

- extract sugary solution for yeast food source
- yeast and sugar solution is fermented anaerobically to produce alcohol (hops added to give flavour)

* Wine Making

- natural sugar found in fruit is used as food source for yeast.
- press grapes and mix juice with yeast and water.
(let yeast respire anaerobically until most of sugar has been used up.)
- filter to remove yeast - bottle - allow to mature.

- * Alcohol in large amounts is poisonous to yeast as well as to people. Hence, the alcohol content of wine is rarely more than 14%. Any higher yeast is killed and fermentation stops.

Microorganisms are grown in a culture medium which contains nutrients that that particular microorganism might need.

- e.g. Carbohydrates (energy source)
- vitamins
 - mineral ions
 - proteins

Agar is most commonly used as growth medium; nutrients added to provide ideal growing conditions for cultures.

Preparing Uncontaminated Cultures.

"rogue" microorganisms might produce undesirable substances which could be harmful - it's only safe to use microorganisms if you have a pure culture of one species.

- Sterilise Petri Dishes and Culture Medium - using autoclave
- Sterilisation of Inoculating Loops - using Bunsen Burner
- Sealing Petri Dish, stored upside down so condensation forms on lid.

In schools / colleges, cultures incubated max. of 25°C to prevent growth of potentially harmful pathogens that grow at body temp.

In industry, higher temps used for rapid growth.