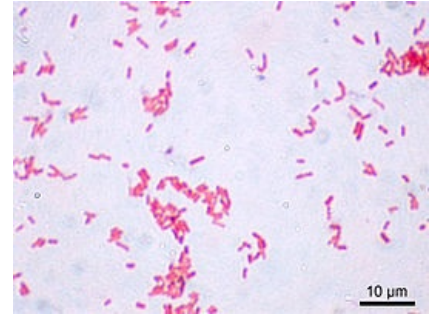


# Barrier functions of the body

**Barrier functions of the body** play an important role in the body's defence against exogenous agents, ie in particular viruses, parasites and bacteria. The basic preconditions for the body's defence include the following:

- intact **skin**,
- **mucosa** (respiratory, GIT, urinary); phlegm; cough reflexes, sneezing, vomiting, diarrhoea,
- acidic **pH** in the stomach,
- a series of **bactericidal substances**,
- **partial pressure oxygen** in tissues,
- body **temperature**,
- **age** ("maturation" immune system),
- intact physiological **urine outflow**,
- **lysozyme**,
- the action of other systems: **endocrine**, **hemocoagulation**.



Escherichia coli - intestinal microflora

Natural non-immune mechanisms are divided into:

1. **mechanical**: cilia movement, longitudinal airflow in the airways or fluid in the urinary tract;
2. **chemical**: fatty acids on the skin, enzymes (lysozyme, pepsin, antibacterial peptides = defensins ), acidic pH in stomach and urine;
3. **microbial**: normal non-pathogenic microflora competing with pathogens for nutrients and receptor sites producing antibacterial agents.

## Links

### Related Articles

- Non-specific immunity

### Used literature

- HOŘEJŠÍ, Václav – BARTŮŇKOVÁ, Jiřina. *Basics of Immunology*. 3. edition. Prague : Triton, 2008. 280 pp. ISBN 80-7254-686-4.