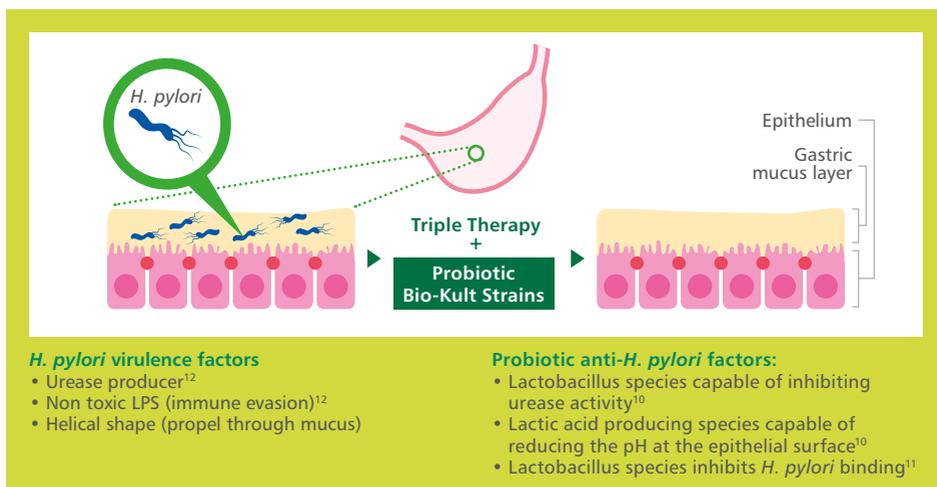


# Eradication of *Helicobacter pylori* in Children

## Evidence series

- *Helicobacter pylori* (*H. pylori*) is a Gram-negative spiral bacillus that colonises the luminal surface of the gastric epithelium.<sup>1</sup> (Figure 1)
- Infection is associated with numerous diseases such as gastritis, peptic ulceration, gastric mucosa associated lymphoid tissue lymphoma and gastric cancer.<sup>2</sup>
- *H. pylori* has also been implicated in diseases of extra-digestive origin including haematological pathologies, cardiovascular diseases and neurological disorders.<sup>2</sup>
- *H. pylori* is generally acquired in childhood.<sup>3</sup>
- In children with duodenal ulcers over 90% were infected with *H. pylori*.<sup>4</sup>
- The survival of *H. pylori* within the stomach relies on numerous features some of which probiotics are able to antagonise (Table 1).
- **Probiotics enhanced the efficacy of triple therapy whilst also improving tolerance to treatment.**<sup>2</sup>

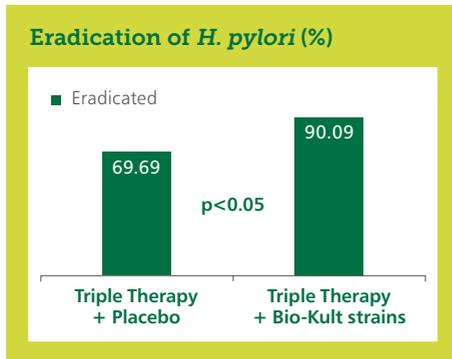
**Figure 1** Probiotics can enhance the efficacy of *H. pylori* eradication therapy



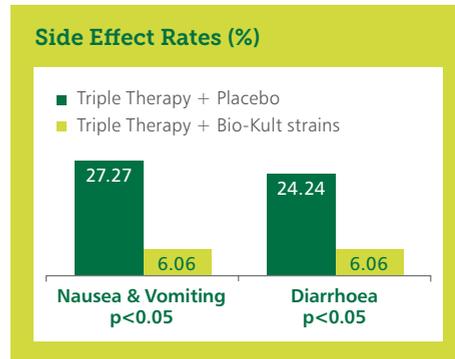
# The evidence behind Bio-Kult probiotics

