

# Creative Thinking and Writing, Seminar

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# Good diet



# Balanced Diet

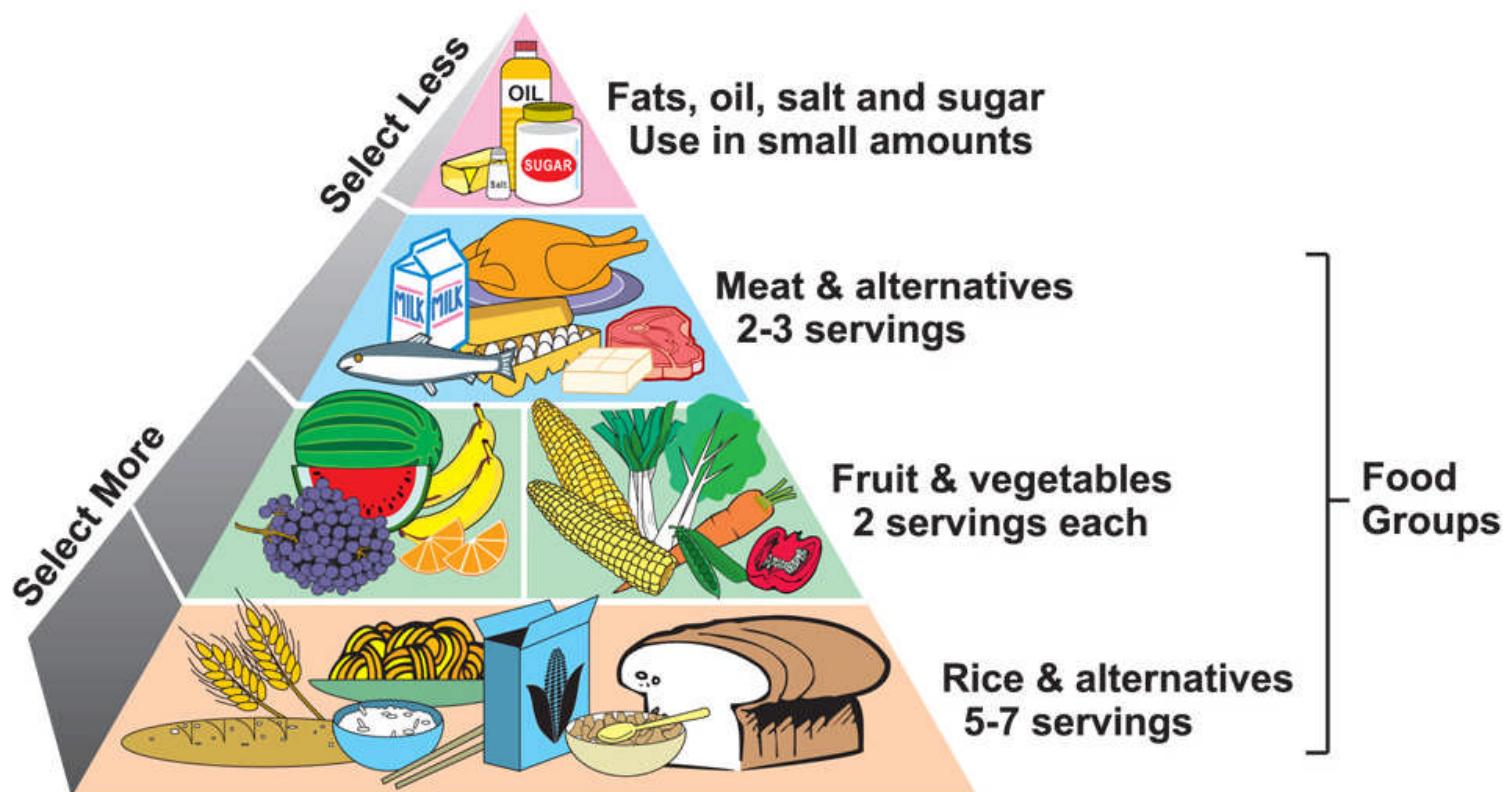


# Balanced Diet

- Omega 3
- Fruits and Veg
- Dairy
- Cereals (Wheat, rice).



# Food Pyramid



# Organic food



# Milk

- Avoid rBGH hormones in milk.
- Boil milk to avoid TB.



# Water

- Drink clean, filtered water.
- Carry water bottle
- Boil water from wells, rivers, tankers.
- Avoid drinking water from stagnant tanks/pools.
- Major cause of cholera.



# Drinks

- Plenty of water
- Fruit juice
- Coconut water

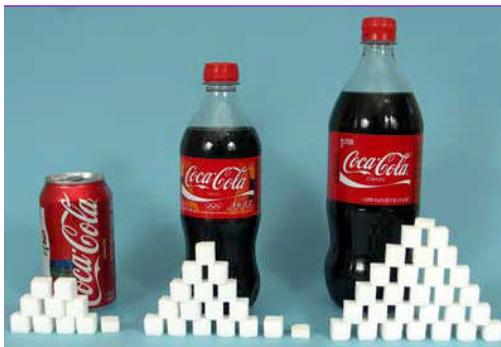


# Drinks

- Less of carbonated sugared drinks



# Sugar in drinks



- See <http://www.sugarstacks.com/beverages.htm>

## Drinks, smoking and medicines?

Avoid alcohol and  
drugs that have  
not been  
prescribed to you



# Food and Nutrition

Mohsin, JKSHIM, 7-2014.

