

The Shocking Ingredients In Beer

By [Food Babe](#)

I have to confess, I'm not a beer drinker, but there's someone in my household that loves it, so I had to figure out the truth. Is beer really healthy? Why are the ingredients not listed on the label? Which brands can we trust? Which brands are trying to slowly poison us with cheap and harmful ingredients? All of these questions were going through my head at once at lightning speed. So a year ago, I started to research what was really in beer and after questioning several beer companies, reading books about food science, and talking to experts, the information I discovered was downright shocking.

I see it all the time. Someone who eats organic, makes the right choices at the grocery store, is fit and lives an extraordinarily healthy lifestyle but then drinks beer like it is going out of style.

Caring about what you eat doesn't necessarily translate into caring about what you drink and this is a HUGE MISTAKE.

Before we get into what exactly is in beer that you should be worried about, let's talk about how body reacts to alcohol in general.

Alcohol is metabolized by the body differently than all other calories you consume. Alcohol is one of the only substances that you consume that can permeate your digestive system and go straight into your bloodstream. It bypasses normal digestion and is absorbed into the body intact, where it goes straight into the liver.

Your liver is your main fat-burning organ. If you are trying to lose weight or even maintain your ideal weight, drinking alcohol is one of your worst enemies. The liver is going to metabolize alcohol first vs. the fat you want to get rid of – making weight loss even harder. Additionally, one of the primary functions of the liver is to remove environmental toxins from your body – if it is overtaxed with alcohol, the normal removal of these toxins becomes extremely diminished and can result in rapid aging, loss of libido, and other diseases.

The one thing that has gotten me before and I'm sure many of you – is the health marketing claims on alcohol products making drinking them seem like a good idea and an added “benefit” to your health. The low alcohol content of beer makes it appear as an innocuous beverage and something people throw back without even thinking about it. Who hasn't seen those studies that say a beer a day is great for you (I want to ask who ever stops at just one beer?)?

So, inherently, alcohol by itself is not a healthy person's best friend – but that's just the tip of the iceberg. Beer, especially American beer, is made with all sorts of ingredients beyond the basic hops, malt and yeast. There are numerous other ingredients used to clarify, stabilize, preserve, enhance the color and flavor of beer.

When you drink beer, there is almost a 100% chance that you don't know what you are drinking (unless you quizzed the beer companies like I did). The ingredients in beer are not required by law to be listed anywhere on the label and manufacturers have no legal obligation to disclose the ingredients. For regular beer, calorie levels and percent alcohol are optional and for light beer calories are mandatory but alcohol levels are optional.

Michele Simon, a public health lawyer, author of [Appetite for Profit](#), and president of Eat Drink Politics told me the reason that beer companies don't disclose ingredients is simple: they don't have to.

“Ingredient labeling on food products and non-alcoholic beverages is required by the Food and Drug Administration. But a whole other federal agency regulates beer, and not very well. The Department of Treasury – the same folks who collect your taxes – oversees alcoholic beverages. That probably explains why we know more about what's in a can of Coke than a can of Bud. You can also thank the alcohol industry, which has lobbied for years against efforts to require ingredient labeling.”

I figured if the beer companies aren't required to tell us the exact list of ingredients, I needed to investigate this for myself and asked them the pointed questions until I got the truth.

First of all, I was able to obtain a baseline list of “legal” additives allowed in beer from the book *“Chemicals Additives in Beer”* by the Center of Science and Public Interest. This list allowed me to ask specific questions about each beer I investigated. For example – beer sold here in America can contain several of the following ingredients:

- *Monosodium Glutamate (MSG) – alcohol is already addictive with some people, but with MSG?! Holy smokes.*
- *Propylene Glycol (an ingredient found in anti-freeze)*
- *Calcium Disodium EDTA (made from formaldehyde, sodium cyanide, and Ethylenediamine)*
- *Many different types of sulfites and anti-microbial preservatives (linked to allergies and asthma)*
- *Natural Flavors (can come from anything natural including a beavers anal gland)*
- *High Fructose Corn Syrup*
- *GMO Sugars – Dextrose, Corn Syrup*
- *Caramel Coloring (Class III or IV made from ammonia and classified as a carcinogen)*
- *FD&C Blue 1 (Made from petroleum, linked to allergies, asthma and hyperactivity)*
- *FD&C Red 40 (Made from petroleum, linked to allergies, asthma and hyperactivity)*
- *FD&C Yellow 5 (Made from petroleum, linked to allergies, asthma and hyperactivity)*
- *Insect-Based Dyes: carmine derived from cochineal insects to color their beer.*
- *Animal Based Clarifiers: Findings include isinglass (dried fish bladder), gelatin (from skin, connective tissue, and bones), and casein (found in milk)*
- *Foam Control: Used for head retention; (glyceryl monostearate and pepsin are both potentially derived from animals)*
- *BPA (Bisphenol A is a component in many can liners and it may leach into the beer. BPA can mimic the female hormone estrogen and may affect sperm count, and other organ functions.)*
- *Carrageenan (linked to inflammation in digestive system, IBS and considered a carcinogen in some circumstances)*

