## Raymond Peat, Ph.D. Good Fats

ELUV. 2008

(Transcribed by Bskory)

Eluv: What is a good oil?

**RP:** Basically, saturated fats are safe and even therapeutic. A man named Mangi who has been working with liver diseases has demonstrated some of the toxicities of the unsaturated fats in a very comprehensive way, and that coconut oil and all of the other saturated fats can be used therapeutically to treat liver disease - hepatitis and cirrhosis and such. The liver just happens to be his specialty but people have demonstrated similar effects in all of the systems - brain protective effects, the skin - preventing aging of the skin and such. Some very old experiments - they shaved rabbits, and the rabbits that were given unsaturated vegetable oil in their diet when exposed to the sunlight got aged, wrinkled skin. And the rabbits that were given coconut oil tolerated the sun exposure without aging effects.

*Eluv:* So this really goes against what we have been taught here in the United States about saturated fats - that they were bad.

**RP:** Ya, the coconut industry doesn't have a good lobby in the United States.

*Eluv:* What is that all about, because years ago, apparently, we used to use coconut oil for many of our food processes? What happened to that?

RP: Oh, for a hundred years it was a good cheap oil that they made Oreo crackers and tortilla chips and potato chips, and it was very popular because you could store it in a barrel as long as you wanted and it never got rancid. But in the Second World War, the islands weren't accessible and they started experimenting with using other seed oils, and animal food was one of the first places that they experimented with the unsaturated fat. They started seeing animals, rats and other lab animals dying with softening of the brain and degeneration of the gonads. They found that it was one of the effects of getting too much of the polyunsaturated fats. But after those experiments, the experimental animals were the first ones to show the damage. Mink farmers were another early experience. They were feeding the mink a lot of fish, and the mink were getting a specific disease of their fat tissues that would ultimately be fatal. It was called yellow fat disease and that was traced to the unsaturated fats in the fish. The early vitamin E studies showed that it would protect to a great extent against the overexposure to the unsaturated fats, and that led to vitamin E being thought of as an antioxidant primarily. The vitamin E originally (research) showed that it was an anti-estrogen. For various reasons it came to be described only as an antioxidant because it protected against the polyunsaturated fat excess. The reason there's a connection is that estrogen excess causes the oxidation of the polyunsaturated fats, and so an excess of either estrogen or polyunsaturated fat amounts to the same thing as a vitamin E deficiency leading to sterility and brain problems and skin aging and so on.

**Eluv:** Is vitamin E a saturated oil?

**RP:** Vitamin E is somewhat unsaturated, but it happens to stop the chain reaction that proceeds if you have too much of the polyunsaturated fats. And if you don't have any of the polyunsaturated fats in your diet, you really don't need vitamin E.

The requirement for vitamin E is directly related to how much unsaturated fat you're eating. So, when they feed animals coconut oil, they find that they hardly need any vitamin E at all. The coconut oil works very much like vitamin E in stopping the chain reactions of oxidation in the polyunsaturated fats.

Eluv: So, let's go back to the fish oil. There's a big, huge industry move for fish oil being promoted as brain food, great oil to take - this is the next kind of phase going on right now. So, you're saying that that's actually not true?

RP: Ya. I've got several articles on my website that...one of them describes the history of the concept of unsaturated fats being essential as the nutrient. But that was revived about 1950. Research that had been knocked out because they were proven not to be essential nutrients... you could cure deficiencies (the disease that had been called "an essential fatty acid deficiency") you could cure it giving Zinc and vitamin B6, so it wasn't a fat deficiency at all, it was a vitamin deficiency brought on by the intensified metabolism when you don't eat the fats. You simply need better nutrition when your metabolism is running at a full 100% activity the way it should. But following the discovery that the polyunsaturated fats slow the metabolism - so you don't need so many of the vitamins and proteins - pig farmers found that that was very valuable because if they fed them a lot of polyunsaturated fat, strictly corn and soy bean diet, for example, the pigs didn't eat so much because their metabolism was suppressed, and they could fatten the pigs very cheaply by suppressing their metabolism. But since they sold the pigs young, it didn't matter that it also caused accelerated aging and cancer and heart disease. So, it was very popular to shift over to a high fat diet for chickens and pigs and any animal that you wanted to fatten up. After it became an established part of the American diet, it had the same effect on people - it started making them obese, even though they weren't eating as many calories as previously because it poisons the thyroid system. The thyroid makes you able to produce energy, use a lot of oxygen, and eat a lot of food without getting fat but the polyunsaturated fats at three or four separate points block the function of the thyroid hormone which is essential for health.

