



HMF Travel

PROBIOTIC SUPPLEMENT

Probiotics to support gastrointestinal health when travelling*

- Shelf-stable formula
- 35 billion CFU per day
- Supports maintenance of a healthy gastrointestinal microflora*
- Includes *Saccharomyces boulardii* plus four proprietary probiotic strains
- Potency guaranteed through expiration

HMF Travel combines five probiotic strains from *Lactobacillus*, *Bifidobacterium* and *Saccharomyces* genera to promote a healthy gut flora and support gastrointestinal health.^{1,2} A number of travel-related factors, including unfamiliar food or water, stress and jet-lag, can all affect the normal composition of gut bacteria.¹ Clinical trials have found that the probiotic yeast *Saccharomyces boulardii* helps support a healthy gastrointestinal microflora and support gastrointestinal health in tourists when taken prior to and during the trip.^{1,3} HMF Travel also contains proprietary, human-sourced, research-driven strains demonstrated to promote gastrointestinal comfort, maintain immune health (when combined with vitamin C), adhere to the gut lining, efficiently colonize the intestinal environment, and naturally resist pH and bile acid without the need for enteric coating.⁴⁻⁹ As some probiotic supplements require constant refrigeration to ensure the stability of the microorganisms, they may be unsuitable for travelers that do not have easy access to refrigeration.¹ HMF Travel is a shelf-stable probiotic supplement offered in a convenient capsule format that can easily be taken anywhere to support gastrointestinal health.^{1,2*}



Supplement Facts

Serving Size 2 Capsules
Servings per Container 15

Each Serving Contains

Probiotic Consortium	35 billion CFU †
<i>Saccharomyces boulardii</i> (CNCM-I-1079)	
<i>Lactobacillus acidophilus</i> (CUL-60)	
<i>Lactobacillus acidophilus</i> (CUL-21)	
<i>Bifidobacterium animalis subsp. lactis</i> (CUL-34)	
<i>Bifidobacterium bifidum</i> (CUL-20)	

† Daily Value not established

Other ingredients: Hypromellose, cellulose, silica, magnesium stearate

Recommended Dose: Take two capsules daily or as recommended by your healthcare practitioner.

Product Size: 30 Vegetable Capsules **Product Code:** 10198



REFERENCES

1. McFarland, LV. Travel Med Infect Dis. 2007; 5(2): 97-105.
2. Black, F, Anderson, P, Orskov, J, Gaarslev, K, Laulund, S. Travel Med. 1989; 7: 333-335.
3. Kollaritsch, HH, Kremsner, P, Wiedermann, G, Scheiner, O. Travel Med Int. 1989; 9-17.
4. Allen, SJ, Jordan, S, Storey, M, Thornton, CA, Gravenor, M, Garaiova, I, Plummer, SF, Wang, D, Morgan, G. J Nutr. 2010; 140(3): 483-488.
5. Williams, EA, Stimpson, J, Wang, D, Plummer, S, Garaiova, I, Barker, ME, Corfe, BM. Aliment Pharmacol Ther. 2009; 29(1): 97-103.
6. Madden, JA, Plummer, SF, Tang, J, Garaiova, I, Plummer, NT, Herbison, M, Hunter, JO, Shimada, T, Cheng, L, Shirakawa, T. Int Immunopharmacol. 2005; 5(6): 1091-1097.
7. Plummer, SF, Garaiova, I, Sarvotham, T, Cottrell, SL, Le Scoullier, S, Weaver, MA, Tang, J, Dee, P, Hunter, J. Int J Antimicrob Agents. 2005; 26(1): 69-74.
8. Plummer, S, Weaver, MA, Harris, JC, Dee, P, Hunter, J. Int Microbiol. 2004; 7(1): 59-62.
9. Seroyal. Data on file.

*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

This information is intended for use by healthcare practitioners only and does not establish a doctor-patient relationship. Please be sure to consult your physician before taking this or any other product.

Copyright © 2016 Seroyal. All rights reserved. No part of this information may be used or reproduced in any form or by any means, or stored in a database or retrieval system, or be distributed or replicated without express permission of Seroyal. Making copies of any part of this information for any purposes other than your own personal use is a violation of copyright law.

3484. Version 1.

US: (888) 737-6925 | www.seroyal.com **Seroyal**



Scientific Rationale:

The human intestinal tract contains more than 400 bacterial species, and its composition can be altered by elements of diet and lifestyle, including travel.¹ These travel-related factors can include unfamiliar food or liquid, stress, and jet-lag.² Research has shown that changes to the normal intestinal microflora occur more often in individuals travelling to certain areas, such as North Africa, Latin America, the Middle East and Southeast Asia.² A disruption in the normal balance of this microflora can affect gastrointestinal health, negatively affecting travel plans and resulting in itinerary changes, trip cancellations or delays.²

Probiotics are live microorganisms that support gastrointestinal health and contribute to a healthy microflora composition.^{1*} Studies have shown that they mediate microbial colonization and support the growth of beneficial bacteria in the intestines.^{1*} They accomplish this by reducing the pH and stimulating the production of peptides in the intestine.^{3*} In addition to supporting bacterial survival, probiotics strengthen the epithelial barrier.^{3*} They mediate the integrity of tight junctions and increase mucin release, which in turn regulates permeability.^{3,4*}

HMF Travel is formulated using *Saccharomyces boulardii*, plus GENESTRA BRANDS' proprietary *Lactobacillus* and *Bifidobacterium* probiotic consortium - microorganisms that have been used in a wide body of clinical research, and have been found to promote gastrointestinal comfort and immune health (when combined with vitamin C).^{5-9*} *Saccharomyces boulardii* is a non-pathogenic yeast that colonizes that intestine within three to four days and is cleared from the colon within a week after ingestion ends.^{2*} Studies involving tourists have found that daily supplementation with *Saccharomyces boulardii*, beginning a few days prior to the start of the trip (to ensure probiotic colonization in the gastrointestinal tract), supports gastrointestinal health and reduces occasional diarrhea for the duration of the trip.^{2*}

