

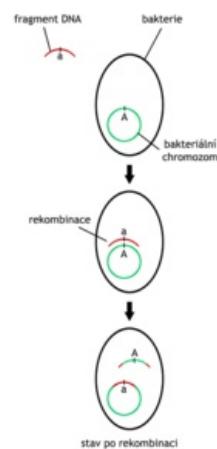
# Transformation

Transformation is the **transfer of genetic information between bacteria**. It is an active, enzyme-driven and energy-intensive process. **The recombination** of the genetically active material takes place during it. Alleles isolated or released from donor cells are transferred to recipient cells (via DNA).

This process can only take place in **genetically engineered species**, such as the *genus Haemophilus*, the *genus Neisseria*, *Streptococcus pneumoniae*, etc. These bacteria produce a **competence factor** that is essential for transformation.

The donor DNA **binds to the cell surface**, one strand is broken down, the other is transferred by the transporter into the cell. Rapid division of bases may not be corrected by the rapid division of bacteria. One chromosome is formed with the original equipment and the other with the donor equipment. Half of the offspring are transformed and the other half are not.

## TRANSFORMACE



## Links

### Related articles

- Parasexual processes in bacteria
  - Conjugation
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Transformation

### Source

- ŠTEFÁNEK, Jiří. *Medicína, nemoci, studium na 1. LF UK* [online]. [cit. 14.03.2010]. <<http://www.stefajir.cz>>.
- JANSKÝ, Petr. *Zpracované otázky z mikrobiologie* [online]. [cit. 2012-02-05]. <[https://www.yammer.com/wikiskripta.eu/uploaded\\_files/3804405](https://www.yammer.com/wikiskripta.eu/uploaded_files/3804405)>.
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### References

- KOHOUTOVÁ, Milada. *Lékařská biologie a genetika (II. díl)*. 1. vydání. Praha : Nakladatelství Karolinum, 2013. 202 s. ISBN 978-80-246-1873-9.