**Bakterielle Stress-Varianten, Persister, Eberth-Koch´sche Varianten, bakterielle L-Formen, filtrierbare Bakterien** http://en.wikipedia.org/wiki/L-form_bacteria, **langsam wachsende Bakterienpopulationen, Bakterielle Yin-Yang Varianten nach Zhang, einschl. Nanobakterien / Nanoben**

**Bacterial stress variants, Persisters, Eberth, Koch variants, bacterial L-forms, filterable microbes** http://en.wikipedia.org/wiki/L-form_bacteria**, slow bacterial infections, bacterial Yin-Yang variants according to Zhang, including nanobacteria / nanobes**

L-Formen = **Sonderformen der bakteriellen Pleomorphie**. http://www.erlebnishaft.de/stressvar2.pdf

„Since many bacteria in the classical form pass through 450 Nanometer pore filters, the term „**filterable microbes**“ should be reserved for **variants which pass through a porosity of 250 Nanometer or less**. Most CWD (cell wall defective) forms include filterable, viable units, but this is not invariable, depending on the age of the culture and nutrients supplied.” In **Mattman L. (2001)** Cell Wall Deficient Forms. Stealth Pathogens. CRC Press 3rd Edition, p.11

"Da viele Bakterien in ihrer klassischen Form 450 Nanometer Poren Filter passieren, sollte der Begriff "**filtrierbare Mikroben**" **für Varianten reserviert werden, die eine Porosität von 250 Nanometer oder weniger passieren**. Die meisten CWD (Zellwand defekte) Formen sind filtrierbar, lebensfähige Einheiten, aber dies ist nicht immer gleich, es hängt ab vom Alter der Kultur und den verfügbaren Nährstoffen." In **Mattman L. (2001)** Cell Wall Deficient Forms. Stealth Pathogens. CRC Press 3rd Edition, p.11
Stress-Granula, SG (2019) https://en.wikipedia.org/wiki/Stress_granule

- ➔ Lebensstrukturenvergleich http://www.xerlebnishaft.de/lebensstrukturenvergleich.pdf
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  **« The intent of this review is to prove the origin and existence of consciousness or sentient awareness in microorganisms based on which these social behaviours originated and its comparison to multifaceted conscious behaviours observed in higher beings; its correlation to quantum generated consciousness which enables organisms to understand and judge perceptions, which gives the organism a prospect to behave as per will. »**

- ➔ Borrelien – Populations – Dynamik http://www.erlebnishaft.de/stressvar2.pdf
- ➔ Warum Borrelien infektiös bleiben trotz intensiver antibiotischer Behandlung http://www.xerlebnishaft.de/escape.pdf Why Borrelia remain infectious despite intensive antibiotic treatment http://www.xerlebnishaft.de/escape_eng.pdf
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| **Obligat** intrazelluläre Krankheitserreger | **Facultativ** intrazelluläre Krankheitserreger |
|---|---|
| Chlamydia spp, Coxiella burnetii, Ehrlichia spp, Erwinia spp, Rickettsia spp, Parachlamydia spp Mycobakterium leprae, Tropheryma Whipelei, Waddlia etc. | Borrelia spp, Treponemen, Leptospiren, Bartonellen, Mycoplasmen, Brucella spp, Legionella spp, Listeria spp, Mycobacterium spp, Neisseria spp, Salmonella spp, Shigella spp, Yersinia spp, Babesia spp, Toxoplasma, Protomyxzoa spp, Trypanosomes, Streptokokken spp, Candida etc. |

http://de.wikibooks.org/wiki/Medizinische_Mikrobiologie:_Atypische_Bakterien

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## Cell wall defective forms, stress variants, bacterial persisters, L-Forms

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**“1. The isolation of a filter-passing diplococcus from the blood of certain cases of influenza by means of a special cultural medium is described. The experimental effects of this organism, while in the filterable state, upon rabbits, is discussed. 2. A procedure is formulated for inducing at will both a filterable and a**

