

LINOLEIC ACID IS CARCINOGENIC

by Stanford Field January 2003

A SHOCKING REPORT FROM JAPAN IS RECEIVED WITHOUT A MURMUR IN THE WESTERN WORLD

1 1997, a report was published by Harumi Okuyama, et ai, in "Progress in Lipid esearch," Vol. 35, No.4, pp. 409-457 that presented overwhelming evidence nat linoleic acid (predominantly in vegetable oils) was not only carcinogenic, but lso a major risk factor for cardiovascular and cerebrovascular diseases and for llergic hyper-reactivity.

ow could such valuable information be ignored? Why haven't we heard even a hisper about it? The answer, I believe, lies in the catastrophic implications for the food processing-pharmaceutical-medical- political industries. We have been ad misinformation that ignores alternative theories. For example, the cholesterol neory of heart disease propagated the use of highly profitable holesterol-lowering drugs and vegetable oils. Heavy investments were made by the pharmaceutical and food processing industries. It's not surprising that the omocysteine theory (first proposed by Kilmer McCully, MD in 1969) was not llowed to see the light of day. To acknowledge the homocysteine theory would ave slowed the rush to drugs and vegetable oils. The homocysteine theory redicted that heart disease was mainly an imbalance of diet (methionine intake) and nutrients to detoxify homocysteine - that required no drugs or vegetable oils.

he Food and Drug Administration (FDA), originally conceived to protect the public, is now corrupted with pharmaceutical money and the promise of high-paying jobs within the pharmaceutical giants. Did you know that 60-75 percent of FDA employees take jobs in pharmaceutical companies when they etire from government? Did you know that FDA officials own stock in the drug companies they are assigned to regulate? Outrageous! And now we are in so leep, that officials, upon whom we depend to guide our health, cannot tell the ruth. Anyone on the inside who attempts to blow the whistle, immediately becomes history. Deception-for-money, without regard for health, has become the vay of life. So, don't expect to hear about the carcinogenicity of vegetable oils.

am certain that free-thinking people throughout the world appreciate the vailability of the **Townsend Letter for Doctors and Patients**, which is one of the ew literary vehicles that is independent of the food processing-pharmaceutical-medical-political complex.

/EGETABLE OILS: A DISASTER IN AMERICA PROVIDES

EPIDEMIOLOGICAL EVIDENCE UNCOVERED BY JAPANESE RESEARCH

After World War II, grain production in the United States rose rapidly because of greatly increased farm productivity brought about by mechanization, fertilizers and pesticides. Within a relatively short time, grain production exceeded demand in the United States. Oils were removed from the excess grains, and the residual mash was fed to cattle. Since cattle were fed grains to fatten them quickly (they normally eat grass), their fats were high in linoleic acid.

he intake of cattle meat and vegetable oils rose dramatically as hamburger hops and grocery store oils proliferated. Nutritionists and healthcare rofessionals encouraged the public to eat vegetable oils because they contained ssential fatty acids - especially linoleic acid.

he growth of railroads and the development of refrigerated railroad cars allowed eef to be shipped to every part of the nation. You could now get a hamburger 80% fat and very high in calories), french fries (boiled in toxic peroxidized oil nat is soaked into the potatoes) and a soft drink whenever you felt the slightest it of hunger. The soft drink contained phosphoric acid (to dissolve the carbon ioxide) that required calcium from the bones to neutralize it. The soft drink also ras also extremely high in sugar (about 30-40 grams or 8-10 teaspoons - the lood normally contains about 5 grams of glucose) which caused insulin levels to oar. High insulin promotes the conversion of linoleic acid to excess arachidonic cid. Excess arachidonic acid in cell membranes causes a response to any injury *i*th excessive inflammation and excessive cell damage. The "arachidonic acid ascade" mediates all inflammatory damage including that associated with heart liseases, Alzheimer's disease and all cancers. Thus, linoleic acid and insulin urges are combined to devastate the body.

eturning to the story, vegetable oils sold in grocery stores were treated with ydrogen (partially hydrogenated) to reduce rancidity and gum formation to icrease shelf life. The oils were crystal-clear and stayed that way. Later, it was bund that the plastic bottles oozed estrogen mimics and hormone - disrupting hemicals that are a leading cause of prostate cancer and breast cancer. These strogen mimics playa significant role in the epidemic of infertility and remenstrual syndrome among young women.

olycarbonate resins contain bisphenol-A which has potent estrogenic effects. olycarbonate resins are made into clear hard plastic water and vegetable oil ottles that have become ubiquitous. Furthermore, polycarbonate resins are used is the inner linings in canned goods and soft drinks. As little as 2 parts per billion of bisphenol-A (1/1000th of the FDA safety limit) cause an estrogenic response in cells.

ull hydrogenation of vegetable oils produced solid saturated fats that were anned (such as "Crisco"). Intermediate hydrogenation produced a semi-solid fat nat was called "margarine" that could be used as a butter substitute. The egetable oil industry did an excellent job of chemical engineering, but whose esponsibility was it to test the physiological effects of these altered oils?