During my investigation, I couldn't get a single mainstream beer company to share the full list of ingredients contained in their beer. But I did get some of them to fess up to the use of these ingredients in writing so I'm going to share this information with you now.

Carcinogenic Caramel Coloring

Newcastle, a UK brand, confessed to using what I would consider one of the most controversial food additives. Toasted barley is usually what gives beer its golden or deep brown color, however in this case, Newcastle beer is also colored artificially with caramel color. This caramel coloring is manufactured by heating ammonia and sulfites under high pressure, which creating carcinogenic compounds. If beer companies were required by law to list the ingredients, Newcastle would likely have to have a cancer [warning label under California law](#) because it is a carcinogen proven to cause [liver tumors, lung tumors, and thyroid tumors](#) in rats and mice.

Genetically Modified Organisms (GMOs)

Many of the beers I questioned contained one or more possible GMO ingredients.

- High Fructose Corn Syrup (Guinness – unable to provide an affidavit for non-GMO proof)
- Corn syrup (Miller Light, Coors, Corona, Fosters, Pabst Blue Ribbon, Red Stripe)
- Dextrose (Budweiser, Bud Light, Busch Light, Michelob Ultra)
- Corn (Red Stripe, Miller Coors Brand, Anheuser-Busch Brands)

Most beers brewed commercially are made with more GMO corn than barley. Many of the companies I contacted dodged the GMO question – however **Miller Coors** had a very forthcoming and honest response. They stated “Corn syrup gives beer a milder and lighter-bodied flavor” and “Corn syrups may be derived from a mixture of corn (conventional and biotech.)”, admitting their use of GMOs.

MillerCoors

ADMITS TO USING GMOs

“Corn syrup gives beer a milder and lighter-bodied flavor. Hops add spicy aroma and bitter flavors. Yeast changes sugars into alcohol and carbon dioxide. There are no sugars, such as table sugars, added to our products with the exception of Sharp's, our non-alcohol brew. Small amounts of natural sugars are present in our products, but because they are in such small amounts, we do not test for them. Corn syrups may be derived from a mixture of corn (conventional and **biotech**).”

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Pabst Blue Ribbon responded saying their corn syrup was “special” and “made of carbohydrates and some simple sugars like dextrose and maltose. The sugars are fermented into alcohol and CO₂, and the carbohydrates, both from the corn syrup and the malt, remain in the beers as flavor, color and body components.”

Dextrose and maltose can come from a variety of substances that are sweet, but likely are derived from GMO corn because it is super cheap for a company to use corn instead of fruit or other non-GMO sources. With cheap beer – you are not just getting a cheap buzz, you are getting the worst of the worst. Just like with cheap fast food – if you don't invest in your beer – you will be drinking a lower quality product like Pabst Blue Ribbon that is made from GMO Corn and Corn Syrup.

In 2007, Greenpeace found [unapproved and experimental GMO Rice strain](#) in **Anheuser-Busch (Budweiser, Bud Light)** beer. Anheuser-Busch responded saying their US-grown long-grained rice “may have micro levels”

of a genetically engineered protein called Liberty Link, but added that the protein is “substantially removed or destroyed” during the brewing of beer sold domestically. Don’t you think it’s hard to trust any beer company that gets caught using experimental food made in a laboratory? GMOs have not been tested long term on human beings and one of the main pesticides (Roundup) they spray on GMO crops are linked to [inflammation](#), [cancer](#) and [other diseases](#).



High Fructose Corn Syrup & Fish Bladders

Speaking of trusting companies, let’s get one thing straight, **Guinness** beer is no longer owned by the Irish, they are now owned by a large beer conglomerate called Diageo and manufactured in over 50 different countries. No matter how many St. Patty’s Day celebrations you’ve had with this dark stout, it’s time to stop because they use high fructose corn syrup in their beer.

