

CONCEPT: ALCOHOL OVERVIEW

Introduction

- ◆ Type of alcohol found in alcoholic beverages is _____.
- **Proof:** _____ of alcohol percent content in a beverage = _____ ethanol %.
- ◆ 1 Standard drink contains _____ oz of pure alcohol.



_____ % ethanol

Standard Drinks		
Beer 5% alc. _____ oz	Wine 12% alc. _____ oz	Spirits 40% alc. _____ oz

EXAMPLE

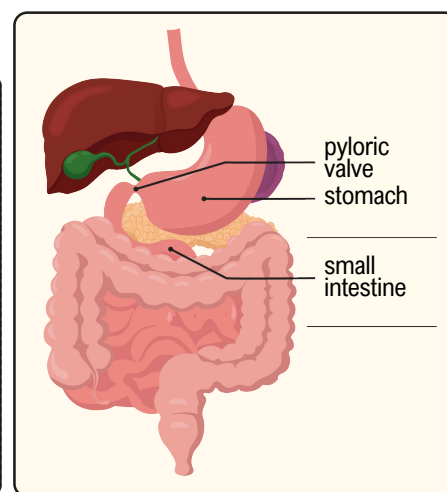
At a party Gabe drank 25 oz of beer containing 9% alcohol. Approximately how many standard drinks did Gabe consume?

- a) 3 drinks b) 2 drinks c) 4 drinks d) 6 drinks

Alcohol Absorption & Metabolism

- ◆ Alcohol is absorbed directly into the bloodstream from the stomach (20%) and _____ intestine (80%).
- ◆ Some factors affecting alcohol absorption:

1 Alcohol Concentration	↑ [Alcohol] = _____ absorption
2 Alcohol Volume	↑ Volume = _____ absorption
3 Food in Stomach	↑ Food = _____ absorption
4 Carbonation	<input type="checkbox"/> Carbonation = _____ absorption. - Relaxes _____ valve of stomach, liq enters small intestine faster.



- ◆ Alcohol is metabolized in the liver at ~_____ oz per hour.
- **Recall:** 1 standard drink = 0.6 oz of alcohol.
- Pathway: Ethanol \longrightarrow Acetaldehyde (_____) \longrightarrow Acetate \longrightarrow CO₂ + water.

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EXAMPLE

Which of the following statements about alcohol absorption is incorrect?

- a) Eating food while drinking will slow down the absorption of alcohol.
- b) 2 oz of vodka in soda will be absorbed faster than 2 oz of vodka in juice.
- c) One standard shot of tequila can be “felt” faster than a standard size of beer.
- d) Spacing out alcoholic drinks over time will result in slower absorption than drinking more in a short period of time.

Blood Alcohol Concentration

- ◆ **BAC:** the ratio of alcohol to _____ blood volume.
 - Measures physiological and _____ effects of alcohol.

Effects of BAC	
Not Impaired	▸ None
< 0.01%	
Sometimes Impaired	▸ Relaxed, increased sociability, slight decrease in judgment & alertness.
0.01 - _____%	
Usually Impaired	▸ Decrease in fine-motor skills, impaired judgment & alertness.
0.05 - _____%	
Always Impaired	▸ Slow reaction time, decrease in motor control, inability to focus. ▸ 0.08% is illegal to drive in U.S.
_____ - 0.14%+	

NOTE: BAC of _____%+ can result in coma and/or death.

- ◆ Several factors affect BAC:
 1. **Weight:** more weight = _____ BAC.
 2. **Water content:** more water = _____ BAC.
 3. **Body fat:** more fat = _____ BAC.
 4. **Sex:** women's BAC is _____ than men's.

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EXAMPLE

Olivia and Maya, two 24-year old women, have just finished brunch and are now going to a wine tasting event together. Olivia is a runner while Maya is not physically active and is struggling with overweight. During the event they consume the same amount of wine. Who is most likely to have a higher BAC, and which factor is most likely responsible for the difference?

- a) Olivia, percentage of body fat.
- b) Olivia, caffeine intake.
- c) Maya, percentage of body fat.
- d) Maya, caffeine intake.
- e) Both are women and will have the same BAC.

PRACTICE

Taylor has consumed 4 standard drinks of 80 proof liquor. How long will it take for Taylor to metabolize all the alcohol in his system?

- a) 2 hrs
- b) 5 hrs
- c) 4 hrs
- d) 3 hrs

PRACTICE

Allysa had a few drinks tonight and decided to drive home afterwards. Her blood alcohol concentration was measured to be 0.06%. Was it a good idea for her to drive home?

- a) No, as she is always impaired.
- b) No, as she is usually impaired.
- c) No, as she is sometimes impaired.
- d) Yes, as she is sometimes impaired.