Vithin a few decades, heart attacks and other heart diseases became epidemic. Medical research identified saturated fats and cholesterol in foods as the main nutritional factors causing heart disease. Polyunsaturated oils were found to ower blood pressure and reduce cholesterol in heart-problem patients. The holyunsaturated vegetable oils were led by safflower oil which had the highest oncentration of polyunsaturates (80% linoleic acid). It was rapidly swept off procery store shelves and fed into the mouths of everyone in America!

hereafter, margarine was endorsed by the American Heart Association as a heart-healthy substitute for butter. Margarine contained partially hydrogenated fat halled "trans-fatty acids" which were later found to be insidiously unhealthy. Nout 80 percent of the margarine in the United States is made from refined hoybean oil which contains about 52 percent linoleic acid. Perhaps, the linoleic had aspect of things should be considered in the "great soy debate." Trans-fats are linked to the following effects: tumor growth and metastasis, inhibition of many hey enzyme reactions, low birth weight in infants, decreased testosterone in men, prostate enlargment, heart disease, increased LDL cholesterol, lowered HDL cholesterol, obesity, suppression of immune system, interference with glucose ransport into cells, and excess-glutamate induced neuronal death. Trans-fats are ound in bread, cake, candies, canned soup, cereals, cookies, crackers, loughnuts, cheese, grocery store oils and margarine.

ledical researchers, doctors and nutritionists were completely unaware of the nintended detrimental health consequences of a diet high in omega-6 oils (most egetable oils) and trans-fatty acids. Today, when even I know about them, very ttle is officially said to warn the public.

As the cancer rate rose and the heart disease rate declined and no greater net survival rate was attained, it became transparent that heart disease was being raded for cancer. Why? We now know, based on the Japanese research, that the nain component of the "heart-healthy" vegetable oils (linoleic acid) is carcinogenic.

A DISASTER IN JAPAN LEADS TO THE DISCOVERY THAT LINOLEIC ACID IS CARCINOGENIC

ince the 1950s, Japan has experienced rapidly rising mortality from cancers lung, colorectum, breast, uterus, prostate, pancreas, esophagus and skin) that rere previously of relatively minor importance. Furthermore, cardiovascular and erebrovascular diseases and allergic hyper-reactivity disease are also rising apidly. Through extensive and detailed research, the main cause for all these iseases is attributed to the relatively rapid switch to the use of vegetable oils nstead of the traditional use of fish oils as a result of a catastrophic disregard for ne sanctity of the nearby ocean environment - the source of sea life used as bod.

n the 1950s, a chemical plant in Minamata, Japan continuously discharged large mounts of waste mercury compounds into Minamata Bay. The passage of nercury through the aquatic food chain led to human deaths following the onsumption of fish that lived in the bay. Infants were born with severe mental etardation and the absence of limbs. The concentration of mercury in those fish eached levels as high as 36 parts per million (ppm). By way of comparison, the werage mercury content of water-packed canned tuna in the United States in 990 was 0.2 ppm (as methyl mercury). Any amount of mercury is considered b dangerous because it can be accumulated to reach toxic levels. How does mercury get into fish around the world?

fercury is released into the atmosphere by the following:

- burning of coal mostly to generate electricity (coal accounts for 29 percent of all energy used in the world in 2000)
- the incineration of all kinds of wastes, including land dumps
- metal smelters
- volcanic eruptions

he mercury vapor is carried around the globe by air currents, and it eventually ettles out of the atmosphere and falls on the land (30%) and in the oceans 70%). The World Health Organization estimates that about 10,000 tons of nercury are released worldwide each year from all sources. That is a huge mount of mercury being deposited n the environment, year after year.

he ultimate sink for the mercury is the sediments of oceans and lakes. There, nicro- organisms convert the inorganic mercury to methyl mercury (the form that most toxic to humans). That mercury is concentrated in the largest fish in the quatic food chain (sharks, swordfish and tuna). Mercury is especially toxic to etuses, so women in their reproduction years must not accumulate mercury in heir bodies to avoid passing it on to their babies.

