THE TERRIBLE 20

INGREDIENTS THAT PREVENT YOU FROM REACHING YOUR IDEAL BODY WEIGHT

1.) Trans Fats

Small amounts of trans fats occur naturally in beef, lamb, and full-fat dairy products, but most come from processing liquid vegetable oil to become a solid fat by hydrogenation. Trans fat oils help processed food stay solid at room temperature and increase shelf life. Some food additives, like DATEM and Mono- and Diglycerides also contain trace amounts of trans fat. A 40 calorie-per-day increase in trans fat intake can lead to a 23% higher risk of heart disease. 40 calories is a mere 2% of a typical 2000 calorie-per-day diet. Trans fats can be deadly even in small amounts, and as you can see, will easily add up if you exceed one serving size.

How To Find Them: Look for "partially hydrogenated" on the ingredient label. They can be found in many shelf-stable food items like crackers, cookies, bakery items, doughs, pies and snack foods. Beware of FDA tricks - food manufacturers are allowed to say "0 Trans Fat" on the label, even though the product can have up to 0.5 grams of trans fat per serving. The FDA has ordered food manufacturers to remove all partially hydrogenated oils from their food, but they have until June 2018 to do so and the Grocery Manufacturers Association has already petitioned the FDA for exceptions.

What To Choose Instead: Choose foods that have non-threatening oils and fats in them like coconut oil, sesame oil, olive oil, hemp seed oil, red palm oil, ghee and grass fed butter.

2.) Preservatives

Preservatives are used to make foods last longer, taste a certain way, or increase shelf life of fake processed foods. The cumulative effect of consuming various kinds of preservatives has not been studied long term on humans, and many preservatives have potential cancer causing compounds and endocrine disrupters.

How to Find Them: Look for "to extend shelf life", or "preserve" on the ingredient label, as well as these common preservative names - Potassium Sorbate, Sodium Benzoate, Propionates, Sodium Nitrate, BHA, BHT, Disodium EDTA, and TBHQ.

What To Choose Instead: Try choosing fresh foods that do not have a long shelf life or certified organic brands that do not allow many of the harmful preservatives.

3.) Monosodium Glutamate (MSG) & Hidden Sources

MSG is used as a flavor enhancer. It is an excitotoxin that can excite brain cells to death. MSG can cause adverse reactions in some people including skin rashes, itching, hives, nausea, vomiting, migraine headaches, asthma, heart irregularities, depression and even seizures. MSG is also linked to obesity because it causes food to taste better than it should increasing addictive eating. Ever wonder why you can't stop after eating one chip? It likely has some form of MSG.

How To Find Them: MSG is listed as "Monosodium Glutamate" on the label and is found in mostly conventional products, restaurant foods, chips, dips, frozen dinners, salad dressings and soups. Some companies will trick the consumer and say "No added MSG" on the label; however, MSG can still be found under these common names on an ingredient list (even in organic products!):

Anything "hydrolyzed"
Any "hydrolyzed protein"
Calcium caseinate
Sodium caseinate
Yeast extract
Torula yeast
Autolyzed yeast
Gelatin
Textured protein
Whey protein
Whey protein concentrate
Whey protein isolate
Soy protein
Soy protein concentrate
Soy protein isolate
Anything "protein"
Anything "protein fortified"
Soy sauce
Soy sauce extract
Protease
Anything "enzyme modified"
Anything containing "enzymes"

What To Choose Instead: Find brands of your favorite snack foods, soups, etc that do not use MSG or hidden MSG in their products.

4.) Artificial Sweeteners

Artificial Sweeteners are sugar substitutes that are synthetically derived in a laboratory and have been manipulated to duplicate the effect of sugar in taste with less calories. There are many dangerous side effects associated with artificial sugars like diabetes, obesity, autoimmune disorders, depression and several forms of cancer.

How To Find Them: They can be found in yogurts, cereals, sodas, candy, desserts and many other processed foods. Look for Aspartame, Neotame, Saccharin, Sucralose, Erythritol, Acesulfame Potassium, and Acesulfame K on the label. You can also find them under brand names "NutraSweet", "Sweet N' Low", "Equal", and "Splenda."

What To Choose Instead: Choose products sweetened with coconut sugar, maple syrup or honey instead. Pure stevia leaf powder or liquid (not Stevia Reb A or Rebaudioside A) and Xylitol are other zero or low calorie options to use in moderation - but remember to check the ingredient list for additives.

