

INE: Digestion: Assessment and Overview of the Digestive System




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Digestion: Assessment and Overview of the Digestive System

Dr. Ritamarie Loscalzo

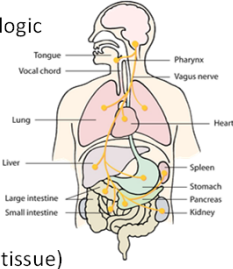
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Why Study Digestion?

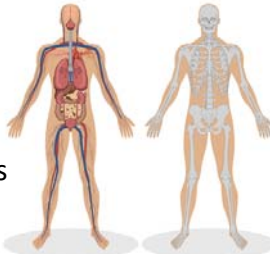
- ✓ **Effects on Brain:** shared embryologic tissue, connected via the Vagus nerve
- ✓ **You what you digest and absorb,** not just what you eat
- ✓ **Protective Barrier:** 70 percent of the immune system is located right in the gut lining - GALT (gut associated lymphoid tissue)
- ✓ Impact body wide
- ✓ Be able to communicate with your client's other providers



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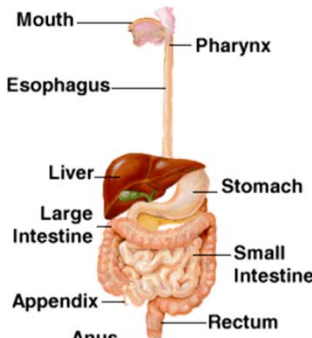
Digestion Influences Other Body Systems

1. Nutritional deficiencies
2. Inflammation
3. Toxin absorption
4. Immune stress
5. Hormone imbalances
6. Neurotransmitters



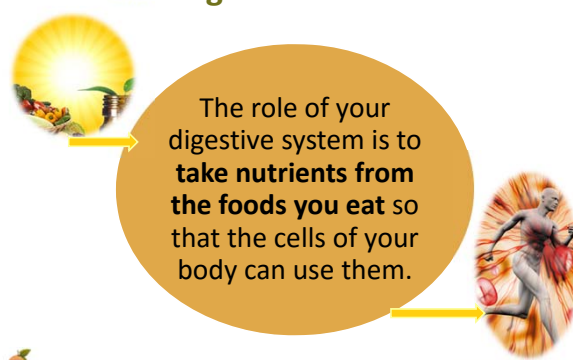
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The Digestive Tract



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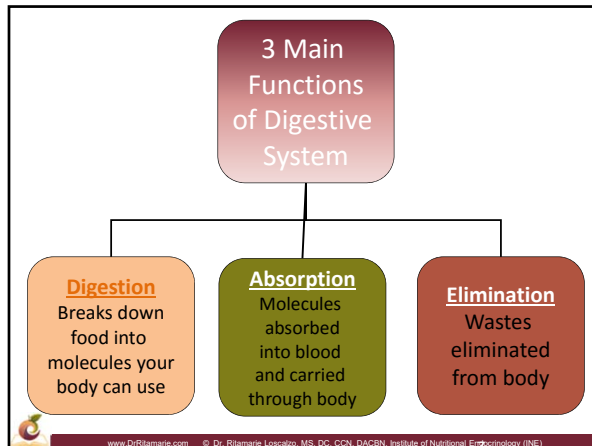
The Digestive Tract's Job




The role of your digestive system is to **take nutrients from the foods you eat** so that the cells of your body can use them.

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Assessing the Digestive Tract




- ✓ **Symptoms:** Online assessment scores
- ✓ Transit time
- ✓ **Lab:** Markers of malabsorption
- ✓ Physical signs of nutrient deficiencies due to malabsorption
- ✓ Inflammation and allergic reactions
- ✓ **Symptoms outside digestive tract:** Skin, gums, nails, lips, tongue, joints, and bones

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4 Stages of Food Processing

- ✓ **Ingestion** (eating): Taking in nutrients
- ✓ **Digestion:** Using physical and chemical means to break down complex organic molecules into smaller usable parts
- ✓ **Absorption:** Pulling in digested molecules into the cells of the digestive tract, then into the blood
- ✓ **Elimination:** The removal of wastes

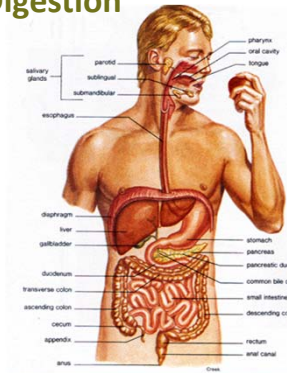


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Four Phases Of Digestion

- ✓ Cephalic phase
- ✓ Esophageal phase
- ✓ Gastric phase
- ✓ Intestinal phase



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2 Kinds of Digestion:

Mechanical

Chemical

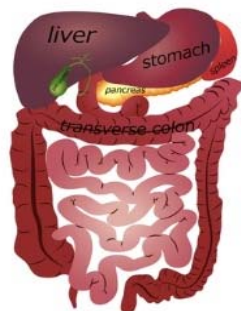
Food ground into small pieces

Large food molecules broken → small molecules by enzymes

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Basic Anatomy of Digestion

- ✓ Mouth
- ✓ Esophagus
- ✓ Stomach
- ✓ Small intestine
- ✓ Liver
- ✓ Gall bladder
- ✓ Pancreas
- ✓ Large intestine



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