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Anatomy and Physiology: Gastrointestinal tract

Gastrointestinal tract starts in the mouth. Teeth (bone) used to masticate/ chew the food. Salivary glands are used to lubricate and moisten the food as the tongue (muscle) is used to push the grounded-up food down the esophagus. Using wavelike motion, the food will move down the esophagus to the stomach. In the stomach there are 2 types of digestion: mechanical digestion, the food is mixed around the stomach to breakdown into smaller pieces. Chemical digestion is occurring through digestion enzymes such as pepsin and hydrochloric acid. After digestion in the stomach the chyme moves towards the duodenum, the first part of the small intestine, triggering the pancreas and liver to release bile from the gallbladder before entering the jejunum. Entering the jejunum this is where most of the nutrients is absorbed. The enzymes continue to breakdown the chyme and move through the intestine by movement called peristalsis. The final part of the small intestine, the ileum, absorbs B-12 and final absorption stages. Next, comes the cecum, the connection between the small and large intestine. In the 4 parts of the large intestine (ascending, transvers, descending and sigmoid colon) the purpose is the absorption of water and electrolytes forming the remaining chyme into solid waste products. The final part is rectum and anus. This rectum, this portion of the GI tract is storage for waste product until the waste is excreted through the anus. The overall process takes time and can take 24 hours to 5 days in some cases, with age this process slows.

Crohn's disease is a chronic inflammatory bowel disease, characterized by remission and exacerbation occurring in any part of the GI tract, commonly in the colon. This disease effects all portions/ layer of the bowel commonly causing fistulas. The portion of effected bowel may show as skip lesions. Skip lesions are bowel the shows a pattern of good bowel then bad bowel and so on. Crohn's has unknow etiology. There are some links to smoking, and genetic predisposition. Having no cure, treatment is symptom management. Taking prescribed medication, decrease irritating foods, smoking cessations, correcting malnutrition if there are diseased portions in the small intestine. In severe cases surgical resection of the intestine may be necessary if medication therapy is unsuccessful of more remission episodes,

then exacerbations or suspicion of cancer since these patients are at a higher risk.