

LEPTIN RESISTANCE

For years Americans have been gaining weight because we have been told that fat is no good for us to eat and that we should have low fat diets. Because of this erroneous advice, we have made our bodies into glucose-based burning metabolisms when we are supposed to have fat-based burning metabolisms. Glucose-based metabolisms are for sudden bursts of energy and fat-based burning metabolisms are the preferred method by the body. Fat-based metabolisms are more efficient and healthy.

Leptin is a fat hormone that tells your brain to eat and it also tells your brain when to stop eating. Leptin is responsible for fat deposition. Experiments have shown that mice with low Leptin levels are obese and hungry. A few years ago, the pharmaceutical industry was enthusiastic to start to produce Leptin in the attempt to help people lose weight. What they found was that obese human beings had elevated Leptin. This sounds contradictory. What has happened is that Leptin has lost its ability to function well – this is called “Leptin Resistance.” When a person becomes Leptin resistant, it takes more and more Leptin to tell the brain it is satisfied and that you don’t need more food. Therefore, it takes more and more food to feel satisfied. The brain, not hearing Leptin, frantically signals for more and more fat to be stored. Since Leptin is made by fat cells, you have to make more and more fat to produce enough Leptin to finally get its message across to the brain to stop being hungry and stop storing fat.

The foods to trigger Leptin resistance are exactly the foods that the Federal government has told us should be the foundation of the food pyramid, such as breads, grains, cereal, pasta and starchy vegetables. These starchy foods lead to higher blood sugar levels and the inability of insulin to function properly, which is also known as insulin resistance or dysinsulinism. We now find ourselves in a position whereby our bodies are aging more rapidly because high blood sugar levels are the hallmark of aging. When sugar combines with proteins in your body (glycation), it triggers chemical reactions that can promote free radicals which are unstable oxygen molecules that can damage cells. The objective of our diet is to burn fat for energy. Good fat burns Leptin. Eating fat does not make you fat or unhealthy. Not being able to burn fat does. Good fat lowers Leptin levels. Leptin resistance desensitizes your taste buds to sugar and makes you crave more sweet foods.

Sugar that isn’t burned is made into saturated fat which is resistant to burning. It is stored as fat and produces even more Leptin in response to sugar which worsens Leptin resistance. Grain fed animals produce more saturated fat than normal. If you are eating sugar (or foods that turn into sugar) and fat together, the body will burn the sugar and store the fat. A great example of this is buttered toast.

There are many different types of fats – there are fats that are good for you and fats that are bad for you.

Polyunsaturated fat is liquid at room temperature. Examples of this are vegetable oils, which contain Omega-6 fatty acids, such as soy, sesame, safflower, corn and peanut oils. Other examples are Omega-3 polyunsaturated oils such as fish oils. All unsaturated fats are unstable and easily oxidized and can easily promote free radical formation. Frying polyunsaturated oils in a pan accelerates the formation of free radicals. Asian restaurants use soy oil because it is inexpensive. Trans-fats and hydrogenated fats are particularly unhealthy and should be avoided completely.

Saturated fats are hard at room temperature. Saturated fats are found in grain fed animals, meat, lamb and dairy products (milk, cheese, lard and butter). Coconut oil is also a saturated fat. Consider the fat in grain fed animals as second generation carbohydrates. Saturated fats may promote heart disease and insulin resistance. Most of the fat stored in your body is saturated fat.

Monounsaturated fats are the omega-9. Examples of these are olive oil and avocado and nuts. It is considered to be part of the Mediterranean diet and it is considered to decrease the risk of heart disease and some cancers and we would therefore like you to use olive oil or avocado or canola oil.

Essential fatty acids are polyunsaturated fats that cannot be produced by the body. Examples of these are omega-3 fatty acids and things like DHA and EPA. DHA has been shown to decrease depression. Today's modern diet is high in omega-6 and this throws off the balance of omega-6 to omega-3 fatty acids. We used to have a ratio of 5:1 of omega-6 to omega-3 and today we have a ratio of 24:1 in the average American diet. Omega-3 fats help improve insulin and Leptin sensitivity. Flax does not contain EPA or DHA, but does contain alpha linoleic acid which can be converted to EPA or DHA, but many of us do not have the enzymes necessary to promote this conversion.

The objective of our diet is to restore Leptin sensitivity. Once Leptin sensitivity is restored, your cells will also become more sensitized to hormones, such as insulin, IGF1 which is instrumental in muscle development.

The diet will be divided into essentially two different levels. Level 1 will last 3 weeks and will teach your metabolism to burn fat instead of sugar. During this time you will have no starchy or sugary carbohydrates and will eat foods high in good fat and vegetables that are high in fiber. Individual supplement programs will be based upon biochemical individuality. In level 2, you will be allowed to have some of the starchy and sugary foods introduced into your diet but will be limited based upon your sensitivity to Leptin levels.