Ionosodium glutamate (MSG and many disguised names) is in a great deal of the ood that is on the market. Excess glutamate in neurons is an excitotoxin which auses neuron death. The body tries to detoxify the glutamate by conversion to glutamine. That conversion is inhibited by mercury. and is strongly associated with Alzheimer's disease. The blood serum of early-onset Alzheimer's patients nontains three times as much mercury (330 mcg/l) compared to controls (110 ncg/l). Mercury is highly toxic to the brain.

Iso, the body uses calcium to activate neurons in response to glutamate. The etoxication of a neuron requires that the calcium be pumped out of the neuron. hat removal of calcium is inhibited by trans-fatty acids. The excessive calcium ccumulation in the neuron causes neuron death, and it is also associated with Izheimer's disease.

DA data showing the mercury content of fish (in parts per million), is as follows:

wordfish 1.00 lobster 0.31 hark 0.96 halibut 0.23 nackerel 0.73 tuna (canned) 0.17 una steak 0.32 scallops 0.05

lercury was not detected in salmon (do not eat farmed salmon - they are fed noleic acid-containing fatty acids and trans-fatty acids), flounder, sole, herring, hitefish, mahi mahi, and cod.

Returning to the story in Japan, well-publicized concerns about contamination of the a foods with mercury-containing compounds and polychlorinated biphenyls PCBs) have caused a sharp increase in the use of vegetable oils. The subsequent steadily rising cancer and stroke rates provided the incentive for unimal research and epidemiological studies in an attempt to uncover the causes. That research culminated in the 1997 report by Harumi Okuyama, et al that contained electrifying evidence that *linoleic acid and its metabolite, arachidonic acid* were prominent causes of a variety of cancers, cardiovascular and cerebrovascular diseases and allergic hyper-reactivity in Japan with implications or America and the rest of the industrialized world.

THE FATTY ACID CONTENT OF VARIOUS COMMON OILS

This report concludes with a table showing the linoleic acid content of various common oils (area under "linoleic acid"). My oil use is limited to one tablespoon of cod liver oil (Norwegian is relatively pure - the label indicates "no detectable" [whatever that means] mercury or PCBs) and liberal use of extra virgin olive oil, coconut oil and medium chain triglycerides.

COMPOSITION OI	FATTY	ACIDS	(wt %	5)
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	Saturated Fatty Acids	Mono- saturated Fatty Acids	Linoleic Acid	Gamma Linolenic Acid	Alpha Linolenic Acid	Eicosa- pentaenoic Acid	Docosahexaenoic Acid
	SAT	OA	LA	GLA	LNA	EPA	DHA
	16-18:0	16-20:1 omega 9	18:2 omega 6	18:3 omega 6	18:3 omega 3	30:5 omega 3	22:6 omega 3
OILS							
Canola	9	54	30	0	7	0	0
Coconut	91	6	3	0	0	0	0
Cod Liver	53	23	2	0	1	10	11
Corn	17	24	59	0	0	0	0
Cottonseed	26	22	52	0	0	0	0
Fish anchovie + sardine	30	30	10	0	2	17	11
Flax Seed	10	16	16	0	58	0	0
Hemp Seed	8	12	60	0	20	0	0
Macadamia	17	73	10	0	0	0	0

TT	Olive	16	76	8	0	0	0	0
11	Peanut	20	50	29	0	1	0	0
TAN	Pumpkinseed	9	34	49	0	8	0	0
	Rice Bran	16	48	35	0	1	0	0
The	Safflower	10	10	80	0	0	0	0
A A	Salmon	50	12	5	0	3	18	12
T	Sunflower	12	23	65	0	0	0	0
	Soybean	15	26	52	0	7	0	0
AR	Walnut	17	28	50	0	5	0	0
ALX.	Wheat Germ	18	25	52	0	5	0	0
-1-2	Special	GLA Oils						
	Black Currant	14	9	47	17	13	0	0
AN I	Borage	25	16	35	24	0	0	0
LA	Evening Primrose	8	9	74	9	0	0	0
1	Animal Fats							
YE	Beef Fat	76	19	4	0	1	0	0
	Butter	78	19	2	0	1	0	0
2	Chicken Fat	66	16	17	0	1	0	0
	Lard	71	18	10	0	1	0	0

TOO LATE SCHMART is written by Stanford Field (BS chemical engineering, 1951) who has been avidly studying biochemistry and physiology, since 1993, with an aim of staying healthy despite the ever-increasing odds of age-related decline. This publication is written to the best of his ability, and it is intended to document any findings that may be useful to interested readers. The publication has neither



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