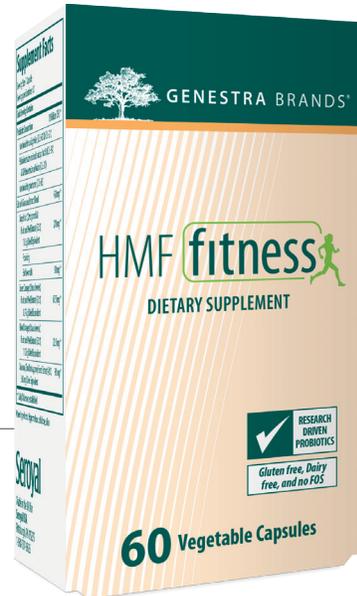




GENESTRA
BRANDS®

HMF Fitness

PROBIOTIC SUPPLEMENT



Probiotic formula with added citrus and guarana extract for healthy weight management support^{†*}

- Supports maintenance of a healthy abdominal fat composition*
- Supports healthy hip and waist circumference*
- Helps to maintain healthy fibrinogen levels*
- Provides 30 billion CFU per day from a combination of five proprietary probiotic strains
- Supplies 900 mg per day of a clinically studied citrus and guarana extract blend daily

Genestra HMF Fitness is a combination of research-driven probiotics and a clinically studied citrus and guarana extract blend that helps to support healthy weight management.[†] In two randomized, double-blind, placebo-controlled trials, supplementation with the extract for 12 weeks, in combination with a strict diet and exercise regimen, significantly supported healthy weight management, body fat composition and abdominal circumference (hip and waist) when compared to the placebo group. Research demonstrates that citrus fruits found in the extract, including grapefruit and oranges, contain bioflavonoids that support lipolysis (breakdown of triglyceride into glycerol and free fatty acids). As daily probiotic supplementation is also considered a necessary component of any healthy diet, HMF Fitness contains five strains of proprietary probiotics to contribute to a favorable gut flora and support gastrointestinal health. Included in this probiotic blend is *L. plantarum* (CUL-66), which has been studied *in vitro* for its ability to modulate intestinal cholesterol metabolism.*

SUPPLEMENT FACTS		
Serving Size 1 Capsule		
Servings per Container 60		
EACH SERVING CONTAINS		
Probiotic Consortium	15 billion CFU	†
<i>Lactobacillus acidophilus</i> (CUL-60 & CUL-21)		
<i>Bifidobacterium animalis</i> subsp. <i>lactis</i> (CUL-34) & <i>Bifidobacterium bifidum</i> (CUL-20)		
<i>Lactobacillus plantarum</i> (CUL-66)		
Citrus & Guarana Extract Blend	450 mg	†
Grapefruit (<i>Citrus paradisi</i>) Fruit and Peel Extract (50:1)		
13.5 g Dried Equivalent	270 mg	†
Providing		
Bioflavonoids	90 mg	†
Sweet Orange (<i>Citrus sinensis</i>) Fruit and Peel Extract (50:1)		
3.375 g Dried Equivalent	67.5 mg	†
Blood Orange (<i>Citrus sinensis</i>) Fruit and Peel Extract (50:1)		
1.125 g Dried Equivalent	22.5 mg	†
Guarana (<i>Paullinia cupana</i>) Seed Extract (4:1)		
360 mg Dried Equivalent	90 mg	†
† Daily Value not established		

Other Ingredients: Hypromellose, cellulose, silica

Recommended Dose

Take one capsule two times daily with meals or as recommended by your healthcare practitioner.

Size
60 Vegetable Capsules

Product Code
10356



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[†] Provides weight management support as part of a healthy lifestyle including regular exercise and a reduced calorie diet

The information contained herein is for informational purposes only and does not establish a doctor-patient relationship.

Please be sure to consult your physician before taking this or any other product. Consult your physician for any health problems.

