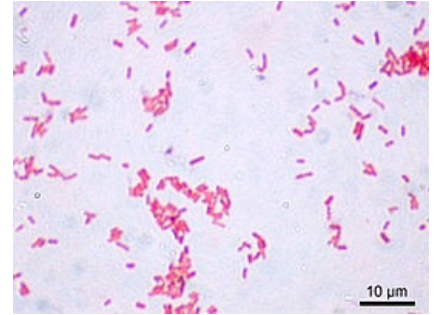


Barrier functions of the body

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.