Eluv: There's probably people out there who have gone to their doctor, and the doctor says, "You have hypothyroid condition," and they are concentrating on that, whereas that's almost an effect?

**RP:** Ya. If you have a slow metabolism, and text books sixty years ago used to say anyone could lose weight if they ate less than 1,700 calories a day, but women have been kept in closed wards where they could see everything they were eating and they could maintain their weight on 700 calories a day, less than half of what used to be maintenance, and that's simply because the American metabolic rate has drastically slowed over the last 50 years. Sometimes taking just a tablespoon of coconut oil with supper... first time I experimented with it, I had been at about 186 lbs. for 20 years. It seemed to be my normal weight. I started putting a tablespoon of coconut oil on my supper, putting it on meat or vegetable as the sauce, and I noticed right after eating that coconut oil that I felt like I'd been exercising. I was pink and breathing hard for about 2 hours after supper. I did that every day... for about a week I had that hour of excess heat and hard breathing after eating, but gradually that leveled out, and I found that I was losing a pound a week. By adding, oh, another 100 or 200 calories a day in the form of coconut oil over a period of several weeks, I stabilized at a new weight of about 176 lbs. - about 10 or 12 lbs. lighter than I had been.

Eluv: (laughing) There's got to be people out there going, "He's eating oil and

**RP:** Years before I had read research with the rats in which they did the same study but in a more methodical way. They divided the rats into five different groups and each of those groups was divided into the high oil, medium oil or low oil intake. The five groups consisted of pure saturated fat - coconut oil - and at the other extreme were pure corn oil, I think it was - unsaturated fat, and then different proportions. At the end of their lifetime, the rat body fat was analyzed. The obesity didn't correspond to the number of calories they had eaten, but only to the ratio of saturated to unsaturated. The low corn oil eaters who had a low calorie diet but pure corn oil as the fat were the most obese. All of the corn oil eaters were the most obese, but the low fat corn oil eaters were fatter than the high fat coconut oil eaters. So it was strictly the ratio of fat, not the quantity of fat.

*Eluv:* Going back to the feeding of animals, or livestock, for our consumption. With these unsaturated fats, how is the effect on us? Are we taking in certain hormones?

RP: People have analyzed lard which a lot of scientists think of as a saturated fat. It used to be when pigs ate well, but for the last 50 years, pig fat has been chemically the same as corn oil or soy oil because that's what they eat, and it gets stored in their tissues. When you eat pork from the industrial pigs, you're basically having a high vegetable oil intake which is extremely fattening. Beef and lamb, they evolved for eating vegetable material where pigs could eat basically anything. Since the sheep and cows and deer and so on evolved as vegetarians, they evolved a stomach which specifically destroys the polyunsaturated fat. They have enzymes which happen to use Vitamin E in the process of destroying the polyunsaturated fat. Their rumen can take care of about 98% of the vegetable oil in their food, destroying it, turning it into saturated fat. That's why milk, even fairly fat milk or whole milk, is not associated with obesity. Where I first noticed it was on a trip - I was in Russia where everyone was fat, and when I crossed over to Finland... I hadn't been able to get good milk in Russia, but just crossing the border into Finland, everyone had milk and cheese in their stores, and I noticed that everyone was slender and healthy looking there. So I looked at the research and saw that milk drinkers have a very low incidence of obesity.

**Eluv:** What if they are drinking low-fat milk on purpose? Would you recommend to avoid that?

**RP:** No, that's fine. They just need to keep the fats in proportion, so if you eat beef, you're always getting a large proportion of saturated fat (beef and lamb) even if you don't eat the fat part of the meat, the muscle tissue itself incorporates a pretty good percentage of saturated fat.

