Ecologic® 825

IBD
Prolongation of remission time

Inflammatory Bowel Disease (IBD) is the umbrella name for ulcerative colitis, pouchitis and Crohn’s disease. All three diseases in the IBD group are characterized by flare-ups and remission. IBD affects over 1.2 million people in the USA and 2.2 million in Europe (2004). These numbers are expected to show an absolute growth of 7% between 2005-2025. Probiotics can be used to induce and prolong remission time (figure 1).

The intestinal mucosal barrier has evolved to maintain a delicate balance between absorbing essential nutrients while preventing the entry to harmful contents. Disruption of this barrier has been implicated as an important pathogenic factor in IBD, which results in an overactive immune system, thus leading to mucosal inflammation. Several studies have been conducted to measure the effects of probiotics on IBD patients. Overall, probiotics seem to have most effect on patients with ulcerative colitis or pouchitis. The effects of probiotics were shown to be highly dependent on the type of bacterial strains used. Research has shown that probiotics have strain-specific effects and that multispecies probiotics are more effective than mono-strain probiotics. For each application of probiotics, the right combination of strains must be selected.

Ecologic® 825
Ecologic® 825 is a multispecies probiotic specifically developed to extend remission time in IBD patients. The bacterial strains of Ecologic® 825 have been specifically selected for their capacity to (figure 2):

1. inhibit various pathogens associated with IBD (C. difficile, E. coli) (level 1)
2. improve barrier function (level 2)
3. induce the production of anti-inflammatory cytokines (level 3)

Figure 1: IBD is characterised by periods of inflammation (flare-up) and no inflammation (remission). Ecologic® 825 is used to prolong the remission time in IBD patients.

Figure 2: Ecologic® 825 is a multispecies probiotic active on three levels in the intestine.
**Clinical evidence**

Several in vitro studies and animal models have shown the effect of Ecologic® 825 in improving the barrier function. In a randomized double-blind placebo-controlled trial the effects of Ecologic® 825 were studied in pouchitis patients. The results show that supplementation with Ecologic® 825 restored the increased gut permeability in patients with chronic pouchitis.

Another clinical study in overweight subjects showed that 8 weeks of supplementation of Ecologic® 825 decreases markers of gut permeability (zonulin, alpha-1-antitrypin and hsCRP) and thereby positively influences the epithelial barrier function of those patients. In addition, Ecologic® 825 has been tested in an open label study with 14 patients suffering from ulcerative colitis and Crohn’s disease. Patients used the product for two months and were asked to fill in a questionnaire. This pilot study showed that Ecologic® 825 has a beneficial effect on patients with IBD. This effect is seen in UC patients where 77% experienced benefit from the usage of Ecologic® 825. In addition 59% of CD patients felt better after using it for 2 months (figure 3). Furthermore, Ecologic® 825 has been tested in an open label study with 14 patients with health problems related to intestinal barrier dysfunction. This study showed that Ecologic® 825 improves parameters of barrier function.

**Figure 3:** Effects of Ecologic® 825 after two months of usage in patients with ulcerative colitis and Crohn’s disease, using questionnaires or ‘self-reported’.

**Applications**

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<thead>
<tr>
<th>Application</th>
<th>Prolongation of remission time in IBD patients.</th>
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<tr>
<td>Product quality</td>
<td>Bacterial strains combined with a unique Winclove technique that ensures biological activity, gastro-intestinal survival and stability of the probiotic strains.</td>
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**Colony forming units (CFU)**

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<th>Dosage</th>
<th>2.5 x 10^9 CFU gram.</th>
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<tr>
<td>Treatment period</td>
<td>During remission, to extend the remission time.</td>
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<tr>
<td>Application form</td>
<td>Powder (delivered in bulk, sachets or capsules).</td>
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<tr>
<td>Stability</td>
<td>Stable at room temperature.</td>
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<tr>
<td>Marketing</td>
<td>Exclusively, on a co-branding basis. We are searching for partners with their own brand selling medical-endorsed.</td>
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**Safety and Quality Profile**

All probiotic strains in Ecologic® 825 have the QPS (Qualified Presumption of Safety)- status. Winclove is a NSF International Certified GMP Facility for manufacturing dietary supplements.

Winclove’s food safety management system is ISO 22000:2005 certified for the development and production of pre-and probiotics.

**Ecologic®825 publications**

2. Data from the Dutch National Institute for Public Health and the Environment (RIVM).

**References**

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**Winclove Probiotics**

It’s all about biology