AOR CODE: AOR04152

Premium

**Saccharomyces boulardii**

**A Natural Solution for Gastrointestinal Disorders**

- A non-colonizing, non-pathogenic probiotic yeast
- Helps relieve diarrhea related to travel, antibiotic use and infections
- Provides a clinically studied dose of 5 billion units per capsule

Gluten Free  Vegan  Non-GMO  Constipation / Diarrhea  Gastrointestinal Health

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<th>AOR Code</th>
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<td>AOR04152</td>
<td>90 VEGI-CAPS</td>
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**Details**

*Saccharomyces boulardii* is a beneficial, non-pathogenic, non-colonizing species of yeast. It has been clinically recognized for its effectiveness in reducing the symptoms of antibiotic-associated diarrhea and *Clostridium difficile* infection, which can result from antibiotic use, hospitalization or traveling abroad. *Saccharomyces boulardii* significantly reduces both the risk and the duration of diarrhea. It has also been used to treat acute diarrhea and gastroenteritis in children with good results.

AOR's *Saccharomyces Boulardii* is an excellent companion for those traveling abroad to reduce the risk of Traveler's diarrhea, is helpful for those experiencing antibiotic-associated diarrhea or acute diarrhea, or for anyone who has been hospitalized and treated with antibiotics.

**Label Info**

**Discussion**

*Saccharomyces boulardii* is a non-pathogenic yeast that has been shown to reduce the risk of antibiotic-associated diarrhea.

**Product Variation**

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Supplements Facts  
**Serving Size:** 1 Capsule  
**Amount**  
Saccharomyces boulardii DBVPG 6763  
250 mg (5,000,000,000 CFU†)

†Colony-forming units.

Non-medical ingredients:  
sodium stearyl fumarate. Capsule: hypromellose.

Guarantees  
AOR™ guarantees that all ingredients have been declared on the label. Contains no wheat, gluten, corn, nuts, peanuts, sesame seeds, sulphites, mustard, soy, dairy, eggs, fish, shellfish or any animal byproduct.

Adult Dosage  
Take 3 capsules per day in divided doses between meals, or as directed by a qualified health care practitioner.

Cautions  
Discontinue use and consult a health care practitioner if symptoms of digestive upset (e.g. diarrhea) occur, worsen, or persist beyond 3 days. Consult a health care practitioner if you are pregnant, breastfeeding, experiencing nausea, fever, vomiting, bloody diarrhea or severe abdominal pain. Do not use if you have an immune-compromised condition (e.g. AIDS, lymphoma, patients undergoing long-term corticosteroid treatment).

Source  
Biological fermentation

Main Application  
Traveller's diarrhea  
Antibiotic-associated diarrhea  
Dysbiosis

Disclaimer  
The information and product descriptions appearing on this website are for information purposes only, and are not intended to provide or replace medical advice to individuals from a qualified health care professional. Consult with your physician if you have any health concerns, and before initiating any new diet, exercise, supplement, or other lifestyle changes.

Research  
Background  
Your Favourite Friendly Yeast
Saccharomyces boulardii is a non-pathogenic, non-colonizing species of yeast that is clinically recognized for its effectiveness in contending with the symptoms of antibiotic-associated diarrhea (AAD) and Clostridium difficile disease (CDD), which is also incited by antibiotics. CDD is a leading cause of nosocomial outbreaks of diarrhea and colitis, and Saccharomyces boulardii is one of the most widely used and highly regarded probiotics for the treatment of symptoms associated with both AAD and CDD.

**Helpful Against Clostridium difficile**

The use of antibiotics can destroy friendly flora that is essential for the maintenance of optimal intestinal health. Therefore, antibiotic use can result in an imbalance of naturally occurring yeast and bacteria that would normally be kept in check by this friendly flora. This imbalance can lead to diarrhea. Clostridium difficile is precisely such a bacterium, and is (understandably) extremely difficult to treat with more antibiotics.

