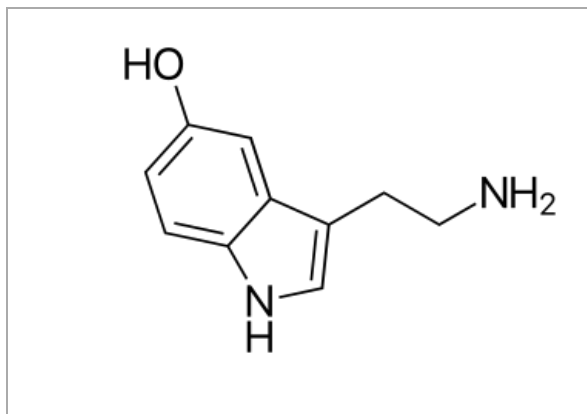


# Serotonin



<b>Gland</b>	GIT; neurotransmitter in brain
<b>Structure</b>	biogenic amine
<b>Target organ/tissue</b>	digestive tract, platelets, brain
<b>Receptor</b>	serotonin (5-HT1-7)

**Serotonin**, or *5-hydroxytryptamine*, is a substance that is mainly found in the enterochromaffin cells of the alimentary canal and in blood platelets, and in smaller quantities also in the brain. It is therefore a hormone (endocrine secretion in the digestive tract) and a neurotransmitter (secretion in the CNS). Serotonin is derived from the amino acid tryptophan, which is why it ranks among the so-called biogenic amines. The effects of serotonin include:

- platelet aggregation,,
- contraction of smooth muscle, especially vasoconstriction and stimulation of peristalsis of the digestive tract,
- inducing nausea and vomiting by acting on the area postrema,
- affecting mood (depression is associated with a lack of serotonin),
- pain suppression

Serotonergic neurons in the brain likely play an important role in altering circadian rhythms and inducing sleep

## Links

### Related articles

- Serotonin syndrome
- Mediator systems of the CNS
- Basic biogenic amines

### Source

- GANONG, William F. *Přehled lékařské fyziologie*. 20. vydání. Praha : Galén, 2005. 890 s. ISBN 80-7262-311-7. GANONG, William F. *Přehled lékařské fyziologie*. 20. edition. Praha : Galén, 2005. 890 pp. ISBN 80-7262-311-7.
- GUYTON, Arthur C. a John E HALL. *Textbook of Medical Physiology*. 10. vydání. Philadelphia, Pa. : W. B. Saunders, 2000. ISBN 978-0721686776. GUYTON, Arthur C. – HALL, John E. *Textbook of Medical Physiology*. 10. edition. Philadelphia, Pa. : W. B. Saunders, 2000. ISBN 978-0721686776.