The Great Fat Debate

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There is so much media hype from mainstream media and leading health authorities, including the naturopathic community suggesting the many ill effects of consuming Trans Fatty Acids (TFA's) that the topic of the Great Fat Debate deserves a closer look for the sake of our heath and understanding.

Whilst there is unanimous agreement that TFA's are problematic and are to be avoided at all costs, some explanations are confusing at best or misleading at worst. It is time for more clarity so we can all choose the fats that are good and avoid those that are bad.

Let's look at some of these warnings

Rekha Balu, writing for the *Wall Street Journal* states that TFA's are like saturated fats "which raise bad cholesterol, causing a build-up of fatty deposits in the arteries." That is incorrect as saturated fats raise both the *good* and the *bad* cholesterol and they do not cause fatty deposits in the arteries. An under-active thyroid coupled with stress and diet high in polyunsaturated oils causes build-up of fatty deposits in the arteries.

Lynn Roblin, writing for the *Toronto Star*, advises consumers to avoid TFA's by consuming more vegetable oils, such as olive oil and canola oil, in preference to butter and coconut oil.
Let's remember that vegetable oils such as canola and safflower are rich in omega -6 fatty acids which have now been proven to cause oxidization of our cells. This reaction leads to inflammation which in turn promotes degenerative conditions and premature ageing.

Harvard nutritionist Frank Hu, featured in an article for the *Washington Post*, says butter is better than margarine, but tub or liquid margarine made from commercial vegetable oils is "a more healthful choice than butter." What Mr Hu is promoting is the omega 6 fatty acids which have been hydrogenated and these are technically TFA's. Quite confusing indeed!

Why is there so much confusion amongst health authorities in relation to fats?

This is because in 1961, the American Heart Association published its first dietary guidelines aimed at the public. The authors, Dr Ancel Keys, Irving Page, Jeremiah Stamler and Frederick Stare, called for the *substitution of polyunsaturated oils* for saturated fat and even though Keys, Stare and Page had all previously noted in their published papers that the increase in Heart Disease was due to increasing consumption of vegetable oils, the 1961 report did not publish this fact, even after a 1956 paper by Dr Keys had suggested that the increasing use of ***partially hydrogenated vegetable oils*** (which is what TFA's technically are) is one of the culprits in the heart disease epidemic.

Why did Dr Keys report was ignored?

For obvious economic reasons the vegetable oil industry then squashed the reports on the dangers of vegetable oils and stealthily began their phony attack on making saturated fats: meat, eggs, cheese, butter and coconut oil responsible for heart disease.

In actuality, saturated fats help in preventing heart disease If we examine the health statistics along with the research on saturated fats consumption from the nations that do consume large amounts of saturated fats in their diet we find that they are among the healthiest nations/tribes/cultures in the world. Herein lies the big 'fat' confusion.

Let's look closer at the FAT debate

TFA's are typically found in processed foods such as cookies, margarine, fried foods, fried potatoes, potato chips, crackers, breaded chicken, and fast food. McDonald's, has admitted its french fries contain a third more TFA's than they had thought. In New York City there are hefty fines which will be imposed upon restaurants if they do not comply by avoiding TFA's in their cooking; this will take place in July 2007.

Polyunsaturated Fats

Polyunsaturated oils are liquid at room temperature. Polyunsaturated fats such as Safflower, Corn, Sunflower, Soybean and Cottonseed Oils all contain over 50% omega-6 fatty acids. Safflower oil contains almost 80% omega-6. Researchers have now discovered there are dangers in consuming more of omega-6 oils in our diet then we need. The ideal ratio of omega-6 to omega 3 (the essential fatty acid) is 1:1. This is easily achieved if one avoids the use of vegetable oils as omega 6 is far more abundant in our diet then omega 3 essential fatty acids found in cold water fish: salmon, sardines and mackerel.

TFA's

In order to have polyunsaturated fats last longer and make them look more appealing, food manufacturers use a process called '**hydrogenation**'. Hydrogenation is a process that takes **unsaturated** liquid fat (usually some kind of **vegetable oil**) and adds hydrogen. The result is a TFA's.

During hydrogenation, oil is heated to an extremely high temperature, this causes the oil to rapidly oxidize and create free-radicals. In basic chemistry 101, free radicals cause prolific cell damage and cause premature ageing.

Even using the so called 'healthiest' organic vegetable oils which includes olive oil in baking and frying creates free radicals. This is because *all* vegetable oils oxidise especially when used in cooking. They not only produce TFA's but form free radicals – lethal combination for our bodies. The only oil that does not oxidise even at 170 degree Celsius is Organic Virgin Coconut oil – a saturated fat. Amazing!

Avoiding TFA's at all costs is a must according to WHO (World Health Organization). This is because TFA's are injurious to the heart and have been linked to cancer, atherosclerosis, diabetes, obesity, immune system dysfunction, birth defects, difficulty in

lactation, and problems with bones and tendons. So we want to exclude them from our diet, yet it is difficult when some of the most tempting foods such as commercial cakes, biscuits, chocolates, potato chips are laden with TFA's.

Why Saturated fats are not TFA's?

TFA's have *similar* properties to saturated fatty acids ***when used in baked goods,*** but the claim that TFA's *are* like saturated fatty acids is incorrect in view of their molecular bonding/structure and their biological effect in our bodies. This is the area that has been mostly ignored by mainstream media and even among the naturopathic community according to lipid and nutritional expert Dr Mary G. Enig. Enig campaigned against TFA's back in the late 1970's after completing her most extensive research on the analysis of all fats. (for more extensive information see Mary G. Enig's PhD Nourishing Traditions: The Cookbook that Challenges Politically Correct Nutrition **www.newtrendspublishing.com**)

So which oils do we to use now?

