

C2 Inclusion: Carbohydrates as providers of energy for metabolism – Starch and detection of sugar

In biology class, Max learned that he shouldn't eat quickly. Instead, he should chew thoroughly because that promotes digestion. He doesn't believe this information and therefore wants to test it. Max chews a piece of bread for about one minute and notices that the taste has changed. It tastes sweet. Max knows that bread contains starch, but that doesn't taste sweet. What happened to the starch during chewing? Has sugar formed? If yes, how?

Preparation for the subexperiments

We want to test unchewed and chewed bread for starch and glucose.

Work according to the instructions using the apparatus and chemicals. You can use the textbook and provided references.

Conduct the experiments according to your instructions.

Write down your observations.

Analysis

Compare the starch and glucose content in the unchewed and chewed bread.

What role does saliva play in the conversion of starch to glucose?
