



## WELLNESS WORKSHEET 52

### Alcohol and How It Affects You

#### Evaluate Your Reasons for Drinking

Be honest with yourself. It is necessary for you to know why you drink in order to control your alcohol-related behavior. Put a check next to the statements that are true for you.

I drink to tune myself *in* to

yes enhance enjoyment of people, activities, special occasions

no promote social ease by relaxing inhibitions, aiding ability to talk and relate to others

yes complement and add to enjoyment of food

yes relax after a period of hard work and/or tension

I drink to tune myself *out* to

no escape problems

no mask fears when courage and self-confidence are lacking

no block out painful loneliness, self-doubt, feelings of inadequacy

no substitute for close relationships, challenging activity

no mask a sense of guilt about drinking

#### Alcohol Content

Drinks differ in the amount of pure alcohol they contain; therefore, a “drink” means different amounts of liquid depending on the type of drink. A proof value indicates concentration of alcohol in a particular drink; the proof value is equal to twice the percentage of alcohol in a drink. To calculate the number of ounces of pure alcohol in a drink, multiply the size of the drink by the percentage of alcohol it contains (one-half proof value). For example, a 12 oz beer (10 proof) has 0.6 oz of pure alcohol (10 proof = 5% alcohol concentration;  $0.05 \times 12 \text{ oz} = 0.6 \text{ oz}$ ).

Calculate the number of ounces of pure alcohol in each of the following drinks.

Drink	Size (oz)	Proof value	Ounces of pure alcohol
beer	12	10	<u>0.6</u>
wine	6	24	<u>0.7</u>
sherry	4	40	<u>0.8</u>
liquor	1.5	80	<u>0.6</u>

Try the calculations on different size drinks and drinks of different alcohol content.

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

(over)

**Maintenance Rate (or how long to sip a drink)**

Remember that the effects of alcohol will be greater when your BAC is rising than when you keep it stable or allow it to fall. BAC is directly proportional to the rate of ethyl alcohol intake. Assuming a general maintenance rate (rate at which the body rids itself of alcohol) of 0.1 oz of pure alcohol per hour per 50 pounds of body weight, you can calculate the approximate length of time it takes you to metabolize a given drink by applying the following formula:

$$\frac{2.5 \times \text{proof of drink} \times \text{volume (size in oz) of drink}}{\text{body weight}} = \text{time in hours per drink}$$

For example, to calculate how long it will take to metabolize one can (12 oz) of 10-proof beer for a person weighing 150 pounds:

$$\frac{2.5 \times 10 \times 12}{150} = 2 \text{ hours}$$

So, it takes this 150-pound individual 2 hours to completely metabolize one 12 oz can of 10-proof beer.

Choose your favorite three drinks (or choose three of the examples from the previous page), and use this formula to calculate your maintenance rate for each drink.

1. beer  $\frac{(2.5) \times (10) \times (12)}{(130)} =$  2.3 hours/drink

2. wine  $\frac{(2.5) \times (24) \times (6)}{(130)} =$  2.7 hours/drink

3. sherry  $\frac{2.5 \times (40) \times (4)}{(130)} =$  3 hours/drink

**In Case of Excess**

To sober up, the only remedy that works is to stop drinking and allow time. For any given type of drink, the amount of time would be the number of drinks you have consumed multiplied by your maintenance rate for that drink. For the example given above, if the 150-pound individual had consumed three 12 oz cans of 10-proof beer, he or she would have to wait 6 hours before the alcohol would be metabolized. Calculate the amount of time that would have to elapse for you to metabolize all the alcohol if you had consumed three of one of the types of drinks you calculated a maintenance rate for above:

wine  $3 \times ( ) = \underline{\hspace{2cm}}$  hours

Given this consumption level, your answer here indicates the number of hours you should wait before driving.