FloraMyces™ may be helpful for:
- Diarrhoea - Antibiotic-associated diarrhoea & Traveller’s diarrhoea
- Imbalanced GI mucosal immune function
- Restoration of optimal GI microflora and mucosal health
- Dysbiosis
- Opportunistic bacterial overgrowth
- Opportunistic Candida and other yeast overgrowths
- H.pylori

**OVERVIEW**
Unlike other products containing this organism, FloraMyces™ is dairy and lactose free and does not require refrigeration – it is stable at room temperature for up to 2 years. Benefits of this source may include broader bioactivity and increased protection of the digestive mucosa. Also, it is this strain that has been most studied for its efficiency in the prevention of antibiotic-associated diarrhoea, and as a general supplement for optimal gastrointestinal health.

**KEY FEATURES:**
Gut ecology is a complex system based on the equilibrium of different bacterial species. Disturbance of this equilibrium (dysbiosis) by infectious diseases and very often by antibiotic treatments can lead to clinical symptoms of diarrhoea. Severe antibiotic-associated diarrhoea can give rise to Clostridium difficile diarrhoea, a severe disorder which has a high rate of relapse and is difficult to cure with conventional treatments. The use of probiotics, particularly Saccharomyces boulardii, as alternatives to antibiotics, is therefore becoming more attractive.

Through its mannose-dominant outer membrane, S. boulardii has the ability to bind E. coli and Salmonella - the bacteria responsible for diarrhoea, especially traveller’s diarrhoea. The large cell surface of the yeast allows the binding of many bacterial cells, limiting their capacity to bind to the intestinal epithelium. In this way the bacteria are likely to be eliminated in the stool.

**THE HISTORY OF SACCHAROMYCES BOULARDII**
Interest in S. boulardii began around 1920 when French microbiologist Henri Boulard living in Vietnam noticed that consuming a particular local drink alleviated symptoms of diarrhoea in villagers afflicted by an epidemic of cholera. The drink was made from tropical fruits such as litchi and mango. Dr. Boulard isolated an active agent from this drink, which proved to be a live yeast of natural origin which now bears his name, Saccharomyces boulardii. Modern science has now elucidated most of the mechanisms of action of S. boulardii, such as the inactivation of C. difficile toxins, competitive exclusion of pathogens like E. coli and various yeasts, specific immune stimulation of the gut, and restoration of functional lactic acid-producing flora.
MECHANISMS OF ACTION

S. boulardii is naturally resistant to antibiotics, so it can be given to patients receiving antibiotics (Czerucka, 2007). It has been shown to stimulate enzymes of the intestinal brush-border, specifically, sucrase, lactase and maltase (Ibid). The probiotic properties of this organism include: (a) Binding of enterohaemorrhagic E. coli and Salmonella; (b) Protection of the digestive mucosa; (c) Promotion of growth of lactic acid producing bacteria in the gut; (d) Protection against Clostridium difficile toxins; and (e) Stimulating effects on the intestinal mucosa and mucosal immunity.

S. boulardii helps preserve tight junctions in the small intestine, decreases inflammatory cytokine production in the gut, and stimulates increased sIgA levels and immune defense in the gut. Additionally, pathogenic bacteria adhere to S. boulardii in the intestinal lumen, resulting in decreased systemic invasion (McFarland, 2010).

In a placebo-controlled study (Surawicz et al, 1989) on patients under antibiotic treatment, compelling results were obtained. Although S. boulardii does not suppress all antibiotic-associated diarrhoea, the fact that it reduces the risk by half is significant (Marteau, 2000). S. boulardii may also be helpful for eradication of H. pylori. A systematic review and meta-analysis showed that the addition of S. boulardii to standard H. pylori eradication treatments significantly increased eradication rates and decreased therapy-related side-effects (Szajewska, 2015). Additionally, S. boulardii has been shown to improve histology and quality of life in patients with IBS-D when added to standard treatment with ispaghula (psyllium) husk (Abbas, 2014) compared to placebo with ispaghula husk, although other studies failed to corroborate this effect. Regarding Crohn’s disease, among a small cohort of Crohn’s patients in remission, 37.5% of those treated with the NSAID mesalamine for six months experienced a clinical relapse compared to 6.25% of those treated with mesalamine plus S. boulardii. Research supports a potential synergy between S. boulardii (Guslandi, 2000) and mesalamine for IBS-D as well: S. boulardii alone did not significantly improve IBS-D symptoms, but given in combination with mesalamine, improvement was greater than with mesalamine alone (Bafutto, 2013).

GENETIC IDENTIFICATION

For many years taxonomists have discussed whether S. boulardii was a new species of Saccharomyces or a specific strain or variant of Saccharomyces cerevisiae.

Mitochondrial DNA analysis (Mallie, 2001) and microsatellite typing techniques (Hennequin, 2001) have shown that S. boulardii is a unique strain or variant of S. cerevisiae, but not a new species of the genus Saccharomyces. The proper taxonomic name is therefore Saccharomyces cerevisiae boulardii (Mallie, 2001).
Dairy/lactose-free strain of Saccharomyces boulardii

FloraMyces™

PRESCRIBING INFORMATION:

> Saccharomyces cervasiae (Boulardii) has not shown to be contraindicated during pregnancy or lactation.
> S. boulardii has been clinically trialled in infants and children without any serious side effects being reported.
> Patients with long term Dybiosis are advised to start at a lower dose.
> Patients with an IGE mediated yeast allergy may be allergic to S. boulardii.
> Take S. boulardii 2 hours away from any antifungal medications, as antifungal medications may decrease its effectiveness.

WARNINGS:

Seek medical advice if diarrhoea persists for more than:
> 6 hours in infants under 6 months.
> 12 hours in children under 3 years.
> 24 hours in children aged 3 to 6 years.
> 48 hours in adults.

If symptoms persist consult your healthcare practitioner.

ACTIVE INGREDIENTS PER CAPSULE:
Saccharomyces Cerevisiae (Boulardii) 500 mg

EXCIPIENT INGREDIENTS PER CAPSULE:
Hypromellose

DOES NOT CONTAIN THE FOLLOWING:
Gluten, dairy, lactose, seeds or nuts.

PACK SIZE:
60 per bottle.

DIRECTIONS FOR USE:
Take 1 to 2 capsules per day, or as directed by your healthcare professional.

SUGGESTED ADULT DOSAGE RANGE FOR CONDITIONS:

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>ACUTE</th>
<th>MAINTAINANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probiotic digestive support;</td>
<td>1-2 capsules daily for 2-4 weeks</td>
<td>1 capsule daily</td>
</tr>
<tr>
<td>Relief of digestive discomfort</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Candida</td>
<td>2 capsules daily for 2-4 weeks</td>
<td>1 capsule daily</td>
</tr>
<tr>
<td>Acute diarrhoea</td>
<td>2-3 capsules for 2-3 days</td>
<td>1 capsule daily</td>
</tr>
<tr>
<td>Antibiotic associated diarrhoea</td>
<td>2-3 capsules daily</td>
<td>1 capsule daily</td>
</tr>
<tr>
<td>Immune support</td>
<td>1-2 capsules daily</td>
<td>1 capsule daily</td>
</tr>
</tbody>
</table>

Designed, encapsulated & packed in Australia from local and imported ingredients.
REFERENCES