We will emphasize the need to stick to the diet because when sugar reacts with protein in your body it affects protein. Sugar damaged proteins are called advanced glycation end products, a.k.a. AGES for short. These end products promote inflammation and glycation is the major reason that diabetics tend to look older than non-diabetics. Glycation has been linked to abnormal structure of nerve cells and can eventually lead to Alzheimer's.

I'd like to share a few new thoughts with you about your new diet. Fats make food taste great and fats make you feel satiated. On this diet you will be allowed to have up to 4 oz. of red wine daily. We will not be looking at carbohydrates in the realm of simple vs. complex, but rather carbohydrates containing high fiber vs. carbohydrates containing low fiber. Fiber cannot be broken down into sugar. Non fiber carbohydrates create a huge surge of Leptin and insulin. You must eliminate or drastically reduce beef, lamb and pork for the first 3 weeks unless it is not grain fed. Feedlots fatten up cattle before slaughter with simple carbohydrates. Almond butter and cashew butter will be fine. You may have protein shakes with your breakfast. Your major sources of protein will be meat, fish, poultry and dairy. For the first 3 weeks, you are allowed only foods on the "A" list. The "B" list contains foods that you can have on an occasional basis when you are at level 2. Avoid all foods on the "C" list.

THE "A" LIST - Plan most of your meals and snacks from this list

"A" List-Fats

Nuts/Nut Butters (raw, unroasted, unsalted)

Almonds
Brazil nuts
Cashews
Hazelnuts
Macadamia
Pecans
Pine nuts
Pistachios
Walnuts

NO PEANUTS! (they're legumes)

Fruit

Avocado (guacamole)
Olives (green and black)

Oils

Almond oil
Avocado oil
Olive Oil

Fish (highest in omega-3 fatty acids)

Halibut
Herring
Mackerel
Orange roughy
Sardines
Tuna

"A" List-Proteins

Eggs (from algae or flax-fed chickens)

Omega-3 enriched eggs

Fish and Seafood

Bass
Catfish
Cod
Crab
Flounder
Grouper
Haddock
Halibut
Herring
Lobster
Mackerel
Mahimahi
Orange roughy
Oysters (canned or fresh)
Perch
Pike
Pollack
Rainbow trout
Salmon (canned or fresh)

Sardines (canned in water, sardine oil, mustard or olive oil)

Scallops
Shrimp (canned or fresh)
Snapper
Sole
Tilapia
Tuna (canned or fresh)
Turbot

Poultry (preferably free-range or organic)

Chicken breast, no skin
Ground chicken
Ground turkey
Chicken sausage
Turkey sausage

Game

Cornish game hen
Buffalo
Ostrich
Pheasant
Rabbit
Venison

Veggie Burgers (< 7 carbs ea)

Chik Sticks Vegetable and Grain Protein Burgers
Morning Star Farms veggie sausage pattie
Natural Touch vegetable burgers

Dairy

Goat cheese
No-fat cottage cheese
No-fat cream cheese
No-fat ricotta cheese
Feta cheese
Jarlsberg Lite Swiss cheese
Parmesan cheese (1 TBS/svg)

Tofu

Plain
Herb
Flavored (Italian, Oriental, Thai)

Protein Powder

Egg protein powder
Vegetable protein
Whey protein

"A" List-Carbohydrates

Vegetables

Asparagus
Artichoke Hearts
Arugula
Bamboo shoots
Bell peppers (red, green, yellow,
orange, hot)
Bok choy
Broccoli
Brussel sprouts
Cabbage
Cauliflower
Celery
Chard
Chives
Cilantro
Cucumbers
Endive
Eggplant
Fennel
Greens (collard, turnip,
mustard, chard)
Hot peppers
Kale
Kohlrabi
Lettuce (except iceberg)
Leeks
Mushrooms (portobello,
shitake, oyster, button)
Okra
Onions
Parsley
Radicchio
Radishes
Rutabaga

Scallions
Seaweed (dulse, nori, hikiki, kombu)
Snow peas
Spinach
Sprouts (all varieties)
String beans
Turnip
Water chestnuts
Watercress
Zucchini

High Fiber Starches

La Tortilla Factory tortilla
"Manna from Heaven" bread
(also counts as a protein)
Low carb, high fiber crackers
(2-3/day)

Legumes (eat in limited qty)

Black soybeans
Hummus-as a condiment, not a
meal (made from chickpeas)

Coffee Substitutes

Roma
Teccino
Cafix
Pero

Tea

Black tea
Green tea
Herbal tea

Condiments, Spices, Seasonings

Basil
Bragg's Liquid Aminos (non-
fermented soy sauce substitute)
Cardamom
Black pepper
Cayenne pepper
Capers
Cajun blended seasonings
Cinnamon
Crushed red pepper flakes
Cumin
Curry powder
Dill weed
Fennel
Garlic (fresh or powdered)
Ginger
Indian blended seasonings
Lemon
Lime
Mexican blended seasonings
Miso salt (if not salt-restricted)
Mustard
Nutmeg
Onion (fresh or powdered)
Oregano
Paprika
Rosemary
Tamari
Tarragon
Thyme
Vanilla
Vinegar (balsamic, red wine,
umeboshi [plum], and rice)
Worcestershire sauce