# Nutrition and Happiness

- Unhappy Boys lose weight
- Unhappy Girls gain weight
- Wealth is useless without Health
- Nutrition has long term effects on obesity, cancer, diabetes, ..
- Hard to find exact cause, but statistics show that certain lifestyles cause health problems after many years.

# Basics

To survive we require:

- Fluids (water and salts).
- Starch (energy).
- Proteins (body mass, muscles).
- Vitamins, minerals, oils.

See [http://en.wikipedia.org/wiki/Dietary\\_element](http://en.wikipedia.org/wiki/Dietary_element)

# Balanced diet

## The eatwell plate

Use the eatwell plate to help you get the balance right. It shows how much of what you eat should come from each food group.



# Fluids for Hydration

- Drink enough water (10 cups/day).
- Boil the water if the source is an open well or stream.
- Dehydration is caused by sweating in heat alcohol drinking and diarrhea (loose motion in cholera).
- Rehydration requires water + salt + Potassium salts (coconut water) + glucose (or sugar).

# What to drink?

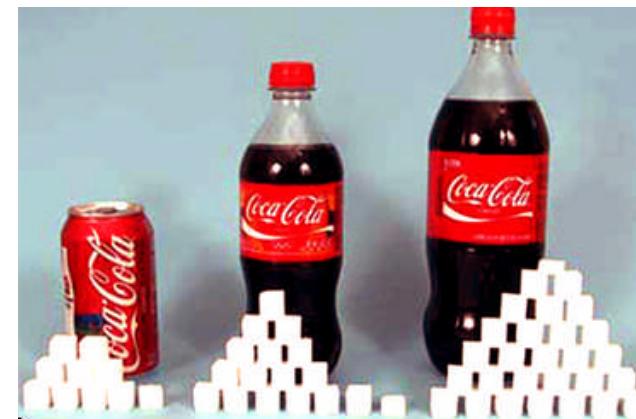


OR



# High fructose sugar?

Soft drinks contain too much high fructose syrup.



# sugar in soft drinks?

- Sports Drink – 2 teaspoons
- Lemonade – over 6 teaspoons
- Orange Juice – over 7 teaspoons
- Sweet Tea – over 8 teaspoons
- Powdered Drink Mix – 9 teaspoons
- Cola – over 10 teaspoons
- Fruit Punch – over 11 teaspoons
- Root Bear – over 11 teaspoons
- Grape Juice – 12 teaspoons
- Orange Soda – 13 teaspoons



# High Fructose diet

- High-Fructose Diet Slows the Mind, Hampering Memory and Learning



# Banned in NY schools?



- people that consume 4 drinks per day were 30% more likely to have problems with depression.

# Coconut water



1/2 teaspoon of sugar, 2 gm.

Nutritional value per 100 g (3.5 oz)		
<b>Energy</b>	79 kJ (19 kcal)	
<b>Carbohydrates</b>	3.71 g	
Sugars	2.61 g	
Dietary fibre	1.1 g	
<b>Fat</b>	0.2 g	
<b>Protein</b>	0.72 g	
<b>Vitamins</b>		
Vitamin A equiv.	0 µg	(0%)
beta-carotene	0 µg	(0%)
lutein zeaxanthin	0 µg	
Thiamine (B <sub>1</sub> )	0.03 mg	(3%)
Riboflavin (B <sub>2</sub> )	0.057 mg	(5%)
Niacin (B <sub>3</sub> )	0.08 mg	(1%)
Pantothenic acid (B <sub>5</sub> )	0.043 mg	(1%)
Vitamin B <sub>6</sub>	0.032 mg	(2%)
Folate (B <sub>9</sub> )	3 µg	(1%)
Vitamin C	2.4 mg	(3%)
Vitamin E	0 mg	(0%)
Vitamin K	0 µg	(0%)
<b>Trace metals</b>		
Calcium	24 mg	(2%)
Iron	0.29 mg	(2%)
Magnesium	25 mg	(7%)
Phosphorus	20 mg	(3%)
Potassium	250 mg	(5%)
Zinc	0.1 mg	(1%)
<b>Other constituents</b>		
Water	94.99 g	