One clinical trial involved Austrian tourists travelling to hot climates.¹⁰ Participants were randomly assigned to one of three groups: placebo, 250 mg of *Saccharomyces boulardii* (5×10^9 viable cells daily) or 500 mg of *Saccharomyces boulardii* (10×10^9 viable cells daily).¹⁰ They consumed the supplements five days prior to the start of their trip and continued supplementation for the trip duration (three weeks on average).¹⁰ Each participant completed a questionnaire concerning previous travel

history, present destination, duration of stay, accommodation, and dietary habits during the trip.¹⁰ Participants also described their bowel habits, including frequency and consistency of stool, as well as the presence of abdominal discomfort over the course of the trip.¹⁰ When compared to the placebo, both doses of *Saccharomyces boulardii* significantly promoted gastrointestinal health and reduced occasional diarrhea during travel, and its effects were more pronounced in certain areas, including North and West Africa, East African Islands, and Southeast Asia.^{10*}

Similar beneficial effects of *Saccharomyces boulardii* were observed in a trial involving tourists travelling to North Africa, the Middle East and Asia.¹¹ Participants consumed a placebo, or a low (250 mg daily) or high (1 g daily) dose of *Saccharomyces boulardii* five days before their trip began, and continued supplementation for the entire length of the trip (three weeks on average).¹¹ Each participant completed a questionnaire concerning previous travel history, present destination, duration of stay, accommodation, and dietary habits during the trip.¹¹ Participants also described their bowel habits, including frequency and consistency of stool, as well as the presence of abdominal discomfort over the course of the trip.¹¹ *Saccharomyces boulardii* significantly and dose-dependently promoted gastrointestinal health and reduced occasional diarrhea during travel when compared to the placebo, and its effects were more pronounced in certain areas, including North Africa.^{11*}

Scientists have suggested that a wide variety of bacterial strains present in the intestines may be the key to gastrointestinal health.^{12*} As a result, a clinical trial evaluated the effects of a multi-probiotic supplement on gastrointestinal health among tourists.¹² Danish participants travelling to Egypt were randomly assigned to a placebo or probiotic group.¹² Each probiotic capsule provided a total of 3×10^9 CFU from a mixture of four probiotic strains, including *Lactobacillus acidophilus* and *Bifidobacterium bifidum*.¹² The supplements were taken three times daily, beginning two days before travelling and ending on the final travel day.¹² Participants completed a diary documenting the number of bowel movements each day, the characteristics of the stools and the presence of abdominal discomfort. When compared to the placebo, the probiotic mixture significantly promoted gastrointestinal health and reduced occasional diarrhea over the course of the trip.^{12*}

For educational purposes only. Do not distribute.

REFERENCES

1. Nagpal, R, Yadav, H, Kumar, M, Jain, S, Yamashiro, Y, Marotta, F. (2013). Chapter 1. Probiotics, Prebiotics and Synbiotics. In Otlies, S. (Ed.), Probiotics and Prebiotics in Food, Nutrition and Health (pp. 1-24). Boca Raton, FL: CRC Press.
2. McFarland, LV. Travel Med Infect Dis. 2007; 5(2): 97-105.
3. Bermudez-Brito, M, Plaza-Diaz, J, Muñoz-Quezada, S, Gómez-Llorente, C, Gil, A. Ann Nutr Metab. 2012; 61(2): 160-174.
4. Saulnier, N, Zocco, MA, Di Caro, S, Gasbarrini, G, Gasbarrini, A. Genes & Nutrition. 2006; 1(2): 107-116.
5. Allen, SJ, Jordan, S, Storey, M, Thornton, CA, Gravenor, M, Garaiova, I, Plummer, SF, Wang, D, Morgan, G. J Nutr. 2010; 140(3): 483-488.
6. Williams, EA, Stimpson, J, Wang, D, Plummer, S, Garaiova, I, Barker, ME, Corfe, BM. Aliment Pharmacol Ther. 2009; 29(1): 97-103.
7. Madden, JA, Plummer, SF, Tang, J, Garaiova, I, Plummer, NT, Herbison, M, Hunter, JO, Shimada, T, Cheng, L, Shirakawa, T. Int Immunopharmacol. 2005; 5(6): 1091-1097.
8. Plummer, SF, Garaiova, I, Sarvotham, T, Cottrell, SL, Le Scouller, S, Weaver, MA, Tang, J, Dee, P, Hunter, J. Int J Antimicrob Agents. 2005; 26(1): 69-74.
9. Plummer, S, Weaver, MA, Harris, JC, Dee, P, Hunter, J. Int Microbiol. 2004; 7(1): 59-62.
10. Kollaritsch, HH, Kremsner, P, Wiedermann, G, Scheiner, O. [Abstract]. Travel Med Int. 1989: 9-17.
11. Kollaritsch, H, Holst, H, Grobara, P, Wiedermann, G. Fortschr Med. 1993; 111(9): 152-156.
12. Black, F, Anderson, P, Orskov, J, Gaarslev, K, Laulund, S. Travel Med. 1989; 7: 333-335.

* These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

This information is intended for use by healthcare practitioners only and does not establish a doctor-patient relationship. Please be sure to consult your physician before taking this or any other product.

Copyright © 2016 Seroyal. All rights reserved. No part of this information may be used or reproduced in any form or by any means, or stored in a database or retrieval system, or be distributed or replicated without express permission of Seroyal. Making copies of any part of this information for any purposes other than your own personal use is a violation of copyright law.