(4/2/14 Update: Guinness Beer claims they do not use high fructose corn syrup any longer, but refuses to disclose ingredient affidavits or full of list of ingredients.)

But, Guinness beer also contains isinglass, a gelatin-like substance produced from the [swim bladder](#) of a fish. This ingredient helps remove any “haziness,” solids, or yeast byproducts from the beer. Mmmmm... fish bladder sounds delicious, doesn’t? The sneaky thing this beer company does like many of the companies mentioned here today is create an illusion of using the best ingredients when in actuality what they tell you publicly on their websites is a complete farce.

On Guinness FAQ's – they have a question that states: “What are the key ingredients in Guinness” and the answer doesn't reveal the whole picture – it only states “Our key ingredients – other than inspiration – are roasted, malted barley, hops, yeast and water.” What BS, right? You have to call, email, question and know the right things to ask to even have a chance at getting the truth. This is insanity.

So What Beers Are Additive and GMO Free?

If you enjoy the occasional beer and wish to maintain your healthy lifestyle, choosing one without GMOs and additives is ideal. Unfortunately, most of the mainstream beers available have additives, but luckily, there are a few that don't. For example, Sierra Nevada, Heineken, and Amstel Light ~~(7/31/13 UPDATE: It has come to my attention that Heinken USA has changed their formula to use GMOs – I called their customer service line 1-914-681-4100 to confirm and asked for the list of ingredients – the man told me “water, yeast, malted barley and hops” – then I asked if their beer contained any genetically engineered material and he confirmed “YES,” but wouldn't tell me what ingredients are genetically engineered. They recently changed their formula after my initial research that started in late 2012.)~~

(8/1/13 Update: Heineken reached out to me personally to say their customer service department made an error in telling me and others who called their beer has GMOs. I met with a head brew master and have viewed affidavits from the company and confirmed Heinken and Amstel Light do not contain GMOs – they apologize for the confusion.) appear to be pretty clean (but these companies still wouldn't disclose the full list of ingredients to me. They did say they use non-GMO grains, no artificial ingredients, stabilizers or preservatives).

German Beers are also a good bet. The Germans are very serious about the purity of their beers and enacted a purity law called “Reinheitsgebot” that requires all German beers to be only produced with a core ingredient list of water, hops, yeast, malted barley or wheat. Advocates of German beers insist that they taste cleaner and some even claim they don't suffer from hangovers as a result.

An obvious choice to consider is also **Certified Organic Beers**. They are required by law to not include GMOs and other harmful additives. Organic beers also support environmental friendly practices and reduce the amount

of pesticides and toxins in our air, support organic farmers – which is a huge plus. (To this day, the beer drinkers in my family haven't found one they love so if you have suggestions, please let us know in the comments!)

Craft & Microbrews Beers – For certain local craft and micro beers, you can ask those companies for a list of ingredients and many of them will be up front with you. However, companies like Miller Coors are slowly closing in on craft beers and buying them up one by one... like they did when they created the unique popular variety called Blue Moon (the beer you drink with an orange) and Anheuser-Busch did this with Rolling Rock and **Goose Island Brewery**. Make sure your favorite craft and microbrew is still independently owned and controlled before taking a sip.

In the end – if you decide to drink beer, you are definitely drinking at your own risk for more reasons than just the crazy ingredients that could be in them. The key point to remember is – if you like to drink beer and want to be healthy, drink it infrequently and quiz the beer companies for the truth. Find a beer that you can trust and stick with it.

For your reference, here are some important questions to ask your favorite beer company:

1. *What are the ingredients in your beer – all of them from start to finish?*
2. *Are any of your ingredients GMO?*
3. *Do you use any soy, corn, or rice processing ingredients? (Examples include: dextrose, corn syrup, etc.)*
4. *Do you add any natural, artificial flavors or colors to the beer? (Examples include: yellow #5, caramel coloring, red #40, MSG, natural flavors)*
5. *Are there any additional preservatives, stabilizers and/or clarifying agents added to your beer during processing? (Examples include: propylene glycol, Calcium Disodium EDTA, anything ending in "sulfite" like sodium metabisulfite, Heptylparaben, isinglass)*

If you know someone who drinks beer – share this post with them.

These ingredients are no joke. We must inform and protect each other from these industrial chemicals, untested and potentially harmful ingredients and it starts by sharing your knowledge with the ones you love.