# Simple Carbs

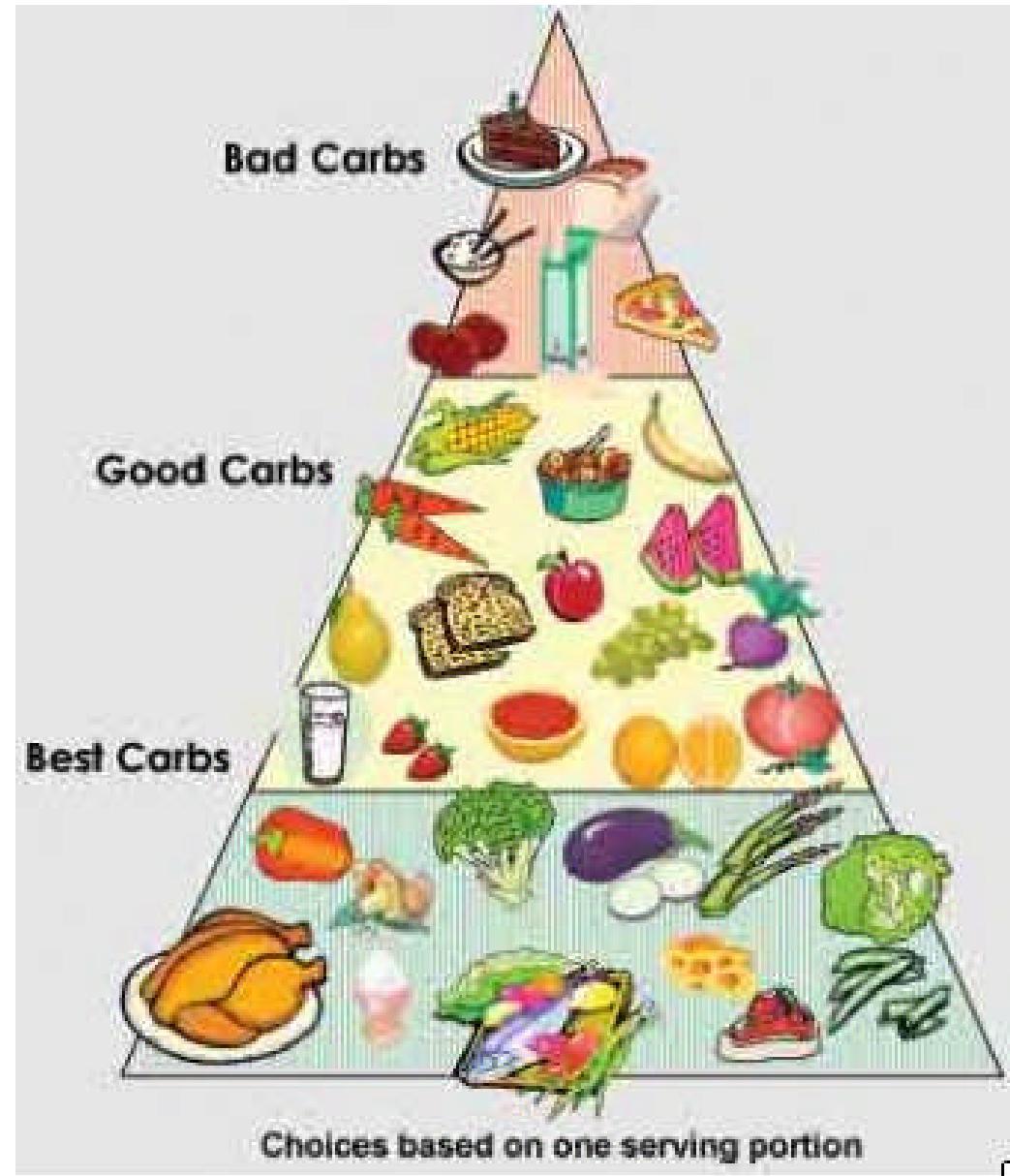
Simple carbohydrates

Simple carbohydrates are found in foods such as fruits, milk, and vegetables

Cake, candy, and other refined sugar products are simple sugars which also provide energy but lack vitamins, minerals, and fiber



# Good and bad carbs



# Carbohydrates – energy source

Bread (wheat and rice flour), roti, chappati, cereals, pasta.

Energy measured in calories.

Body converts excess carbs into fat and saves it for winter.



# Proteins

- Proteins build muscles and body mass.
- We get proteins from meat, fish, beans, peanuts, lentils (dal).



# Proteins are made of amino acids

- Nine amino acids are essential for humans, and must be obtained from diet (cannot be produced).
- They are found in: eggs, soy, pulse (beans), white fish.

# Proteins from Vegetables

- Tofu (bean curd)
- Lentils or Dal (toor dal is brain food).
- Peanuts
- Beans, Rajma.



# Meats

- Fish
- Eggs
- Chicken
- Mutton
- Beef
- Pork
- etc

# Mercury Poison in fish

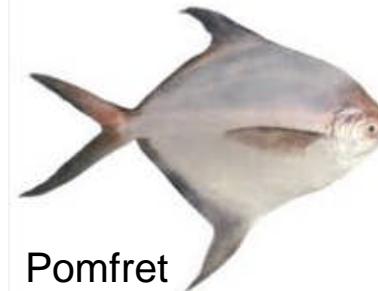
- Mercury and lead cause brain damage.
- Mercury is used in CFL bulbs and tubelights. In US, you cannot throw this in garbage, because it will pollute the watertable below the garbage dump.
- Mercury is found in fish, more in large fish.

# Lead and arsenic poisons

- Lead was used in pipes, bullets and hats (mad hatter). Lead was responsible for madness and fall of Roman empire.
- Search on google and read.

# Fish is brain food

- Small fish (white meat): smelt, sardines, anchovies, mackerel, pomfret, etc.
- Medium fish: king fish, salmon (red meat).



Pomfret



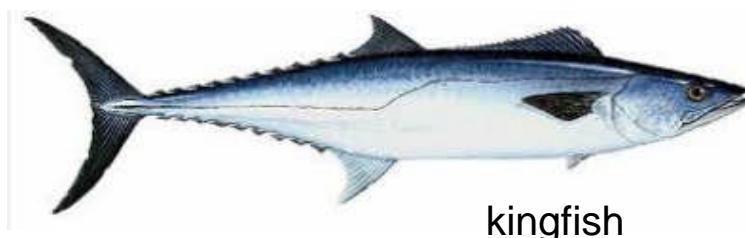
Sardine



mackerel



Salmon



kingfish

# Fish is brain food

- Large fish (red meat) are cheaper but they contain more mercury and should be avoided:  
Tuna (shark family), whale, cat fish.