Eluv: Would that be the same for duck or pheasant?

**RP:** No. Those animals reflect exactly what they eat. They don't have the detoxifying system and so they're pretty unsaturated. It happens that they live at a very high body temperature, though, so poultry is not as bad as pork or rabbits or other animals that don't live at such a high body temperature because the higher the temperature of the organism, the more saturated the fat has to be, and the extremely unsaturated fats are oxidized and break down so fast in a chicken or a pheasant, they just don't make it into the tissue the way they do in a rabbit or a pig.

Eluv: And is fish oil not good because it's taken separately from the fish?

RP: If you have ever had a piece of fat fish laying around at room temperature it's even worse than leaving canola or soy oil or corn oil out at room temperature. The fat gets rancid very quickly. That's because it's evolved to live in cold water at just slightly above freezing temperature. At room temperature, it starts oxidizing quickly. Anyone can do a simple experiment - if you have a quart of an unsaturated vegetable oil, you can put a cork in it and a small rubber tube from the top of the bottle into a glass of water. At room temperature, the oil acts like it's respiring - it's burning oxygen and breaking down, turning into basically a plastic or varnish-like material, and it sucks the water up the tube just like a small organism was breathing in the bottle. Fish oil is even worse than the standard seed oils. Unless, for example, there's an Amazon River fish where the water is very warm in the Amazon, and that fish has fat that's very similar to olive oil and is much safer, but we never get those in the United States.

*Eluv:* What about fish from Florida, being that it's a little warmer?

**RP:** Ya, undoubtedly they are safer. Any organism exactly reflects the temperature of the tissue, with the warmer tissue having a more saturated fat because the unsaturated fats break down so quickly at high temperatures. A biochemist put sweaters on pigs and found that their fat was more saturated, just by keeping their skin warmer.

Eluv: I was speaking with someone in Israel this week. They were saying they don't have coconut oil as a local commodity, and they happen to get their organic olive oil from somewhere up in the mountains. She asked me, "Is that a good oil for us?"

**RP:** It's one of the best oils that we can get in the United States next to coconut oil, but it still is about 10% of the toxic polyunsaturated fats, so you don't want to use more than just enough for flavoring. A spoonful now and then gives good taste without giving a toxic amount of the polyunsaturateds.

*Eluv:* Is there a particular quantity of coconut oil that someone would want to consume each day to reap the benefits?

**RP:** I've known people who would eat ounces a day when they wanted - like, one study was using a fraction of coconut oil for treating brain tumors, and it's sometimes used for treating epilepsy, but I've known people who were wanting to reduce their fat thighs or something very quickly, so they would eat 5 ounces a day. One very fat person thought he would lose weight quickly, so he drank a cup of coconut oil for supper and said he thought he would explode he was so hot. He would never touch it again (laughing)! But usually, with a tablespoon once or twice a day, that will intensify your metabolism and make you lose weight easier.

*Eluv:* You were mentioning that it reduces the estrogens. Is that through the process of the thyroid?

**RP:** Ya, the thyroid activates the liver, assuming that there's enough protein and B-vitamins in your diet. The liver should destroy 100% of the estrogen in the blood that passes through the liver. But if your thyroid is low, or you're deficient in protein or B-vitamins, your liver can allow all of the estrogen to pass through, and that systemically raises your exposure to estrogen which blocks the secretion of the thyroid hormone, and so it can start a vicious cycle that locks you into a high estrogen state with low thyroid function. In the estrogen-stimulate state, somehow

we selectively favor the polyunsaturated fat. One favors the other, but women normally have a much higher concentration of polyunsaturated fats circulating in their blood stream because even if the fat tissues contain a mixture of fats, estrogen causes unsaturated fats to be released specifically. And then the unsaturated fats activate the so-called estrogen receptor and intensify the effect of estrogen on the cells.

Eluv: Does this have an effect on cellulite?

