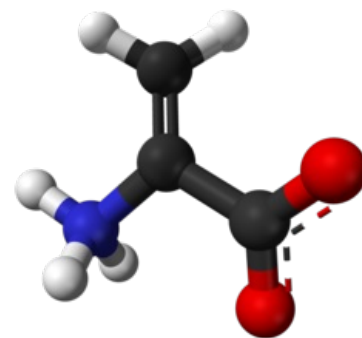


Glycine

Glycine is one of the **non-essential amino acids** with the general formula $C_2H_5NO_2$. By the term non-essential, we mean that the human organism is capable of *de novo* synthesis (from serine), so dietary intake is not necessary.

It is the only one that does not contain asymmetric carbon. It can be converted to serine by the enzyme serine *hydroxymethyltransferase* , the cofactor for this reaction being tetrahydrofolate. Subsequently, pyruvate is formed from serine . If glycine is converted to glyoxylate, then oxidized to oxalate, which in higher concentrations forms an insoluble complex with calcium cations, which can contribute to the formation of calcium oxalate, which can be the cause of urinary stones . It is one of the inhibitory neurotransmitters in the CNS and a precursor to the synthesis of other substances such as porphyrins , purines, glutathione, creatine .



Glycine molecule

Links

Related Articles

- Amino acids

References

- MATOUŠ, Bohuslav, et al. *Fundamentals of medical chemistry and biochemistry*. 2010 edition. Prague: Galen, 2010. 0 pp. ISBN 978-80-7262-702-8 .