

type of bacteria (pl)	type of bacteria (sg)	shape	examples of bacteria	disease
cocci	coccus	spherical	staphylococcus pneumococcus gonococcus	boils (hnisavý vřed – pus-hnis) pneumonia gonorhea (kapavka)
bacilli	bacillus	rod-shaped	E-coli	typhoid
spirilli	spirillum	spiral	triplonema pallidum	syphilis

type of bacteria (pl)	type of bacteria (sg)	shape	examples of bacteria	disease
cocci				infections characterized by boils (vředy)
			pneumococcus	
				gonorhea (kapavka)
bacilli	bacillus		E-coli	
	spirillum		triplonema pallidum	
mycoplasma		twisted into fantastic shapes		

Another way of distinguishing bacteria is a staining technique that divides bacteria into two major groups based on chemical differences in their cell walls gram-positive bacteria retain the dark violet colour of the stain after the decolorizing treatment while lose the stain.

Podtitulek u videa

There are many different species of bacteria. Scientists often classify bacteria on the basis of shape, size, and other morphological characteristics, as well as the genetic material that each type of bacteria contains. The Gram stain is one important tool that scientists use to identify and characterize bacteria.

Despite

their simple structure have developed
most b have a very distinctive shape (architectural)
cocci – spherical cells (staphylococci, pneumococci - pneumonia, gonococci gonorrhea= sexually transmitted disease)
bacilli – rod-shaped (e-coli, typhoid fever– intestinal tracts)
spirilli – spiral (syphilis)

mycoplasma – lack a cell wall – becomes twisted in the fantastic shapes, have as much DNA as the other bacteria these are microbes represent the smallest known form of the cellular life

another way of distinguishing bacteria is the staining technique – that divides bacteria into two major groups, based on chem diff in their cell walls –

gram positive b retain the dark violet colour of the stain after the decolorizing treatment

gram negative cell lose their stain

X

wiki

strain – a group of organisms within a species that differ in trivial ways from similar groups

- http://64.233.183.104/search?q=cache:N_Qa4vDPLzMJ:science.jrank.org/pages/1330/Cell-Staining.html+staining+technique+bacteria&hl=cs&ct=clnk&cd=3&gl=cz&lr=lang_en%7Clang_cs%7Clang_fr%7Clang_sk&client=firefox-a

Medical science depends on the **staining** of cells in tissues to make accurate diagnoses of a wide range of diseases from **cholera** to **sexually transmitted diseases**, to parasitic diseases and skin infections. **Staining** techniques performed routinely in microbiological laboratories include gram's stain, acid-fast stains, acridine orange, calcofluor white, toluidine blue, methylene blue, silver stains, and fluorescent stains. Stains are classified broadly as basic, acidic, or neutral stains. The chemical nature of the cells under examination determines which stain is selected for use.

Cell staining is important in the **diagnosis** of **microorganisms** because **bacteria** can be identified by the **color** differentiation of stains (dyes). Microscopic examination of stained cell samples allows examination of the size, shape, and arrangement of organelles, as well as external appendages such as the whip-like **flagella**, which are the cell's organs of **motion**. When sample cells are stained to show their chemical composition it is called differential **staining**.

- http://cs.wikipedia.org/wiki/Gramnegativn%C3%AD_bakterie

Gramnegativní bakterie mají [buněčnou stěnu](#) tvořenou převážně [liposacharidy](#) a svrchu překrytou druhou [membránou](#). Následkem toho vycházejí tyto [bakterie](#) z [Gramova barvení](#) zbarvené růžově, na rozdíl od [grampozitivních bakterií](#), které se jeví jako modrofialové.

Gramnegativní bakterie obsahují v buněčné stěně 17 aminokyselin včetně aromatických aminokyselin. Netvoří spory, množí se příčným dělením. Některé druhy tvoří pouzdra či pochvy. Pohybují se pomocí bičíků nebo plazivě po substrátu.

Mnozí zástupci gramnegativních bakterií jsou [patogeny](#), obecně se považují za nebezpečnější než zástupci skupiny grampozitivních bakterií. Důvod je zpravidla spatřován v některých komponentech jejich buněčné stěny, zejména pak v liposacharidové vrstvě.