

REVIEW SHEET FOR CH. 5 & 29

Be able to...

CARBOHYDRATES

What is the shape of most carbon skeletons?

What do we need carbohydrates for?

How do we access energy in sugars?

What happens to excess (unused) sugars?

How do mono-, di-, and polysaccharides differ structurally?

Examples of each?

What are the differences between glycogen and cellulose and starch? Where is each type found? Functions of each?

LIPIDS

Are lipids hydrophilic or hydrophobic?

What is the difference between saturated and unsaturated fat?

What is the difference between fats and lipids?

What do all steroids have in common? How do various steroids differ from each other? What are examples of steroids and their functions?

PROTEINS

What is the name of the monomer that makes up proteins?

Describe the factors that cause denaturation.

Describe what happens to protein shape and function with denaturation.

Explain what activation energy is.

Describe the problem with using heat to provide activation energy for chemical reactions in body.

Give the role of catalysts in chemical reactions.

Explain how enzymes affect activation energy.

Discuss how enzymes work, incorporating active sites and substrates.

Describe why each enzyme catalyzes a specific kind of chemical reaction.

Explain why enzymes are recyclable.

NUTRITION & DIGESTION

State what nutrition is.

List the six types of nutrients found in food and give their general functions.

Summarize the four stages of food processing and state where each occurs in the digestive system.

Compare and contrast the two types of digestion.

Trace the path of food through the organs of the digestive system and explain what happens to the food in **each** organ of the alimentary canal.

Explain what peristalsis is and state which organs it occurs in.

Describe the role of the salivary glands, pancreas, gallbladder, and pancreas in the digestive system.

Discuss how the small intestines are specialized for absorption.

State what a calorie is and how it differs from the Calories on food labels.

Describe how the body uses food as fuel.

Explain what essential nutrients are.

Discuss the significance of the specific types of essential nutrients (essential fatty acids, essential amino acids, vitamins, and minerals).

Describe the information provided by the Food Guide Pyramid and food labels.

Contrast malnutrition and undernutrition.

Summarize the causes and consequences of obesity.

Differentiate between anorexia, bulimia, and bingeing.