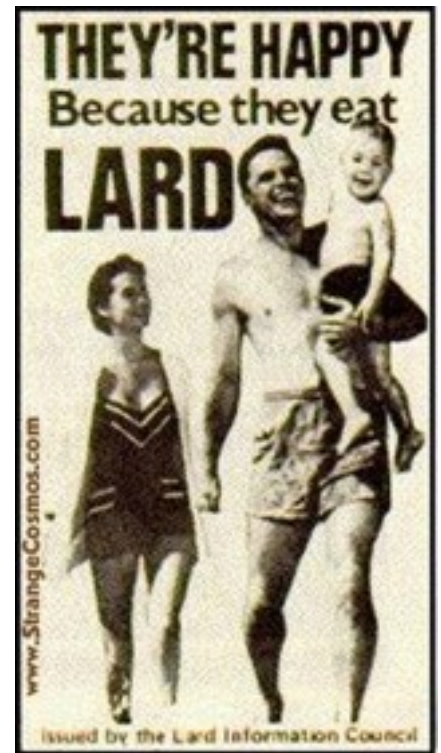


REAL LARD is rendered pork fat (it is called tallow if it comes from a ruminant such as beef cattle). **RENDERING** is gently heating the fat to separate out the protein strands, the “cracklings”. It is a beautiful, white, naturally-hydrogenated, solid fat. Most of its carbon sites are filled with hydrogens in their natural and normal *cis* position just as it comes from the hog. Good lard is only 40% SATURATED fat, with 48% MONOUNSATURATED and 12% POLYUNSATURATED fat.

Lard is stable and the preferred fat for frying, it does not easily turn into trans fats when heated. Potatoes, for example, fried in lard can be cooked in a shorter time at a higher temperature resulting in a better taste and texture as well as less rancidity and embedded oil. Lard is a **HEALTH FOOD** that needs to be returned to its rightful place in the American diet.



There are two kinds of fatty acids we cannot make and are therefore called **ESSENTIAL FATTY ACIDS**, they are both polyunsaturated 18 carbon molecules. **OMEGA 6** is double unsaturated **LINOLEIC** acid and **OMEGA 3** is the triple unsaturated **LINOLENIC** acid. the Omega number refers to the location of the first double bond. Like the other polyunsaturated fatty acids (PUFAs) they are very unstable, go rancid easily and should never be heated. Special and incredibly healthful EFA Omega 3 fats include **CONJUGATED LINOLEIC ACID (CLA)** which is found in grass-fed animals especially ruminants, **DHA** (the brain fat) and **EPA** which are found primarily in deep ocean fish, and **GLA** found in some plant oils.

Organically-raised, foraging and outdoor range hogs have the healthiest lard. Conventionally-raised pork get virtually no exercise, live indoors and eat no greens. Much of their diet is of the lowest possible quality. This lard is of equally low quality. The diet and lifestyle of the hog radically affects the quality of the lard! Confinement pork lard has similar **OMEGA 6:3** ratios to feedlot beef, a 100 gm serving has about 8 grams of O-6 and 0.8 grams of O-3. A much more healthful ratio of O-6:O-3 can be achieved by increasing the amount of fresh green forages. The O-3 content can be greatly enhanced by feeding flax seed, sea greens, green algae or fish oils. On the other hand, hogs that eat garbage, especially bakery waste will incorporate toxic trans fats, heavy metals or other toxins in the fat. Free-living warthogs have a ratio approaching 1:1.

The health of Americans plummeted when the “politically correct” diet advice recommended vegetable oils for cooking, especially partially-hydrogenated oils. Shortening, for example, is a liquid oil until manufacturers heat it up under pressure, bubble hydrogen gas into it (with a catalyst to make it all work faster) and force-feed the C double bonds hydrogen atoms that often latch on in a crossways or *trans* configuration. (“*cis*” means “same side whereas “*trans*” means on the opposite side). A little bit of hydrogen added in the *trans* configuration increases shelf life of the oil and allows liquid vegetable oils

and corn oil not to go rancid in large, clear containers exposed to light and heat on the store shelves A lot of hydrogen added in the *trans* configuration solidifies the liquid oil, creating stick margarine or solid vegetable shortening, such as Crisco. Polyunsaturated oils go rancid easily due their unstable double bonds.

Fats are made of FATTY ACIDS which are the carbon-hydrogen chains (C-C-C-C-C-C-C-C) that latch on in groups of three to a GLYCEROL backbone to make a TRIGLYCERIDE molecule, which are the basic molecules of which all fats are made. The length of the carbon chains and where, if any, double bonds (ie, missing hydrogen molecules) occur differentiate the fatty acids one from another. The more double bonds, the more unsaturated. One double bond gives you a *monounsaturate*, many double bonds gives you a *polyunsaturate*, no double bonds gives you a *saturated* fatty acid. The main saturated fatty acids (from shortest to longest chains): CAPRIC, LAURIC, MYRISTIC, PALMITIC, and STEARIC acids. The main monounsaturate is OLEIC acid.

Olive oil contains 71% OLEIC acid, that heart-healthy, monounsaturated fat that we're supposed to get more of. Lard contains 44% oleic acid, sesame oil (41%), corn oil (28%), walnut oil (28%), flaxseed oil (21%), cottonseed oil (19%) and sunflower oil (19%), grapeseed oil (15%) and safflower oil (13%), beef tallow (43%), butterfat (29%), and human butterfat (ie the fat of breast milk at 35%).

Lard (14%) of the 18-C saturated fat, STEARIC acid, which has been shown in clinical testing to lower cholesterol.

Like olive oil, lard contains 10% of the omega-6 fatty acid LINOLEIC acid, again, roughly the same as human butterfat (breast milk) at 9%.

