

INNATE INTELLIGENCE

Esophagus And Mucous Membranes

Normal Function-to transport food and liquids from the mouth to the stomach. The esophagus is coated with a protective lining (mucous membrane) that secretes mucus to keep tissues moist and to trap pathogens and irritants. Mucous membranes also secrete HCO_3^- (alkaline) to buffer acidity.

Innate Stimulus-A complex reflex response initiated by sensory receptors in the base of the tongue, tonsils, and pharynx.

Innate Response-Peristalsis (rhythmic involuntary muscle contractions) to prevent food and liquids from entering the trachea or nasal cavity.

MOUTH



Protective mucosal lining

Involuntary rhythmic muscle contractions

UPPER STOMACH (Fundus-physiological pre-digestive section)

SYMPTOMS OF ENERGY DEFICIENCY	
STRESS RESPONSE	ORGAN EXHAUSTION
Increases nutrient requirements	Deficient nutrients available
Decreased digestive secretions	Inadequate digestive secretions
FREQUENT SYMPTOMS	
Difficulty swallowing	Heartburn and chest pain
Sensation of lump in throat	Possible loss of protective covering
NUTRITIONAL CONSIDERATIONS	
Include foods rich in probiotics and prebiotics, bone broth, and those high in fiber and healthy fats. These foods can help heal and strengthen the gut lining.	
CLINICAL CONSIDERATIONS	
Sympathetic Nerve Supply	The thoracic sympathetic trunk, specifically from the 1st through 9th thoracic ganglia
These fibers travel along with the vagus nerve and blood vessels, joining the esophageal plexus to regulate smooth muscle in the arterial walls and potentially influence esophageal motility and sphincter function.	

Supplementing nutrients to counter symptoms is a little more than educated guesswork. Symptoms are Innate's signal that a system, organ, or tissue is unable to produce adequate energy to meet its responsibilities for maintaining homeostasis and normal physiological function. **Carbohydrates, protein, lipids, vitamins, and minerals** are **building blocks** used in **producing energy**. They must be put to work. They are not workers. Find out how to put them to work by visiting the Food Enzyme Institute.

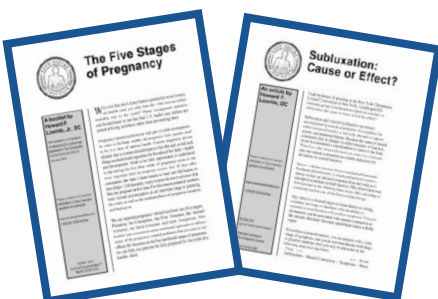
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Toll-free: 800-662-2630
customerservice@foodenzymeinstitute.com



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