

Copper sulphate on amylase essay sample



**ASSIGN
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My experiment was to find out the effect of changing the copper sulphate concentration on the rate of the hydrolysis of starch to maltose using the enzyme amylase. Copper sulphate was used because it acted as an inhibitor.

Hypothesis, I predicted that the more copper sulphate added to the solution the longer the reaction would take to complete. This was due to the fact that copper sulphate would interfere with the starch for the active sites on the amylase molecules because it is a inhibitor.

Biological Knowledge, Amylase acts as a catalyst and starch is a complex carbohydrate.

The amylase was used to hydrolyse the alternate glycosidic bonds in starch. By doing this it meant that the starch, a polysaccharide was broken down into maltose, a disaccharide. However, copper sulphate would interfere with starch for the active sites and so prevent the formation of enzyme-substrate complexes. Fewer complexes formed means that the time taken to hydrolyse the starch would be greater and the rate of the reaction would be slower.