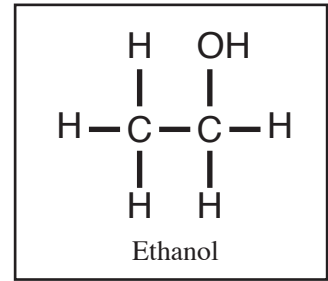


# Alcohol



## 1. Ethanol (Pages 184 - 191)

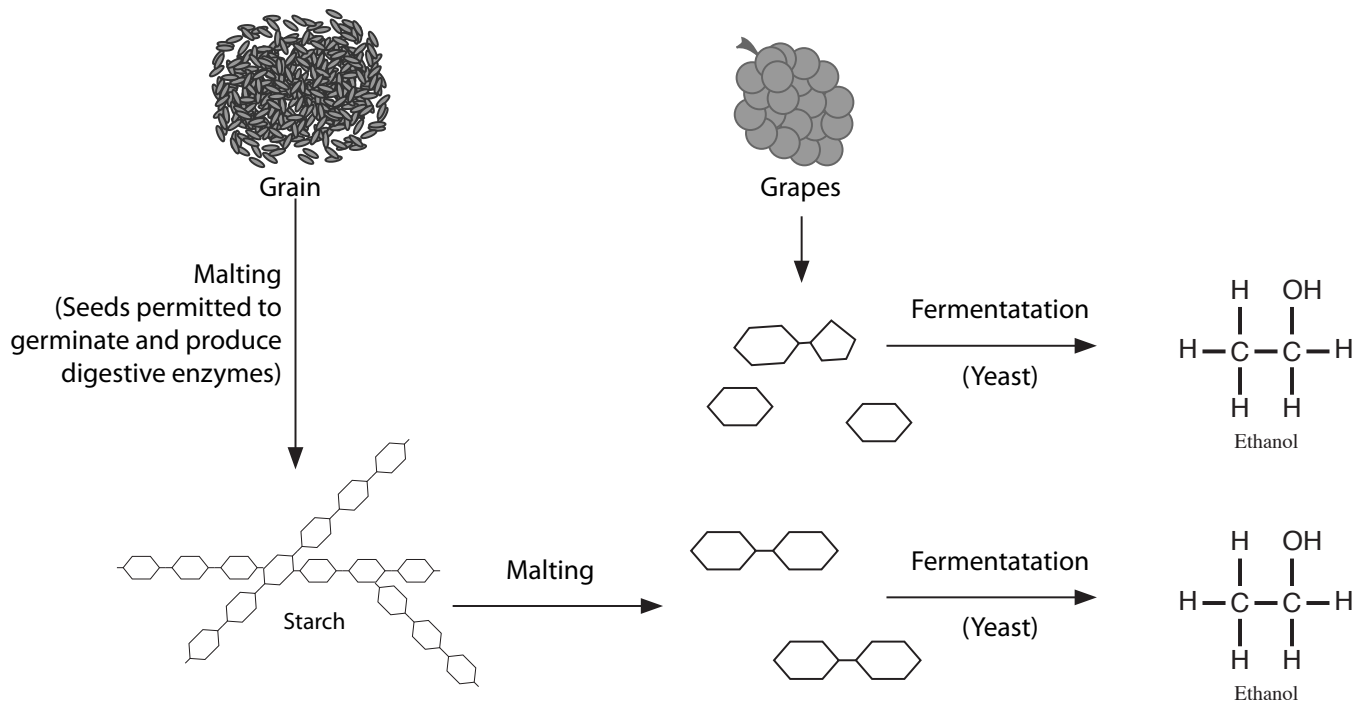
### A. What is it?

#### i. Yeast

##### a. Fermentation

- Simple Sugars → Ethanol

##### b. Malting



#### ii. Process

## Nutrition - Alcohol Outline

### iii. Distillation Process

a. Proof - 80 proof is 40% alcohol.

### iv. Energy - 7 kcal / gm

## B. Beverage Comparison

i. The “Standard Drink” Serving Size: 15 gm alcohol

a. General Equivalents (may vary)

- 12 oz beer
- 5 oz wine
- 1.5 oz hard liquor

### ii. Chart

<b>Beverage</b>	<b>Amount (Fl oz)</b>	<b>Alcohol (gm)</b>	<b>Energy (kcal)</b>
Beer, Reg	12	12	150
Beer, Lite	12	10	75-100
Wine, Red	5	14	100
Wine, White	5	14	100
Wine, Dessert Sweet	5	23	225
Gin, rum, Vodka, whiskey (80 proof)	1.5	14	95
Martini	3.5	32	220
Margarita (frozen)	8	20	175

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*From Wardlaw's Perspectives in Nutrition, 9th edition, copyright 2013*

### ii. General Guidelines

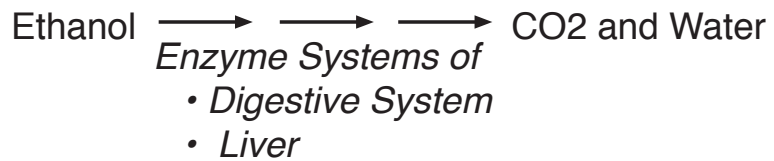
## Nutrition - Alcohol Outline

### B. Metabolic Processing of Ethanol

#### i. Detoxification

##### a. Digestive Lining

##### b. Liver



### 2. Blood Alcohol Concentration (BAC)

### 3. Toxicity Issues (Pages 187 - 191)

#### A. Depressant of Central Nervous System (Pages 187 - 189)

- Relaxant
- Depressed Motor Function
- Diminished Reasoning
- Nervous Tissue Damage

#### B. Digestive Tract (Page - 188)

#### C. Liver (Pages 189 - 190)

##### a. Cirrhosis of Liver

## Nutrition - Alcohol Outline

- D. Nutritional Issues (Page 190)
  
- E. Diuretic Effect (Page 190)
  
- F. Fetal Alcohol Spectrum Disorder (Page 190 - 191)
  - a. Fetal Alcohol Syndrome
  
  
- 4. Male / Female Differences
  
  
- 5. Alcohol Abuse (Page 186 - 187)
  - A. Binge Drinking
  - B. Alcohol Dependence

## Nutrition - Alcohol Outline

### 6. Benefits of Ethanol (Page 191)

A. Raises HDL

B. Antioxidant Properties

C. Endorsements

- US Surgeon General's Office
- National Academy of Science
- US Department of Agriculture
- US Department of Health and Human Services

***DO NOT*** recommend nondrinkers start because the risks often outweigh possible benefits. But they do not discourage moderate use.