Trypsin

Trypsin (in the form of trypsinogen), like other pancreatic enzymes, is produced by acinous cells of the pancreas in the inactive form so called proenzyme and is secreted into the duodenum via the pancreatic duct.It is an enzyme that hydrolytically cleaves proteins just like pepsin. It differs from pepsin by its optimal pH for its function, ie it is active in the alkaline environment of the duodenum. Activation of pancreatic enzymes takes place in an activation cascade that is initiated by intestinal enterokinase.Trypsin passes partially into the bloodstream, where it can be meassured by doctors using immunological methods (RIA).



Activation cascade of panreatic enzymes in CZ

Usually trypsin is meassured together with trypsinogen and trypsin complex with α1-proteinase inhibitor (α1-antitrypsin), depending on the detection methodology used. **Physiological values range from 100 to 400 µg / l**, which depend on the type of detection method used. In acute pancreatitis we show a several-fold increase (up to 20,000 µg / l), a slight increase is in cholelithiasis. Decreased values indicate chronic pancreatitis, cystic fibrosis. Decreased and elevated trypsin levels can be seen in pancreatic cancer.

Links

- se svolením autora převzato z KOCNA, Petr. *GastroLab : MiniEncyklopedie laboratorních metod v gastroenterologii* [online]. ©2002. Poslední revize 2011-01-08, [cit. 2011-03-04]. <http://www1.lf1.cuni.cz/~kocna/glab/glency1.htm>.
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Source

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