COMBUSTION

L1: Examine Nutrition Labels

Guiding Question: What is most important in determining the "healthiness" of a food?

- **<u>Do Now:</u>**
  - Looking at the 4 images below, what do they have in common and what is different? Be prepared to share out to the whole class




NUTRITION LABELS – GUIDED WALK-THROUGH

- You will work with your group on the chrome books. If you have your own device, you can use it too, but you must work in your groups.
- Go to our Schoology page to find the link for the website.
- Follow the steps for the tutorial. Answer the questions as you go.
- When you are done, call me over to check off your progress and release you to page 5

INVESTIGATING NUTRITION LABELS

- Chose one nutrition label from the front of the room using the guidelines from the workbook.
  - It must have both fat and sugar in it.
- Answer the questions on page 5 using the nutrition label you chose.
- Determine if it qualifies for the vending machines at the school.

NOTES

- Calorie - A measure of energy; how much energy is required to raise 1kg by 1°C.
- Energy Breakdown:
  - Fats – 9 Calories/gram
  - Carbohydrates – 4 Calories/gram
  - Proteins – 4 Calories/gram
- We will also discover that the not all fats, carbohydrates, or proteins are created equal. Some are more nutritious than others.

NOTES

- Carbohydrates are the body's main source of energy

  3 Types:

  - Refined and Natural Sugars – Simple Carbohydrates
    - Found as glucose, sucrose, lactose, maltose, fructose
    - Come from sugar cane, beets, fruit, and other sources
    - These tend to be classified as *unhealthy*. But we will find that you can eat anything as long as it is in *moderation*.
  - Starches – Complex Carbohydrates
    - Found in grains, legumes, rice, potatoes
    - The body must break these down into *simple carbs* first before getting energy out of it.

NOTES

- Fats:
  - Saturated Fats
    - Solid at room temperature
    - Found in some meat and dairy products
    - Can raise cholesterol levels
    - Found in butter, cheese, lard and margarine
  - Unsaturated Fats
    - Mostly Liquid at room temperature
    - Made from plant products
    - Found in corn oil, canola oil, olive oil, coconut oil, etc.

NOTES

- Fats:
  - Trans Fats
    - A process called hydrogenation that makes unsaturated fats solid at room temperature
    - Found in shortenings and many margarines
    - Raises cholesterol
  - Fatty Acids
    - Need to eat those that the body cannot produce on its own
    - Used to make complex molecules like hormones

HOMEWORK

- Bring back signed syllabus by tomorrow (Friday)
- Homework 1 Due NEXT Friday (8/25)