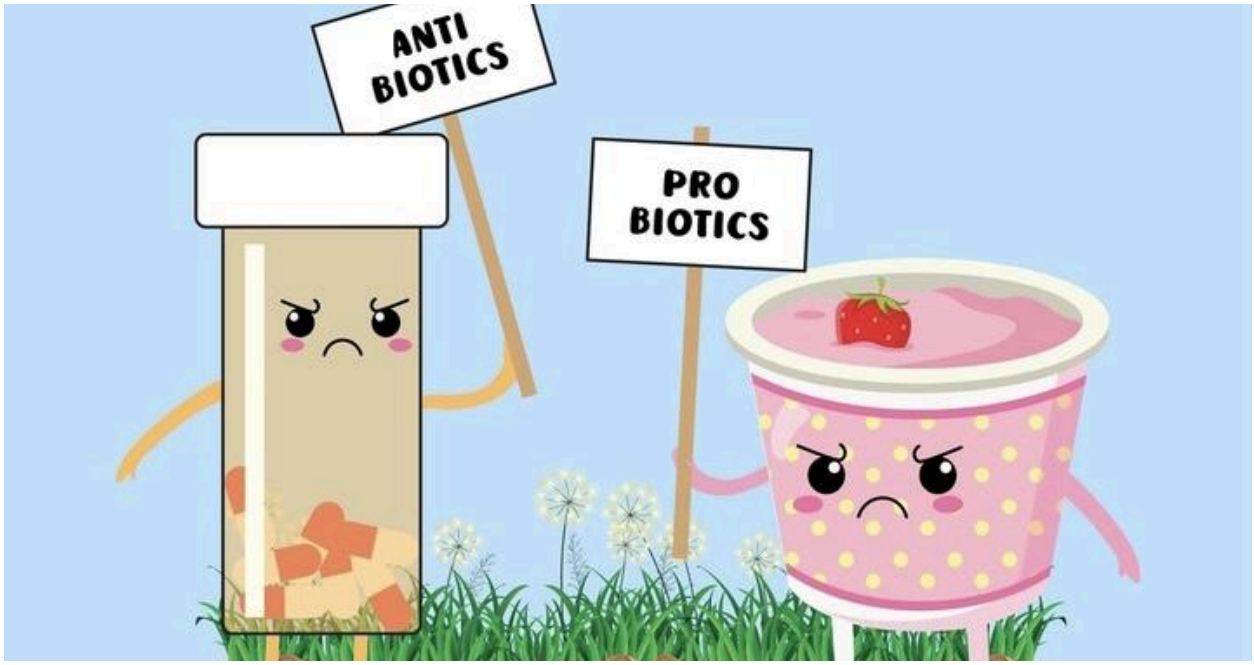
Should I take probiotics with antibiotics

By Dr.HMT



Antibiotics are commonly prescribed to almost half of the population in the UK annually, both for common ailments and in hospitals to combat severe infections. Although antibiotics have revolutionized the field of medicine, they do have the drawback of causing unwanted gastrointestinal side effects.

Contrastingly, probiotics are renowned for their capacity to enhance gut health. This raises the question: Should I take probiotics with antibiotics? Let's jump into this matter.