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

HMF Fitness

Scientific Rationale:

Fat accumulation is associated with weight gain, and usually results from an imbalance between energy intake and expenditure.^{1,2} Globally, the increased intake of caloric, high fat diets and sedentary lifestyles have contributed extensively to this energy imbalance.^{2,3} Excess calories consumed are converted into fat and first stored in subcutaneous fat stores (directly under the skin).³ Once these stores are filled to capacity, visceral fat stores (packed between organs deep inside the abdominal cavity) are used.³ The distribution of fat is an important factor in overall health, with abdominal fat accumulation associated with the greatest changes in metabolic regulation.³

Citrus fruits, including grapefruits and oranges, contain high levels of bioflavonoids.⁴ Naringin is one of the most important bioflavonoids isolated from citrus fruits.⁴ It is metabolized by gut flora and absorbed in the intestines as naringenin.⁴ In addition to its antioxidant effects, naringenin has been investigated for its effects on lipid metabolism.^{4*} Preclinical research involving naringenin has reported its ability to mediate lipolysis (breakdown of triglyceride into glycerol and free fatty acids) by regulating genes involved in fatty acid oxidation as well as cholesterol and fatty acid synthesis.^{5,6*} Similarly, guarana (a fruit naturally containing caffeine) has also demonstrated lipolytic activity in adipocytes.^{6*}

Genestra HMF Fitness contains a research-driven citrus and guarana extract blend. Research involving mice has reported that supplementation with this extract blend may help control body weight and fat composition by promoting healthy serum lipid metabolism and regulating the expression of genes related to lipid metabolism.^{7*} Furthermore, *in vitro* research reported that a similar citrus and guarana extract blend promoted lipolytic activity in adipocytes.^{8,9*} In addition to mediating certain genes, researchers have suggested that citrus polyphenols contained in the blend may promote lipolysis by inhibiting the enzyme phosphodiesterase (PDE).^{6*} In turn, this would result in the breakdown of stored triglycerides into glycerol and free fatty acids.^{6*} The fatty acids released could then be used as fuel by the body.^{6*}

One randomized, double-blind, placebo-controlled trial evaluated the effects of HMF Fitness' citrus and guarana extract on body fat in adults.¹⁰ Participants aged 22-45 were randomly assigned to consume a placebo or 900 mg of the extract daily for 12 weeks.¹⁰ They consumed a calorie-reduced diet (1800-2000 kcal/day for women and 2000-2500 kcal/day for men) and were instructed to participate in regular physical activity (30 minutes per week).¹⁰ Body composition was assessed at baseline and after the 12-week study period.¹⁰ Researchers reported that supplementation with the extract significantly promoted healthy weight management,

body fat composition and abdominal circumference.^{10*} Specifically, the extract promoted a decrease in abdominal body fat (-9.7%) and waist (-5.7%, approximately -5.1 cm) and hip circumference (-4.7%, approximately -5.2 cm), with each change significantly greater than placebo values.^{10*} Supplementation with the extract also significantly decreased fibrinogen levels when compared to placebo values; this biomarker is positively associated with elevated weight.^{10*} Therefore, the extract supported healthy weight management and promoted healthy levels of fibrinogen when used with a calorie-reduced diet and regular physical activity.^{10*}

Another randomized, double-blind, placebo-controlled trial investigated the effects of HMF Fitness' citrus and guarana extract blend on body composition.¹¹ Male participants aged 30-45 were randomly assigned to consume a placebo or 900 mg of the extract daily for 12 weeks.¹¹ They were also instructed to follow the same normo-caloric diet (2200-2500 kcal daily) and exercise program (30 minutes per week).¹¹ Body composition was assessed at baseline and after the 12-week supplementation period.¹¹ Once again, researchers reported that the extract significantly promoted healthy weight management, body fat composition and abdominal circumference.^{11*} Specifically, the extract supported a decrease in abdominal fat (-9.7%), waist-to-hip ratio (-2.2%), and waist (-7.5%, approximately -7.4 cm) and hip circumference (-5.3 cm), with each change significantly greater than placebo values.^{11*} This further demonstrates that the extract supports healthy weight management in combination with a strict diet and exercise program.^{11*}