Lard contains 2% MYRISTIC acid, a 14-C saturated fat that has been shown to have important immune enhancing properties. Human butterfat 8% myristic acid, cottonseed oil (1%) and the tropical oils, coconut oil (18%) and and palm kernal oil (16%) vegetable oils have zero.

Lard contains 26% PALMITIC acid, a 16-C saturated fatty acid, olive oil only 13%, human butterfat contains 25%. Palmitic acid is antimicrobial.

Lard's basic fatty acid composition as compared to the butterfat of human breast milk. Lard is less saturated, and has more monounsaturates:

	Saturated	Monounsaturated	Polyunsaturated
Breast Milk	48%	35%	10%
Lard	42%	44%	10%

WE NEED SATURATED FAT- It makes up over half of all cell membranes and give cells stiffness and integrity. Bones require about 50% of the dietary fat to be saturated so calcium can be absorbed. SF lowers Lipoprotein-a in the blood, an inflammatory marker directly associated with risk of heart disease. SF protects the liver from alcohol, toxins and drugs and the enhance the immune system. Omega 3 fats are retained in the tissue when the diet is rich in SF. Heart muscle contains rich deposits of stearic and palmitic fatty acids as they are the foods the heart muscle uses and which are drawn upon in times of stress. Many SF have antimicrobial properties and protect us from harmful pathogens in the intestine. There is no scientific evidence to back up claims that SF causes “artery clogging” in fact arterial plaque is only 26% SF the rest unsaturated fat, over half of the plaque is polyunsaturated fat!

WE NEED CHOLESTEROL-It is only found in animal fat. In spite of being falsely accused of being the cause of atherosclerosis, heart attack and stroke, cholesterol is actually a necessary substance in every body. It is a strong anti-oxidant and free radical scavenger. This is why cholesterol levels go up as we get older since we need more protection. Cholesterol makes up a large portion of the brain, is the root of all corticosteroids and hormones in the body, it is the precursor to vitamin D. It keeps our skin soft and moist, and makes bile which we need to digest fat. Mother’s breast milk is very high in it (which should tell us something!). Our bodies make over 2000 mg daily whereas a maximum of only 100 mg can be absorbed from the diet, so it’s pretty clear how shaky and wrong the connection of heart disease to dietary cholesterol intake. It is oxidative stress that causes cholesterol to elevate in the bloodstream in response to excessive free radicals. In the skin, uv light causes the production of free radicals, known carcinogens and aging factors, which damage the vital phospholipids of the skin unless the cholesterol is there in adequate supplies to protect it. Cholesterol is required for proper function of serotonin (the “feel good” brain chemical such that low cholesterol levels are associated with aggression, violence, depression and suicidal tendencies Cholesterol lowering drugs, especially the statins, are intrinsically toxic to the liver, they deplete CoQ10, an enzyme needed by all muscles by (note that the heart is a muscle), and ultimately leaves us dangerously exposed to oxidizers, free radicals and other damaging agents.

TRANS FATS- Are one of the most dangerous foods in the world. They serve no purpose in the body except to cause inflammation, cancer and degenerative disease. TF began to enter the diet of Americans around 1910. Not too many years later we began to see the heart attack “epidemic” begin. Now, most Americans consume up to or more than 20% of their fat intake as trans fats. French fries have about 40% TF, cookies and crackers range from 35-50%,and doughnuts are 35-40% TF. If mothers eat TF it will cross the placenta and every cell in the baby will contain TF, even the brain. Every cell membrane is a layer of fat with a thin protein coating on both sides. If TF gets built into the membrane it is defective and won’t resist viral or other infection and it becomes cancer prone (seen most often in the current skin cancer

“epidemic”). TF cause problems in the brain as DHA or other brain fats cannot be made from it, and the stiff and straight abnormal molecule creates overly rigid membranes. By eating a good balance of SATURATED FATS, POLYUNSATURATES and AVOIDING TF, it is thought that we can prevent MS, ALS, Alzheimer’s, Parkinson’s Disease as well as depression, schizophrenia, and other mental illnesses.

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NOW YOU'RE COOKIN' WITH LARD!

Bringing the Joy of Cooking with Lard Back into the Kitchen.

by Will Winter

The fact that you have stooped to read this first sentence tells me there's a good chance that you are either planning on adding more good saturated fat to your diet, or you are just plain horrified by the very thought of eating lard. If it's the latter, I'll assume that your morbid curiosity just won't allow you to stop reading about what makes us "suicide-by-cholesterol" fools tick. But I figure either way, I win. I get to talk about one of my favorite subjects, LARD, yes.... that lovely white pig fat. I've got some great stories about making of it and even more about all the delicious foods that will soon follow once your larder is fully "larded"! These may be lean times, but almost everyone can enjoy the fat of the land!

STATIN DRUGS ARE NOT OUR SPONSOR

Just to review a bit, we lard-eaters really don't have a death wish, nor do we feel we are tempting Fate to smote us with arterial fire and brimstone. Quite the contrary. In this series of articles we are moving beyond the fat-o-phobic fad, aka, the Lipid Hypothesis of Cardiovascular Disease. If you merely glance at the new scientific evidence, not to mention epidemiological studies by the masters, you will know now that the whole thing was a bad scientific hoax, just plain wrong. In fact, those of us in the fat-redemption world believe the whole "cholesterol myth" has contributed to the premature death of many millions of people, not to mention the fact that those poor folks had to eat so many dry, boring, tasteless, fat-free meals prior to waking up dead. As you may know, we are currently losing over 800 thousand Americans to heart attacks annually (now that we are all eating so much less fat!). Hydrogenated fat wasn't even invented until 1910; that was back when heart attacks were practically unheard of. The line graph for cardiovascular deaths goes up from there at about a 45 degree angle. But enough about these sad stories, let's talk fat!