**THE "B" LIST - Eat these foods in limited quantities;
avoid for the first 3 weeks on the diet.**

"B" List-Fats

A splash of cream in your coffee or tea daily is allowed	Canola oil	High oleic safflower oil
Butter for cooking	Coconut oil	
	Ghee (clarified butter for cooking)	

"B" List-Proteins

Beef (no more than one svg twice per week)	Lamb (no more than one svg twice per week)	Colby
Beef tenderloin	Chop	Havarti
Cubed steak	Leg	Monterey Jack
Filet mignon	Roast	Provolone
Flank steak		Swiss
Ground round, extra lean	Pork	<i>Soft Cheese</i>
Ground sirloin, lean	Lean, boiled ham	Nonfat plain yogurt w/one TBS of flaxseed to increase protein content (no more than 2-1/2 cup servings per week)
Round steak	Loin chop	One percent cottage cheese
Roast beef (top round or rump)	Pork tenderloin	Part skim milk ricotta cheese
Sirloin steak		
	Dairy	
	<i>Hard Cheese - eat lite or low- saturated fat varieties (no more than one slice daily)</i>	
	Cheddar	

"B" List-Carbohydrates

Vegetables (no more than 1/2 C. per day and avoid first 2 wks)	Pears	Low Starch, High Protein Pasta
Carrots	Plums	Keto spaghetti (low carb, high protein)
Parsnips	Raspberries	
Peas	Strawberries	Low Carb Tomato Sauce
	Tomatoes	Any brand with 5 or less grams of carbs.
Fruit (no more than 1 svg/day, 1/2 C. berries, 1/2 grapefruit, or one small piece of whole fruit. Use only fresh or frozen - not canned)	Seeds (preferably raw, unroasted and unsalted-nuts are best)	Beverages
Apples	Pumpkin	1 C. of real coffee
Apricots	Poppy	4 oz. of red wine
Blueberries	Sesame	
Cherries	Sesame Tahini (sesame paste)	Sweeteners (in very limited qty)
Grapefruit	Sunflower	Stevia
Kiwi		Sucralose
Nectarines	Legumes	
Peaches	Adzuki	
	Navy	
	Lentil	
	Mung	

THE "C" LIST - try to avoid these altogether

Dairy

Milk
Frozen custard
Frozen yogurt
Fruit-flavored yogurt
Ice cream

All Full-Fat Hard Cheeses

Cheddar
Colby
Havarti
Monterey Jack
Provolone
Swiss

All Cuts of Meat not Included in "A" Protein or "B" Protein Deli Meats (other than fresh cooked)

Chicken roll
Corned beef
Honey turkey
Hot dogs (all varieties)
Pastrami
Sandwich meats
Sausage (other than turkey
or chicken)
Turkey roll
Roast beef

Off-Limits Legumes

Chickpeas (garbanzos), except
for small amount of hummus)
Lima beans
Peanuts
Peanut butter
Pinto beans

Vegetables

Corn and corn products (such as
corn tortillas)
White potatoes (powdered,
mashed, fried, baked, etc.)
Pumpkin
Yams

All Fried Foods

Fried chicken
Fried fish
Chicken nuggets
French fries

Bad Fats

All commercially processed oils
Corn oil
Hydrogenated fats
Lard
Margarines with transfatty acids
Peanut oil
Safflower oil
Soybean oil
Sunflower oil
Squeezable butter or shortening

Bad Condiments

Barbecue sauce
Most commercially prepared salad
dressings
Ketchup
Mayonnaise (unless made with good
oils, such as olive oil, almond oil,
avocado oil, or canola oil)

Beverages

Fruit juice (all varieties)
Soda pop (all varieties)
Sports drinks
Sweetened teas

Sugar and Artificial Sweeteners

Brown sugar
Corn syrup
Dextrose
Fructose
Honey
Maple sugar
Maple syrup
Nutrasweet
Saccharin
Sucrose
Sugar
Sweet'n Low
Turbinado

Starches

All bread (except "Manna from Heaven"
bread or very low-carb bread)
Couscous
Crackers (except low carb and
made with good fat)
Muffins
Packaged pancake mix
Packaged dry cereal (all brands)
Pasta
Rice
Quinoa
Waffles

Fruits

Banana
Cantaloupe
Dried fruit (all varieties)
Grapes
Honeydew
Orange
Pineapple
Watermelon

Snack Foods

Chips (all varieties)
Breakfast bars
Energy bars
Cakes
Candy
Cookies
Flavored Jello-O (sugar free or
regular)
Frozen fruit ice
Gelato
Ice cream
Popcorn
Pretzels