



Alcohol Abuse and the Human Body

Substance use disorders occur when the recurrent use of alcohol and/or drugs causes clinically significant impairment, including health problems, disability, and failure to meet major responsibilities at work, school, or home.⁸ This info sheet gives a basic overview of how alcohol abuse impacts the body, but should not be considered exhaustive.

ENDOCRINE SYSTEM

Weight Gain: Alcohol is high in calories and can alter cognitive processes and metabolism, leading to poor nutritional choices³

HEART

Cardiomyopathy: The stretching and drooping of the heart muscle⁴

Arrhythmias: Irregular heartbeat⁴

Higher risk of stroke⁴

LIVER

Steatosis, or fatty liver: Early stage alcoholic liver disease⁶

Alcoholic hepatitis: Inflammation of the liver⁵

Fibrosis: The formation of an abnormally large amount of scar tissue in the liver. It occurs when the liver attempts to repair and replace damaged cells⁴

Cirrhosis: Caused by extensive scarring and disruption of liver structure. This impairs a liver's ability to filter the blood from toxins, process nutrients and hormones, detoxify chemicals, metabolize drugs, and create bile used by the body to absorb fats³

CANCER⁴

- Head and neck
- Esophageal
- Liver
- Breast
- Colorectal

IMMUNE SYSTEM

Alcohol weakens a person's immune system, making them more susceptible to other illnesses⁴

BRAIN

Alcohol interferes with the brain's communication pathways, and can affect the way the brain looks and works. Blackouts and Memory Lapses¹

Thiamine Deficiency: Causes loss of appetite, constipation, fatigue and muscle weakness, and in extreme cases can lead to Wernicke-Korsakoff syndrome²

Liver Disease can lead to hepatic encephalopathy, which causes changes in sleep patterns, mood, and personality; psychiatric conditions such as anxiety and depression; severe cognitive effects such as shortened attention span; and problems with coordination such as a flapping or shaking of the hands¹

DIGESTIVE SYSTEM

Mouth Damage: Damage to the salivary glands, gums, and tongue, tooth decay³

Esophageal or stomach ulcers³

Acute pancreatitis³

High Blood Pressure: Can cause the blood vessels in the esophagus to enlarge and be at risk of rupturing⁴

REPRODUCTIVE SYSTEM

People assigned male at birth can experience:

- Decreased testosterone production
- Reduced sperm production and altered sperm structure³

People with uteruses sometimes experience:

- Disruption to menstrual cycle
- Infertility
- Pregnancy and birth complications³

NERVOUS SYSTEM

Peripheral neuropathy (nerve damage): Associated with pain, tingling, spasms, weakness, movement disorders, and loss of functioning in limbs. Also associated with issues to urinary and bowel function⁷

SOURCES:

1. National Institute on Alcohol Abuse and Alcoholism. (2004). Alcohol's Damaging Effects on the Brain. Retrieved December 16, 2020, from <https://pubs.niaaa.nih.gov/publications/aa63/aa63.htm>
2. Alcohol and Drug Foundation. (2018). Alcohol related thiamine deficiency. Retrieved December 16, 2020, from <https://adf.org.au/insights/alcohol-related-thiamine-deficiency/>
3. Thomas, S. (2020). What is the Effect of Drinking Alcohol on the Body? Long Term Effects of Alcohol. Retrieved December 16, 2020, from <https://americanaddictioncenters.org/alcoholism-treatment/body-effects>
4. National Institute on Alcohol Abuse and Alcoholism. (n.d.). Alcohol's Effects on the Body. Retrieved December 16, 2020, from <https://www.niaaa.nih.gov/alcohols-effects-health/alcohols-effects-body>
5. Mayo Clinic. (2020). Alcoholic hepatitis. Retrieved December 16, 2020, from <https://www.mayoclinic.org/diseases-conditions/alcoholic-hepatitis/symptoms-causes/syc-20351388>
6. Narayanan Menon, K. V. (2020). 6 Surprising Ways Alcohol Affects Your Health - Not Just Your Liver. Retrieved December 16, 2020, from <https://health.clevelandclinic.org/6-surprising-ways-alcohol-affects-health-not-just-liver/>
7. Allen, S. (2019). Alcoholic Neuropathy: Causes, Symptoms and Diagnosis. Retrieved December 16, 2020, from <https://www.healthline.com/health/alcoholism/alcoholic-neuropathy>
8. SAMHSA. (2020). Mental Health and Substance Use Disorders. Retrieved December 17, 2020, from <https://www.samhsa.gov/find-help/disorders>