SMART AMERICANS WANT GOOD FAT

You also remember that there are only three kinds of calories, fat, protein and carbohydrates. We cannot survive without two of these categories; can you guess which caloric source is totally unnecessary? Yep, carbs. And, if you are concerned about being overweight, it's the carbohydrates that, thanks to the effects of the hormones insulin and lectin, make us fat. It's never from fat, never from protein.

You probably don't remember back when we were hunter-gatherers (before the Ice Age) but anthropologists can tell from carbon testing of bones what those hairy people ate. We have less hair now (most of us anyway) but we are still the same on the inside. We are designed to eat a diet of about 70% animal-source food, the rest being seeds, nuts, greens, fruit and the occasional deliciousness of a handful of stolen honey. We get our building blocks for brain, bone, muscle as well as our energy from animal sources, we get our vitamins, minerals and plant nutraceuticals from the foraged veggies. By moving

away from grazing all day, unlike the gorilla, the most simplistic digesters of all the primates, we can thrive on the concentrated proteins and fats. Thus giving us much more time for thinking, relating to other apes, and reading magazines like this one. One can actually track the incidence of cancer in a population because it's directly parallel to the degree that the diet has moved away from hunter-gatherer. That is, moving more towards grain consumption and more processed food. In a nutshell, "civilization" is the only word that describes the root cause of all cancer (see fourfoldpath.com, Dr. Tom Cowan's medical site for more on this). Just knowing this fact can change your life.

America's per capita hunger for meat is only exceeded by a couple of tiny countries; we love our meat. Not only do we eat more per capita, we pay less for it than any other country in the world (that is actually a problem!). We make up only one-fifteenth of the world population but eat over 1/3 of the meat. Americans have always preferred to eat beef, but in the past we ate what was most available, that being pork! For over 300 years of history we have been eating our pork most of all. However, beef consumption has shot up over the past 70 years and now makes up over 100 pounds of our annual meat intake with pork holding steady at 70 pounds a year. Poultry and other meats come in at about 50 pounds.

Here's an interesting sidenote on fat eating, before we got here, the Native people made the most intense food package for travel ever known. Pemmican. An "energy bar" made from pulverized jerky (venison or bison), mixed 50:50 with meat fat then mixed with crushed dried wild berries. A man carrying only two pounds of pemmican in his pouch could travel for 10-14 days living on this. Again, note the similarity to the hunter-gatherer diet, in this case just dried and condensed for travel. Incidentally, these people were the strongest, healthiest people on the planet, virtually free of cancer, cardiovascular diseases, and even diabetes. Frybread, white man's fire-water, and the sedentary life on the rez changed all that!

I have a small business selling purebred Berkshire hogs, a breed famous not only for deep red meat but also the ability to lay down thick backfat and plenty of intramuscular fat, aka, marbling. This conversation is already making me hungry. I have found that for my fat-loving customers, I take the hogs out to a weight of approximately 340 pounds. This gives me plenty of good fat in the belly, loin and other cuts but also some nice fat for making sausage. My customers like their brats and sausages to sizzle in the skillet and we like the grease to drip down our chins. Incidentally, I've found that the best way to cook a proper bratwurst (about 70% lean) is in a pyrex pan in the oven at about 325 until they split open. It's permissible to add another 2-4 minutes on a charcoal grill but they will be delicious right out of the oven! Always use a pure herb and seasalt mixture, never MSG, nitrites or any other chemicals when making sausage. Good brats can explode and set your grill on fire if you do all the cooking of them there. Save the grill for lightly searing a good grass-fed steak or a slab of wild-caught salmon!

GROUND PORK FAT

I have the meat plant save every scrap of pork fat that is not going into the manufacturing of sausages and grind it. I then have it stuffed into five pound chubs for freezing.

RENDERING AND STORING LARD

When the time is right for rendering, I thaw the fat, not a lengthy process, and begin to melt it. For quantities of 100 pounds or less, I find that the kitchen oven works fine set very low, 180-200 degrees, melting 10-20 pounds at a time. Add about ¼ cup of water to the pan. Gentle handling is good, if the fat comes to boil or turns brown it will taste harsh. It's also possible to render on the stovetop in a sauce pan. The tiny bit of water will evaporate and the lard will liquify. Body fat is held in place by thin strands of protein that must be removed. Strain these out, we call them "cracklings", using cheesecloth or a wire mesh filter. The cracklings can be deep-fried in lard or tallow or used as flavoring for braised cabbage or sauteed potatoes. While cooling and before solidifying, the strained-off pure lard may be poured into one quart or one gallon BP-free plastic tubs or into canning jars. It's always best to keep stored lard frozen until you are ready to use it. Even in the refrigerator good lard will lose some of it's neutral flavor and delicacy after a few weeks.

CONFIT

Confit means to poach meat in fat, then store it until it's ready to eat. It was done originally for safe storage, now the top chefs confit to make the most delicious meat in the world. Confitted meat when submerged in fat will store for months in a cool cellar, then the fat can be used to cook the meat, and again for frying potatoes. Chefs around the world love confitting goose or duck meat, although pork is right up there. Any cut of pork may be confitted, but particularly good are belly, shoulder or loin. When you confit meat and bones a liquid called "confit jelly" forms on the bottom from the collagen and meat juices. This delicious essence is medicinally healing and has a variety of uses in sauces, a vinaigrette or heated and poured over a meat dish. Chefs make a similar version of meat confit using instead vegetables such as tomatoes, onions or even fennel, all gently cooked in fat. A "confiture" is the same thing using fruit but with sugar instead of fat, we call this jam.

