

Name _____

The Marvelous Digestion Dance in Your Stomach

Open-Ended Response Answer Key

1. The churning action in the stomach helps mix food with gastric juices, creating a semi-liquid mixture called chyme. This mixing action ensures even distribution of digestive enzymes and acids, facilitating the breakdown of food.
2. Hydrochloric acid activates digestive enzymes and provides an acidic environment for digestion. It also helps kill harmful bacteria in the food, preventing potential infections and ensuring that only safe nutrients are absorbed.
3. The stomach lining's production of mucus serves as a protective barrier. It shields the stomach from the corrosive effects of its own acidic juices, preventing damage to the stomach lining and ensuring its continued functionality.
4. The journey of food starts in the mouth, where it's chewed and mixed with saliva. It then enters the esophagus, travels to the stomach, where gastric juices and churning occur. Next, it moves to the small intestine, where digestion continues, and nutrients are absorbed. Finally, any undigested food enters the large intestine, where water is absorbed, and waste products are formed.

