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Alcohol's Origins and its Role in Modern Society

Aims and learning outcomes

This chapter aims to introduce the areas central to the origin of alcohol and its role in modern society. It also explores the rates of consumption. After reading this chapter you should be able to:

- Outline the origins of alcohol and drinking from its earliest written reference to the early twentieth century.
- Explain the evolution and development of beer, wine and distilled alcohol.
- Describe the past legal methods used to prevent the availability and consumption of alcohol plus the effects of banning alcohol consumption.
- Identify the role and consumption rates associated with alcohol in society.

2.0 The origins of alcohol and drinking

Alcohol can be traced back to the dawn of time. It is beneficial when it is consumed in recommended amounts but dangerous when taken in excess. Professor Robert Dudley of the University of California, Berkeley suggests in his 'drunken monkey hypothesis' that the human attraction to alcohol may have a genetic basis due to the high dependence of early primates on fruit as a food source. For 40 million years, primate diets were rich in fruits and in the humid tropical climate where the early evolution of human took place, yeasts on fruit skin and within fruit converted fruit sugars into ethanol (alcohol). When the alcohol molecules diffused out of the fruit, its smell identified the food as ripe and ready to consume. Natural selection favoured primates who had a keen appreciation for the smell and taste. Dudley (2004) adds that as

human evolution continued, fruits were mostly replaced by roots, tubers and meat. Although our ancestors stopped relying heavily on fruit, it is possible that the taste for alcohol arose during our long shared ancestry with primates.

The archaeological evidence indicates that the production of alcoholic beverages dates back to the late Stone Age or Neolithic period. Patrick (1952) contends that samples of 'beer jugs' help to establish that intentionally fermented beverages existed at least as early as 10,000 BC. Dr. Patrick McGovern of the Applied Science Centre for Archaeology, University of Pennsylvania, and colleagues in America and China performed chemical analysis on traces absorbed and preserved in ancient pottery from the Neolithic village of Jiahu, in the Henan province of northern China. This was shown to be the residue left behind by the alcoholic beverages they had once contained (McGovern et al, 2004). Further analysis of this residue confirmed that the fermented drink was made of grape and hawthorn fruit. Wine, honey mead and rice beer were being produced in 7000-5600 BC (McGovern, 2003). Prior to the modern era, fermented alcoholic beverages were known in all tribal and village societies except in Australia, Oceania and North America. Evidence of alcoholic beverages (a pictograph of wine) has also been found from 3150 BC in ancient Egypt (Cavaliere et al, 2003). Other evidence has been found and dated from 3000 BC in Babylon, 2000 BC in pre-Hispanic Mexico, and 1500 BC in Sudan (Dirar, 1993; Pedersen, 1979). In India, alcoholic beverages started appearing in the Indus Valley civilization in the Chalcolithic Era – 3000 BC-2000 BC.

Early written references to alcohol

The first written reference to alcohol records a daily beer allowance for workers on a temple in Mesopotamia in the year 5000 BC. Recipes for making alcoholic beverages have been found on clay tablets from around that time, and art in Mesopotamia shows people using straws to drink beer from large vats and pots. Around 1750 BC, the famous Code of Hammurabi, from the 6th King of the first dynasty of Babylon, devoted attention to alcohol; Popham (1978) notes that this concentrated around fair commerce in alcohol. The Old Testament contains many references to drink, often with advice, which is as relevant today as it was then. For example, it recommends giving alcoholic drinks to those who are dying or depressed, so that they can forget their misery (Book of Proverbs 31:6-7).

Alcohol from the middle ages to the eighteenth century

The Swiss Alchemist Paracelsus (1493-1541) was the first European to use the word 'alcohol' in the Middle Ages. Babor (1986) maintains that throughout history all ancient cultures had their own form of alcohol, and it played its

role in each society, be it religious or cultural. Where alcohol was traditionally consumed, production of alcoholic beverages commonly occurred on a small scale as a household or artisanal activity, particularly when and where agricultural surpluses were available. Room et al (2002) maintain that drinking alcohol was thus often an occasional and communal activity, associated with particular festivals. Willis (2006) adds that there are many places in the world where versions of these patterns, originating from tribal and village societies, still persist today.