LARDO

No, not that lumpy guy in 9th grade who couldn't make the track team, this is a delicacy found most commonly in Italy but now making it's way into the more savvy American restaurants. Many villages in Europe compete to win the title of the best lardo. To make it you start with thick slabs of pure pork backfat which is then cured with seasalt and savory herbs, traditionally in marble casks, for a year or more. Then the raw pork fat is thinly sliced and served on either crusty bread or basil leaves with a bit of fresh olive oil, salt and pepper. The resultant creamy soft slices of heaven have been known to cause people to swoon. It is sometimes served under the name "carpaccio bianco" or other more innocent sounding names.

RILLET

Here's another must-try charcuterie delicacy that you will grow to love. It's inexpensive, practical, delicious and fun to make! In this case, the meat, be it pork, goose, duck or rabbit is poached in fat until it is falling apart tender. It is then mixed with spices, seasonings and more fat and pounded until it becomes a coarse paste. It is then spread onto crusty bread. Sealed in a ramekin with another layer of fat, this delicious treat can be stored in the refrigerator for weeks before using. When going to the trouble to make confit, always prepare more so that a brace of rilletts may be added to the larder, this takes about 10 minutes and the rewards are rich and delicious.

RILLONS

One of the types of confit that has begun to achieve cult stature is made from pork belly. Small medallions of the raw pork belly (also called "side pork") are used and they are sauteed (poached) gently in lard until they are a bit crispy. Then a good white wine or cognac is added along with a sweet-spicy-salty mixture of seasonings. Once confitted the rillons can be stored in a tightly sealed container for months. To reheat them most chefs either deep-fry them crispy in lard or simply roast them for a drier texture. Serve pork belly rillons with a good mustard and crusty bread.

LEAF FAT

The snowy and soft white fat around the kidneys is the most desirable fat on the hog. It's almost a shame to mix it with the backfat and other trim. If possible, save it separately and either sell it to cutting-edge chefs or savor it all to yourself. When rendered carefully, this makes the best of all possible lard. Additionally, the jowl fat is extra soft, white and creamy and worthy of harvesting separately. Recently I have been approached by local chefs who are interested in harvesting the lacy omental membranes that cover the inner organs. This finely-flecked membrane is a see-through "negligee" that can be used to cover meat dishes, roasts or meatloaf dishes as they cook giving a ravishing look and mouth-feel to your masterpiece.

Bon Apetit!

William G. Winter, DVM is a free-lance journalist and teacher. He is primarily interested in awakening the world to the human health benefits and the environmental bonus that comes from raising 100% grass-fed livestock using sustainable practices and the magic of holistic herd health. He is also the herd health consultant for producers of livestock for Thousand Hills Cattle Company, the swinemeister of Lucky Pig Farm, and lives in Minnesota where the grass grows green and lush, and all the producers children eat right and are therefore above average. Contact him with your concerns, grand concepts, and rave compliments at holistic@visi.com or www.willwinter.com.

I almost bit my tongue the other day, not by accident mind you, I was trying hard not to talk! I was in a grocery store sampling our delicious 100% grass-fed beef when a customer came up, tasted it and broke out into a broad smile. He said that his family had been eating grass-fed beef for a long time, mainly for health reasons and he was really glad we were making our good beef available (Ahh, music to my ears, this is great...). He went on to say that he has read up on the horrors of feedlots, antibiotics, artificial hormones, cruelty, not to mention E. coli (Correct! Wow, this guy is good, yes, yes...). “Boy, is this hamburger delicious!” he raved, munching away on his sizzling hot sample, saying he was going to grill some tonight (Yes....Sale!) but that he was trying to decide between his other love, *bison burgers* (well, that’s OK too, I thought, many of my friends raise grass-fed bison), “Yeah, he said, “I just love how LOW-FAT all this meat is...” (Opps! Oh, no, my Inner Voice was now yelling “Will, bite your tongue”! Bite your tongue!). Here I was with this little devil on one shoulder telling me to “just let the man buy the meat...” and the angel on the other shoulder whispering loudly, “No, no, tell him about how good our fat is! Tell him to eat more fat!”. What to do?

All of who work at Thousand Hills Cattle Company, spend part of almost every work day talking to customers, we consider educating the public to be at least 50% of the work of being producers and purveyors of grass-fed meat. We work hard giving away hundreds of pounds of meat every year, letting people have a taste experience that almost always “wakes up” a memory of a time long ago, when beef used to have flavor. And, as all of us who enjoy a good burger know, real meat flavor comes along with FAT! There are two good ways to RUIN a good grass-fed beef burger, one is to overcook it. Somewhere along the way Americans, especially it seems Midwesterners, have learned to ruin just about every cut of beef they throw on the grill by the idiotic concept called “well-done” (there is nothing “well” about that except the well down which you should throw the black briquette that was a burger). The other way to ruin a burger experience is to start with a grind that is too lean), which basically means anything beyond 75% lean (well, OK, we can’t even get people to buy that one, so we sell predominately 80% lean). OK, a third way to kill a burger is the seriously horrendous burger-grilling offense in which the grill chef (usually us guys) takes the spatula tool and cruelly squishes all the delicious fat onto the hot coals! For shame! We’ve educated our meat counter personnel to extend the education to customers. One of our supermarket chains has a huge floor-stand sign explaining “How to Cook Grass-Fed Beef”! Exciting. Be sure to provide copies of “The Grassfed Gourmet Cookbook” by Shannon Hayes to your customers. You can get it at the www.eatwild.com store.

