

Nutrition Unit

5 chemical categories of food:

Carbohydrate - quick energy

Protein - building blocks

Fat (lipids) - stored energy

Minerals - elements needed in body structures

Vitamins - Compounds that help the body function.

Fiber is also considered an essential nutrient.

Carbs, Protein, & Fat are considered Macronutrients, the substance of food

Minerals & Vitamins are called Micro-Nutrients for obvious reasons

You should know this from biology! Nutrition chemistry is simple. Science has known this stuff for a long time. Keep your eating simple. Balance is the key! A little of this and a little of that can add up to a very healthy diet!



Simple Nutrition principles from Mr. Brown.

1. There is **No Bad Food!** (food is not good and/or bad)
2. It is not what you eat, it is what you don't eat.
3. Americans eat too much!

Behaviors: Eating well is fun and simple and also good for your health! Do it!!

Nutrition Label

You must be able to the % calories due to fat in food you are eating.

$$\text{Fat Calories} / \text{Total Calories} \times 100 = \text{Fat Calories \%}$$

You **MUST** be able to do these calculation! The Reason? You should eat an average of 30% of calories due to fat and this calculation enables you to know how much fat you are eating!

You must be able to do the same for protein.

$$4 \text{ calories per gram of protein} \times \text{grams of Protein} / \text{Total Calories} \times 100 = \text{Protein Calories \%}$$
 Protein is the building blocks for a growing and functioning body

Remember: 4 Calories per gram in protein & carbohydrate, 9 Calories per gram in fat.

The FDA (Food and Drug Administration) regulates food labeling and is responsible for keeping our food supply safe.

A Federal Agency (reports to the President) but depends on Congress for funding and will therefore respond to pressure from the food industry.

Class Work Assignment: [Food Label Worksheet](#) Make sure you do this before the test!

On Line label Assignment: [Compare Breakfast Links](#)

I did this with my cross country team to discover the best source of protein. This assignment will help you understand how much protein a product has.

A web site that will help you understand what you eat. <http://www.choosemyplate.gov/>

Video:

We watched a Scientific American video with Alan Alda as host:

Colonial feast - We eat a feast often in the US

Pima Indians story - "fidget factor", "thrifty gene", importance of exercise and diet.

Super foods story - Corn and B vitamin not active, Raw soy beans are toxic, and Wheat and yeast.

Obesity story - Obese people are not honest with themselves about how much they eat.

Behaviors: Develop some tricks to eat well in Ridgewood's fast paced life style.

Nutrition Facts title signals that the label contains the new required information.

Serving sizes are more consistent across product lines and reflect the amounts people actually eat.

List of nutrients covers those most important to the health of today's consumers.

Daily Values are based on a daily diet of 2,000 and 2,500 calories.

Label shows calories per gram of fat, carbohydrates, and protein.

Nutrition Facts

Serving Size ½ cup (114g)
Servings Per Container 4

Amount Per Serving

Calories 90	Calories from Fat 30
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% Daily Value*

Total Fat 3g	5%
Saturated Fat 0g	0%
Cholesterol 0mg	0%
Sodium 300mg	13%
Total Carbohydrate 13g	4%
Dietary Fiber 3g	12%
Sugars 3g	
Protein 3g	

Potassium	0%	Thiamin	0%
Vitamin A	80%	Riboflavin	0%
Vitamin C	60%	Niacin	0%
Calcium	4%	Vitamin B 6	0%
Iron	4%	Folate	0%
Vitamin D	0%	Phosphorus	0%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

Calories		2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Potassium		3,500mg	3,500mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Calories from fat help consumers meet dietary guidelines that recommend people get no more than 30 percent of their calories from fat.

% Daily Value shows how a food fits into the overall daily diet.