**non-filterable state in bacteria. Mention is made of a series of experiments in which both the filterable and the non-filterable state has thus been induced in a series of well-known bacteria comprising a variety of types. 3. It is postulated that a majority, if not all, known bacteria can and do exist in a filterable and in a non-filterable state. 4. A preliminary report of the isolation of microbes in the blood, not only of cases of influenza, but also from common cold, rheumatic fever, arthritis, from Staphylococcus bacteriophage and Besredka's Staphylococcus Antivirus is presented in evidence of the ubiquity of the procedure. 5. An explanation of the chemical basis for the existence of bacteria, both in the filterable and non-filterable states, in the animal and human body, and in culture, is proferred. 6. The relation of this chemical concept to microbic infection, and the state of microbes in the body during infection is discussed."**


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**« Summary: Many parasitic bacteria live in the cytoplasm of multicellular animals, but only a few are known to regularly invade their nuclei. In this study, we describe the novel bacterial parasite "*Candidatus* Endonucleobacter bathymodioli" that invades the nuclei of deep-sea bathymodiolin mussels from hydrothermal vents and cold seeps. … We first discovered the intranuclear parasite "*Ca.* E. bathymodioli" in *Bathymodiolus puteoserpentis* from the Logatchev hydrothermal vent field on the Mid-Atlantic Ridge. Using primers and probes specific to "*Ca.* E. bathymodioli" we found this intranuclear parasite in at least six other bathymodiolin species from vents and seeps around the world. Fluorescence *in situ* hybridization and transmission electron microscopy analyses of the developmental cycle of "*Ca.* E. bathymodioli" showed that the infection of a nucleus begins with a single rod-shaped bacterium which grows to an unseptated filament of up to 20 µm length and then divides repeatedly until the nucleus is filled with up to 80 000 bacteria. The greatly swollen nucleus destroys its host cell and the bacteria are released after the nuclear membrane bursts. Intriguingly, the only nuclei that were never infected by "*Ca.* E. bathymodioli" were those of the gill bacteriocytes. These cells contain the symbiotic sulfur- and methane-oxidizing bacteria, suggesting that the mussel symbionts can protect their host nuclei against the parasite. Phylogenetic analyses showed that the "*Ca.* E. bathymodioli" belongs to a monophyletic clade of *Gammaproteobacteria* associated with marine metazoans as diverse as sponges, corals, bivalves, gastropods, echinoderms, ascidians and fish. We hypothesize that many of the sequences from this clade originated from intranuclear bacteria, and that these are widespread in marine invertebrates".**

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## Therapie, therapy

- **Chronic inflammatory disorders http://www.kabilahsystems.de/ko-erreg_eupd1.pdf**

Back to top: http://www.erlebnishaft.de/stressvar1.pdf

"Da viele Bakterien in ihrer klassischen Form 450 Nanometer Poren Filter passieren, sollte der Begriff "filtrierbare Mikroben" fÃ¼r Varianten reserviert werden, die eine PorositÃ¤t von 250 Nanometer oder weniger passieren. Die meisten CWD (Zellwand defekte) Formen sind filtrierbar, lebensfÃ¤hige Einheiten, aber dies ist nicht immer gleich, es hÃ¤ngt ab vom Alter der Kultur und den verfÃ¼gbaren NÃ¤hrstoffen."Â  LÃ¶hnis F (1916), Almquist E (1922), Relman DA (1999), Wainwright M (1999), Klineberger E (1931, 1947, 3x1949,2x1951, 1960), Kendall AI (1931), Dienes (1947, 1951), Fleming (1950), Delamater ED (1951), Vigoroux (1956), Hanoun C (4x1957) Persister cells are phenotypic variants of regularly growing bacteria and survive lethal antibiotic treatment in a nongrowing, dormant state. Upon termination of treatment, the resuscitation of persister cells can replenish the population. Our Review focuses on the diverse molecular mechanisms that underlie bacterial persister formation and drive the heterogeneity of these cells. PMF, proton-motive force. Abstract.Â  You are going to email the following Mechanisms of bacterial persistence during stress and antibiotic exposure. Message Subject (Your Name) has forwarded a page to you from Science. Message Body (Your Name) thought you would like to see this page from the Science web site.