Todd Churchill, owner of THCC, is in my opinion a veritable expert in reading each potential customer in the process of deciding how far to expound upon “the gospel of grass-fed”. It’s certainly a topic almost guaranteed to stir up emotions. Satisfying when it works but, oh so painful when it leads to a horrible argument and parting of the ways. A famous Civil War general said of another general known for worsening his mistakes said “when he discovered his error, he redoubled his effort” and, as an argument begins, isn’t that we all do instead of just backing off and being agreeable? A grocery-store demo person telling a customer that he is a fool for eschewing “good fat” and especially for talking Lipitor or other statins goes against a tsunami of “white coats” who are standing together in the trenches, like the last bastion of tobacco salesmen, doing their best to protect their lofty incomes most often these days by scaring people about the evils of cholesterol. But, a “reformation” is taking place and we “Martin Luthers” can easily tack more than 95 theses on the door to the church of modern medicine, a church that has gone over to the dark side of capitalist opportunism.

So, the real truth remains, until the medical establishment and subsequently the media gets off the faulty Lipid Hypothesis and the drugging of Americans with statins we the people must shoulder the burden of educating our customers. If you have been reading this series about why we love good fat you know that we started out debunking myths and have talked about why cholesterol is really your friend (you would be sterile, senile and dead without it!), why saturated fat in the diet is not only delicious but truly good for you, and what the truly dangerous dietary fats look like, primarily hydrogenated fats, trans fats, and have oxidized cholesterol. Yes, it’s true, our friends in the food industry will heat and add oxygen to good natural cholesterol so we never want to eat such products as powdered eggs or powdered milk. Don’t eat those, you say? Well, don’t be too sure, powdered milk is added to reduced-fat milk, yogurt, ice cream and other products to give them body. Ironically reduced-fat milk is not only super fattening, it can cause you to die of a heart attack! (If you are still skeptical, please read “Cholesterol-Friend or Foe” for the full story on my website [HYPERLINK "http://www.willwinter.com"](http://www.willwinter.com) www.willwinter.com . It’s the best summary about cholesterol you will ever read).

When dentist and world-famous dietary epidemiologist (see www.westonaprice.org) traveled to the far corners of the world to study traditional nutrition, he was surprised to learn that, in comparison to the American diet of the 1940’s, these traditional diets provided at least *four times* the water soluble vitamins, calcium and other minerals, and at least *ten times* the fat-soluble vitamins. These life-giving fat soluble vitamins that he found so important, especially A and D are uniquely provided by the fat and organs of

fish, shellfish, butter, egg yolks, organs and meat from pastured animals and the fat of birds and pigs raised outside and on natural forage. Meanwhile, back in the states, the post-war food industry was gearing up to replace our God-given gift of raw butter with the polyunsaturated margarine and joyous white lard with such products as Crisco! The death toll from this industry switch vastly exceeds the death from all wars put together.

I opened today's local paper to find the "good news" that my state of Minnesota is now recognized as having the "most fit-least obese" children in the nation (with poverty-ridden Mississippi and several other Deep South states dragging up the rear). But, it's tough to brag when we still have 23% of our children rated as overweight as well as over 2/3 of our adults. In Mississippi, over 44% of the children are overweight or obese and well on their way to certain diabetes and heart disease. We'd like to say that our grass-fed beef can take credit for our healthy kids, but it's a larger story, most often connected to socioeconomic level. We certainly find a higher proportion of or grass-fed customers in the upper income and educational brackets. One clear point is that Good Fat does not make you fat. Dr. Atkins (Diet Revolution) was totally accurate in his observation that sugar and carbohydrates are making us fat. Sure enough, no diet plan in the world caused more weight loss (or more eating joy) than getting the doctor's Rx to eat all the fat and all the protein you want! However, while totally correct and totally effective in losing weight, the original form of Dr. Atkins' diet killed thousands of people. Why? Well, as evidenced by the new and revised Atkins' diet there was *no fruit* in the original plan. Not much about healthy nuts, and not enough about greens and vegetables as part of a healthy traditional diet. We desperately need the anti-oxidants in colorful fruit (and greens and vegetables) to prevent the oxidation (aging and hardening) of the body. Dr. Atkins also forgot to inform people about the toxins, excitotoxins and chemicals in factory farm meats, dairy and eggs. Some early adopters were eating a couple of pounds of cheap confinement factory farm bacon a day, no fruit, no vegetables and not much else good. Compare that with a juicy Lucky Pig BLT, with about a half pound of lightly-cooked, pasture-raised, whey-fed, no MSG, no Nitrite bacon, several slices of 25% brix garden tomato, and layers of deep green and tender garden spinach on sprouted grain bread, all washed down with a tall glass of raw grass-fed summer milk! For the real story of losing weight and staying healthy, avoiding all the fad diet books and getting even healthier, a must-read is the book "Eat Fat, Lose Fat" by Mary Enig and Sally Fallon.

COMING UP

Part 4- "Cooking with beef fat (tallow) and other good animal fats"

Part 5- "Grass-fed Butter. The Almost-Magical Health Food"

Part 6- "Keeping farmers and ranchers alive, healthy, and off drugs- How to interpret your blood lipid profiles and what to do if they are off"

William G. Winter, DVM is a free-lance journalist and teacher. He is primarily interested in awakening the world to the human health benefits and the environmental bonus that comes from raising 100% grass-fed livestock using sustainable practices and the magic of holistic herd health. He is also the herd health consultant for producers of livestock for Thousand Hills Cattle Company and lives in Minnesota where the grass grows green and lush, and all the producers children eat right and are therefore above average. Contact him with your concerns, grand concepts, and rave compliments at HYPERLINK "mailto:holistic@visi.com" holistic@visi.com or HYPERLINK "http://www.willwinter.com/" www.willwinter.com.

