

Probiotic supplementation may reduce use of antibiotics, scientific analysis shows



Global demand exists for new ways to reduce antibiotic use, given the urgent public health threat of antibiotic resistance. The systematic review, which was authored by an international group of ten scientists, reviewed studies that administered *Lactobacillus* or *Bifidobacterium* to healthy people to determine the impact of probiotics on incidence or duration of common infectious diseases. In all studies that also tracked antibiotic use, the study found that healthy infants and children who consumed probiotics rather than a placebo were at least 29% less likely to receive or .consume antibiotics

Author Andi Shane MD MPH, Emory University School of Medicine, says, "Taken together, the studies we included in this analysis demonstrated that probiotic supplementation is more effective than placebo for reducing the incidence or duration of certain illnesses: acute respiratory tract infections, acute digestive infections, and acute ear infections. This analysis shows that, in addition to those advantages, ".probiotic supplementation may reduce the use of antibiotics

This reduced antibiotic prescribing may occur because probiotics reduce incidence and duration of infections. If people stay healthy or get healthy sooner, antibiotics may not be prescribed. Alternatively, probiotics may serve as a tool physicians use as a replacement for antibiotics for self-limited illnesses that don't require antibiotics. Previous analyses show a high prevalence of unnecessary or inappropriate antibiotic prescriptions--contributing to the critical public health threat of antimicrobial resistance and inciting hospitals worldwide to implement antibiotic stewardship programs. Furthermore, antibiotics may have implications for children's long-term health, given the emerging links between .increased use of the drugs in childhood and chronic diseases later in life

This publication is proof-of-concept that taking probiotics on a regular basis deserves consideration as a way to reduce the over-prescription of antibiotics," says Prof. Daniel Merenstein MD, Georgetown University School of Medicine. "Given the potential public health risks of ".widespread antibiotic misuse, innovative strategies for addressing this problem are urgently needed