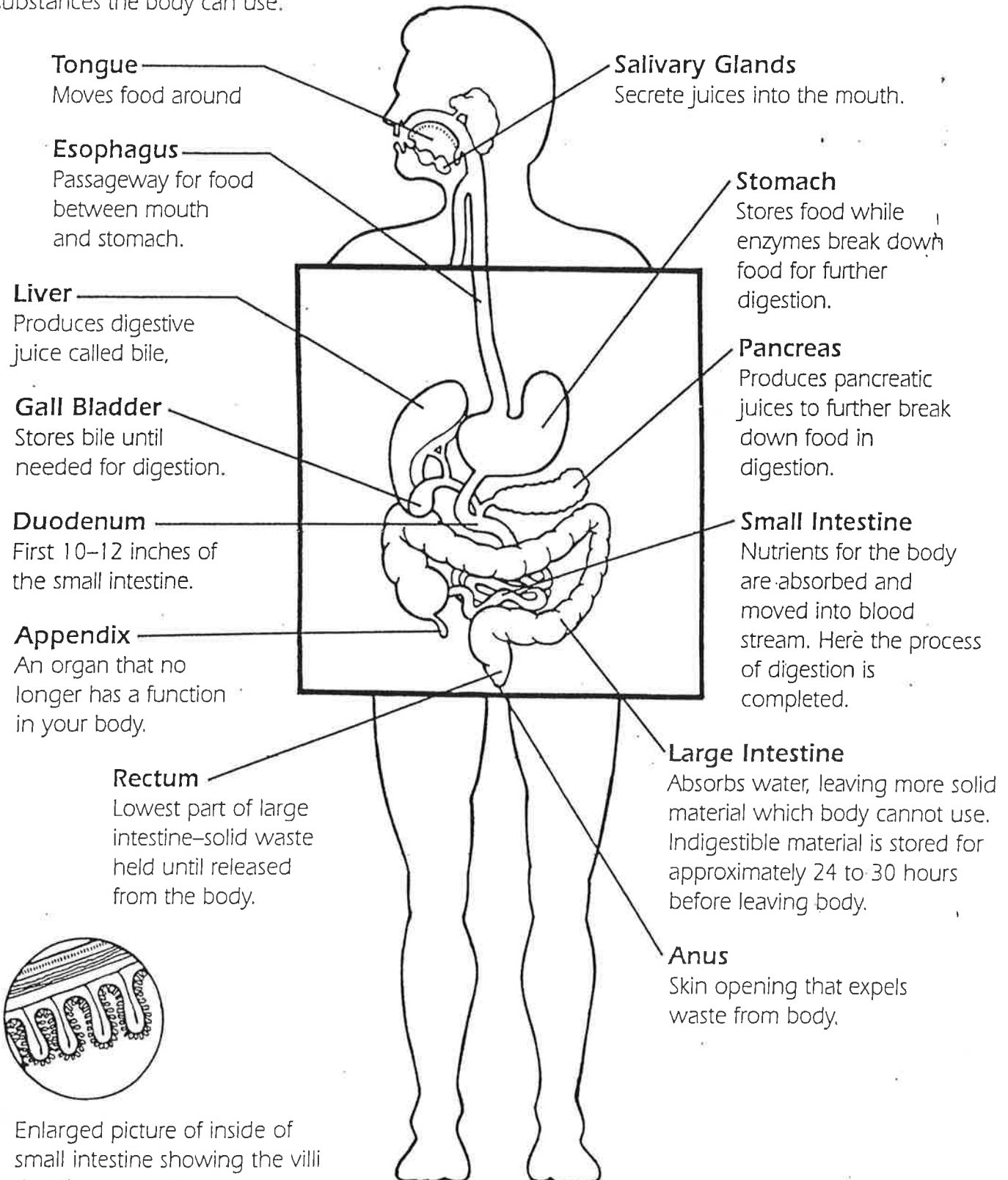


BODY SYSTEMS**DIGESTIVE SYSTEM**

The main function of the digestive system is to change food, through chemical action, into substances the body can use.



Enlarged picture of inside of small intestine showing the villi that line the walls.

BODY SYSTEMS**DIGESTIVE SYSTEM**

Use the illustration on page 4. Fill in the blanks as you follow the process of digestion.

1. Food is the body's fuel. The materials the body needs to run properly come from the food and drink we consume. The process of changing food to substances the body can use is called _____.
2. Digestion begins in the _____. The instant food enters the mouth, the _____ send secretions in to begin changing starches into usable sugar.
3. The _____ moves food around. Teeth further break up food into small pieces and reduce it to a small, soft ball ready for swallowing.
4. Food moves down the _____ toward the _____ by muscular movements called peristalsis. When it reaches the stomach, some of the food is stored temporarily, and further digestion takes place. Chemicals called enzymes are produced by the stomach. They also act to break down the food. Powerful stomach muscles grind and churn the food while strong digestive juices, called gastric juices, make proteins digestible. The food is broken down into a thick, pasty juice called chyme. The process takes three to four hours.
5. At this point, some of this digested "food" is absorbed into the _____.
6. The rest is slowly released into the _____ through a "door" at the end of the stomach called the pylorus. This "door" is necessary to keep the food in the stomach long enough to be digested.
7. As the semi-digested food passes into the next 10 or 12 inches of the small intestine, called the _____, it is further acted upon by digestive juices.
8. Bile from the _____ is stored in the _____.
9. Bile is released to break down fats. The _____ produces pancreatic juices and sends them into this section to carry on further digestion. Tiny, fingerlike projections called villi line the inside of the small intestine. The villi absorb the nourishing chemicals from the food. Blood vessels carry these chemicals to all parts of the body.
10. Water is absorbed in the _____, leaving the more solid material which cannot be used. This waste has not been digested.
11. It will finally be released from the body through the _____ and expelled out an opening in the skin called the _____.

chyme (kīm)
 duodenum (dyū ə'dē nəm)
 peristalsis (per ə'stol səs)
 pylorus (pī'lōr'əs)