**Traveler’s Diarrhea**

There is a wealth of human studies providing testimony to the efficacy of Saccharomyces boulardii against various forms of diarrhea, including Traveler’s Diarrhea or TD. TD is a major concern for visitors to foreign nations, especially ones where the food and climate are unfamiliar and/or the socioeconomic and hygiene levels are low. One recent clinical review cited Saccharomyces boulardii as among the most effective probiotics in treating the symptoms of Traveler’s Diarrhea (TD).

**Other Types of Diarrhea**

Saccharomyces has also been clinically found to greatly reduce antibiotic-associated diarrhea and diarrhea related to acute gastroenteritis in infants and children.

**How Does Saccharomyces Work?**

While the precise mechanism of action for S. boulardii remains the subject of conjecture, there are three basic types of explanations – or a combination thereof. The first involves the ability of S. boulardii to prevent the gastrointestinal inflammation that causes diarrhea by interfering with the various pathogens that bind to gastrointestinal cells. The second is based on S. boulardii providing an enhancing effect for certain protective proteins of the immune system whose role is to protect the body from such pathogens. One particular pharmacokinetic theory closely related to this explanation is that S. boulardii secretes a protease that digests two protein exotoxins which are themselves mediators of inflammatory diarrhea and colitis. The third explanation is that S. boulardii actually competes with pathogens for receptor sites on the cells of the intestinal walls.

**Research**

**Diarrhea**

In one double-blind, placebo-controlled study of 151 patients who underwent antibiotic therapy, the rate of patients suffering from antibiotic-associated diarrhea was almost 6 ½ times higher in the placebo group than in the Saccharomyces boulardii group.

The largest placebo-controlled study of Saccharomyces boulardii ever conducted specifically examined its effects on TD. The double-blind study examined 3,000 Austrians who took either a
placebo, 250 or 1000 mg of S. boulardii while they traveled abroad, particularly to North Africa and the near East where recorded incidents of TD were highest. The results showed that those using S. boulardii suffered ‘significantly fewer’ cases of diarrhea than those who took the placebo, and that the beneficial results were dose-dependent.

Recent studies have examined the efficacy of S. boulardii in treating acute diarrhea in children. A recent review of five clinical trials involving a total of 619 otherwise healthy infants and children with acute gastroenteritis revealed that S. boulardii ‘significantly reduced’ both the risk and the duration of diarrhea.

**Potentially Helpful in Preventing IBD and UTIs**

One study examined the effect of S. boulardii on the E. coli content in the colon and found a decrease in the amount of E. coli found in the stool. The authors suggested that S. boulardii could potentially be useful in preventing urinary tract infections (UTIs) since most of these originate in the colon, but more clinical trials are needed. In an animal study, S. boulardii reduced the inflammation associated with irritable bowel syndrome (IBD), which suggests that Saccharomyces could play a role in reducing the symptoms of IBD.

**Market Trends**

Saccharomyces boulardii is a well-known non-pathogenic yeast used to help reduce diarrhea and to help fight against C. difficile, especially when acquired after a round of antibiotic treatment.

**AOR Advantage**

AOR’s Saccharomyces boulardii provides a clinically studied dose of the yeast.

**References**


Abstract

Effect of Saccharomyces boulardii in children with acute gastroenteritis and its relationship to the immune response.


Min YD, Choi CH, Bark H, Son HY, Park HH, Lee S, Park JW, Park EK, Shin HI, Kim SH.

We evaluated the effect of Saccharomyces boulardii administration in otherwise healthy children aged between 6 months and 10 years who were admitted for acute diarrhoea (15 males, 12 females). The patients were randomized into two groups: group 1 (n = 16) received 250 mg S. boulardii dissolved in 5 ml of water orally twice daily for 7 days and group 2 (n = 11) received placebo. Clinical and laboratory assessments were performed on admission and on day 7 of follow-up. Both groups experienced reduced daily stool frequency, the decrease being significantly greater in group 1 on days 3 and 4 compared with group 2. Group 1 demonstrated significant increases in serum immunoglobulin A and decreases in C-reactive protein levels on day 7. The percentage of CD8 lymphocytes on day 7 was significantly higher in group 1 than group 2. This study confirmed the efficacy of S. boulardii in paediatric acute gastroenteritis and the findings suggest that S. boulardii treatment enhances the immune response.

