Alcohol and Your Body

When you drink alcohol, less than 5% of the alcohol you drink is turned into fat. Most of the alcohol is converted to acetate by your liver in a process called oxidation. Oxidation must occur to prevent alcohol from accumulating and destroying your cells and organs. Once oxidation occurs, the acetate is released into your bloodstream. Your body then uses the excess acetate as energy instead of using your body’s stored fat. This creates a higher caloric intake than caloric output and this may be why some people note a weight gain. If you’re worried about weight gain, here are some steps to drinking mindfully.

1. Ask yourself if you really want to drink.
2. Ask for drinks mixed with juice and drink them slowly.
   **TIP:** hydration will help prevent a hangover.
3. Alternate alcoholic drinks with non-alcoholic drinks or water.
4. Eating a meal high in protein before you go out will line your stomach and slow the rate at which alcohol absorbs into your bloodstream, keeping you in control of how much you eat and drink.
5. Listen to what your body is telling you and stop drinking when your body tells you to.

---

Female Blood Alcohol Content Chart
(after 3 hours of drinking)

<table>
<thead>
<tr>
<th>Body Weight</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>.000</td>
<td>.042</td>
<td>.087</td>
<td>.132</td>
<td>.177</td>
<td>.222</td>
<td>.267</td>
<td>.312</td>
<td>.357</td>
<td>.402</td>
</tr>
<tr>
<td>125</td>
<td>.000</td>
<td>.024</td>
<td>.060</td>
<td>.096</td>
<td>.132</td>
<td>.168</td>
<td>.204</td>
<td>.240</td>
<td>.276</td>
<td>.312</td>
</tr>
<tr>
<td>150</td>
<td>.000</td>
<td>.012</td>
<td>.042</td>
<td>.072</td>
<td>.102</td>
<td>.132</td>
<td>.162</td>
<td>.192</td>
<td>.222</td>
<td>.252</td>
</tr>
<tr>
<td>175</td>
<td>.000</td>
<td>.003</td>
<td>.029</td>
<td>.055</td>
<td>.081</td>
<td>.106</td>
<td>.132</td>
<td>.158</td>
<td>.183</td>
<td>.209</td>
</tr>
<tr>
<td>200</td>
<td>.000</td>
<td>.000</td>
<td>.020</td>
<td>.042</td>
<td>.065</td>
<td>.087</td>
<td>.110</td>
<td>.132</td>
<td>.155</td>
<td>.177</td>
</tr>
<tr>
<td>225</td>
<td>.000</td>
<td>.000</td>
<td>.012</td>
<td>.032</td>
<td>.052</td>
<td>.072</td>
<td>.092</td>
<td>.112</td>
<td>.132</td>
<td>.152</td>
</tr>
<tr>
<td>250</td>
<td>.000</td>
<td>.000</td>
<td>.006</td>
<td>.024</td>
<td>.042</td>
<td>.060</td>
<td>.078</td>
<td>.096</td>
<td>.114</td>
<td>.132</td>
</tr>
</tbody>
</table>
• **.07-0.10**: Noticeable speech impairment, impaired motor coordination and balance issues; feelings of elation or depression; increased confidence
• **.08 IS THE LEGAL DRIVING LIMIT FOR THOSE 21 YEARS OLD AND OLDER**
• **.11-.12**: Lack of control of coordination and balance; distinct impairment of mental faculties and judgment
• **.14-.15**: Major impairment of mental and physical control; slurred speech and blurred vision
• **.16-.20**: Loss of motor control; might need assistance walking; mental confusion, and black outs are possible
• **.20-higher**: Severe intoxication; potential loss of consciousness; requires monitoring, possible hospitalization or death

---

**Did you know? Alcohol is the Number One Predatory Drug**

• **On college campuses, 1 in 4 females** in college will be victims of an attempted or completed sexual assault. Alcohol is involved in 90% of these cases.
• **In Missouri, a person cannot give consent to sex if they're intoxicated.** If you or someone you know has been the victim of a sexual assault or rape and would like more information, contact your counseling center, student health center, or Women’s Center on campus.

---

**Academic Success**

People dependent on alcohol showed less activation in brain areas that are needed for spatial tasks like puzzles and maps, and for working with information that is held mentally, like doing math inside your head. Students who practice weeknight sobriety:

• Have consistently higher GPAs
• Have higher graduation rates
• Hold more leadership roles across campus
• Become more active and engaged in class
• Receive more university and national awards
• **TIP**: Seek out like-minded students who also practice weeknight sobriety
• **TIP**: Offer to be the sober driver for your friends so you won’t feel pressured to drink

---

**Did You Know?**

**Alcohol Affects Females Differently than Males**

There are three main reasons that females are unable to drink like males. Remember that all bodies are different and these suggestions are based on average female sizes and statistics. It’s important to always listen to what your body is telling you. Typically:

• **Females are smaller than males**, so there is less mass to distribute the alcohol.
• **Females naturally have 10% more fat than men**. Fat holds less water than muscle, so there is less body fluid to dilute the alcohol. This means that the alcohol taken in is more concentrated and can cause more harm.
Female’s livers produce less alcohol dehydrogenase (the enzyme that breaks down alcohol). This means that females will get drunk more quickly and the effects will last for longer.

**Tips for Drinking Responsibly**

There are a number of steps you can take to stay safe while drinking and still have fun!

- **Know your limits** – everyone is different so listen to what your body is telling you, not how much your friend can drink.
- **Set a limit** – determine the number of drinks you want to drink before you go out. This way you will know when you want to stop. It’s also a good way to save some money!
- **Use the buddy system** – going out with friends is not only more fun, it’s safer. You can ask them to watch your drink and can help you maintain your drink limit.
- **Use a designated driver!** The legal driving limit for someone over the age of 21 is .08.
- **Stay hydrated** – hangovers are caused by dehydration! Drinking a glass of water for every drink you consume is an easy to remember tip.
- **Eat something high in protein before you go out**, like chicken, fish or beans!

**Alcohol and Sex**

- 60% of STIs (sexually transmitted infections) were transmitted under the influence of alcohol
- Drinking can cause less lubrication
- Drinking is associated with reduced vaginal blood flow and decreased intensity of orgasms
- In 67% of unplanned pregnancies, the woman reported being drunk. If you vomit within two hours of taking your pill, it may not be effective

**Menstruation and Alcohol**

- Your tolerance for alcohol decreases the week before your monthly period
- For most women, regular alcohol consumption can increase the duration and severity of symptoms associated with pre-menstrual syndrome (PMS)

**All About Sleep**

Your sleep cycle has four stages. All stages are important and necessary for proper human function.

- **N1**: The brief transition period between wakefulness and sleep
- **N2**: The time when your heart rate and breathing pattern begin to slow
- **N3**: The “deep sleep” stage when your body and brain are undergoing restoration
- **REM**: The stage where dreams occur. Our brains are most active during this stage, but our muscles are paralyzed preventing us from acting out our dreams

Alcohol may alter the quality of sleep you get by suppressing REM and lightening sleep and you may not feel rested even after a full night of sleep.

You may also wake frequently and have problems falling back asleep as the alcohol in your body works its way out of your system. Alcohol may also increase the prevalence of pre-existing sleep disorders.