5.) Artificial Food Dyes

Artificial food dyes are created synthetically and/or derived from petroleum. During processing, the dyes can be contaminated with carcinogens. Dyed foods trick the consumer by making processed food more appealing. Artificial food dyes are linked to hyperactivity in children, asthma, allergies and skin issues. They are banned in certain countries and require a warning label in Europe.

How To Find Them: Look for "artificial color", Yellow #5 (Tartrazine) (E102), Yellow #6 (E110), Citrus Red #2, Red #3 (E127), Red #40 (E129), Blue #1 (E133) or Blue #2 (E132) on ingredient labels. Also, watch out for "Caramel Color" which is usually artificially derived and contaminated with the carcinogen 4-MEI. These artificial dyes are found in bread, pickles, cereals, sodas, candies, cakes, and are used to dye some packaged fruit such as cherries and fruit cocktails.

What To Choose Instead: Choose foods that are natural in color or not artificially dyed. Look for substitutes for your favorite conventional products at health foods stores like Whole Foods, Earth Fare or online. There are several alternatives to conventional items like kids fruit snacks, candy and mac & cheese available that do not have artificial food dyes.

6.) Dough Conditioners

Dough conditioners are chemicals added to bread dough to strengthen its texture, extend shelf life, reduce processing time, or alter it in some other way. Dough conditioners allow companies to pass off chemically processed cheap food as "freshly baked" because it recreates perfect, evenly packed air pockets within the dough, improving the texture after coming out of large industrial machines from processing. Several dough conditioners have been linked to cancer, allergies, and asthma in animal and human studies.

How To Find Them: Look for "dough conditioners" or specific names like: azodicarbonamide, DATEM, potassium bromate, monoglycerides, diglycerides on the ingredient list.

What To Choose Instead: Choose or make freshly baked breads. Try sprouted bread like Food For Life Ezekiel that is found in the freezer section of most health food stores. Always check the ingredient list of store bought baked goods.

7.) Carrageenan

Carrageenan is used as a thickener, stabilizer, and/or emulsifier. This ingredient is linked to gastrointestinal problems such as irritable bowel syndrome, gas, and bloating. It can also be contaminated with carcinogens during processing.

How To Find Them: Look for carrageenan on the ingredient list of non-dairy milks (nut, coconut, etc.), cheese, cottage cheese, sour cream, cream cheese, whipping cream, ice-cream, processed deli meats, infant formula, and flavored coconut waters.

What To Choose Instead: Make your own nut milk, ice-cream, etc. Find brands that do not use carrageenan.

8.) Artificial Flavors

These flavors come artificially from synthetic chemicals and cheap ingredients like petroleum. When a food is heavily processed it loses flavor, so flavors are added to make dead food taste good! This is a big indicator that a product is very processed and not going to serve your body.

How To Find Them: Look for "artificial flavors" on the ingredient list.

What To Choose Instead: Choose organic products that do not use artificial flavoring.

9.) Natural Flavors

Natural flavors can be made from anything in nature that is "generally recognized as safe" - including beaver's anal gland! They are found in the majority of processed food products to make them taste better than they should, and can also include hidden forms of MSG that can cause addictive eating which is linked to weight gain and obesity.

How To Find Them: Look for "natural flavors" on the ingredient list.

What To Choose Instead: Choose fresh foods and other ingredients that are minimally processed without added flavors.

10.) Cellulose

The additive cellulose is often derived from wood pulp, and can be used as a cheap filler to bulk up foods with fake fiber. The gelling action of cellulose when combined with water creates an emulsion, suspending ingredients, making processed food products creamier and thicker than they would be otherwise. Cellulose can absorb water and is used as an "anti-caking" agent in shredded and grated cheeses, spice mixes, and powdered drink mixes. New research links this additive to weight gain, inflammation and digestive problems.

How To Find Them: Cellulose can also be called by these different names on the ingredients label: Carboxymethyl cellulose, Microcrystalline Cellulose, or MCC, and Cellulose Gum. It is often added to foods with "added fiber" and shredded cheese.

What To Choose Instead: Grate your own cheeses, and choose products that do not contain cellulose additives.