Saccharomyces boulardii in acute childhood diarrhoea: a randomized, placebo-controlled study.


OBJECTIVE: To evaluate the efficacy of the probiotic yeast Saccharomyces boulardii (S. boulardii) as an adjuvant to oral rehydration solution (ORS) in shortening the duration of acute infectious gastroenteritis in children less than 2 years old in ambulatory care.

MATERIALS AND METHODS: In a period of 1 year, 100 outpatients between 3 and 24 months old presenting with acute mild to moderate diarrhoea of less than 7 days duration, were included in a double-blind, randomized, placebo-controlled trial evaluating the efficacy of S. boulardii administered for 6 days. Twelve children were lost in follow-up; the data of 88 children could be analysed (44 in the placebo and 44 in the S. boulardii group). Seventy-two patients were followed for one month (37 in the placebo and 35 in the S. boulardii group) allowing the calculation of the duration of diarrhoea.

RESULTS: The mean duration of diarrhoea was 6.16 days (range 2-13 days) in the placebo group and 4.70 days (range 2-10 days) in the S. boulardii group (p

CONCLUSION: S. boulardii as an adjuvant to ORS in ambulatory care in children less than 2 years old with mild or moderate acute diarrhoea decreased the duration of diarrhoea, accelerated recovery and reduced the risk of prolonged diarrhoea. The data also indicate increased efficacy if S. boulardii is administered within the first 48 h of the onset of diarrhoea.
Meta-analysis: Saccharomyces boulardii for treating acute diarrhoea in children.

Aliment Pharmacol Ther. 2007 Feb 1;25(3):257-64.

Szajewska H, Skórka A, Dylag M.

BACKGROUND: Saccharomyces boulardii is a non-pathogenic probiotic yeast considered useful against enteropathogens.

AIM: To assess the effectiveness of S. boulardii in treating acute infectious diarrhoea in children.

METHODS: The following electronic databases were searched through August 2006 for studies relevant to acute infectious diarrhoea and S. boulardii: MEDLINE, EMBASE, CINAHL and The Cochrane Library; additional references were obtained from reviewed articles. Only randomized-controlled trials were included.

RESULTS: Five randomized-controlled trials (619 participants) met the inclusion criteria. Combined data from four randomized-controlled trials showed that S. boulardii significantly reduced the duration of diarrhoea compared with control. The pooled weighted mean difference was -1.1 days (95% CI: -1.3 to -0.8) with a fixed model and remained significant in a random effect model. Saccharomyces boulardii significantly reduced the risk of diarrhoea on days 3, 6 and 7. Also the risk of diarrhoea lasting >7 days was significantly reduced in the S. boulardii group vs. control group (1 RCT, n = 88, RR 0.25, 95% CI: 0.08-0.83; NNT 5, 95% CI: 3-20).

CONCLUSIONS: There exists a moderate clinical benefit of S. boulardii therapy in otherwise healthy infants and children with acute gastroenteritis, mainly a shorter duration of diarrhoea. However, these results should be interpreted with caution due to methodological limitations of the included studies.

Saccharomyces boulardii inhibits inflammatory bowel disease by trapping T cells in mesenteric lymph nodes.


BACKGROUND & AIMS: Saccharomyces boulardii is a nonpathogenic yeast used for treatment of diarrhea. We used a mice model of inflammatory bowel disease (IBD) to analyze the effects of S boulardii on inflammation.