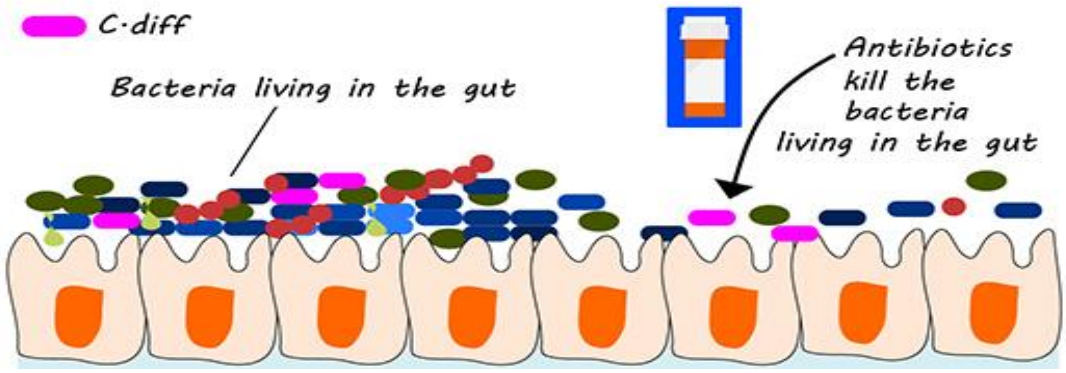
Antibiotics and gut health

The gut microbiome consists of trillions of microorganisms that harmoniously coexist in your digestive system. Beneficial microbes are responsible for regulating harmful ones and aiding in various functions like digestion, immune support, skin health, and mental well-being. Factors such as diet, lifestyle choices, and medications can disrupt the delicate balance of the gut microbiome.

Antibiotics as major disruptors of gut microbiota

Antibiotics disrupt the gut microbiota by eliminating both good and bad bacteria. While they effectively fight against harmful bacteria, they unintentionally remove the beneficial bacteria in your gut. This disruption can lead to side effects like nausea, vomiting, gas, diarrhea, and yeast infections which are observed in about 5- 35% of patients.

Although most cases are generally mild, in some cases, it can cause an overgrowth of pathogenic bacteria like Clostridium difficile leading to colonic inflammation and bloody diarrhea.



Using probiotics in combination with antibiotics

Despite the potential negative impact on the gut microbiome, antibiotics are necessary for treating infections, and their benefits generally outweigh the drawbacks. This is where probiotics come into play, offering a solution.

🦠 Probiotics resolve antibiotic-associated diarrhea

Antibiotic-associated diarrhea (ADD) is one of the most common side effects of antibiotics. A Cochrane review of 23 studies (3938 participants) reported that probiotics can significantly reduce the incidence of antibiotic-associated diarrhea.

Moreover, a meta-analysis of research involving 6851 participants shows that probiotics are a useful and safe prevention strategy for Clostridium difficile infection.

🦠 Probiotics correct dysbiosis or bacteria imbalance caused by antibiotics

A recent review of 29 clinical trials found that co-administration of probiotics helped to preserve gut microbial diversity and ameliorate the changes to gut microbial composition caused by antibiotics.