Tuna



catfish

# Tuna fish is cheap



# Sea food

- Prawns and shrimp, difficult to clean



# Fish oil

- If you don't like fish smell, but need it in your diet, take fish oil capsules (cod liver oil, fish oil).

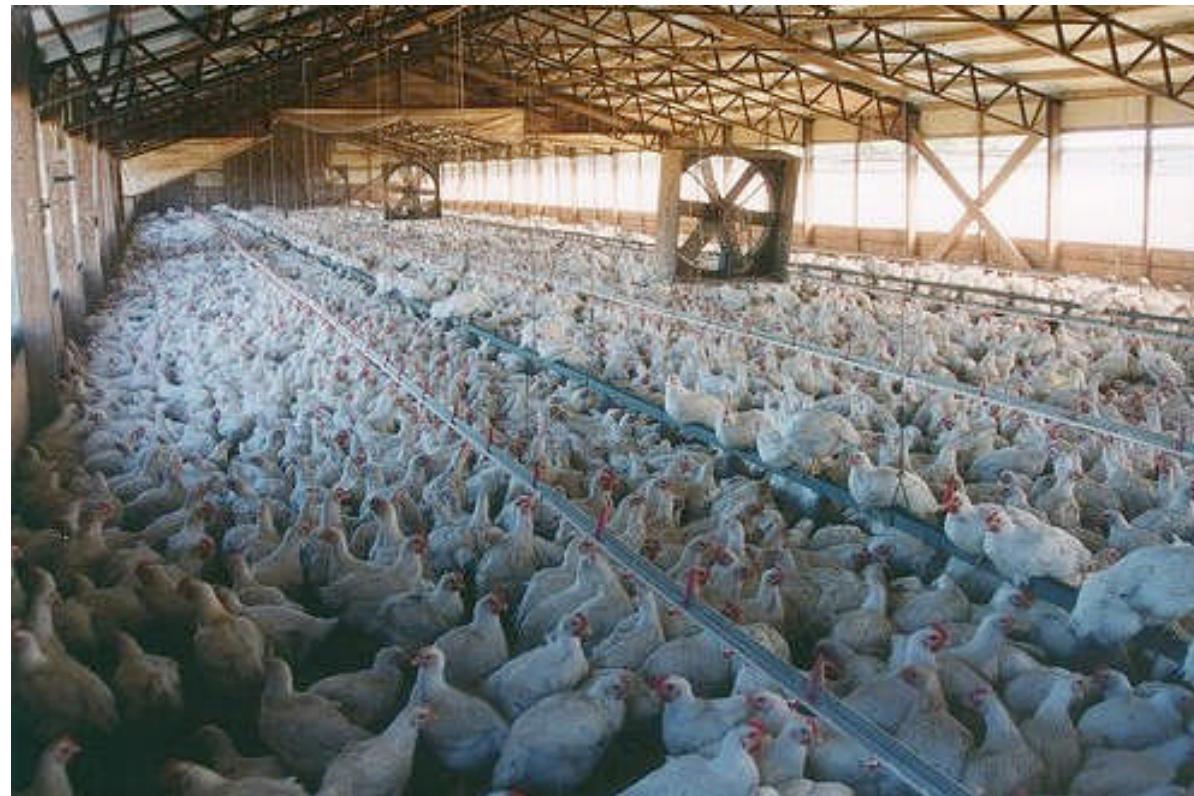


# Chicken proteins

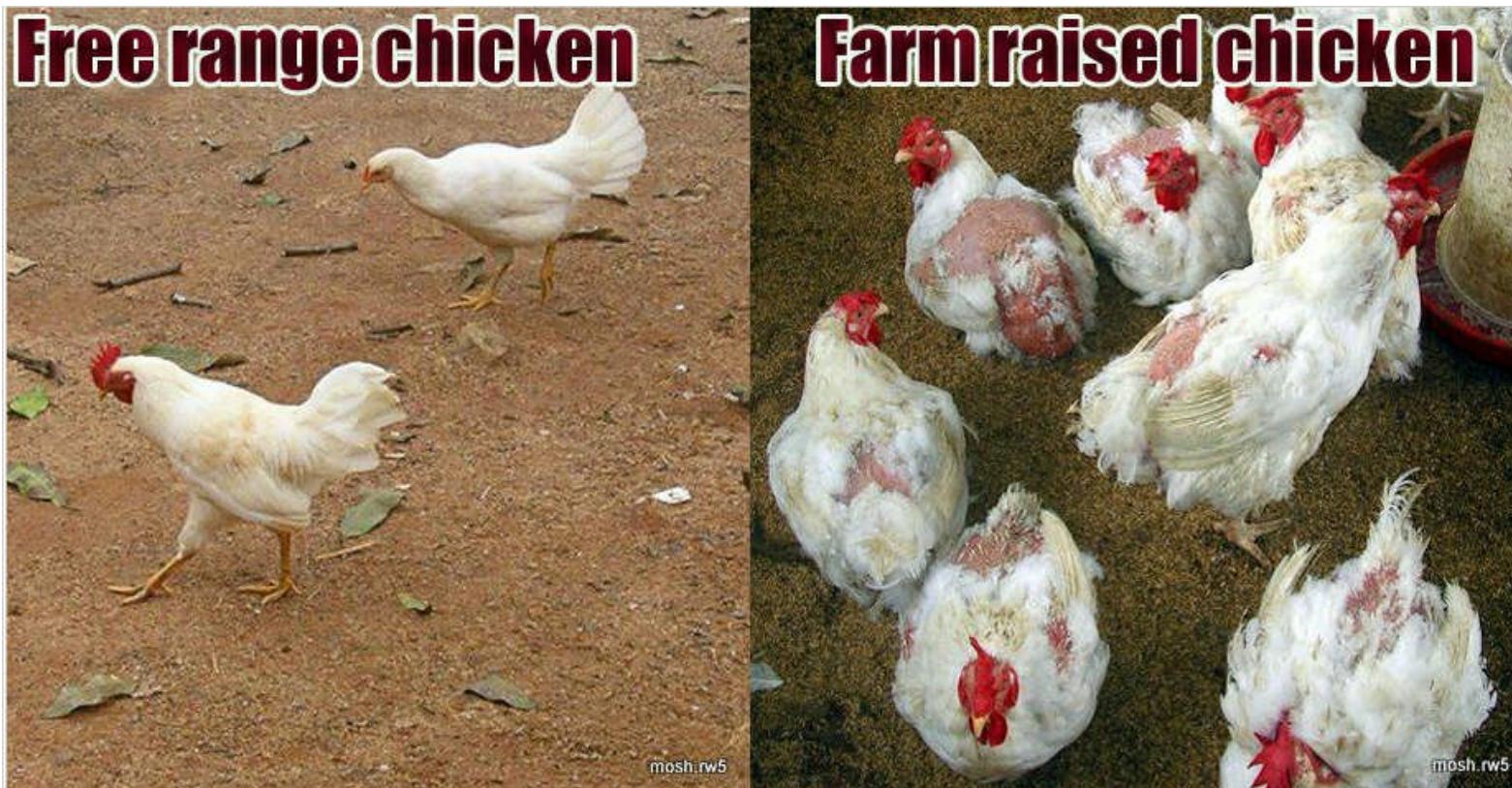
- Chicken leg (red meat) and wings (white meat) have different proteins.

[http://en.wikipedia.org/wiki/Chicken\\_\(food\)](http://en.wikipedia.org/wiki/Chicken_(food))

# Chicken farm



Farm raised chicken (photo from Mangalore chicken shop).



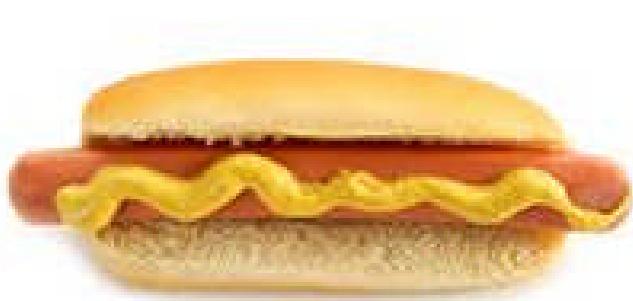
# Growth hormones fed to chicken end up in humans

Antibiotics fed to animals effect people.



# Hot dog

- Made in a factory from leftover parts of meat (see on youtube).



# rBGH hormone



**NORMAL GRASS FED  
COW**

**GROWTH HORMONE +  
ANTIBIOTICS + CORN FED**

# Milk

- Always boil milk or you will get TB.
- Lactose intolerance as you get older



# Curd

*Curdling* (coagulating) milk with renet or any edible acidic substance such as lemon juice orvinegar, and then allowing it to set.

The increased acidity causes the milk proteins (casein) to tangle into solid masses, or *curds*.

Remaining liquid, which contains only whey proteins, is the whey.



