When alcohol consumption becomes more than just a standard drink, it is time to understand more about this disorder and how to treat it. As a society, we have been using alcohol related products for many centuries for a variety of hygienic, dietary, medicinal, religious, and recreational reasons, but the overuse of alcohol is dangerous and addictive. In the last 100 years, the medical community began to monitor the negative effects of alcohol more closely. In the 1950's, World Health Organization (WHO) identified alcoholism as a serious medical issue.

**DEFINITION:**

Alcohol is defined as a drug produced by the fermentation of yeast, sugars, and starches. Once these ingredients ferment, ethyl alcohol or ethanol is produced. That is the intoxicating ingredient found in beer, wine, and liquor. Alcoholism is a chronic and often progressive disease directly related to overuse or dependency of alcohol.

**SYMPTOMS:**

One of the most common symptoms associated with alcohol use disorders is the inability to control the amount of alcohol consumed. These additional symptoms are characteristics you may notice in yourself or others:

- You are pre-occupied with alcohol use
- You continue to drink despite the problems it creates in your health, family and work.
- You have built up a tolerance to alcohol, which requires more drinks to get the same effect. This effect causes you to consistently drink more and more.
- You start experiencing withdrawal symptoms when you try to rapidly decrease or stop drinking.

**EFFECTS OF ALCOHOL ON THE BODY:**

The effects that alcohol has on the brain are often well known and documented, but alcohol can also affect every other organ in your body.

- **Liver Problems** - Heavy drinking can cause alcoholic hepatitis (damage to liver cells), which may lead to irreversible destruction (cirrhosis).
- **Digestive Problems** - Heavy drinking can damage stomach lining (gastritis) and the pancreas (pancreatitis) causing ulcers and digestion problems.
- **Heart Problems** - Heavy drinking can lead to high blood pressure and heart failure.
- **Blood Sugar Level** - Alcohol interferes with the release of glucose and can increase the risk of low blood sugar (hypoglycemia). This is especially dangerous if you have diabetes.
- **Bone Damage** - Alcohol use can lead to thinning bones (osteoporosis) and increase the risk of fractures.
- **Brain Disease** - Excessive drinking can affect brain and can cause disorders of thinking, memory loss, depression, and poor coordination in walking.
- **Cancer Risk** - Long-term alcohol use has been linked to a higher risk of many cancers including mouth, throat, liver, colon and breast cancer.
- Excessive drinking can cause erectile dysfunction in men.
RESPONSIBLE USE OF ALCOHOL:

Some reports may indicate that one glass of wine daily is a good and healthy habit. However, no medical experts can advise concretely about the use of alcohol as good or bad. Using no alcohol at all has more advantages than drawbacks. No drink is “better” than another is. Regardless of the type of alcohol, the effects remain the same. What makes a difference is the amount consumed, not the type (like beer, wine, etc.)

American Dietary Guidelines for Alcohol Consumption

- Not more than one ‘standard drink’ per day for women.
- Not more than two ‘standard drinks’ per day for men.

In US, a ‘standard drink’ is equal to 14.0 grams (0.6 ounces) of pure alcohol. This amount of pure alcohol is found in:

- 12-ounces of beer = one standard drink.
- 8-ounces of malt liquor = one standard drink.
- 5-ounces of wine = one standard drink.

RISK GROUPS:

For these particular groups of individuals, alcohol poses a significantly greater risk and the standard guidelines may not be applicable.

- Pregnant women or who may become pregnant: There is no safe level or safe amount of alcohol use during pregnancy. Alcohol use during pregnancy may cause fetal alcohol syndrome that affects the baby with lifelong physical and developmental problems. Some of its features are - Abnormal facial features, Small head size, Learning disabilities, Speech and language delays, Intellectual disability or Low IQ, Problems with the heart, kidney, or bones.
- Children and adolescents
- Person struggling with mental health issues
- Person on psychiatric medication or other medication that interacts with alcohol.
- Person with certain medical conditions.
- Person recovering from alcoholism or other drug addiction

BINGE DRINKING

Any alcohol amount more than the recommended American Dietary Guidelines can affect health. Remember, binge drinking can lead to the same health risks and social problems associated with alcoholism. Binge drinking is defined as -

- Drinking pattern of five or more drinks in a row for males.
- Drinking pattern of four or more drinks in a row for females.

IMPORTANCE OF TREATMENT:

Treatment for alcohol use disorders is available for those who need help in overcoming this illness. If you have a problem controlling your own alcohol use, or following the guidelines stated above, it may be time to seek treatment. Ask yourself these questions:

- Do you have problem following the American Dietary Guidelines for alcohol consumption?
- Do you ever need a drink to get you started in the morning?
- Do you feel guilty about your drinking?
- Do you find it hard to cut down on your drinking?
• Are you drinking despite problems related with drinking and people commenting on your drinking habits?

If you answered yes to even one of these questions, then it is time to get HELP.

Depending on the stage of the illness, different treatment options are available. The most effective treatment is the combination of therapy and medication. Addiction experts strongly believe that the following approach can increase the success of road to recovery:

• Empathic and motivational enhancement approach works better than confrontation approach.
• Treating mental health issues simultaneously with alcoholism is very important to prevent relapse.
• Treating other co-morbid addictive illness is also important.
• Use of medication can increase the chances to remain sober and prevent relapse.

Medications: Several FDA approved medications are safe and effective in treating alcoholism. Medications that are used to prevent craving and prevent relapse are - Disulfiram (Antabuse), Naltrexone (Revia), Acamprosate (Campral) and Vivitrol (Injectable Naltrexone)

RISK FACTORS:
There are several risk factors that may make you more susceptible to an alcohol use disorder. These risk factors include:

• If you started drinking at an early age. Experts feel that youths who use alcohol before the age of 15 are five times more likely to become alcohol dependent.
• If you drink heavily or binge drink on a regular basis
• If you have a strong genetic background - the risk of alcoholism is higher for people who have a parent or other close relatives with alcoholism.
• If you have other mental health disorder such as anxiety, depression, bipolar disorder or substance abuse you are more prone to develop alcoholism.

REFERENCES:
Official Foundation for a Drug-Free World, Substance Abuse, History of Alcohol.

CDC - Frequently Asked Questions - Alcohol.


Alcoholism - MayoClinic.com.

CDC - FASD, Alcohol Use in Pregnancy - NCBDDD.