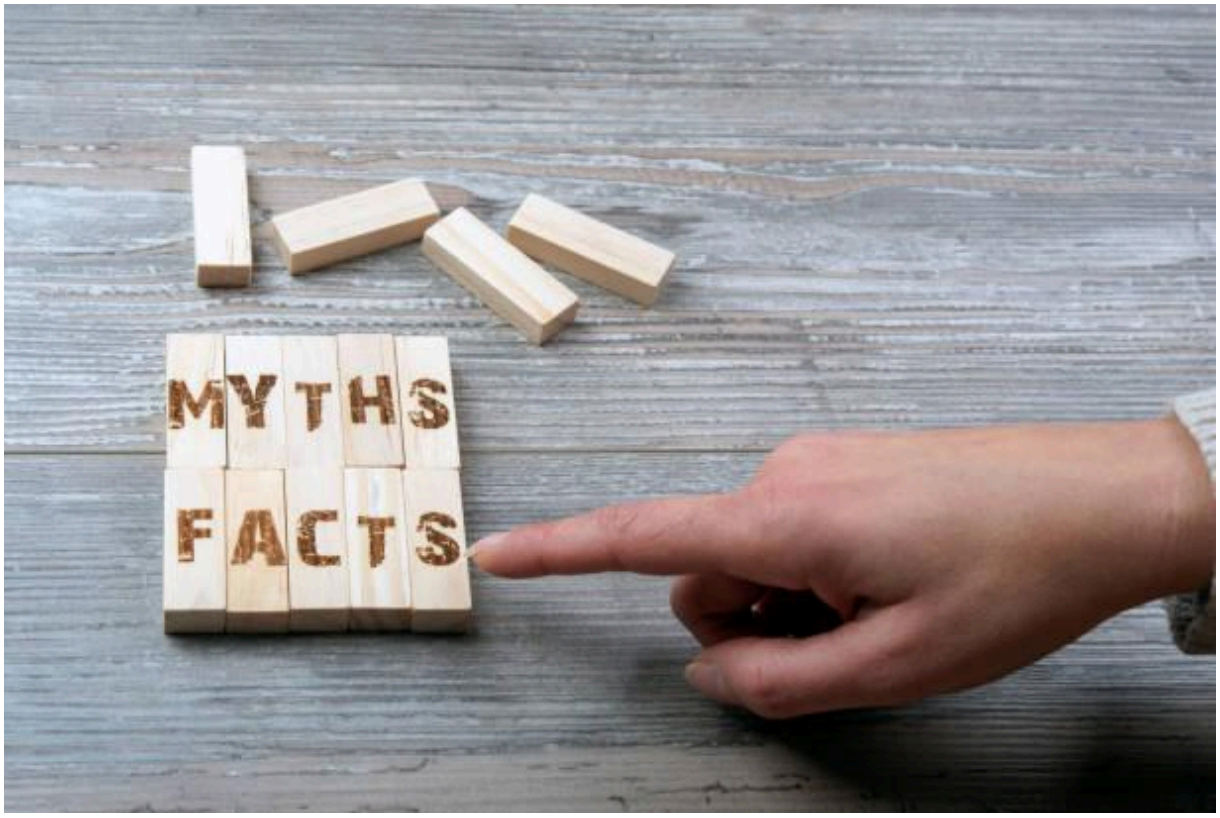
In 2023, the Journal of Therapeutic Advances in Infectious Disease published a current understanding of antibiotic-associated dysbiosis and approaches for its management. In this article, the authors mentioned that probiotic bacteria are highly promising in preventing or restoring the equilibrium disturbed by antibiotics in the gut microbiota.

How should I take probiotics with antibiotics?

You can start your probiotic the same day you start the antibiotic but do not take it at the same time as the antibiotic. It is best to give a 2-hour gap between antibiotics and the probiotic supplement.

You should continue the probiotics for several weeks even after your course of antibiotics has finished. Most studies reporting the beneficial effects of probiotics co administration involved the continuation of probiotics for at least a month after the end of antibiotic use.

Facts and Fiction about Probiotics with Antibiotics



❓ **Fiction:** Combining probiotics and antibiotics is futile because antibiotics wipe out the beneficial bacteria.

✅ **Fact:** Despite the intuitive reasoning, compelling studies have demonstrated the advantages of concurrently consuming probiotics and antibiotics.

❓ **Fiction**: Probiotics hinder the restoration of the gut microbiome.

✅ **Fact**: This claim originated from a limited study that cast doubt on the efficacy of combining probiotics and antibiotics. The study involved 21 participants and revealed that probiotics were less effective than no treatment at all in aiding microbial recovery.

However, numerous extensive and meticulously conducted trials have already demonstrated that probiotic supplementation prevents the decline in microbial diversity caused by antibiotics. Consequently, a single small-scale study cannot undermine the findings of larger, high-quality clinical trials.

Which are the best probiotics to take alongside antibiotics?

Lactobacillus and Bifidobacterium blends, Saccharomyces boulardii, and soil-based Bacillus species are the most often studied probiotics in clinical trials.

So, Should I take probiotics with antibiotics?

You will now figure out that my answer to that question is “yes”.

While taking antibiotics is not entirely avoidable and the negative impact of antibiotics on the gut microbiota is well known, our best solution is to rely on probiotics to reduce the side effects of antibiotics and restore our gut microbiota to a healthy state.

Moreover, based on available clinical findings, there is no reason to withhold probiotic interventions while on antibiotics.