

## Chapter 1 The Digestive Tract

The GI tract, or gastro-intestinal tract, encompasses the entire digestive system that originates with the ingestion of food at the mouth and finishes with defecation through the anus. The GI tract has a mucous coating. The nutrients in food are taken through the mucous of the mouth and converted into energy building blocks. Those building blocks are transported into the blood through the intestines.<sup>1</sup>

Once food enters the mouth, the teeth ground it up into smaller pieces. The saliva helps facilitate easy swallowing and digestion begins through enzymes in the saliva. The food passes through the throat into the esophagus. The muscles that run the length of the 30-centimeter-long esophagus facilitate downward movement of the food towards the stomach.<sup>1</sup>

The stomach stores the food while gastric acid and mucous continue to digest the contents. The muscles of the stomach facilitate the continued movement of the food into the small intestine a little bit at a time. The liver adds bile, which is stored in the gall bladder, to the food to aid in the digestion of fats. Digestion continues in the small intestine as food remnants are stripped of nutrients when they go into the blood through the intestinal walls into the large intestine. The remaining substance is watery and void of anything useful to the body. The intestines mix bacteria with the fluid and extract any salt. The result is a piece of stool ready for excretion. It is stored in the rectum until it is ready to be pushed out of the anus. The anus is a type of muscle called a sphincter that will open and close when stool is released.<sup>1</sup>

## Chapter 2 What is IBD?

Inflammatory Bowel Disease, or IBD, is a chronic inflammatory disease of the intestines. The inflammation can come and go and there is no cure for IBD. There are two common forms of IBD: Crohn's Disease and ulcerative colitis. If a specific diagnosis between the two forms is not possible, it will be termed 'unclassified', or IBD-U.<sup>2</sup>

IBD severity varies with each person and symptoms generally continue throughout a person's lifetime. Symptoms include stomach ache, diarrhea, and blood in the stool. These diseases come and go with unpredictable intensity patterns. A person can go into remission or experience periods of flare-ups without warning.<sup>2</sup>

The cause of IBD is unknown, but experts have identified certain factors that play a part: genetics, the immune system, and environmental factors. The immune system reacts abnormally to bacteria which disrupts normal functioning of the immune system. IBD inflammation is initiated when the immune system attacks healthy intestinal tissue.<sup>2</sup>

## Chapter 3 Diagnosis

IBD is diagnosed through many different tests and a physical examination. These tests can take a while to complete due to scheduling and waiting for results. The specific tests will be dependent upon the type of symptoms an individual is experiencing. Therefore, a definitive diagnosis may take some time.<sup>2</sup>