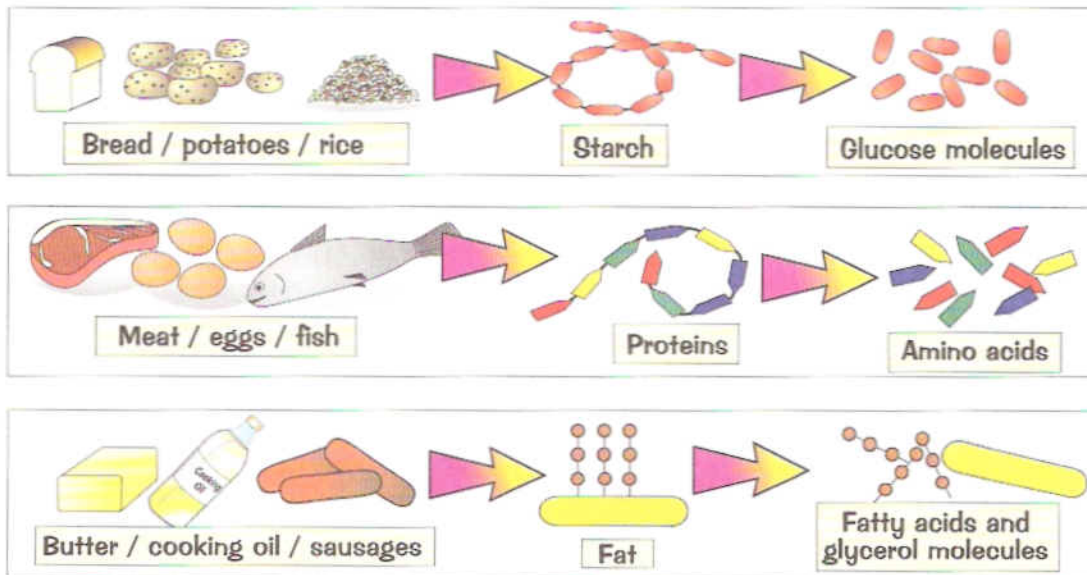


Diffusion of "Food" Molecules

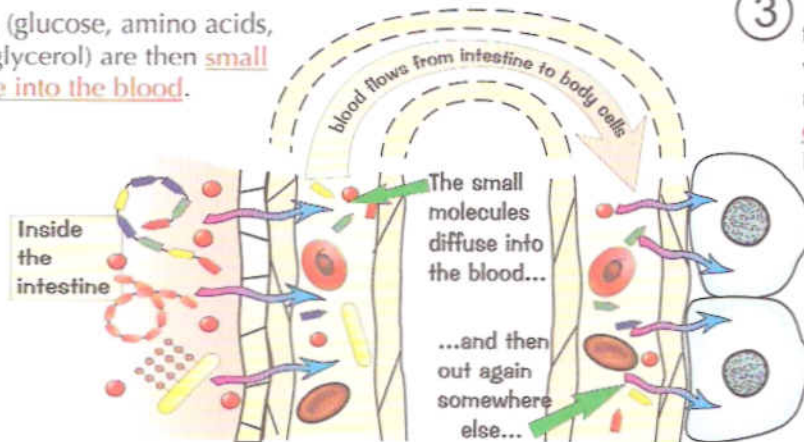
The big food molecules must first be broken down

After you've chewed your food up and your stomach's had its turn at munching it up still further, it's still made up of pretty big molecules, namely: starch, proteins, and fats ("lipids"). These are still too big to diffuse into the blood, and so they are broken down in the small intestine into smaller molecules: glucose, amino acids, fatty acids, and glycerol.



The small molecules can then diffuse into the blood

- ① These molecules (glucose, amino acids, fatty acids, and glycerol) are then small enough to diffuse into the blood.



- ③ The nutrients then travel to where they're needed, and diffuse out again. It's all clever stuff.

- ② When the blood has lots of nutrients in it, the molecules will only move into the blood with the help of active transport because the concentration gradient is reversed (see p. 4 & 5).

Let's see what you've LEARNED, shall we...

Practice answering these questions until you can do them both without looking at the page.

If you can't, then it means just one thing — you haven't learned it. (Obviously)

- 1) Name the three types of big molecules that won't diffuse into the blood.
- 2) Name the four types of small molecules that will diffuse into the blood.