**RP:** There's usually a lot of water in the tissue under the influence of estrogen because both estrogen and polyunsaturated fats cause cells to be more permeable. Water leaks out of your capillaries very easily when you're exposed to estrogen or polyunsaturated fat- and so even though you might not have a lot of fat in your tissues, the estrogen, specifically around thighs, intensifies the leakiness and causes water to accumulate in those tissues as well as fat.

*Eluv:* So you get both of them in there. So, why is it so difficult for women to get rid of it?

**RP:** Mostly, because they keep their thyroid suppressed by the percentage of unsaturated fats in the diet. The gland is unable to break down the stored thyroid hormone under the influence of either estrogen or polyunsaturated fat. Both of them block the enzyme that secretes it, and the protein that transports the thyroid hormone in the blood is competed against by both estrogen and polyunsaturated fat. And the action of thyroid hormone in the tissues at different sites, the action is blocked by polyunsaturated fats.

Eluv: Moving along - in terms of the differences between the different processing of the oils, which is best: cold pressed, virgin, expeller pressed? What is the difference between those styles?

**RP:** For at least 100 years, and for probably thousands of years in other tropical climates, they have filtered it through clay or other material to remove the debris produced when you crush the coconut. That was done originally because particles of material caused the oil to go rancid by liberating enzymes which break down the fatty acids - free the fatty acids - and the carotene and other nutrients in the oil, when it's in its crude form, are also removed in the filtering process. The research of all of the benefits of coconut oil... the research was done using the highly filtered, tasteless, pure product. So it's the oil itself, not the nutrients in the natural product that have such a range of benefits.

Eluv: So, it's not the actual pulp of the coconut.

**RP:** No, that's all removed so that the oil will last a long time and be stable. The protein itself has been tested as a food for various animals, and it's [just] ok as a food - most people can't digest it in its ordinary form because it has a high cellulose content - so it can cause gas if there's the pulp material in it. And the product they call coconut milk is hard for some people to digest because of the vegetable material in it other than fat. The nutrients are there in the fresh oil, and it's delicious if you want to make ice cream or cookies out of it - it has a coconut flavor and has a great taste, and it contains vitamin E and carotene and so on, but it doesn't keep very well - so for the weight loss and anti-cancer, anti-inflammatory, liver protecting effects and so on, just the plain tasteless filtered oil is fine. And it happens to be extremely cheap. Currently, a 5 gallon bucket is about \$50.00. Forty pounds, I think, they

weigh.

*Eluv:* And is that a cold process? And what's the difference between cold processed or virgin or expeller pressed?

**RP:** The traditional way in the Philippines and Laos and Indochina was to crack the nuts open, let them dry somewhat so they can peel out the ripe coconut flesh, and then they would chop it up and boil it, and the oil rises to the surface where they would skim it off. So it was hot processed, but only at the temperature of boiling water. When that's filtered, it lasts forever, practically. But if you want to get the full taste for making ice cream and such, you can use a slightly un-mature nut that's a little softer, and grind it up. The oil that rises is still going to have some of the tasty material in it, and it has a very pleasant taste, but it isn't anything but a treat, really its nutritional value isn't so great.

Eluv: How long does it take to see the benefits after consuming coconut oil for a little while?

**RP:** Well, you can feel the effect, usually, in about 30 minutes after eating it. You notice that your pulse rate goes up and your hands are warmer and such. That's the immediate effect which is beneficial (it's starting the process). But the other processes take various periods depending on how fat you are - it might take a year to get your oil exchanged. All animals exchange their fat between their stores and their diet at about the same rate, and a complete change takes four years. So, if you've had a very unsaturated diet for most of your life, your thyroid is going to keep being suppressed for 2 or 3 years anyway, even after you've changed over to the saturated fats.

*Eluv:* Would it help the thyroid if the thyroid is fast, as well? Does it help to balance it out?

**RP:** Ya. Usually when the thyroid is over active - if your pulse rate is over 100 at rest and your temperatures stick around 99 degrees Fahrenheit, and your hands are always red and sweaty, usually that is a self-correcting process that after about six weeks your thyroid has unloaded the excess. In the last 50 years, people are frightened by that overproduction of heat. They go to a doctor and the doctor kills their thyroid gland. But, it really is a self-corrective process, usually, when the thyroid is overactive.