11.) Genetically Modified Organisms (GMOs)

GMOs can be found in about 80% of processed food in America, yet they are not labeled. They come from seeds that are biologically manufactured in laboratories - injected with foreign DNA - and are completely different than hybridizing techniques allowed by nature. These foods have only been in our food supply since 1996 and long-term health impacts were not conducted before they were approved. Many GMOs have been modified to withstand heavy spraying with synthetic chemicals, including the herbicide Glyphosate (Roundup). Unlike regular crops, these "Roundup Ready" GMO crops survive after they are sprayed with glyphosate herbicide. This herbicide is a toxin that can accumulate in your body the more you are exposed to it and has been found in the breast milk of lactating women. The World Health Organization's International Agency for Research on Cancer recently deemed glyphosate "probably carcinogenic to humans", and it's also linked to kidney disease and some birth defects.

How To Find Them: The most common GMO crops are soy, corn, cottonseed, canola, sugar beets, zucchini and squash. GMO apples and potatoes were recently approved, and may be hitting the market by 2016-2017. If you see any ingredients derived from these crops on the label, it is likely GMO. For instance, high fructose corn syrup likely comes from GMO corn, and soybean oil likely comes from GMO soybeans. Conventional (non-organic) animals raised for meat, dairy, or eggs are typically raised on a diet of GMOs. (Also see full list of common GMO ingredients on page 22).

What To Choose Instead: Buy certified organic products and look for the "Non-GMO Project Verified" label.

12.) Growth promoting drugs and hormones in meat

Conventional animals being raised for meat or dairy are often given growth-promoting steroids, hormones, and drugs. Some big conventional dairies in the U.S. are still injecting their cows with synthetic growth hormones (invented by Monsanto) to increase milk production, despite evidence that it may lead to higher levels of the cancer-causing hormone IGF-1 in our bodies. Other drugs - like ractopamine - are used to fatten up cattle, turkeys, and pigs before slaughter. These drugs are unhealthy for the animals, while residues of some of these drugs have been found in meat and can increase the risk of certain diseases in humans as well.

How To Find Them: Non-organic meat and dairy (as well as packaged non-GMO foods) may contain meat and dairy that has been raised with growth-promoting drugs and hormones.

What To Choose Instead: Choose certified organic meat and dairy as they prohibit the use of growth promoting drugs in the raising of their animals.

13.) Antibiotics in Meat

Almost all of the antibiotics in the U.S. (about 80%) are fed to farm animals at constant low levels just to fatten them up on less food. This saves the meat industry money, but is causing a major human health crisis. Many experts agree that the overuse and misuse of antibiotics in food animals is a major source of the antibiotic-resistant bacteria that's affecting humans, and leading to infections that are difficult to treat and sometimes impossible to cure. At least 23,000 Americans die from antibiotic-resistant bacteria infections every year, and these infections are on the rise.

How To Find Them: Any conventional animal product (meat, dairy, eggs) that is not organic or isn't specfically labeled as "Raised without Antibiotics" was likely raised with antibiotics that is contributing to resistant bacteria.

What To Choose Instead: Choose meat, dairy, and eggs that are organic or labeled as "Raised without Antibiotics".

14.) Pesticides and Herbicides

Conventional crops can be laden with synthetic pesticide residues, including organophosphates that are linked to lymphoma and leukemia. For instance, a bag of non-GMO potato chips can contain residues from up to 35 different pesticides used on conventional potatoes, several of which are known carcinogens, suspected hormone

disruptors, neurotoxins, or reproductive toxins. Food made from GMO crops (sugar, corn, canola, soy, cottonseed) may be further contaminated with the herbicide Roundup, which is linked to cancer (See #11 "Genetically Modified Organisms"). Only natural pesticides are allowed on organic crops, and it's been shown that organic produce has very low levels of pesticide residue compared with conventional crops.

How To Find Them: Non-organic produce and products, even if they are Non-GMO.

What To Choose Instead: Choose certified organic produce and products that are made with organic ingredients if possible. Seek out local farmers that don't use pesticides. Use EWG's Dirty Dozen Guide to determine which produce is the least contaminated with pesticides if organic is not available.

15.) Refined and Enriched flour

The wheat crops in this country have been through some serious manipulation to make them profitable for the food industry and less healthy for us. Refined flour can be treated with any of the 60 different chemicals approved by the FDA before it ends up on store shelves – including chemical bleach! This industrial processing also destroys nutrients, such as Vitamin E and fiber. Manufacturers "enrich" this dead flour by putting synthetic nutrients back in.

How To Find Them: Bread (even "wheat" bread) and baked goods that contain enriched flour, bleached flour, or wheat flour.

