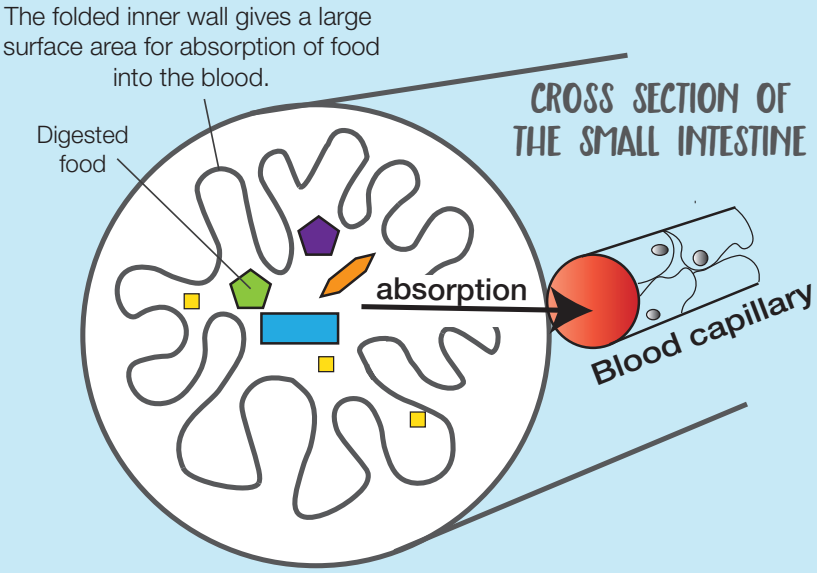
BIOLOGY

WORKSHEET - SMALL INTESTINE

INSIDE THE SMALL INTESTINE



The small intestine is a long tube specially adapted to absorb digested food.

The digested food is made up of small soluble molecules which are absorbed through the thin wall of the small intestine into a dense network of blood capillaries.

The inner wall of the small intestine is highly folded, which increases its surface area for absorption.

The blood in capillaries leaving the small intestine is rich in glucose, amino acids, fatty acids and glycerol.

QUESTIONS

1) Name the tiny blood vessels found in large numbers in the wall of the small intestine?

2) The inner wall of the small intestine is folded. This adaptation:

- ☐ Increases the surface area of the wall for gas exchange.
- ☐ Increases surface area for the absorption of insoluble food into the small intestine.
- ☐ Increase the surface area for the absorption of soluble food into the blood.

3) Glucose molecules move across the wall of the small intestine.
What is this process called?

- ☐ Osmosis
- ☐ Diffusion
- ☐ Active Transport

4) Name another molecule that moves across the wall of the small intestine into the blood.

5) Suggest the pH (between 1 and 14) that you would find in the small intestine.

6) Explain why the wall of the small intestine contains large numbers of blood vessels.

7) Extended: Describe another adaptation of the small intestine that increases the surface area available for absorption of substances.