

## Question to be CHALLENGED with supporting explanation

Given below are two statements:

**Statement I:** Fatty acids and glycerols cannot be absorbed into the blood.

**Statement II:** Specialized lymphatic capillaries called lacteals carry chylomicrons into lymphatic vessels and ultimately into the blood.

In the light of the above statements, choose the most appropriate answer from the options give below:

- (1) Both Statement I and Statement II are correct
- (2) Both Statement I and Statement II are incorrect
- (3) Statement I is correct but Statement II is incorrect
- (4) Statement I is incorrect but statement II is correct

**CORRECT ANSWER WILL BE:** Statement I is correct but Statement II is incorrect

**Explanation supporting my answer: NCERT LINES HIGHLIGHTED IN YELLOW**

**The correct statement II in the Question should have been**

**Statement II:** Specialized lymphatic capillaries ~~called lacteals~~ carry chylomicrons into lymphatic vessels **called lacteals** and ultimately into the blood. Below are two lines of NCERT which are in support of above statement.

- (1) As per NCERT PARA **16.1.1 Alimentary Canal** Page No. 260

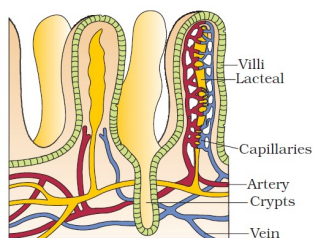


Figure 16.5 A section of small intestinal mucosa showing villi

tissues containing nerves, blood and lymph vessels. In duodenum, glands are also present in sub-mucosa. The innermost layer lining the lumen of the alimentary canal is the mucosa. This layer forms irregular folds (rugae) in the stomach and small finger-like foldings called **villi** in the small intestine (Figure 16.5). The cells lining the villi produce numerous microscopic projections called microvilli giving a brush border appearance. These modifications increase the surface area enormously. **Villi are supplied with a network of capillaries and a large lymph vessel called the lacteal.** Mucosal epithelium has goblet cells which secrete mucus that help in lubrication. Mucosa also forms glands in the stomach (gastric glands) and crypts in between the bases of villi in

**“Villi are supplied with a network of capillaries and a large lymph vessel called the lacteal.”**

- (2) As per NCERT PARA **16.3 ABSORPTION OF DIGESTED PRODUCTS** Page No. 265

**“They are re-formed into very small protein coated fat globules called the chylomicrons which are transported into the lymph vessels (lacteals) in the villi.”**