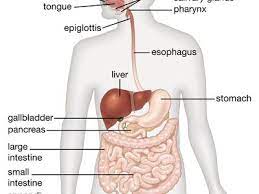
The journey of turkey through the digestive system

Mouth and oesophagus



An adult human has 32 teeth, twelve molars to grind and crush food along with eight premolars, eight incisors for biting or ripping food, and four canines to help rip apart food further. As the piece of turkey enters your mouth your salivary glands start to produce saliva which moistens your food allowing it to travel down your oesophagus far easier. Saliva also has enzymes that start to break down the food.

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As you swallow your food your tongue pushes the food into your throat in a bolus shape. Then a small piece of tissue called the epiglottis folds over your windpipe to prevent food or liquid to enter and cause choking.

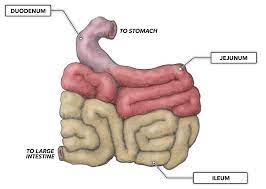
The oesophagus is a 11–12-inch muscle connected to the stomach and bellow the mouth. As the turkey bolus is swallowed it enters the lower oesophageal sphincter, which then brain signals are sent to the oesophagus and the muscles begin to perform peristalsis (The involuntary constriction and relaxation of canals or intestines, creating a wave like movement that push contents of the canal forward).

Stomach

As the turkey bolus leaves your oesophagus it enters the stomach. The stomach is an organ in the shape of a J that is involved in the chemical digestion of food. As the turkey enters, the upper stomach muscle relax to allow the turkey bolus to enter then the lower muscles mix the bolus with intestine juice and is then broken down by enzymes. Your stomach contains a thick mucus lining that prevents these strong juices from eating through its walls. Proteins take longer to digest, meaning the turkey bolus will take longer to digest than foods rich in carbohydrates. In the stomach the bolus turns into chyme, it takes around 2-8 hours for this process to happen and exit the stomach through the duodenum.

Small intestine absorption

Absorption in the small intestine occurs through the luminal face of the mucosa. The mucosa is covered in small hair like projection called villi. Each villi have small pouches called crypts. The cells of the villi are involved in absorbing dietary nutrients (carbohydrates, fat, vitamins, minerals and proteins) and water from food so that it can be used in the body. Turkey is high in protein so its protein will be absorbed by these villi and be absorbed into the blood stream through the capillary beds and used in things such as building and repairing muscles and producing hormones and enzymes.



Small intestine (breakdown)

The small intestine, or bowel, is hollow tube about 20 feet long that runs from the stomach to the beginning of the large intestine. The small intestine further breaks down the chyme. When food enters your duodenum, it interacts with digestive enzymes secreted by your pancreas (Trypsin and chymotrypsin are enzymes that digest proteins, amylase

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is an enzyme that digests carbohydrates; and lipase is an enzyme that breaks down fats). These enzymes help deteriorate the largest food molecules, such as proteins and starches.

Material breakdown

Turkey is mainly all protein. Proteins are made up of chemical building blocks called amino acids. Your body uses these amino acids as a form of energy they also build and repair muscles and bones, they make hormones and enzymes turkey also contains phosphorus and zinc important vitamins in the human body. Phosphorus is required for the growth, maintenance, and repair of all tissues and cells, as well as the production of DNA and RNA, the genetic building blocks. Zinc is involved in the creation of DNA, the building of protein, and supporting a healthy immune system.

Large intestine

The large intestine is one long tube that continues from the small intestine as food nears the end of its journey through your digestive system. Chyme passes from the small intestine through the ileocecal valve and into the cecum of the large intestine. Waste products from the digestive process things like undigested parts of food (turkey), older cells from the lining of your Gi tract and fluids are all turned from liquid (chyme) into faeces to be excreted this process moves through the large intestine down to the transverse colon by peristalsis. This compact movement and the extraction of fluids allows the chyme to form solid faeces. Your large intestine temporarily stores the faeces prior to elimination.

Elimination and faeces

The body expels its waste products from digestion through the anus and rectum. This process is known and defecation and involves the relaxation of the internal anal sphincter, the contraction of rectal muscles and the initial contraction of the external anal sphincter. Defecation is mostly involuntary, but the somatic nervous system allows you to control the time of elimination.

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