

## Alcohol Facts



### WHAT IS A DRINK?

One person's idea of "a drink" may vary considerably from another's.

- ▶ The standard is actually one that delivers 1/2 ounce of pure ethanol:
  - 3-4 ounces of wine
  - 10 oz. wine cooler
  - 12 oz. Beer
  - 1 oz. hard liquor (vodka, whiskey, gin, rum or brandy)

### WHAT DOES "PROOF" MEAN?

Proof is a way of stating the percentage of alcohol. Proof - 2 gives the percentage of alcohol. Liquor that is 100 proof is 50% alcohol.

## Calorie Content of Alcoholic Beverages

- ▶ The alcohol portion of a drink has calories, as well as any mixer you may use with hard liquor.
  - ▶ Alcohol is rather dense in calories. It contains 7 calories per gram. (Proteins and carbohydrates have 4 calories per gram; fats have 9 calories per gram)
  - ▶ Here is a way to estimate calories:
  - ▶  $\text{Calories} = \text{ounces} \times \text{proof} \times 8$  (for hard liquor)
  - ▶  $\text{Calories} = \text{ounces} \times \% \text{ alcohol} \times 1.6$  (for beer or wine)
- (Note that added sugars will add extra calories, especially in liqueurs, wine coolers and mixers.)

BEVERAGE	SERVING (OZ)	PROOF/% ALCOHOL	CALORIES
Beer, regular	12	10-12 Proof / 5-6%	150
Beer, light	12	8-10 Proof / 4-5%	105
Wine	4	24 Proof / 12%	77
Wine Cooler	10	10-13 Proof / 5-6.5%	125
Vodka, Gin, Rum, Whiskey or Scotch	1	80 Proof / 40% 100 Proof / 50%	64 (80 Proof) 80 (100 Proof)
Cordials, liqueurs	1	32-52 Proof / 16-26%	103-123

## How the Body Metabolizes Alcohol

- ▶ Alcohol can make weight loss more difficult. In addition to supplying empty calories, it interferes with fat burning. Normally the liver metabolizes fats, but when a person drinks, alcohol takes preference. The liver breaks down alcohol for energy first, causing a build up of fatty acids. The body uses the calories supplied from alcohol before it is able to burn the calories from fat. Sometimes alcohol is referred to as "fat sparing" because its presence spares the fat from being burned for energy. In addition, alcohol stimulates appetite in many people.
- ▶ Drinking alcohol on an empty stomach speeds its absorption - some of it is absorbed right through the walls of the stomach. (Alcohol does not require digestion.) It can affect the brain within one minute.
- ▶ Carbohydrates and fats slow the absorption of alcohol, so it is recommended to eat something before drinking. After digestion, when the stomach is empty, alcohol is once again rapidly absorbed.
- ▶ The liver can only process about 1/2 oz. ethanol per hour, depending on body size, the amount of alcohol-metabolizing enzymes your body makes, and other factors. Fasting greatly reduces the number of these enzymes, resulting in a slow rate of clearing alcohol from the blood.
- ▶ Alcohol affects hormones responsible for fluid balance. It causes drinkers to urinate frequently and lose body fluids. When thirsty drinkers have another alcoholic beverage, the vicious cycle of urination→dehydration → thirst continues. The only way to break the cycle is to have water or another non-alcoholic drink.
- ▶ Along with the fluids drinkers lose, they also excrete important nutrients: calcium, magnesium, potassium and zinc. Alcohol interferes with absorption of vitamins B-1 (thiamin), B-6, B-12 and folate. It causes problems in processing Vitamins A and D.
- ▶ Alcohol abuse or excessive drinking interferes with the body's use of nutrients. Even if a person takes in sufficient vitamins and minerals through food or supplements, the body cannot use them effectively.
- ▶ Excessive alcohol intake inhibits the body from making the proteins it needs. One result of this is decreased immune function.
- ▶ Hangovers are a result of fluid and nutrient losses.

### IF YOU DRINK, FOLLOW THESE TIPS:

- ▶ Be sure to eat something prior to drinking. If it's been a few hours since your last meal, have some snacks while drinking. Choose foods high in carbohydrates. Including some fat is helpful, because it slows digestion, which delays the absorption of alcohol.
- ▶ Don't drink quickly. Limit your intake to 1 drink per hour, (1/2 oz. ethanol). Refer to the chart in this handout for the amount of 1 drink".
- ▶ Alternate between alcoholic and non-alcoholic beverages, to prevent fluid losses and dehydration.

References:

- 1) Hamilton EM, Whitney EN,Sizer, FS. Nutrition Concepts and Controversies. 5th ed. St. Paul: West Publishing, 1991.
- 2) Whitney E, Cataldo C, Rolfes S. Understanding Normal and Clinical Nutrition. 3rd ed. St Paul: West Publishing, 1991.