GRASS-FED ANIMAL FAT- THE “PRODIGAL SON” OF TRADITIONAL NUTRITION RETURNS

I almost bit my tongue the other day, not by accident mind you, I was trying hard not to talk! I was in a grocery store sampling our delicious 100% grass-fed beef when a customer came up, tasted it and broke out into a broad smile. He said that his family had been eating grass-fed beef for a long time, mainly for health reasons and he was really glad we were making our good beef available (Ahh, music to my ears, this is great...). He went on to say that he has read up on the horrors of feedlots, antibiotics, artificial hormones, cruelty, not to mention E. coli (Correct! Wow, this guy is good, yes, yes...). “Boy, is this hamburger delicious!” he raved, munching away on his sizzling hot sample, saying he was going to grill some tonight (Yes.....Sale!) but that he was trying to decide between his other love, *bison burgers* (well, that’s OK too, I thought, many of my friends raise grass-fed bison), “Yeah, he said, “I just love how LOW-FAT all this meat is...” (Opps! Oh, no, my Inner Voice was now yelling “Will, bite your tongue”! Bite your tongue!). Here I was with this little devil on one shoulder telling me to “just let the man buy the meat...” and the angel on the other shoulder whispering loudly, “No, no, tell him about how good our fat is! Tell him to eat more fat!”. What to do?

All of who work at Thousand Hills Cattle Company, spend part of almost every work day talking to customers, we consider educating the public to be at least 50% of the work of being producers and purveyors of grass-fed meat. We work hard giving away hundreds of pounds of meat every year, letting people have a taste experience that almost always “wakes up” a memory of a time long ago, when beef used to have flavor. And, as all of us who enjoy a good burger know, real meat flavor comes along with FAT! There are two good ways to RUIN a good grass-fed beef burger, one is to overcook it. Somewhere along the way Americans, especially it seems Midwesterners, have learned to ruin just about every cut of beef they throw on the grill by the idiotic concept called “well-done” (there is nothing “well” about that except the well down which you should throw the black briquette that was a burger). The other way to ruin a burger experience is to start with a grind that is too lean), which basically means anything beyond 75% lean (well, OK, we can’t even get people to buy that one, so we sell predominately 80% lean). OK, a third way to kill a burger is the seriously horrendous burger-grilling offense in which the grill chef (usually us guys) takes the spatula tool and cruelly squishes all the delicious fat onto the hot coals! For shame! We’ve educated our meat counter personnel to extend the education to customers. One of our supermarket chains has a huge floor-stand sign explaining “How to Cook Grass-Fed Beef”! Exciting. Be sure to provide copies of “The Grassfed Gourmet Cookbook” by Shannon Hayes to your customers. You can get it at the www.eatwild.com store.

Todd Churchill, owner of THCC, is in my opinion a veritable expert in reading each potential customer in the process of deciding how far to expound upon “the gospel of grass-fed”. It’s certainly a topic almost guaranteed to stir up emotions. Satisfying when it works but, oh so painful when it leads to a horrible argument and parting of the ways. A famous Civil War general said of another general known for worsening his mistakes said

“when he discovered his error, he redoubled his effort” and, as an argument begins, isn’t that we all do instead of just backing off and being agreeable? A grocery-store demo person telling a customer that he is a fool for eschewing “good fat” and especially for talking Lipitor or other statins goes against a tsunami of “white coats” who are standing together in the trenches, like the last bastion of tobacco salesmen, doing their best to protect their lofty incomes most often these days by scaring people about the evils of cholesterol. But, a “reformation” is taking place and we “Martin Luthers” can easily tack more than 95 theses on the door to the church of modern medicine, a church that has gone over to the dark side of capitalist opportunism.

So, the real truth remains, until the medical establishment and subsequently the media gets off the faulty Lipid Hypothesis and the drugging of Americans with statins we the people must shoulder the burden of educating our customers. If you have been reading this series about why we love good fat you know that we started out debunking myths and have talked about why cholesterol is really your friend (you would be sterile, senile and dead without it!), why saturated fat in the diet is not only delicious but truly good for you, and what the truly dangerous dietary fats look like, primarily hydrogenated fats, trans fats, and have oxidized cholesterol. Yes, it’s true, our friends in the food industry will heat and add oxygen to good natural cholesterol so we never want to eat such products as powdered eggs or powdered milk. Don’t eat those, you say? Well, don’t be too sure, powdered milk is added to reduced-fat milk, yogurt, ice cream and other products to give them body. Ironically reduced-fat milk is not only super fattening, it can cause you to die of a heart attack! (If you are still skeptical, please read “Cholesterol-Friend or Foe” for the full story on my website www.willwinter.com . It’s the best summary about cholesterol you will ever read).

When dentist and world-famous dietary epidemiologist (see www.westonaprice.org) traveled to the far corners of the world to study traditional nutrition, he was surprised to learn that, in comparison to the American diet of the 1940’s, these traditional diets provided at least *four times* the water soluble vitamins, calcium and other minerals, and at least *ten times* the fat-soluble vitamins. These life-giving fat soluble vitamins that he found so important, especially A and D are uniquely provided by the fat and organs of fish, shellfish, butter, egg yolks, organs and meat from pastured animals and the fat of birds and pigs raised outside and on natural forage. Meanwhile, back in the states, the post-war food industry was gearing up to replace our God-given gift of raw butter with the polyunsaturated margarine and joyous white lard with such products as Crisco! The death toll from this industry switch vastly exceeds the death from all wars put together.