METHODS: Lymphocyte-transferred SCID mice, displaying IBD, were fed daily with S boulardii. Weight loss and inflammatory status of the colon were monitored. Nuclear factor-kappaB activity was assessed in the colon. The CD4(+) T-cell production of interferon (IFN) gamma was evaluated by enzyme-linked immunosorbent assay, and a comprehensive reverse-transcription polymerase chain reaction (RT-PCR) analysis for both colon and mesenteric lymph nodes was performed. Finally, we analyzed cell migration mechanisms in vitro and in vivo.

RESULTS: S boulardii treatment inhibits IBD. S boulardii induces an accumulation of IFN-gamma-
producing T-helper 1 cells within the mesenteric lymph nodes correlated with a diminution of CD4(+) T-cell number and IFN-gamma production by CD4 T cells within the colon. The influence of S boulardii treatment on cell accumulation in mesenteric lymph nodes was also observed in normal BALB/c mice and involves modifications of lymph node endothelial cell adhesiveness by a yeast secretion product.

CONCLUSIONS: S boulardii has a unique action on inflammation by a specific alteration of the migratory behavior of T cells, which accumulate in mesenteric lymph nodes. Therefore, S boulardii treatment limits the infiltration of T-helper 1 cells in the inflammed colon and the amplification of inflammation induced by proinflammatory cytokines production. These results suggest that S boulardii administration may have a beneficial effect in the treatment of IBD.

Role of a probiotic (Saccharomyces boulardii) in management and prevention of diarrhoea.


Billoo AG, Memon MA, Khaskheli SA, Murtaza G, Iqbal K, Saeed Shekhani M, Siddiqi AQ.

AIM: To assess the efficacy and safety of Saccharomyces boulardii (S. boulardii) in acute watery diarrhoea and its role in reducing the frequency of episodes of diarrhoea in subsequent two months.

METHODS: Children from 2 mo to 12 years of age, with acute diarrhoea were selected according to inclusion criteria and randomised in S. boulardii group (treated with ORS, nutritional support and S. boulardii, 250 mg bid) and in control group (treated with ORS and nutritional support only). Active treatment phase was 5 d and each child was followed for two months afterwards. Frequency and consistency of stools as well as safety of drug was assessed on every visit. A comparison of two groups was done in terms of number of diarrhoeal episode in subsequent two months.

RESULTS: There were fifty patients in each group. Baseline characteristics such as mean age and the average frequency of stools were comparable in S. boulardii and control group at the time of inclusion in the trial. By d 3 it reduced to 2.7 and 4.2 stools per d respectively and by d 6 it reduced to 1.6 (S. boulardii Group) and 3.3 (control group). The duration of diarrhoea was 3.6 d in S. boulardii group whereas it was 4.8 d in control group (P = 0.001). In the following two months, S. boulardii group had a significantly lower frequency of 0.54 episodes as compared to 1.08 episodes in control group. The drug was well accepted and tolerated. There were no reports of the side effects during treatment period.

CONCLUSION: S. boulardii significantly reduces the frequency and duration of acute diarrhoea. The consistency of stool also improves. The drug is well-tolerated.

Effects of Saccharomyces boulardii on intestinal mucosa.


Buts JP, De Keyser N.

Saccharomyces boulardii (S. boulardii) is a non-pathogenic biotherapeutic agent, widely prescribed in
a lyophilized form in many countries over the world. S. boulardii acts as a shuttle liberating effective enzymes, proteins and trophic factors during its intestinal transit that improve host immune defenses, digestion, and absorption of nutrients. In addition, S. boulardii secretes during its intestinal transit polyamines, mainly spermine and spermidine that regulate gene expression and protein synthesis. In this review, we will focus on the interactions of the yeast with the host intestinal mucosa.

**Saccharomyces boulardii and infection due to Giardia lamblia.**


Besirbellioglu BA, Ulcay A, Can M, Erdem H, Tanyuksel M, Avci IY, Araz E, Pahsa A.