What To Choose Instead: Choose products (breads, crackers, bagels, etc.) made with whole wheat, whole grain, sprouted grains, whole oats, rye, buckwheat, almond, or quinoa flour. Cook with these types of flours at home too.

16.) BPA

This is a toxic chemical in some food packaging materials that's a known endocrine disruptor. Chronic exposure to BPA has been linked to a host of issues, such as obesity, cancer, thyroid problems, infertility, diabetes, and early puberty in children.

How To Find Them: Packaged food, primarily found in cans and plastic. Although BPA is banned in Canada and the E.U., in the U.S. it's only banned from baby bottles and infant formula packaging.

What To Choose Instead: Choose products that are packaged in glass or BPA-free packaging. Instead of canned, buy organic dried beans and cook them yourself (this

is cheaper also). Stay away from plastic as much as possible, and choose glass and stainless steel for your food storage at home.

17.) High Fructose Corn Syrup (HFCS)

This chemically refined sugar has been shown to cause more weight gain than regular sugar. Even when eaten in moderation, it's said to be a major cause of heart disease, cancer, dementia and liver failure. Also beware that food companies are allowed to list a variation of high fructose corn syrup (HFCS-90) as just "fructose" on an ingredient list. HFCS contains way more fructose (90%) than regular high fructose corn syrup (55%). It is also derived from corn starch, which is likely GMO.

How To Find Them: Look for fructose or high fructose corn syrup on an ingredient list.

What To Choose Instead: Choose products that are naturally sweet, or sweetened with fruit or unrefined sweeteners like coconut sugar, maple syrup, and honey.

18.) Heavy Metals and Neurotoxins

Pesticides, fish farming, and food packaging materials have contaminated our food with heavy metals like aluminum, lead, mercury, and arsenic. We cannot easily eliminate these toxins from our system, and they end up stored in our bodies where they can invade our organs. They have been shown to be neurotoxins that can cause memory loss, migraines, and premature brain aging.

How To Find Them: Fish and rice are both common culprits. Unless a food is tested, they can be difficult to spot and avoid. However, you can eat certain foods that can mitigate your exposure.

What To Choose Instead: Foods that help to detox your body from exposure to heavy metals include cilantro, cruciferous vegetables (broccoli, kale, dandelion, cabbage), and sulfur-rich foods (onions, garlic). Also limit your fish intake to 1-2 times per week.

19.) Nitrates

Nitrites and nitrates (which turn into nitrites in the body) are common preservatives that come with serious health risks. Found in cured meat - like deli meats and bacon - they convert into nitrosamines during cooking. These nitrosamines are linked to several types of cancer, and have been shown to be toxic to the brain, contributing to alzheimer's disease.

How To Find Them: Look for "sodium nitrate" or "sodium nitrite" on the ingredient list.

What To Choose Instead: Avoid cured and smoked meat products, and choose fresh organic meat instead. Also check the labels of soups and other packaged products that contain bacon and processed meat.

20.) Toxins in water

The water that comes into our homes can be contaminated with pesticides, pharmaceuticals, perchlorate, chlorine, heavy metals, and other toxins. In 2010, the EWG reported that it's common for our tap water to contain more than 300 contaminants! The most common form of fluoride that's added to tap water is called hexafluorosilicic acid, which is frequently contaminated with arsenic (a carcinogen). Disposable water bottles are usually just filled with glorified tap water and stored in plastic which means that BPA (Bisphenol A) may leach into the water creating a huge health hazard. The toxins in water can also enter your body through open skin pores while you're showering, so it is wise to put a filter on your showerhead. You can eat the best organic food on the planet, but if you're using water that is full of toxins, that effort could be compromised.

How To Find Them: Tap and unfiltered water (including many bottled waters)

What To Choose Instead: If possible, get a high-quality water filter that installs under your sink for your home. Drink your own filtered water out of reusable stainless steel or glass water bottles when you go out. When traveling, choose spring water in glass bottles such as Mountain Valley Spring Water from Vermont.

List of Possible GMO Ingredients

If a non-organic packaged good has one of these ingredients listed below it could be GMO or genetically engineered. Look for Non-GMO Project certified products and ingredients that are listed as 100% organic on labels to avoid all GMOs in your diet.