I opened today’s local paper to find the “good news” that my state of Minnesota is now recognized as having the “most fit-least obese” children in the nation (with poverty-ridden Mississippi and several other Deep South states dragging up the rear). But, it’s tough to brag when we still have 23% of our children rated as overweight as well as over 2/3 of our adults. In Mississippi, over 44% of the children are overweight or obese and well on their way to certain diabetes and heart disease. We’d like to say that our grass-fed beef can take credit for our healthy kids, but it’s a larger story, most often connected to socioeconomic level. We certainly find a higher proportion of or grass-fed

customers in the upper income and educational brackets. One clear point is that Good Fat does not make you fat. Dr. Atkins (Diet Revolution) was totally accurate in his observation that sugar and carbohydrates are making us fat. Sure enough, no diet plan in the world caused more weight loss (or more eating joy) than getting the doctor's Rx to eat all the fat and all the protein you want! However, while totally correct and totally effective in losing weight, the original form of Dr. Atkin's diet killed thousands of people. Why? Well, as evidenced by the new and revised Atkin's diet there was *no fruit* in the original plan. Not much about healthy nuts, and not enough about greens and vegetables as part of a healthy traditional diet. We desperately need the anti-oxidants in colorful fruit (and greens and vegetables) to prevent the oxidation (aging and hardening) of the body. Dr. Atkins also forgot to inform people about the toxins, excitotoxins and chemicals in factory farm meats, dairy and eggs. Some early adopters were eating a couple of pounds of cheap confinement factory farm bacon a day, no fruit, no vegetables and not much else good. Compare that with a juicy Lucky Pig BLT, with about a half pound of lightly-cooked, pasture-raised, whey-fed, no MSG, no Nitrite bacon, several slices of 25% brix garden tomato, and layers of deep green and tender garden spinach on sprouted grain bread, all washed down with a tall glass of raw grass-fed summer milk! For the real story of losing weight and staying healthy, avoiding all the fad diet books and getting even healthier, a must-read is the book "Eat Fat, Lose Fat" by Mary Enig and Sally Fallon.

COMING UP

Part 4- "Cooking with beef fat (tallow) and other good animal fats"

Part 5- "Grass-fed Butter. The Almost-Magical Health Food"

Part 6- "Keeping farmers and ranchers alive, healthy, and off drugs- How to interpret your blood lipid profiles and what to do if they are off"

William G. Winter, DVM is a free-lance journalist and teacher. He is primarily interested in awakening the world to the human health benefits and the environmental bonus that comes from raising 100% grass-fed livestock using sustainable practices and the magic of holistic herd health. He is also the herd health consultant for producers of livestock for Thousand Hills Cattle Company and lives in Minnesota where the grass grows green and lush, and all the producers children eat right and are therefore above average. Contact him with your concerns, grand concepts, and rave compliments at holistic@visi.com or www.willwinter.com.

DRY TOAST, CEREAL, OJ, AND SKIM MILK FOR BREAKFAST? NO THANKS. FARM BACON AND EGGS, WITH REAL MILK AND BUTTER FOR ME, PLEASE!

Part 4 of a Series about Traditional Fats and Oils, by William G. Winter, DVM

Farmers, by rights, should be the healthiest people in America; fresh air, plenty of exercise, clean living, working outdoors, pure well water, and, of course, farm fresh food right out of the backyard. However, it doesn't take a medical statistician to tell you that this is no longer true. A trip to any small town cafe will reveal creaky old guys with canes and coronary bypass scars. Cancer and obesity is everywhere on the farm, including the children, where adult-onset diabetes (type II) is now seen as young as seven years of age! We should neither criticize nor judge the hard-working Amish, a religious group I hold in high esteem, but even with them, even with them, it's becoming more and more clear that they may someday have to reconcile their increasing white sugar consumption and the health toll it is taking. No one knows how deep this metabolic "ticking time bomb", as holistic pediatrician Allan Green, MD calls it, really is.

I need to look no further than my own farm family to see the wreckage that has been wrought from just a few decades of being immersed in our "modern" diet and lifestyle. When I was a kid, my grandmothers and all my aunts tended to huge gardens. Canning and putting up food occupied a large portion of everyone's summer. Even us kids got involved with canning, butchering, drying, and pickling our home-grown treasures. Now all my aunts and uncles are dead, and, tragically, many of my younger farm cousins have passed as well. Cancer, obesity and chronic illness haunts our family. My farm relatives butcher or can nothing, you can find them picking up "groceries" at Wallyworld or, perhaps worse, where they buy their gasoline!

Farm folk, perhaps more than city people tend to do exactly what their doctor tells them to do, even if it's wrong! Sadly, all too many small town doctors, while out of their literal horse and buggy, tend, by and large, to be slaves to the outdated and obsolete "horse and buggy" thinking. There is virtually nothing in the way of preventative advice, not much in the way of education, but a plethora of prescription drugs and, when that fails, trips to the big city hospital. There it is too often heard that "his old heart was just too far gone....sorry, we did everything we could". Only one or two of my uncles died on the farm, the rest died in the hospital. But I digress.