In Medieval Europe, consuming alcoholic drinks was a way of avoiding water-borne diseases such as cholera when quenching thirst. The small concentration of alcohol in these beverages would have had only a limited effect, but the really dangerous microorganisms would be killed during the boiling of the water and the growth of yeast.

In Europe between the 16th and 18th centuries, alcohol was perceived and consumed as a gift of God, created to be consumed in moderation for pleasure, enjoyment and health, while drunkenness was viewed as a sin. In this period, Jennigan (2000) reports that new beverages, new modes of production, distribution and promotion, and new drinking customs and institutions were created, and as distilled spirits became available and transportation improved, alcoholic beverages became a market commodity which was available in all seasons of the year, and at any time during the week. Colson and Scudder (1988) contend that these supplies and the availability of alcohol often proved disastrous for indigenous economies and subsequently, as Coffey (1966) indicates, for 'the local public health'. Room et al (2002) add that these impacts were experienced on a global scale.

Nineteenth and early twentieth century

The nineteenth century and early twentieth century brought a complete change to alcohol consumption, and the perception, Hanson (1995) argues, that self discipline was needed in place of self expression, and task orientation replaced relaxed conviviality. Every type of problem, moral, social, personal or even religious, was blamed on alcohol and consumption came to be viewed as unacceptable. Temperance was in and abolitionist successfully lobbied for total prohibition, which not only failed but actually created additional new social problems. Nonetheless these early attempts to control alcohol consumption gained broad membership and eventually political strength and a new and fairly stable alcohol control structure was put in place (Aaron and Musto, 1981; WHO, 2011a).

From fermented mare's milk to brewing beer

Home brew came in almost immediately with the raising of grain, though Clark Wissler (famous anthropologist of the American Museum of Natural History and Yale University) contends that people did not wait for cereals to sprout to get a drink. The plainsmen of Siberia discovered that fermented mare's milk was a stimulant. This was probably the world's first intoxicating drink. It is called *kumiss* and is still drunk in parts of Russia today (Wissler, 1932). Brewing has taken place since around the 6th millennium BC, and archaeological evidence suggests that it was used in most emerging civilizations, including ancient Egypt and Mesopotamia (Arnold, 2005). The process involved in brewing beer made drinking it a safer option than drinking water or mare's milk, for many generations. Babylonians regularly used beer as an offering to their gods. Hartman and Oppenheim (1950) contend that in Mesopotamia the brewer's craft was the only profession which derived social sanction and divine protection from female deities/goddesses, specifically Ninkasi, who covered the production of beer, Siris, who was used in a metonymic way to refer to beer, and Siduri, who covered the enjoyment of beer. Throughout the Egyptian, Greek, Roman and Christian eras, right through medieval times and onwards from the 1400s up to the developments of the Industrial Revolution, beer has evolved to become one of the most popular alcoholic beverages consumed today.

Beer has been a drink of and for the common people throughout the centuries. Marciniak (1992) maintains that it was always brewed on an everyday basis. Brewing nowadays is a global business, consisting of several dominant multinational companies and many thousands of smaller producers, known as microbreweries or regional breweries, depending on size. Although brewing at home is subject to strict regulation or prohibition in many countries, relaxation of the laws on home brewing by some has encouraged some individuals to learn the craft and to experiment with modern techniques and ingredients, to produce classic recipes and some new flavours. The global interest in beer continues to grow, with speciality beers in ever-greater demand. These were developed in direct response to the mass produced carbonated and pasteurized key beers that had dominated pubs around the world. This renaissance brought about the surge of designer lagers and boutique beers. Large-scale breweries have now recognized this segment of the market, and have responded by hiring technical consultants to create new beers.

Wine – the alcohol of the elites

Vouillamoz et al (2006) contend that wine first appeared around 6000 BC in Georgia. The Babylonians, as early as 2700 BC, worshipped a wine goddess