*Eluv:* Given the right fats, the body has the capability to absolutely regenerate and heal itself from the most serious conditions!

**RP:** Ya! There's a man in Israel, Gershom Zajicek, who has a website that's very interesting. He calls it the Streaming Organism, and he cites evidence in which all of the tissues and organs studied are in fact streaming, regenerating themselves, constantly. New cells are always being born. In the brain, the eye, the liver, adrenal glands, thyroid and so on. All you need is energy to keep that regeneration going at a good rate. The thyroid is the main thing that provides that energy.

Eluv: So we really have a food that's so suitable for the thyroid in taking in our saturated fats through coconut oil.

**RP:** Ya, the main value is that they will go to the same places that the toxic stored polyunsaturated fats go, and so they interrupt the anti-thyroid effect momentarily

like when you eat a tablespoon full of coconut oil it quickly gets into your blood stream, and while it's circulating, it's relieving the suppression of your metabolism by simply getting in front of the suppressive molecule. The shorter chain saturated fats in coconut oil, the carbon molecules that contain 6, 8 and 10 carbon molecules are very active metabolically and they literally will get ahead of the other long chain fat molecules, and they can be taken up and metabolized by the mitochondria without using the transport system that involves carnitine that is used to treat heart disease and such. Coconut oil bypasses that system and lets the fat get metabolized immediately, so it's really like little kids crowding in line ahead of the big, fat people.

Eluv: And it sounds like it's acting more like a carbohydrate in terms of that...

**RP:** Ya, exactly. It's as easily metabolized as a sugar molecule.

Eluv: So, it's both helpful to the liver and less stress on the liver, at the same time curative.

**RP:** Ya, and those short chain saturated fats happen to have sort of a hormone-like effect. They have an anti-histamine effect because they help to quiet the immune cells, keep them from producing too much histamine, and they protect cells from over reacting to toxic excitants like histamine, and they even immediately, when they are released as a free fatty acids and their first metabolic passes through the mitochondria, they release ketones. And these short fatty acids and ketones act like the GABA transmitters in the brain and other tissues to quiet and calm over-excited cells. The GABA system - people usually think of it as a nerve transmitter, but it's really active in all types of cells and it helps, for example, to slow excess cell division in tumors, and that's probably one of the reasons that the saturated fats are protective against tumors - that it's applying the brakes the way the GABA molecule would.

*Eluv:* In your personal nutrition counseling, have you seen people who have started on the coconut oil that have had tumors or other serious diseases shift?

**RP:** Ya, but if a tumor goes away by itself, it wasn't a cancer. Lumps go away, but according to the doctrine a cancer doesn't regress, and so by the time a lump regresses you know it wasn't cancer, according to the orthodox definition.

*Eluv:* Which I personally respect. I do coconut oil, every day. Several times a day I eat it, I drink it, I put it in my smoothies, and I also use it for skin care.

**RP:** Ya! The rabbit experiment was using internal coconut oil and showing that it protected against skin aging and sunburn, but if you happen to be sunburned, you can apply coconut oil quickly and get a protective antihistamine effect, because what happens when the sun hits your skin is the excitation quickly spreads to the polyunsaturated fats in your skin cells and creates a progressing after effect, and the saturate fats can interrupt that spreading of destructive oxidation through the polyunsaturated fats, even right in your skin when you put it on the surface.

Eluv: And wasn't there studies in Thailand and Asia for the fact that their skin was able to handle sun better by their intake of coconut oil.

**RP:** Ya, I read the animal experiments for years and years, but I was consulting with some people in San Diego... there was a doddering old man and his attractive young

Filipino wife. She said that they'd been married for 30 or 40 years. She said he had never learned to like Philippine food, and she had never learned to like American food, and so three meals a day she made two separate meals. She cooked her meals all in coconut oil, and his all standard American food. It turned out she was almost as old as he was, but she looked 30, 40 years younger than him.

(show wrap-up)