- Aspartame
- Baking Powder
- Canola Oil (Rapeseed Oil)
- Caramel Color
- Cellulose
- Citric Acid
- Cobalamin (Vitamin B12)
- Colorose
- Condensed Milk
- Confectioners Sugar
- Corn Flour
- Corn Masa
- Corn Meal
- Corn Oil
- Corn Sugar
- Cornstarch
- Cottonseed Oil
- Cyclodextrin
- Dextrin
- Dextrose
- Diacetyl
- Diglyceride
- Erythritol
- Equal
- Food Starch
- Fructose
- Glucose
- Glutamate
- Glutamic Acid
- Glycerides
- Glycerin
- Glycerol
- Glycerol Monooleate
- Glycine
- Hemicellulose
- High Fructose Corn Syrup
- Hydrogenated Starch
- Hydrolyzed Vegetable Protein
- Inositol
- Inverse Syrup
- Inversol
- Invert Sugar
- Isoflavones
- Lactic Acid
- Lecithin
- Leucine
- Lysine
- Malitol
- Malt
- Malt Syrup
- Malt Extract
- Maltodextrin
- Maltose
- Mannitol
- Methylcellulose
- Milk Powder
- Milo Starch
- Modified Food Starch
- Modified Starch
- Mono And Diglycerides
- Monosodium Glutamate (MSG)
- Nutrasweet
- Oleic Acid
- Phenylalanine
- Phytic Acid
- Protein Isolate
- Shoyu
- Sorbitol
- Soy Flour
- Soy Isolates
- Soy Lecithin
- Soy Milk
- Soy Oil
- Soy Protein
- Soy Protein Isolate
- Soy Sauce
- Starch
- Stearic Acid
- Sugar (Unless Specified As Cane Sugar)
- Tamari
- Tempeh
- Teriyaki Marinades
- Textured Vegetable Protein
- Threonine
- Tocopherols (Vitamin E)
- Tofu
- Trehalose
- Triglyceride
- Vegetable Fat
- Vegetable Oil
- Vitamin B12
- Vitamin E
- Whey
- Whey Powder
- Xanthan Gum

THE INSTITUTE FOR FUNCTIONAL MEDICINE®

Goal Setting for Behavior Change

"A goal properly set is halfway reached." —*Zig Ziglar*

Changing habits to consciously improve your health is no small undertaking, and making the decision to change is just the first step. Actively thinking about and planning for change will help prepare you for the process and motivate you to stay on track.

When you're ready to make a change, it is often helpful to set tangible goals. These goals can be short-term (daily, weekly, monthly) or long-term (6–12 months). When goal setting for behavior change, it's also helpful to set goals that are SMART—specific, measurable, attainable, realistic, and timely. The table below lists some examples of SMART goals.

SMART Goal Component	Example
Specific State the desired outcome as explicitly as possible, and target a specific area for improvement. This is the "who, what, where, when, which, and why" of your goal.	I will walk at least five days per week in the evenings to help me reduce my waist size (in inches).
Measurable Identify the ways in which you will track your progress, and be as specific as possible. This is the "how" of your goal.	I will meditate for 30 minutes a day five times a week in order to lower my stress levels and blood pressure.
Action-oriented Start with small, achievable goals that are easily outlined into specific steps that will enable you to complete the goal. Then, as you meet those smaller goals, work up to intermediate goals and goals that are more difficult to achieve.	I will make an effort to move my body for at least 15 minutes three days a week, increasing my time each week by five minutes until I reach 30 minutes per day. I will add an extra day every two to four weeks until I reach 30-60 minutes for five days a week.
Realistic Create a goal that you are both willing and able to accomplish.	I will begin my bedtime ritual one hour before bedtime, which will help me fall asleep faster each night.
Timely Set a deadline or time for achieving your goal to help keep you motivated.	Over the next month, I will start eating breakfast every day. For the first week, I will make breakfast (or prepare it ahead the night before) twice per week. In the second week, I will make breakfast three times per week. In the third week, I will make breakfast five times per week. In the fourth week, I will make breakfast every day.

To begin setting your own SMART goals, flip the page and fill in the information in the template provided.

SMART HEALTH GOALS

Date_____

Name_____ Age_____ Gender _____

SMART Health Goals are:

Specific ▪ Measurable ▪ Action-oriented ▪ Realistic ▪ Timely

SMART Health Goal	Does the goal require adding or eliminating a behavior?	What is the first action step to accomplish the goal?	What is the start date, timeframe, or deadline for taking action?

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