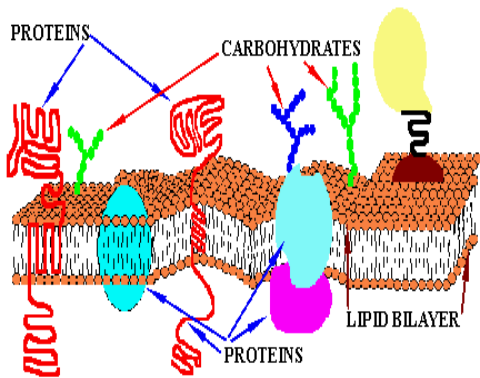


Cells and Macromolecules

Why do we “eat”?

We eat because each of our CELLS need materials IN THE FOOD to operate and do their functions. The cells need “macromolecules” and the energy inside them. The cells themselves are made up of MACROMOLECULES



Cell Membrane

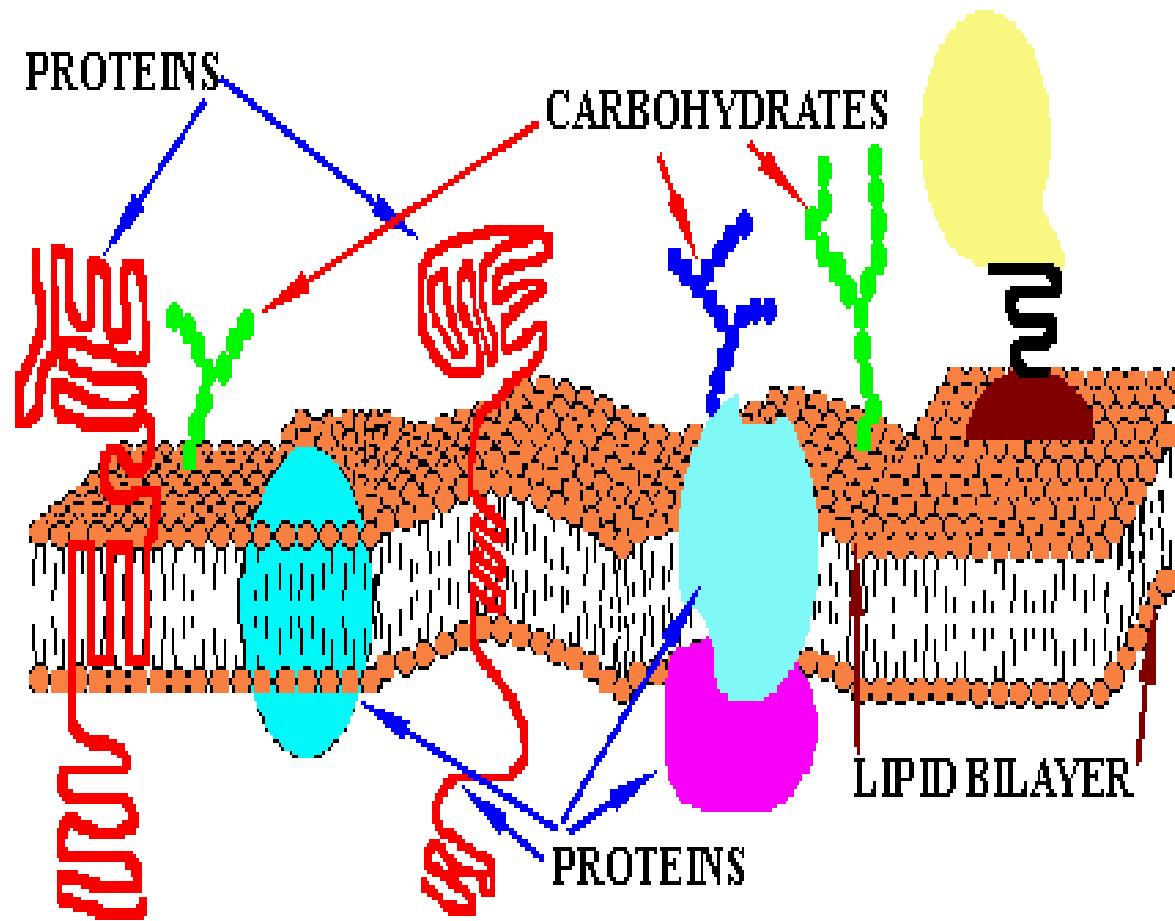
Why do we “eat”?

**What are
macromolecules?**

**Macromolecules are
LARGE MOLECULES.**

Examples:

- **Carbohydrates**
- **Protein**
- **Fats (Lipids)**
- **Nucleic Acids**



Cell Membrane

Why do we “eat”?

Besides “energy” that we get from food there are four macromolecules plus two nutrients that we get from food:

1. **Carbohydrates- energy, growth, repair**
2. **Protein- growth, repair**
3. **Fat- energy and building**
4. **Vitamins- helps cell processes, building**
5. **Minerals- helps cell processes, building**

- **Macromolecules & diet**

- All macromolecules are needed for your cells to “do” what they “do”
- That is why when we eat, it is important to get all the macromolecules

- Box 2

- Box 3

- Box 4

- Box 5

- Box 6

Box #2

Carbs- any food
from plants:
bread, cereal,
starches
(potato, corn,
rice), fruit.

Box #3

Protein & Nucleic
Acids- mostly foods
that are from animals:
meat, eggs, milk. Also
beans and "nuts": soy,
lentil, kidney beans,
peanut butter,
almonds, hazelnuts,
walnuts.

Box #4

Fats- usually from oils (olive, peanut, vegetable) but also found in meat products and some plant products (avocado, nuts)
EXAMPLES: butter, fried foods, salad dressings

Box #5

Vitamins- most foods but more in vegetables and fruit; usually added to some foods like milk, cereal and bread

Box #6

Minerals- many foods but more in vegetables and fruit; usually added to some foods like milk, cereal and bread

8th grade Anchor Questions Week 36 (May 26-29)

8th Anchor Questions Week 36 (May 26-29)

1. Explain how you would know if something is a living thing or not.
2. What are the needs of all living things? Include examples for each one.
3. Explain the key concepts of the Cell Theory.
4. Explain in detail what we get from food when we eat.
5. What are cells made of? What macromolecules make up cells?
6. What are the levels of organization for multicellular organisms? Give examples for each level.

Vocabulary:			
Macromolecule	Protein	Carbohydrate	Organism
Food	Cell	Plant	Animal