Lactobacillus is a kind of bacteria which can convert a sugar into an acid by means of fermentation. It converts the lactose into lactic acid, which imparts the sour taste to curd.

# Cheese

- Milk is curdled by adding acids such as vinegar or lemon juice. Most cheeses are acidified to a lesser degree by bacteria, which turn milk sugars into lactic acid, and adding rennet to make cheese.
- 8000BC very old art.



Cheese is valued for its portability, long life, and high content of fat, protein, calcium, and phosphorus.

See <http://en.wikipedia.org/wiki/Cheese>

# Cheese

Cheese is concentrated milk, high in fat,  
useful for longer storage and travel.

Cheese consumption is the leading  
contributor of **saturated fat** in the U.S. diet,  
increases **LDL cholesterol** and CVD  
**(cardiovascular disease)**.

See <http://en.wikipedia.org/wiki/Cheese>

# Gelatin

- Made by boiling waste bones.
- Classified as vegetarian by FDA.
- Used in jelly beans, jelly, foods.



# Alcohol

- Wine is fruit juice preserved in alcohol for winter, before refrigerator (till 1900).
- Alcohol is made by fermenting sweet juices (sugars are digested by yeast).
- Hard liquors, whiskey, rum, vodka – to get drunk.
- Bad for the brain, liver, body.
- Alcoholism is addiction to alcohol, AA.

