

Fact sheet

Centre for Community Child Health

Probiotics for infants and children

In recent years, probiotic supplementation in our foods and probiotics promoted as dietary supplements have become quite common. You will usually see probiotics advertised as an aid to gut health. For babies and children, probiotics are promoted as possibly being helpful for conditions as varied as diarrhoea, infant colic and allergy. However, the evidence is mixed on whether probiotics are actually effective for a range of infant conditions.

All babies are born with a sterile gut. After birth, babies naturally introduce bacteria to their gut through the breastmilk or formula they drink and later, through the food they eat. These bacteria are an important part of the way that humans digest food and extract all the necessary nutrients. They also play a role in your baby's developing immune system. Probiotic supplements are intended to aid the bacterial colonisation of your baby's gut or to restore it when it has been disrupted.

Importantly, probiotics have strain-specific effects, which means that different types of probiotics will act in different ways. Probiotics as a term is equivalent to canine for different dog breeds; it gives you a broad idea, but no indication of whether you're faced with a Chihuahua or a Doberman.

The most common groups of probiotics are:

- *Lactobacillus*
- *Bifidobacterium*
- *Streptococcus*
- *Saccharomyces boulardii*.

All of these different groups of probiotics can have different effects in the body.



Research indicates that probiotics are safe and well-tolerated in normal, healthy infants and children. Good tolerance has also been observed in premature infants, very low birth weight babies and in HIV-infected children and adults. Probiotics are also safe to use in late pregnancy. There have been some cases of probiotic septicaemia in immunocompromised adults and children, but these have occurred in very unwell individuals with complex medical problems.

The evidence for probiotic use to treat a range of infant conditions is mixed. While there have been quite a number of studies of probiotic use in adults, there have been very few in children.

At the moment, the research evidence suggests that probiotics could help to manage allergies and provide relief from eczema symptoms. Probiotics might also help to reduce the frequency and duration of diarrhoea. However for infant colic, evidence indicates that probiotics are of limited use.

There has not yet been sufficient research to tell us which particular strains might be most effective, for which conditions, in what doses, and when. Before you consider adding probiotics to your own or your baby's diet, talk with your child and family health nurse or GP.

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