

Bilirubin

Bilirubin is a yellow substance produced by the breakdown of heme. It belongs to bile dyes. It is formed in the smooth endoplasmatic reticulum of reticuloendothelial cells (spleen, liver, bone marrow) by the action of heme oxygenase enzyme complex.

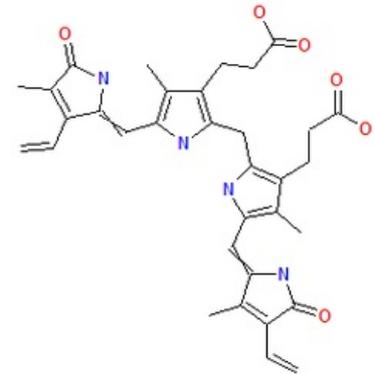
Most is excreted in the intestine as part of bile. Unconjugated (indirect) bilirubin is insoluble in water, it binds to albumin (transport from the spleen to the liver). Conjugated (direct) bilirubin (most often **bilirubindiglucosiduronate**) is water-soluble, it is conjugated with glucuronic acid in the liver. Reference values are 3-17 $\mu\text{mol/l}$ (total bilirubin)

Related articles

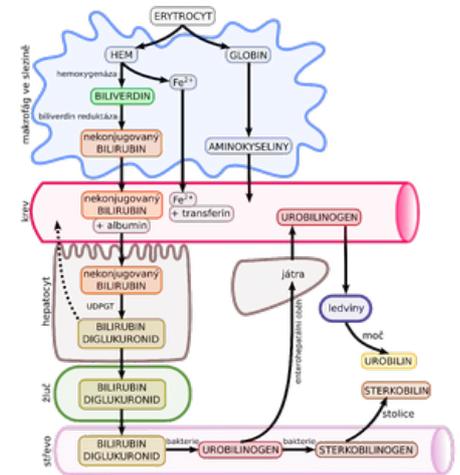
- Jaundice
- Differential diagnosis of jaundice

References:

- MURRAY, Robert K.. *Harperova biochemie*. 2. edition. H&H, 1998. pp. 872. ISBN 80-7319-013-3.



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Metabolism of heme