

Where does alcohol come from?

The alcohol that you can drink is ethyl-alcohol (another name is ethanol). It is produced by fermenting carbohydrates, such as sugars or starch. Fermentation is anaerobic process used by yeast to convert sugars into energy. Ethanol and carbon dioxide are products of the reaction. The reaction for the fermentation of glucose to produce ethanol and carbon dioxide is:



The fermented product may be used (wine) or we may use distillation to concentrate and purify the alcohol (vodka, tequila).

A lot of plants can be used to produce alcohol. Here is a list of the source material for several popular alcoholic beverages.

Ale - fermented from malt with hops

Beer - brewed and fermented from malted cereal grain (as barley), flavoured with hops

Bourbon - whiskey distilled from a mash of not less than 51 percent corn and aged in new charred oak barrels for a minimum of two years

Brandy - distilled from wine or fermented fruit juice

Cognac - a brandy distilled from white wine from a specific region of France

Gin - distilled or redistilled neutral grain spirits from a variety of sources, flavoured with juniper berries and other aromatics

Rum - distilled from a sugarcane product such as molasses or sugarcane juice

Sake - produced by a brewing process using rice

Tequila - a Mexican liqueur distilled from blue agave

Vodka - distilled from a mash as of potatoes, rye or wheat

Whiskey - distilled from mash of grain such as rye, corn, or barley

Scotch - whiskey distilled in Scotland typically from malted barley

Wine - fermented juice of fresh grapes and/or other fruit (e.g., blackberry wine)



brewing – pivovarnictví, brewed - vařit pivo

ale – pivo (anglické světlé)

hop - chmel

malted barley - sladový ječmen

rye - žito

wheat - pšenice

yeast - kvasnice, kvasit, droždí

starch - škrob

molasses - melasa

sugarcane - cukrová třtina

Přečti si řádně text a vypracuj odpovědi na následující otázky:

Jaký je chemický vzorec glukosy?

Jaké produkty vznikají kvašením glukosy? a

Jakým způsobem se zvýší koncentrace etanolu v alkoholickém nápoji?

