Hangovers – Facts, Remedies, and Protocols

There’s nothing like a good buzz, but add to it with another drink and tomorrow morning may be torture. Hangovers are terrible, horrible things, as many of us can attest. But ironically enough, while we’re all too familiar with the symptoms of too much drinking, a lot of us have no idea how alcohol actually causes hangovers.

Alcohol’s Effect

When we drink alcohol (ethanol, specifically), it makes it’s way through our digestive system. It is then absorbed into the bloodstream where it circulates until the liver is able to process it. Once it’s in the liver, the enzyme, alcohol dehydrogenase, breaks it down into acetaldehyde – a toxin that’s far more toxic than ethanol itself. Luckily, the antioxidant glutathione is able to jump in with acetaldehyde dehydrogenase to break it down yet again, this time converting it into non-toxic acetate.

The metabolization of those Friday night cocktails is a pretty impressive process. However, as powerful an organ as the liver proves to be, there are limits to its detoxifying powers. The typical liver is able to process ½ oz of ethanol per hour (about one drink). When we tip back brews faster than we can metabolize them, our glutathione gets used up quicker than it can be replenished. There’s no other option but to put detoxification on hold while glutathione stores build back up. This leads to a build-up of the nasty toxin acetaldehyde, the culprit behind our hangover woes.

The Hangover

With alcohol in our system, our body stops producing the antidiuretic hormone ADH. Now all available water stores are tapped into – brain included – in order to flush the toxin out. This rise in fluid raises our blood volume, which leads to a spike in blood pressure. Luckily we're able to offset this by sending fluids to the bladder, but every trip to the toilet deplenishes more of our water reserves, and precious electrolytes are being flushed as well.

With alcohol in our system, the body puts a halt on producing the stimulant glutamine – leaving us drowsy and ready to nap at a moment's notice. This deep sleep won't last though. Once our livers are able to process the last of the alcohol in our bloodstream, glutamine goes back into production and that booze-induced snooze is interrupted. Depending on the damage, waking up can be quite a doozy. All those lost water reserves leave us dehydrated, our brains shrunken, and our electrolyte levels low; a physiological recipe for disaster.

The "Cure"

We can try to prevent hangovers altogether by drinking plenty of water and giving our livers a much-needed break between drinks. However, there are bound to be nights that we get carried away. In that case, a dose of electrolytes, supplements, and eggs can be paired with a nice long Epsom soak.

The important minerals we call electrolytes play a crucial role in hydration, so they're a must for Saturday mornings. Bone broth, potassium-packed bananas, and a dash of sea salt all offer a serving of these balancing minerals. Coconut water is especially popular thanks to its electrolyte content, so it's a great thing to have in the fridge before you head out Friday. But if you want to step it up a notch, make it coconut

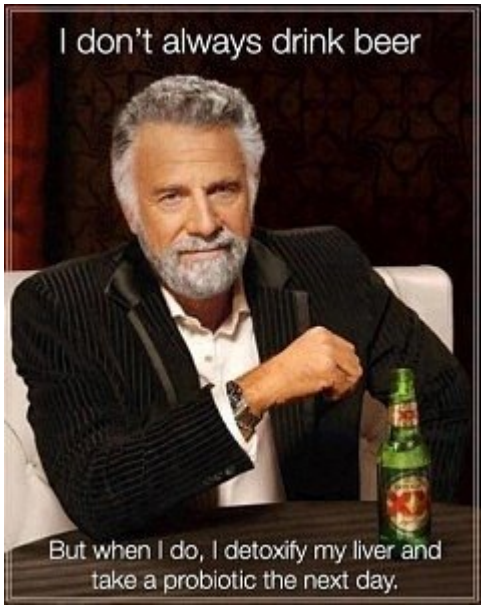
kefir. A study through the American College of Gastroenterology showed that drinking one serving of alcohol per day (2 drinks for men and 1 for women) was connected to a higher count of Small Intestinal Bacterial Overgrowth (SIBO). This can leading to uncomfortable bowel problems like gas and bloating, and it can even reduce our small intestine's ability to absorb important nutrients.

After drinking some liquid remedies, consider supplements like n-acetylcysteine. It can be taken before ordering that first drink to help the body process acetaldehyde and reduce the after-effects. Milk thistle extract is another helpful supplement that contains liver-protecting antioxidants that can also boost production of glutathione. Combine this with Vitamin C and the liver will get an extra shot of power in metabolizing alcohol. However, if your cupboards are bare of any vitamins or supplements you can always turn to the fridge for some eggs. Fried in a skillet or baked up as a frittata, they offer a punch of cysteine for inexpensive damage control that will help break down acetaldehyde.

If your joints are aching, draw up a hot bath infused with Epsom salt (aka electrolyte-balancing Magnesium Sulfate). Magnesium has much to offer aches and pains thanks to its anti-inflammatory nature. Plus, a good soak in hot water offers an increase in circulation that will help blood flow through the liver quicker, thereby speeding up the process of detoxification. And for more hangover magic, consider adding aromatherapy to your weekend bath. Thanks to the highly volatile nature of quality essential oils, the beneficial compounds can be inhaled as well as absorbed by the skin. Lavender is particularly relaxing and therapeutic while rosemary works wonders with migraines. Should help be needed with easing nausea, soothing digestion, or taming headaches, peppermint makes an excellent ally.

Important Factors

We're always reading about different drinking limits for men than for women. This has many of us ladies ready to wage a drinking competition, but there's a reason drinking recommendations differ. Levels of ALDH and glutathione are generally lower in women, so we aren't able to be metabolized alcohol as quickly. There are also differences in the body's ability to process alcohol between races across the globe, with people of East Asian descent often getting a bigger impact per drink because of the how their alcohol dehydrogenase and acetaldehyde dehydrogenase process alcohol.



However, male or female, the suggested remedies above have great potential with those haggard weekend mornings. But while they can do much to tame the pains of a night out, they're meaningless when it comes to binges and regular drinking. High amounts of alcohol over a period of time can do serious damage to our bodies. It's also a sign of a bigger problem like alcohol dependency. A healthy body takes a healthy liver, and that means taking a break from the stress of alcohol. So, every now and then, show your liver some love with a virgin margarita or Bloody Mary. No hangover – *100% guaranteed*.

Editor's Note: A high-quality probiotic is essential for recovering quickly from a night of drinking. Alcohol kills our beneficial microflora, but it does not kill Candida or other fungal spores that take over right away. If you drink frequently and are ready to cut down and repair the gut, check out the further reading below.

My own personal protocol includes 15 FloraMend or Bio-K, goat

milk Keifer (plain), a B vitamin complex, and I do my usual cranberry and salad routine which will flush the body and detox the liver.

Further Reading:

- *Detox Cheap and Easy Without Fasting – Recipes Included*
- *Gluten, Candida, Leaky Gut Syndrome, and Autoimmune Diseases*
- *Natural remedies for a Hangover*
- *Boost Your Liver Function Naturally*

Resources:

- *Hangover Hacks You Can Hang Your Hat On* – Mercola
- *Your Body: The Liver & Alcohol* –The Molecular Circus
- *Why Do Hangovers Give You A Headache And How You Can Banish Them* –Daily Mail
- *Hangover Cures* – Mark's Daily Apple
- *Healing Plants 101*– Avant Garden Decor
- *The Essential Oils For Hangover Cure* – Essential Oils Natural Living
- *Alcohol Abuse In The United States* – 1-800 Addicts
- *Moderate Alcohol Consumption Is Associated With Small Intestinal Bacterial Overgrowth, Study Finds* – Science Daily