# Beer

Light



Dark Ale



Pale



Stout



Beer on tap in a bar



Beer Keg



# Liqueurs (dessert)

Liqueurs are very sweet and often syrupy, flavoured with fruit, cream, herbs, spices, flowers or nuts, with high alcohol to preserve the flavours.



**BAILEYS &  
KAHLUA**

# How to open Champagne bottle?

# Dessert wines

- Served with sweets, ice-cream after dinner, in small quantity (10ml).
- Sweet wines: Moscato, straw (raisin), Riesling, sherry, port,
- Sparkling wines: champagne.
- See <http://winefolly.com/review/types-dessert-wine/> and [http://en.wikipedia.org/wiki/Dessert\\_wine](http://en.wikipedia.org/wiki/Dessert_wine)



# Google office



# Oils

- Cooking oils: Saffola, Canola, Sunflower for high temperature frying.
- Question: What happens if you fry pooris at lower temperature?
- Cheap oils: Dalda, Veg oils.
- Salad oils: Ghee, Butter, Olive, Walnut, Almond, Sesame oils.
  - Not for frying, as they burn easily.

Olives - produced in south Europe since 1000s BC



# Omega 3 and Olive oil

- “First cold pressed” “extra virgin” olive oil.
- 1% acid; considered the finest and fruitiest, and thus the most expensive
- “Cold” refers to the olives being kept no higher than 28 °C, and “pressed” refers to the method of extraction.
- no heat or chemical additives in extraction
- the olive oil keeps its full nutritional value.
- see [http://en.wikipedia.org/wiki/Olive\\_oil](http://en.wikipedia.org/wiki/Olive_oil)

# Fats

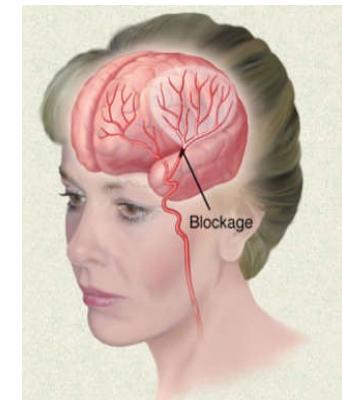
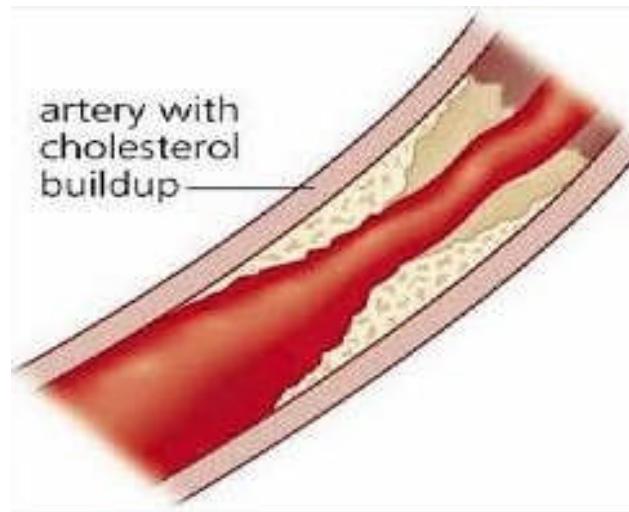
- The fat found in butter, margarine, soft spreads, and vegetable oils is considered either good (unsaturated) or bad (saturated and trans-fat).
- Good: Unsaturated fats (mono-unsaturated and poly-un-saturated) prevent clogged arteries that block the flow of blood to the heart and brain.
- Unsaturated fats should be used in cooking.

## Good: Mono-Sat fats

- Monounsaturated fat is the primary type found in olive, canola, and sesame oils, as well as in avocados and avocado oil, and in nuts and their oils.
- Polyunsaturated fat is prevalent in corn, cottonseed, and safflower oils; sunflower seeds and sunflower oil; flaxseed and flaxseed oil; soybeans and soybean oil; tub margarine and soft spreads; and seafood.

# Bad: Saturated fat

- Saturated fat increases the risk of blocked blood vessels.
- Heart attack, stroke, etc.



## Bad: Saturated fat

- Found in fatty meats, and in full-fat dairy foods - butter, cheese, ice cream, and whole milk (lots of dietary cholesterol).
- Coconut oil, palm, palm kernel oil, and cocoa butter supply large amounts of saturated fat, too, but are cholesterol-free.

## Bad: Trans-fat

- Trans fat, (or **trans fatty acids**) are created by hydrogenating vegetable-oils into solids. Eg. Dalda is “**partially hydrogenated oils.**”
- *Trans fat raises your*
  - increase “**bad**” (*LDL*) cholesterol
  - lowers your “**good**” (*HDL*) cholesterol. .

# Bread, Chappati, Roti, Naan, Poori



# Cooking

Mohsin, JKSHIM, 7-2014.

# Cooking basics

- Cleanliness, Wash veg, hands, vessels.
- Balance Acidity/Base in foods.
  - Mildly Acidic: Lemon, Curd, Kokum, Tamarind
  - Basic: Brinjal, Papaya
- Saliva in mouth breaks down starch into sugar.
- HCL acid in stomach digests the food.
- Bacteria in intestines digests the food.

