed journals brought forth the fact that palm oil was healthier than TFA and this opened the possibility that palm oil could, at least in part, fill the void that would result from the removal of TFA containing fats. Indeed this is exactly the current scenario and the fact of which seems to have irked the likes of CSPI.



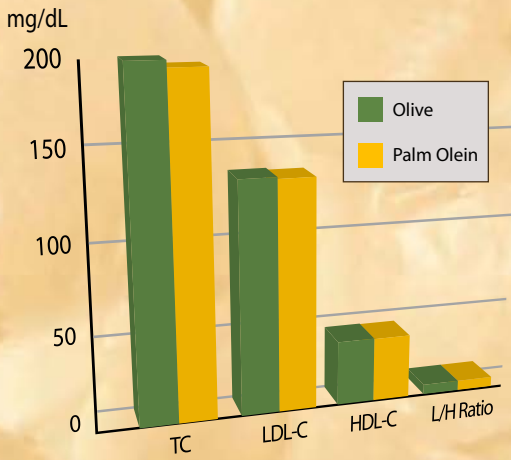
CSPI also cleverly advocates the use of new zero TFA foods made from fully hydrogenated interestrified liquid oils and gives examples of such choices. Does CSPI really understand the implications of this recommendation, or is it just a shot in the dark to dent palm oil?

American food industry is rapidly being regulated towards minimizing and eliminating the use of hydrogenated fats and assuming that it wishes to shun away from palm oil for its many solid fat formulations, what realistic choice does it really have? A number of corporations have begun toying with an alternate fat modification technique which involves fully hydrogenating liquid oil into a solid saturated stearic-acid block, claiming TFA-free, and then interestrifying the preparation with native liquid oil. Health claims that will be made for such a product include “high in stearic acid which does not raise blood cholesterol”. But are these new modified fats really safe?

You have been educated to count fatty acids in the foods you eat. The new process will require you to learn about triglyceride molecules that have an equally important but yet poorly understood role in cholesterol regulation and heart disease risk. The problem is that the human body and its cascade of metabolic enzymes are conditioned to rapidly recognize natural triglyceride molecules, which are then broken down and repackaged for precise metabolic functions. The proposed fat modification process will generate a number of triglyceride varieties that can only be classified as alien (unnatural) and their real values and effects are yet to be ascertained. This surely rings a bell – hydrogenated fats contain trans fatty acids, many of them unnatural fatty acid isomers, and we all now understand their disastrous effects on health, who can safely say that the interestrified fats would not be equally unhealthy?

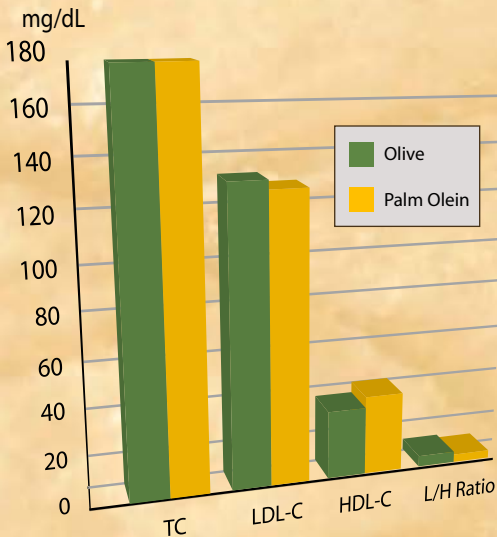


Study 1
Olive Oil and Palm Olein Have Similiar Effects on Plasma Cholesterol in Humans



Human subjects fed diets predomination as either olive oil or palm olein showed identical plasma cholesterol response. *Ng et al. (1992) J. Am. Coll. Nutr.*

Study 2
Olive Oil and Palm Olein Have Similiar Effects on Plasma Cholesterol in Humans



Human subjects fed diets predominating as either olive oil or palm olein showed identical plasma cholesterol response. *Choudhury et al. (1995) Am. J. Clin. Nutr.*

CSPI advocates the use of traditional oils such as soy, canola, corn, high oleic sunflower and low linolenic soybean oils for crackers, pastries, cereals and popcorn.

Consumers should immediately be wary of these oils since they are mostly genetically modified (GM) and WHO has just recently advocated that GM foods must be subjected to further safety assessments. Why then does CSPI insist on compromising the consumers by advocating such questionable practices? But be realistic. These oils cannot on their own or without further modification be used in the manufacture of solid fats. The real fact is without the availability of solid fats, the American food system as we know it today will collapse from a lack of functionality and taste.

We advocate the use of palm oil since it is comparable with olive oil for its nutrition effects on blood cholesterol and lipoproteins.

Palm oil has been shown to be effective in maintaining desirable plasma cholesterol and lipoprotein cholesterol levels. Monounsaturated oils rich in oleic acid are currently touted to be the healthiest of the edible fats in the human diet. While olive, rapeseed and canola have in excess of 60% of their fatty acid composition as cis-oleic acid, palm oil has about 48% of this monounsaturated fatty acid. The question of whether this level of oleic acid in palm oil is adequate to result in a lipoprotein-cholesterol profile that protects against coronary heart disease was examined in a series of human trials. In these studies the exchange between palm oil and olive oil resulted in similar plasma and lipoprotein cholesterol values (total cholesterol, low-density lipoprotein cholesterol and high density lipoprotein cholesterol). This showed that in humans, palm oil could be exchanged for olive, canola and rapeseed oils (high oleic) without adversely affecting serum lipids and lipoprotein levels.



