

## Probiotika, Milchsäurebakterien oder Hefen, das Mikrobiom Probiotics, bacteria or yeasts and the microbiome

**Milchsäurebakterien und andere Symbiotika.** <http://de.wikipedia.org/wiki/Probiotikum>

(2013) **"Probiotics Revisited"** The Medical Letter. Vol 55 - Issue 1407

**"Probiotics are live, nonpathogenic microorganisms (usually bacteria or yeasts) that have been used for centuries for their potential health benefits. They are currently marketed for prevention and treatment of a variety of disorders, including diarrhea, irritable bowel syndrome and inflammatory bowel disease...."**

<http://secure.medicalletter.org/cannotaccess?ac=2&a=1267b&t=article&n=10401&p=tml&title=Probiotics&i=1267>

**„Probiotika sind lebende, nicht-pathogene Mikroorganismen (meist Bakterien oder Hefen), die seit Jahrhunderten wegen ihres potenziellen gesundheitlichen Nutzens verwendet worden sind. Sie werden derzeit für die Prävention und die Behandlung bei einer Reihe von Krankheiten, einschließlich Durchfall, Reizdarmsyndrom und entzündlichen Darmerkrankungen vermarktet.“**

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### Hefen, Yeast, Fungi

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**„Given the right immunocompromised host, virtually any fungus can kill a human being“.**

**„Ein immungeschwächter Wirt, kann von jedem Pilz getötet werden“**

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**"Fungi growing feebly may be stimulated to heavy growth by certain antibiotics and simultaneously produce wall-free forms. This is antibiotic-dependent growth of a fungus, rather than variant induction. This may be one reason why fungi invade antibiotic-treated patients".**

**„Das üblicherweise geringe Wachstum von Pilzen kann man durch Zugabe von Antibiotika erheblich stimulieren wobei die Pilze auch zellwanddefekte Formen bilden. Dabei handelt es sich aber vor allem um ein Antibiotika-abhängiges Wachstum von Pilzen, weniger häufig wohl um die Induktion von zellwand-defekten Pilz-Varianten. Diese Tatsache könnte ein Grund dafür sein, warum Pilze in Antibiotika-behandelte Patienten auch eindringen können.“**

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**“The real time PCR assay developed here might become a convenient tool enabling an accurate, fast and sensitive detection of probiotic lactobacilli commercially used in food”.**

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**„In conclusion, these data show that the immunomodulatory effects of the microbiota in humans are not limited to the mucosal immune system but extend to the systemic immune system.“**

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**“This short review looks at the current literature in this area and attempts to identify if there is a scientific basis to inform the cautious clinical use of probiotics either alone or in combination with antibiotics. Whilst the evidence base is to date rather thin, there is sufficient to allow for a cautious support for such ideas. This review also identifies those areas in which further study is required before the general use of probiotics in the treatment of infection may be fully supported.”**

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