# Spices

- Chillies - anti cancer
- Turmeric - antibiotic
- Mustard
- Ginger
- Garlic
- Curry leaves

# spices 1

Spices



cloves



black peppercorns



star anise



cinnamon



nutmeg



ginger



saffron



turmeric



paprika

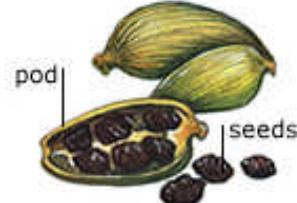
Red chilly powder



cumin seeds



coriander seeds



cardamom

# spices 2



# spices 3



spices 4



# spices 5



Cardamom – warming



Coconut – smoothing



Curry leaves – fresh



Saffron – aroma



Star Anise – Licorice



Jaggery – sweet

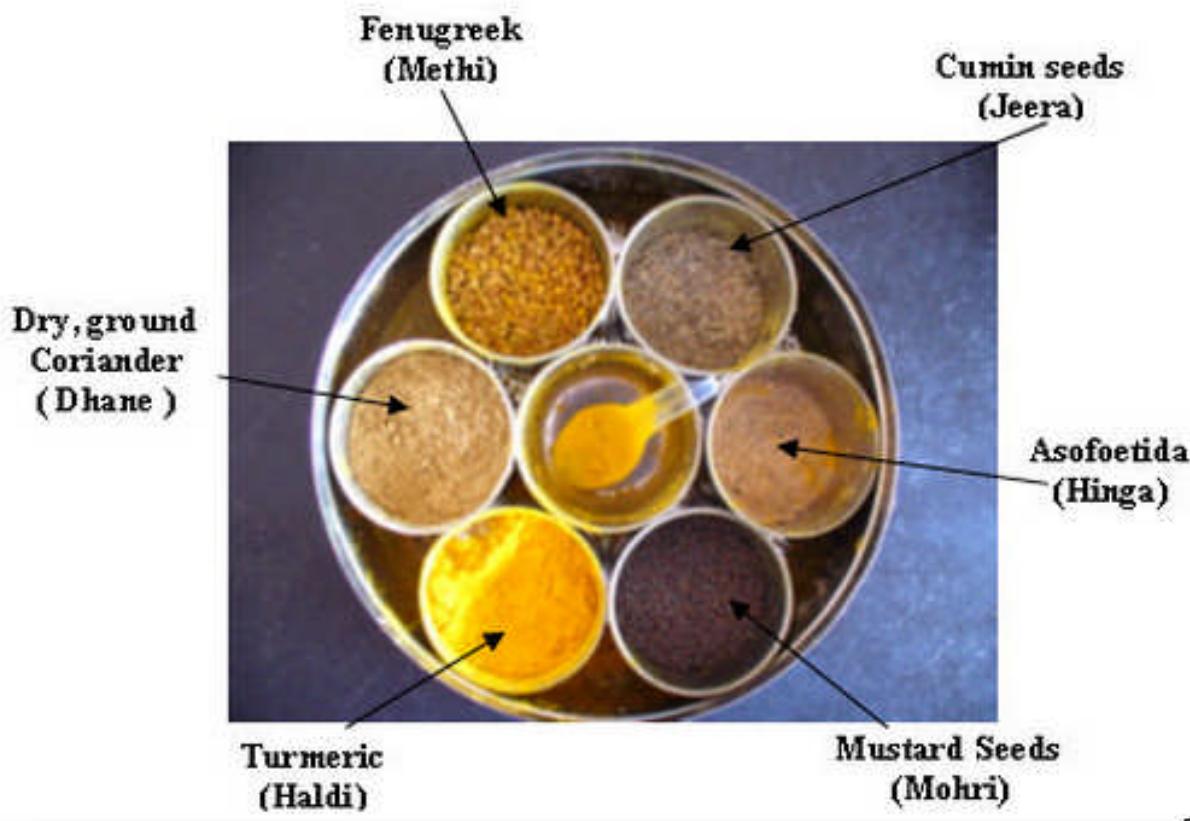


Chilli – fiery



Tamarind – fruit / sour

# cooking spices 1



# cooking spices 1



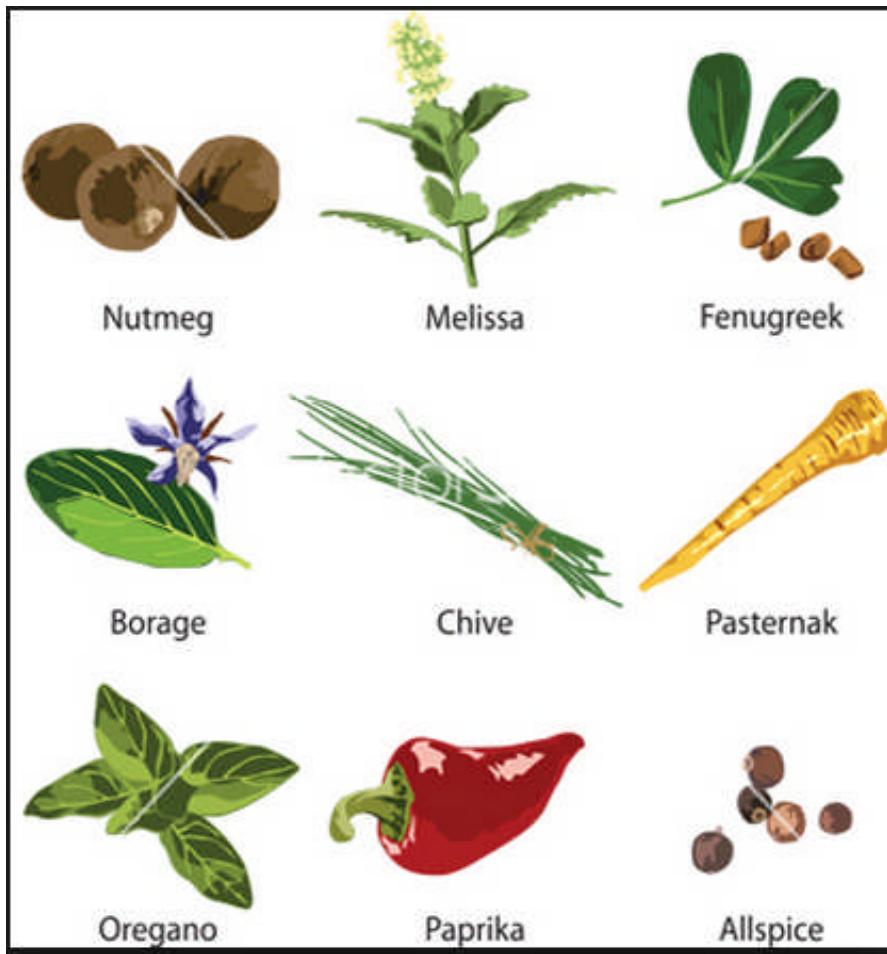
# US spices 1



# US spices 2



# US spices 3



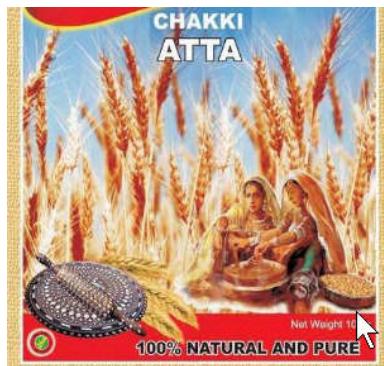
# Maida roti

- Maida (refined flour), harder to digest, lack of fibre, elastic dough.
- Roti and Nan, fermented overnight with yeast or baking powder (not good), also called leavened bread.
- Need oven to cook.



# Whole wheat Chappati

- Atta (whole wheat flour) is made from flour of wheat, more fibre, harder to roll dough.
- Chappati (also called unleavened bread).
- Cooked on fire and pan without oven.



# Kneading

- Atta and water are mixed thoroughly for about 15 minutes to make it elastic, before making chappati / roti / bread.
- Add one spoon oil and pinch of salt, for taste.
- Otherwise chappati will break up.



See <http://en.wikipedia.org/wiki/Kneading>

# Making chappati is easy with practice



# Roasting chappati

- Roast one side lightly.
- Roast second side till steam forms inside it.
- Be careful of the steam, it will burn your fingers.



# Fermenting dough for bread

- Fermentation occurs when yeast and bacteria inside the dough convert carbohydrates to carbon dioxide causing gas bubbles to form, which has a leavening effect on dough.
- This process is very similar to wine, beer and sour kraut and causes a strong aromatic sensation that is usually pleasing.
