## **Alcohol: New Limits**

In 2016 new guidelines were released on the safe limits of alcohol. They are:

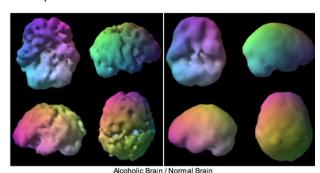
- No more than one standard drink per day (on average), and no more than 3 drinks on any given day.
- People should have 2-3 drink-free days each week to allow their liver to recover.
- Drink alcohol slowly, and drink it along with plenty of water.

A standard drink is 12 ounces of beer, 5 ounces of wine, or 1.5 ounces of 80-proof spirits. For the rarer drinks, it's 8.5 ounces of malt liquor, 3.5 ounces of fortified wine, and 2.5 ounces of cordial, liqueur or aperitif. What that all translates to is 14 grams of pure alcohol.

Compared to the old guidelines, which were developed in the 1980s, these new limits are stricter for men and about the same for women. The old guidelines allowed men to drink double that amount, based on the fact that they metabolize alcohol twice as quickly. However, new data on the health risks have caused doctors to reexamine those numbers.

Staying below these new limits would save 20 in 1,000 people from cancer. High blood pressure, heart disease, stroke, and liver disease are among the other reasons to keep within the new limits.

Simply put, going beyond those numbers is likely to be toxic to your brain and body over the long term. The pictures below, which come from PET scans taken by Dr. Daniel Amen, show what this toxicity looks like in the brain:



These safe limits may be even lower for people who have suffered from alcohol addiction, who are over age 65 or who have medical problems.

## Alcohol's Effects on the Body

Drinking too much – on a single occasion or over time – can take a serious toll on your health. Here's how alcohol can affect your body:

Brain: Dementia (memory loss), depression, psychosis, seizures, poor coordination. These effects can be due to intoxication but can also set in permanently.

Heart: Cardiomyopathy (stretching and drooping of heart muscle), arrhythmias (irregular heart beat), stroke, high blood pressure.

Liver: Potentially fatal liver inflammations including: steatosis (fatty liver), hepatitis, fibrosis, cirrhosis.

Stomach: Heart-burn, gastritis, ulcers, chronic diarrhea.

Pancreas: Alcohol causes the pancreas to produce toxic substances that can eventually lead to pancreatitis, a dangerous inflammation and swelling of the blood vessels in the pancreas that prevents proper digestion. It also raises the risk of diabetes.

Cancer: In the mouth, esophagus, throat, liver, colon and breast.

Immune System: Drinking too much can weaken your immune system, making your body an easier target for infections like pneumonia and tuberculosis. Alcohol slows your ability to ward off infections for up to 24 hours after getting drunk.

Sexual: feminization in men from high estrogen levels (leading to male breasts and smaller testes), infertility, sexual dysfunction.

Other: weakened bones, anemia, cough, painful gout (arthritis), muscle cramps.

## **Liquid Calories**

Alcohol packs a lot of hidden calories, which are oddly never listed on the bottle:

| Drink   | Calories |
|---|----------|
| Beer (12 oz)                                  | 153      |
| Light beer (12 oz)                            | 103      |
| Gin, rum, vodka, whiskey,<br>tequila (1.5 oz) | 92       |
| Brandy, cognac (1.5 oz)                       | 98       |
| Liqueurs (1.5 oz)                             | 165      |
| Red wine (5 oz)                               | 125      |
| White wine (5 oz)                             | 121      |
| Sweet wine (3.5 oz)                           | 165      |
| Sherry (2 oz)                                 | 75       |
| Port (2 oz)                                   | 90       |
| Champagne (4 oz)                              | 84       |
| Vermouth, sweet (3 oz)                        | 140      |
| Vermouth, dry (3 oz)                          | 105      |
| Martini (2.25 oz)                             | 124      |
| Martini (extra dry) (2.25 oz)                 | 139      |
| Cosmopolitan (2.75 oz)                        | 146      |
| Mojito (6 oz)                                 | 143      |
| Margarita (4 oz)                              | 168      |
| Piña Colada (9 oz)                            | 490      |
| Manhattan (3.5 oz)                            | 164      |
| Daquiri (2 oz)                                | 112      |
| Whiskey sour (3.5 oz)                         | 160      |

## All Things In Moderation, Except Tea

It's hard for alcohol to compete with the health benefits of tea. Drinking three cups of tea lowers the risk of depression by 37%, and this effect doubles when you go to six cups a day. Coffee has similar benefits, but unlike tea its antidepressant effect does a reversal when you drink too much. The antidepressant effects of coffee level out at around 1-2 mugs per day (2.5 metric cups); beyond that it seems to cause depression. Drinking any caffeine after 2 p.m. can also worsen mood by disrupting sleep.

Tea also lowers the risk of heart disease, cancer, and diabetes. The best effects come from freshly brewed green, black and red teas (hot or cold). Limit sweeteners or use a little bit of honey if you need. The added sugars and other processed ingredients in bottled or powdered tea (and chai concoctions) probably cancel out any health benefits the tea leaf carries.

Coffee also lowers the risk of diabetes, heart disease and stroke. When drunk without cream and sugar, it's hard to find a beverage with fewer calories than coffee and tea. Well, diet sodas have zero calories, but be careful: they actually raise appetite and can destabilize blood sugar in ways that lead to diabetes.