Let's start with learning how to interpret our own blood lipid tests, that's where many of us run into the "scare tactics" presented in some doctor's offices, a place where many people could get bamboozled into the one-way prescription drug caravan, our long, costly and slow death trip. What is coming to light in the past decade or so, is that basic blood lipid (fats and cholesterol) levels tend to be overrated in relevance, even the level at which blood cholesterol is determined to be "high" is being lowered every few years (why?), and to top it all off, the mechanisms that raise and lower cholesterol are not well understood and certainly not communicated to patients. We live in a world inundated with "low fat" and "low cholesterol" foods and almost everyone has become "fat phobic". The American Heart Association sells their endorsement seal of approval on such

marginal foods as Trisket crackers. Statin drugs, which artificially lower blood cholesterol, are thrown at nearly every patient, even children as young as 8 may be prescribed with the \$4-8-a-pill statins (think about the long term medical and financial consequences of that)! A delicious breakfast of farm eggs and bacon soaked in raw grass-fed butter and accompanied by a glass of full-fat milk is considered playing with death...”Why that’s a ‘heart attack on a plate!’” they scream, while a person eating dry toast, puffed and sugared cereal, skim milk, orange juice and decaf coffee is showered with praise for their nutritional wisdom. Who will die first, we wonder? (actually, a peek into the history of eating tells us!).

Since this article is constrained to be a brief overview, I call it a “reality check”, I encourage readers who are concerned about health to read the incredible book “The Cholesterol Myths” by Uffe Ravnskov, MD, PhD. Once and for all (we hope) he debunks the current paradigm and shows us why there is no medical or health connection between coronary artery disease and cholesterol, lipids or the intake of traditional fats. For that matter, old people with high cholesterol live much longer and are more healthy than people with low cholesterol! After all, cholesterol, an amazing anti-oxidant, is truly our friend, one we cannot live without. Large books could be filled extolling all the benefits and functions of cholesterol. We also know beyond refute that just as many patients die of coronary disease with low total cholesterol as those with so-called “high” cholesterol.

And I certainly don’t want to give the impression that I am “bad-mouthing” all doctors or the entire medical profession. I’m not. There are many doctors vitally concerned with the new thinking shifts as well as teaching preventative medicine. We also have to credit all doctors by realizing that the vast majority of their patients don’t want to hear advice, they will not quit smoking, lose weight, or exercise, will not give up high stress jobs, habits and lifestyles, and will certainly not change their diet very much. These patients, if truth be told, actually demand (and deserve?) bad medicine!

Since I am not a cardiologist myself, I will quote another famous doctor, actually the most holistic doctor I know, and the one most familiar with the reintroduction and the devillification of traditional foods and fats. That would be Tom Cowan, MD who is in practice in San Francisco (you can read his actual words about blood lipids on the Weston A. Price Foundation website at www.westonaprice.org/askdoctor/highcholesterol) He states that since many patients come to him with blood tests for his interpretation, he can’t just say “ Oh, phooey, that’s nothing of value”, so he does review it and he does it from the “conventional” point of view. Thus, he gives concerned patients a way to evaluate these blood values. He rates levels into 4 categories of “high, medium, low and no risk”. He believes that this has value in that it allows patients to track the effects of diet and lifestyle changes on their lipid profile.

WHAT YOU NEED TO KNOW:

Total Cholesterol

~No risk: <150

~Low risk: 150-200

~Medium risk: 200-250

~High risk: >250

However, bear in mind that a cholesterol of less than 150 puts you in the highest risk group for cancer and early death. Lots of people with a level over 250 live long healthy lives. This is an extremely insensitive test.

LDL Cholesterol

~No risk: <100

~Low risk: 100-130

~Medium risk: 130-160

~High risk: >160

This Low Density Lipoprotein (not really the “bad” cholesterol as some call it) is made in the liver and increases when the liver senses that there is chronic oxidative stress to combat. Examples would be oxidation from smoking, trans fats, excess sugar intake, chronic infections, exposure to pollution or toxins, or even a liver disease.

HDL Cholesterol

~No risk: >75

~Low risk: 60-75

~Medium risk: 40-60

~High risk: <60

These High Density Lipoproteins are called the “good” cholesterol. One of HDL’s many functions is to help direct fatty plaque deposits out of the arteries and back to the liver for processing. This test is fairly predictive for risk assessment.

Total Cholesterol/HDL Ratio

~No risk: <3.5

~Low risk: 3.5-4.5

~Medium risk: 4.5-5.5

~High risk: >5.5

From the conventional view this is the most important value to watch. Changing diet, exercising, reducing oxidative stress shows up rapidly here.

Triglycerides

~Goal is to stay below 50

~ The level is inversely related to the HDL level, so it is bad to have high Triglycerides.

~High Triglycerides usually means you are eating too much sugar and carbohydrates

~If the Total Cholesterol is twice the Triglyceride level, the HDL will be low

Famed nutritionist and scientist Jerry Brunetti has also studied blood testing evaluation in detail and has summarized some of newer and even more diagnostic blood testing that can be done now. Most of these tests will require the patient to ask specifically for these values, however, all of the tests can be done with one simple blood sample along with the standard tests. If your doctor does not know of a lab that does these tests, Jerry recommends sending the blood sample to Life Extension, an organization that reliably

performs all of the common lipid tests, liver and organ tests, vitamin levels, hormone levels and other critical testing required in complex cases.

~**LipoProtein A** (10X riskier than LDL) target: <10 mg/dL common range: 0-30

~**Homocysteine** target: <7.5umol/L common range: 4.3-11.4

~**C-Reactive Protein** target: <1.0 mg/L common range 0-3.0

~**Fibrinogen** target <300 mg/dL common range 200-400

In the next installments we will discuss how it is recommended that we weave such traditional nutrition as pastured eggs, raw butter, lard, full-fat raw milk, and grass-fed meats into our overall diet, to not only achieve better blood tests, but to get the radiant health and brain power that comes along with it. Hey Doc, give those drugs and surgery to someone else! (we know for example that eating just two apples a day will reduce a total cholesterol from 240 to 200!). Following that we will discuss the use of each fat and oil, how and when to use it, whether or not it can be safely heated and where to get the best stuff!

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