TYPES OF ALCOHOL AND ALCOHOLIC BEVERAGES

There are different types of alcohol. Some are used in chemistry laboratories and industry, e.g. isopropyl and methyl alcohol. Isopropanol, or isopropyl alcohol is also used in industrial processes as well as in home cleaning products and skin lotions. It is also commonly known as "rubbing alcohol". Methanol, or methyl alcohol or wood alcohol has been used as an industrial solvent and is also commonly available as methylated spirit. It is found in cleaning solvents, paint removers, photocopier developer and anti-freeze solutions. As such, it is often available in large quantities inexpensively. It is similar to ethanol but the end product after it is digested by the body is formaldehyde, which is poisonous. This is responsible for "alcohol poisoning". Methanol poisoning leading to blindness has been known to occur on consuming even small amounts.

Another type of alcohol is ethyl alcohol, also known as ethanol. This has been consumed by human beings for its intoxicating and mind-altering effects. The term 'alcohol', unless specified otherwise, refers to ethanol or ethyl alcohol. It is a thin, clear liquid with harsh burning taste and high volatility. It is usually consumed in diluted concentrations of absolute (i.e. 100 per cent) ethyl alcohol. Ethyl alcohol is also used as a reagent in some industrial applications. For such use, ethyl alcohol is combined with small quantities of methanol, with the mixture being called "denatured ethanol" to prevent theft for human consumption.

Brief description of alcoholic beverages

Wines are made from a variety of fruits, such as grapes, peaches, plums or apricots. The most common wines are produced from grapes. The soil in which the grapes are grown and the weather conditions in the growing season determine the quality and taste of the grapes which in turn affects the taste and quality of wines. When ripe, the grapes are crushed and fermented in large vats to produce wine.

Beer is also made by the process of fermentation. A liquid mix, called wort, is prepared by combining yeast and malted cereal, such as corn, rye, wheat or barely. Fermentation of this liquid mix produces alcohol and carbon dioxide. The process of fermentation is stopped before it is completed to limit the alcohol content. The alcohol so produced is called beer. It contains 4 to 8 per cent of alcohol.

Whisky is made by distilling the fermented juice of cereal grains such as corn, rye or barley. Scotch whisky was originally made in Scotland. The word "Scotch" has become almost synonymous with whisky of good quality.

Rum is a distilled beverage made from fermented molasses or sugarcane juice and is aged for at least three years. Caramel is sometimes used for colouring.

Brandy is distilled from fermented fruit juices. Brandy is usually aged in oak casks. The colour of brandy comes either from the casks or from caramel that is added.

Gin is a distilled beverage. It is a combination of alcohol, water and various flavours. Gin does not improve with age, so it is not stored in wooden casks.

Liqueurs are made by adding sugar and flavouring such as fruits, herbs or flowers to brandy or to a combination of alcohol and water. Most liqueurs contain 20-65 per cent alcohol. They are usually consumed in small quantities after dinner.

Types of alcoholic beverages

Beverage	Source	Alcohol content (percentage)
Brandy	Fruit juices	40 - 50
Whisky	Cereal grains	40 - 55
Rum	Molasses/sugarcane	40 - 55
Wines (Port, Sherry, Champagne, etc)	Grapes (also other fruits)	10 - 22
Beer	Cereals	4 - 8

Common local brews in the countries of the South-East Asia Region

Arrack is a distilled beverage, obtained from paddy or wheat. Jaggery, sugar or sugarcane is added to either of these two cereals and boiled with water. This is allowed to ferment, after which it is distilled. This beverage contains about 50- 60 per cent of alcohol.

Toddy is obtained from the flowers of a coconut or palm tree. A white liquid, with a sweetish taste, oozes out of

these flowers. When consumed fresh, this juice has no intoxicating effect. This liquid is collected and allowed to ferment. At times, yeast is added to hasten the process. The fermented juice has an alcohol content of approximately 5-10 per cent.

Types of local brews in the countries of the South-East Asia Region

Country	Local brews
Bangladesh	Bangla Mad, Cholai, Tari
Bhutan	Ara
India	Arrack, Desi Sharab, Tari, Tharra
Indonesia	Palm wine
Nepal	Raksi, Tadi, Chayang, Tomb
Sri Lanka	Toddy, Arrack
Thailand	Oou, Krachae, Namtanmao, Sartha, Waark

Equivalence of different beverages

The volume-by-volume strength of alcoholic beverages varies considerably. The equivalence of different beverages is measured in terms of 'units' of alcohol. One unit is equal to approximately 10 grams of absolute alcohol, often considered as one drink, since it is available from 30 ml (1 fluid ounce or small peg) of spirits like whisky, rum or brandy. The same amount of alcohol, one unit, is also available from a glass of wine, which is generally 120 ml or half a pint or 285 ml of beer.

1 standard drink equals:

1 standard bottle of regular beer (285ml)

1 single measure of spirits (30ml)

1 glass of wine (120ml)

1 measure of aperitif (60ml)

Note: One unit of alcohol is equal to approximately 10 grams of absolute alcohol.

Total estimated alcohol consumption in a country in a given year

The total estimated alcohol consumption in a country in a given year can be calculated by adding all the alcohol produced in the country and the alcohol imported, and then subtracting the alcohol exported from the country. This number is divided by the population 15 years of age and over.

Annual per capita alcohol consumption *per adult* can be derived by:

$$\frac{\text{Alcohol production + alcohol imports - alcohol exports}}{\text{population 15 years of age and over}}$$

The problem with this calculation is the substantial amount of unrecorded production which includes home brewing, illicit production, alcohol brought into the country by overseas travellers, smuggling into the country and variation in strength of different beverages. At the same time, consumption by tourists which can be substantial in some countries, stockpiling of alcohol, wastage and spillage are not subtracted from the formula. However, this remains a popular indicator for comparison between countries and monitoring trends within countries.