

Digestive system in a normal individual:

In the normal individual, chewed food mixes with salivary enzymes and enters the stomach. In the stomach it mixes with the protein digesting enzymes pepsin and with stomach acid. Vitamin B12 separates from protein and combines with intrinsic factor. The slurry then travels to the duodenum where the food mixes with two more digestive juices, bile from the liver and amylase from the pancreas. These substances aid in the breakdown of fats. The pancreatic juice also contains bicarbonate which serves to neutralize the acidity of the food. Iron and Calcium are absorbed in part into the body in the duodenum.

As the food and digestive juices pass through the duodenum, jejunum, and ileum (the three parts of the small intestine) nutrients are absorbed into the blood stream and travel to the liver for secondary processing. Vitamin B12 and bile salts are absorbed by the ileum. Whatever is left over passes into the colon. Here excessive water is absorbed and the left over undigested food mixes with bacteria and forms stool.

## Normal GI Anatomy

