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Name:	Group:	Date:



# THE FUNCTIONS OF THE DIGESTIVE SYSTEM

LJ PA	GES 168	TO 1/2
Complet	te this o	oncept
review	hando	ut and
keep it	as a re	cord of
what you	u have l	earned.

## **DEFINITIONS**

•	Digestion is the transformation of food into nutrients that can be used by the body.			
•	Mechanical transformation consists of <a href="physically breaking down food into smaller">physically breaking down food into smaller</a> particles in preparation for subsequent chemical transformation.			
•	Chemical transformation breaks down the complex molecules of food into simpler molecules. These changes occur with the help of secretions from the digestive glands.			
•	Nutrients are food molecules that can be absorbed by the body.			

Absorption is the passage of nutrients from the digestive tract into the blood or lymph.

# PROCESSING FOOD IN THE DIGESTIVE SYSTEM

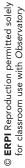
- Ingestion and propulsion of food along the digestive tract
- Digestion of food

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- Absorption of nutrients
- Elimination of fecal matter

#### HOW FOOD TRAVELS ALONG THE DIGESTIVE TRACT

Mechanism	Description	Location
Deglutition	Swallowing	Mouth
<u>Peristalsis</u>	Muscle contractions that propel substances through the digestive tract	Esophagus Stomach Small intestine Large intestine



THE LIVING WORLD

CONCEPT REVIEW

# DIGESTION

# Mechanical transformation

Process	Description	Location
Chewing	The process of crushing and grinding food	Mouth
Churning	Muscle contractions that mix food with secretions from the digestive glands.	Stomach Small intestine

## Chemical transformation

Digestive glands and secretions

Digestive glands	Secretions Location		Targets	
Salivary glands	Saliva	Mouth	Starch (complex carbohydrate)	
Gastric glands	Gastric juice	Stomach	<u>Proteins</u>	
Intestinal glands	Intestinal juice	Small intestine	Proteins, carbohydrates, fats	
Pancreas	Pancreatic juice	Small intestine	Proteins, carbohydrates, fats	
Liver	Bile	Small intestine	Fats	

## **Nutrients**

Nutrients	that	can	be	directly	absor	bed
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Water, \_\_\_\_\_\_ vitamins and minerals

Nutrients requiring chemical transformation

Nutrients	Molecules
Proteins	Amino acids
Carbohydrates	Simple carbohydrates (mainly glucose)
Fats	Fatty acids, glycerol

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