- Several studies demonstrate that multi-strain probiotic preparations are more effective in counteracting the growth of pathogens when compared with single strain preparations.<sup>5-8</sup>
- In a double-blind, randomised, placebo controlled study in children Bio-Kult strains, taken in addition to standard triple therapy, lead to a statistically significant improvement in the eradication of *H. pylori* (Figure 1).<sup>9</sup>
- Bio-Kult strains effectively reduce the adverse gastrointestinal affects commonly associated with antibiotic usage (Figure 2).<sup>9</sup>
- Clinical research demonstrates that the augmentation of standard triple therapy with Bio-Kult strains offers the benefits of increasing the eradication rate of *H. pylori* whilst reducing antibiotic side effects; a finding that may also enhance compliance and therefore help to reduce antibiotic resistance (Figure 3).

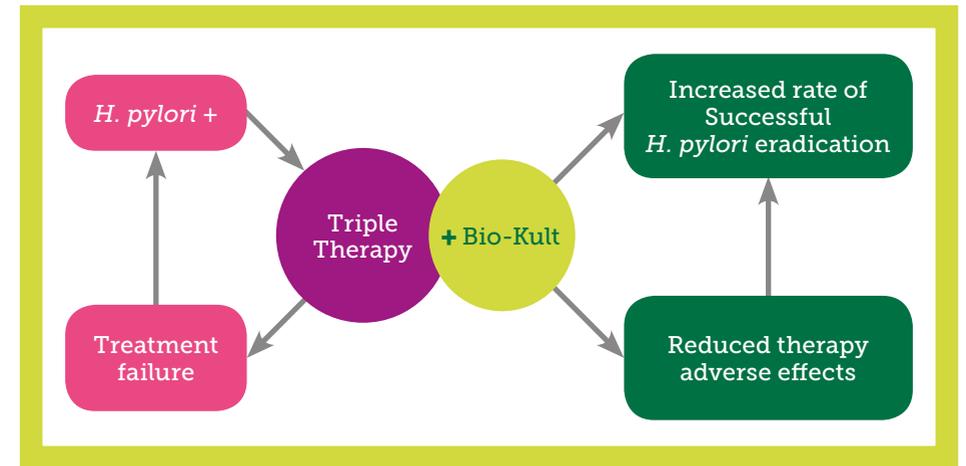
**Figure 1** Bio-Kult significantly increases the eradication rate of *H. pylori*



**Figure 2** Bio-Kult strains significantly reduce triple therapy associated diarrhoea, nausea and vomiting

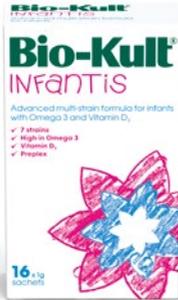


**Figure 3** Bio-Kult strains significantly increase the eradication rate of *H. pylori* and decrease the rate of adverse effects of the triple therapy



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<b>LIVE BACTERIAL CULTURES</b>	<i>Lactobacillus casei</i> PXN 37 <i>Lactobacillus rhamnosus</i> PXN 54 <i>Streptococcus thermophilus</i> PXN 66 <i>Lactobacillus acidophilus</i> PXN 35 <i>Bifidobacterium breve</i> PXN 25 <i>Lactobacillus delbrueckii ssp. bulgaricus</i> PXN 39 <i>Bifidobacterium infantis</i> PXN 27
<b>OTHER INGREDIENTS</b>	DHA + EPA Powder: >1mg per sachet (Omega-3 fatty acid from fish) Vitamin D <sub>3</sub> : 2.5mcg per sachet (50% of Nutrient Reference Value) Preplex® (fructooligosaccharide (FOS) and gum acacia)
<b>TOTAL VIABLE COUNTS (CFU)</b>	1 x 10 <sup>9</sup> CFU/sachet
<b>USAGE GUIDELINES</b>	½ -1 sachet once a day mixed with milk, water or food (start with ¼ of a sachet for babies <6 months) during the antibiotic treatment and for least 2 weeks after completion of the antibiotic course

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+44 (0) 1460 243230 [www.protexin.com](http://www.protexin.com) [info@protexin.com](mailto:info@protexin.com)

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