

Differences Between Men and Women

Remember, the smaller you are, the more you're likely to be affected by a given amount of alcohol. Women are generally more sensitive to alcohol's effect than men; they may become more intoxicated than men on the same amount of alcohol even if they are of comparable body weight. This is due to men having more muscle tissue which contains more fluid to dilute alcohol. The menstrual cycle also has an effect: alcohol reaches its highest level in the blood just before a woman's menstrual period, and the lowest level occurs on the first day of menstrual bleeding.

•Also if you are pregnant, beware...

A pattern of growth abnormalities and birth defects known as the fetal alcohol syndrome is common among babies of women who drink heavily during pregnancy. A safe level of alcohol for pregnant women has not been defined, so total abstinence is suggested.

The Hangover

How it happens...

•Alcohol anesthetizes the brain's early warning system that tells you when you're tired and ready for bed.

•It increases the loss of water through the kidneys causing the extreme thirst common to hangovers.

•Headaches may result from the swelling of cranial arteries since alcohol causes blood vessels to expand.

•Nausea, vomiting and heartburn may result from alcohol's irritation of the GI tract.

•Alcohol also delays the passage of food to the small intestine, interfering with proper food digestion.

The cure...

Contrary to popular belief, if you have indulged in alcohol, only time and rest will help you sober up (and recover from a hangover). Coffee, cold showers, vitamins, and other popular remedies will not work!

There is no way to make the liver metabolize alcohol any faster than it can.

The Prevention...

The only real prevention for a hangover is to drink in moderation or not at all.

For more information:

Call or e-mail the Life Enhancement Office at 783-5248 or

life.enhance@moreheadstate.edu

Visit our office or web page at 112 Allie Young or www.moreheadstate.edu/units/development/LifeEnhancementOffice/

Call or visit the Health Clinic at 783-2055

Recommended Reading:

Kercham, K. and Mueller, L., *Eating Right to Live Sober*, Signet Penguin Books, USA Inc.

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Alcohol & Nutrition



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The Absorption of Alcohol

The absorption of alcohol begins almost immediately with very small amounts being absorbed in the mouth. The majority passes into the stomach where up to 20% can be absorbed directly; from the stomach the remaining alcohol passes into the small intestine where it is rapidly absorbed by the bloodstream and carried to all parts of the body. The amount of food in the stomach affects the rate at which alcohol is absorbed into the bloodstream. This rate of absorption is responsible for feelings of intoxication and will vary depending on the concentration of alcohol. Absorption occurs quicker with high concentrations of alcohol.

Alcohol's Effect on the Body

What are alcohol's immediate effects on various bodily organs and their functions?

- Alcohol interferes with the functioning of the brain and the central nervous system, affecting first judgement, then muscular coordination and sensory perception.
- Alcohol interferes with the functions of the liver: it diminishes the liver's ability to maintain stable blood sugar levels. The intake of even relatively small amounts (1-2 oz.) of alcohol can result in the accumulation of fat in liver cells.
- Alcohol leads to the increased production of urine by the kidneys.
- Alcohol irritates the gastro-intestinal system; it increases acid secretion by the stomach; it can injure the lining of the small intestine and interfere with the ability of the intestine to absorb vital nutrients.

The Alcohol - Nutrient Connection

One way in which alcohol consumption can affect nutrition status is by displacing healthier foods from the diet. Alcohol itself has a caloric value of 7 calories/gram (more than either protein or carbohydrate at 4 calories/gram), but contains no vitamins, minerals, or protein. Therefore excessive alcohol consumption can satisfy caloric requirements without contributing much in the way of other nutrients. Although alcohol in small doses is an appetite stimulant that prompts a desire for food, larger amounts suppress hunger. People who drink a lot tend to eat poorly (the toxic effects of alcohol are then compounded by the effects of chronic malnutrition, with liver and other diseases the likely result).

Alcohol also deprives the body of nutrients derived from other foods in the diet. When alcohol is metabolized by the liver it uses up niacin, thiamine (vitamin B1), and other B vitamins, which means that these vitamins are not available for other essential purposes.

Alcohol also interferes with the absorption and storage of the vitamins B12, folacin, and vitamin A. Alcohol may deplete the liver of its entire stores of vitamin A; it somehow triggers a release of all the vitamin A stores at one time. The vitamin A released into the bloodstream may cause a person to feel a slight sharpness of vision after a couple of drinks, followed by night blindness after the vitamin is metabolized. In addition, because alcohol is a diuretic that increases the output of urine, it can cause the loss of such water-soluble minerals such as zinc, magnesium and potassium. Zinc status appears to be particularly affected by alcohol

Nutrients Depleted by Long-term Alcohol Use

B1 (Thiamine) - deficiency can result in fatigue,, impaired nerve function e.g. polyneuritis, beri-beri (a cardiac problem).

B3 (Niacin) - deficiency can result in headaches, irritability, insomnia, dermatitis, pellagra (a disease with the appearance of schizophrenia).

B6 (Pyridoxine) - deficiency can result in dermatitis, altered nerve function, anemia, immune system dysfunctions.

B12 (Cobalamine) - deficiency can result in pernicious anemia, general fatigue/lack of energy.

Folic Acid - deficiency can result in intestinal abnormalities which interfere with nutrient absorption orr cause anemia.

Pantothenic Acid - deficiency can result in an increased susceptibility to infection, disrupted energy metabolism.

Vitamin C - deficiency can result in an increased susceptibility to infection, poor wound healing.

Vitamin A - deficiency can result in an increased susceptibility to infection, night blindness, skin problems.

Zinc - deficiency can result in poor wound healing, skin inflammations, loss of taste and smell.

Tips for Safer Drinking...

- Eat something that is not sweet and that is high in protein or fat; then wait 15 minutes before drinking. The food in your stomach will help soak up the alcohol and slow its absorption.
- Stay away from salty snack foods like chips,, pretzels, and salted nuts. These make you thirsty and the likelihood that you'll drink too much.
- Lower the concentration of alcohol in your drink by diluting it with lots of ice and a mixer.

Avoid carbonated mixers since these speed the absorption of alcohol. Water is the best mixer, fruit juices are okay.

- Sip your drinks slowly. It takes the average person's liver on hour to break down the alcohol from one drink; the more you overwhelm the liver's capacity the drunker you'll get.