- The gas bubbles expand inside the dough making the dough appear larger, this is called leavening. There are two theories for the origins of leavened bread dating back to Antiquity:
- Egyptian beer was added to in lieu of water, thus introducing yeast into the dough.
- A piece of dough was forgotten, leavened by ambient yeast and later baked.

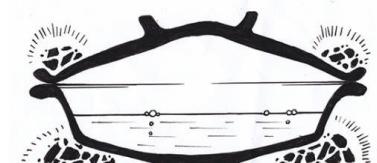


# Bread recipes

- Flour (maida, wheat, ragi, jowar, lots).
- Water, olive oil, salt, sugar, yeast, spices.
- Knead the dough
- Ferment at warm temperature for few hours.
- Bake at lower temperature, 350 to 425C for 30 to 45 minutes (more brown crust).

# Baking bread

- Oven: traditional, bread machine, dutch oven.



# Buying and Cooking fish

- Buying
  - body must be firm and supple to touch,
  - gills must be reddish (not brown or black),
  - skin should be shiny not pale.
- Cleaning
  - Remove scales, fins, gut, wash with clean water.
- Cooking
  - Spices: salt, turmeric, chillies, garlic.
  - Shallow fry or bake.

# Methods of cooking

From <http://en.wikipedia.org/wiki/>

Category:Cooking\_techniques

**Blanching** - is a cooking process wherein the food substance, usually a vegetable or fruit, is plunged into boiling water, removed after a brief, timed interval ..

**Broiling** - heat source for grilling comes from above, grilling is termed **broiling**.

**Sautéing** (tossing while cooking) is a method of cooking food, that uses a small amount of oil.

# Pressure cooker

Pressure cooking allows food to be cooked with greater humidity and higher temperatures than possible with conventional boiling or steaming methods.

For beans.

Careful, high pressure!



# Steaming

**Steaming** is a method of cooking using steam. **Steaming** is considered a healthy cooking technique and capable of cooking almost all kinds of food.

# Grilling

- **Grilling** is a form of cooking that involves dry heat applied to the surface of **food**, commonly from above or below