Therapy with metronidazole is the recommended option in giardiasis. However, some clinical trial reports suggest the appearance of drug resistance to explain therapeutic failure. Several investigations have been carried out on the effect of probiotic microorganisms for preventing or treating gastrointestinal diseases, but little is known about their efficacy against protozoal infections. The principal objective of our study was to evaluate the efficacy of Saccharomyces boulardii against Giardia lamblia infections. A double-blind, placebo-controlled study was carried out on adult patients with giardiasis. Group 1 (30 patients) included metronidazole 750 mg 3 times daily along with S. boulardii capsules (250 mg b.i.d. orally) for 10 d while group 2 (35 patients) was treated with metronidazole 750 mg 3 times daily and with empty capsules as placebo for 10 d. Patients were re-examined at 2 and 4 weeks after treatment, and stool examinations were performed. At week 2, G. lamblia cysts were detected in 6 cases (17.1%) of group 2 and none in group 1. At the end of the fourth week, presence of the cysts continued in the same 6 cases in group 2 (control group). These findings indicated that S. boulardii may be effective in treating giardiasis when combined with metronidazole therapy.

**Influence of oral intake of Saccharomyces boulardii on Escherichia coli in enteric flora.**


Akil I, Yilmaz O, Kurutepe S, Degerli K, Kavukcu S.

Enteric flora constitutes 95% of the cells in the human body. It has been shown that the bacterial content of this flora is affected by diet and changes in nutrition. Considering that urinary tract infections (UTI) are mostly due to ascending infections from the gut flora, the importance of the elements of this flora and their characteristics becomes more evident. The aim of this study was to evaluate the influence of oral Saccharomyces boulardii (S. boulardii) intake on the number of Escherichia coli (E. coli) colonies in the colon. This study was carried out with 14 boys and 10 girls (total of 24 children) aged between 36 and 192 months (mean: 104.3 /-45.1 months). A commercial capsule or powder containing 5 billion colony-forming units (cfu) of S. boulardii was administered once a day for 5 days. The number of E. coli and yeast colonies was measured in the stool samples of the study group before and after the use of this drug. Before treatment, the mean number of E. coli colonies in g/ml stool was 384,625 /-445,744. This number decreased significantly to 6,283 /-20,283 after treatment (p=0.00). S. boulardii was not detected in stool before treatment and the number of
colonies increased to 11,047 /-26,754 in g/ml stool. S. boulardii may be effective in reducing the number of E. coli colonies in stool. The influence of this finding on clinical practice such as prevention of UTI needs to be clarified by further studies.

**Prophylactic Saccharomyces boulardii in the prevention of antibiotic-associated diarrhea: a prospective study.**


**Can M, Besirbellioglu BA, Avci IY, Beker CM, Pahsa A.**

BACKGROUND: Interest to probiotics for the prevention and treatment of antibiotic-associated diarrhea is increasing gradually. The most promising seems to be Saccharomyces boulardii. Using a double-blind controlled study, we investigated the preventive effect of S. boulardii on the development of antibiotic-associated diarrhea in patients under antibiotherapy but not requiring intensive care therapy.

MATERIAL/METHODS: All the patients were hospitalized at the Gulhane Military Medical Academy, Department of Infectious Diseases and Clinical Microbiology. S. boulardii was given twice daily during the course of antibiotic therapy and application was initiated in all patients as late as after 48 hours of antibiotic therapy. A total of 151 patients completed the study.

RESULTS: The antibiotic-associated diarrhea development ratio in placebo group was 9% (7/78) and in the study group 1.4% (1/73) (p < 0.05). Stool samples from the patients with antibiotic-associated diarrhea were stored at -70 degrees C and Clostridium difficile toxin A assay was performed using Enzyme Immune Assay as late as in seven days. C. difficile toxin A assay yielded positive results in two (2/7) stool samples from the patients with antibiotic-associated diarrhea in the placebo group and a negative result in the only patient who developed antibiotic-associated diarrhea in the study group.

CONCLUSIONS: The results implied that prophylactic use of Saccharomyces boulardii resulted in reduced, with no serious side effects, antibiotic-associated diarrhea in hospitalized patients.