Organic Virgin Coconut oil; a saturated fat that is unlike any other fat and truly deserves a classification of its own.

With all the research and studies on saturated fats to date, health authorities still group TFA's with healthy saturated fats like coconut oil. Coconut oil is not only the healthiest saturated fat but is one of the healthiest foods we can consume on a daily basis. Let's examine the most misunderstood fat that is actually a super food.

Why is Coconut oil unique and unlike any other fat?

Coconut oil is made up of ***medium-chain fatty acids*** (MCFA's). Two-thirds of the saturated fat in coconut oil is a medium-chain saturated fat. This important fact deserves clarification as MCFA's actually helps us to lose weight, lower cholesterol, improve diabetic conditions and reduce the risk of heart disease.

One of the most outstanding benefits of consuming MCFA's is that they do not require the liver and gallbladder to digest and emulsify them. This means instant quick energy, increased thermogenisis (increased metabolic rate in the body) which leads to more heat production as well as improved circulation. For anyone with impaired fat digestion or removed gallbladder, coconut oil is the only oil to consume as it is very easily digested.

MCFA's have also antimicrobial and anti-fungal properties, so they are beneficial to our immune system. In addition, coconut oil assists people with under-active thyroid by increasing the metabolic rate of the body and creating more energy.

Ray Peat Ph.D., a physiologist who has worked with progesterone and related hormones since 1968, says that the sudden surge of **polyunsaturated oils** in the food chain post World War II has caused many changes in hormones. He writes:

> Their [polyunsaturated oils] best understood effect is their interference with the function of the thyroid gland. Polyunsaturated oils block thyroid hormone secretion, its movement in the circulatory system, and the response of tissues to

> the hormone. When the thyroid hormone is deficient, the body is generally exposed to increased levels of oestrogen. The thyroid hormone is essential for making the 'protective hormones' progesterone and pregnenolone, so these hormones are lowered when anything interferes with the function of the thyroid. The thyroid hormone is required for using and eliminating cholesterol, so cholesterol is likely to be raised by anything that blocks the thyroid function. http://www.efn.org/~raypeat/efatox.rtf

It is very interesting to note that high cholesterol is not a sign of eating too much saturated fat. High cholesterol in a lot of the cases is due to an under-active thyroid which affects the liver as well as the many loops and feedback systems within the endocrine system. Stress and over consumption of carbohydrates/sugars also forms high levels of cholesterol.

What are saturated fats and why do we need them?

Saturated fats are semi solid at room temperature and are found in animal products such as meat, poultry, lard, poultry skin, whole milk, cheese, eggs, butter and tropical oils such as coconut and palm oil.

Our body actually needs saturated fats to stay healthy. Why?

1/ Saturated fats constitute at least 50% of our cell's membranes - the phospholipid component of every cell. Saturated fatty acids are what gives our cells structural integrity, so the cell walls are not weak and can protect the inside of the cells.

2/ Saturated fatty acids play a vital role in the health of our bones. For calcium to be effectively utilized by the bones, at least 50% of the dietary fats should be saturated.

3/ Saturated fatty acids actually lower Lipoprotein (a), a substance in the blood that leads to heart disease, whereas excess consumption of vegetable oils increase it. (www.mercola.com/2003/aug/13/statin_drugs.htm)

4/ Saturated fatty acids protect the liver from alcohol and other toxins, including Tylenol, a pain reliever.

5/ Saturated fatty acids are needed for the proper utilization of omega-3 essential fatty acids because omega-3's are better retained in the tissues when the diet is rich in saturated fats (particularly organic virgin coconut oil)

6/ Saturated stearic acid found in beef and cocoa, and palmitic acid found in coconut oil are the preferred foods for the heart, ***which is why the fat around the heart muscle is highly saturated.*** The heart draws on this reserve of fat in times of stress.

7/ Saturated fatty acids such as **caprylic acid** found abundantly in coconut oil, is anti fungal and helps combat candida (yeast overgrowth so common in our society)

8/ While saturated fats raises both the bad and the good cholesterol, TFA's as well as excess consumption of omega -6 fatty acids raise the bad Low Density Lipo-protein (LDL) and suppress the good High Density Lipo-protein (HDL) cholesterol, making it even worse.

In conclusion, avoiding TFA's is a must. There are no tolerance levels. They are serious culprits of degenerative conditions disguised in some of the most tempting foods to date. Avoiding over consumption of polyunsaturated oils (omega – 6 fatty acids) such as flax oil and completely avoiding corn, soy, safflower and canola is a great start, as polyunsaturated oils have been shown to contribute to heart disease, inflammation, under-active thyroid and weight gain.

Using virgin organic coconut oil and I stress the importance of using only virgin organic coconut oil, because the refined version of coconut oil no longer has the same structure and same health benefits as the virgin organic coconut oil. In fact, consuming plain coconut oil can even give someone a headache or nausea.

The food manufacturers will not willingly return to using naturally saturated fats such as coconut oil, palm oil, butter and lard because they are more expensive. Only a concerted demand by educated consumers will bring healthy traditional healthy fats back into our commercial food supply and restaurant cooking.

Using organic coconut oil in all cooking and baking is the best choice for a healthy alternative. Because virgin coconut oil is completely saturated and no TFA's can be made from it, it is therefore harmless. In addition, it does not oxidise even at 170 degrees Celsius.

Virgin Coconut oil is the fat of fats as it also helps us burn body fat for energy because of its unique molecular structure of medium chain fatty acids. So do enjoy eating more organic virgin coconut oil, drinking organic coconut milk/crème in your teas as well as pouring it over your porridge and munching on macaroons made from organic cocoa and desiccated organic coconut for health and longevity.

In Wellness!

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