Daily probiotic supplementation is also considered a necessary component of any healthy diet.^{12*} Probiotics help maintain a healthy balance of bacteria in the intestines, which is critical for overall good health.^{12*} Specifically, research suggests that a healthy microflora composition may play an important role in regulating microbial colonization and immune responses.^{12*} In addition, beneficial bacteria promote the production of short chain fatty acids (SCFA), an important energy source for colon cells.^{13*} SCFA also maintain an acidic intestinal pH (further contributing to a healthy microflora composition) and may play a role in supporting healthy lipid metabolism.^{13*} HMF Fitness is formulated using Genestra's proprietary *Lactobacillus* and *Bifidobacterium* probiotic consortium - microorganisms that have been used in a wide body of clinical research, including a recent *in vitro* study investigating *L. plantarum* (CUL-66) and mechanism of modulating intestinal cholesterol metabolism.¹⁴ Studies demonstrate that these strains support a healthy gut flora, gastrointestinal comfort and immune health.^{15-21*}

REFERENCES

1. Tchernof, A, Després, JP. *Physiol Rev*. 2013; 93(1): 359-404.
2. Suastika, K. *Acta Med Indones*. 2006; 38(4): 231-7.
3. Abdali, D, Samson, SE, Grover, AK. *Med Princ Pract*. 2015; 24(3): 201-15.
4. Alam, MA, Subhan, N, Rahman, MM, Uddin, SJ, Reza HM, Sarker SD. *Adv Nutr*. 2014; 5(4): 404-17.
5. Goldwasser, J, Cohen, PY, Yang, E, Balaguer, P, Yarmush, ML, Nahmias, Y. *PLoS ONE*. 2010; 5(8): e12399.
6. Dallas, C, Gerbi, A, Tenca, G, Juchaux, F, Bernard, FX. *Phytomedicine*. 2008; 15(10): 783-92.
7. Yoo, JM, Lee, M, Kwon, HO, Choi, SG, Bae, MH, Kim, OK. [Abstract]. *J Korean Soc Food Sci Nutr*. 2016; 45(4): 484-491.
8. Lim, H, Yoo, E, Song, E, Chang, YH, Han, BK, Choi, HJ, Hwang, J. *Nutr Res Pract*. 2015; 9(6): 599-605.
9. Lim, H, Seo, J, Chang, YH, Han, BK, Jeong, JK, Park, SB, Choi, HJ, Hwang, J. [Abstract]. *J Korean Soc Food Sci Nutr*. 2014; 43(11): 1688-1694.
10. Dallas, C, Gerbi, A, Elbez, Y, Caillard, P, Zamaria, N, Cloarec, M, Phytother Res. 2014; 28(2): 212-8.
11. Cases, J, Romain, C, Dallas, C, Gerbi, A, Rouanet, JM. *Int J Food Sci Nutr*. 2015; 66(4): 471-7.
12. Kumar, M, Babaei, P, Ji, B, Nielsen, J. *Nutr Healthy Aging*. 2016; 4(1): 3-16.
13. Jones, RM, Yale J Biol Med. 2016; 89(3): 285-297.
14. Michael, DR, Moss, JW, Calvente, DL, Garaiova, I, Plummer, SF, Ramji, DP. *Benef Microbes*. 2016; 7(3): 443-51.
15. Allen, SJ, Jordan, S, Storey, M, Thornton, CA, Gravenor, M, Garaiova, I, Plummer, SF, Wang, D, Morgan, G. *J Nutr*. 2010; 140(5): 485-488.
16. Madden, JA, Plummer, SF, Tang, J, Garaiova, I, Plummer, NT, Herbinson, M, Hunter, JO, Shimada, T, Cheng, L, Shirakawa, T. *Int Immunopharmacol*. 2005;

5(6): 1091-1097.

17. Plummer, SF, Garaiova, I, Sarvotham, T, Cottrell, SL, Le Scouiller, S, Weaver, MA, Tang, J, Dee, P, Hunter, J. *Int J Antimicrob Agents*. 2005; 26(1): 69-74.
18. Williams, EA, Stimpson, J, Wang, D, Plummer, S, Garaiova, I, Barker, ME, Corfe, BM. *Aliment Pharmacol Ther*. 2009; 29(1): 97-103.
19. Garaiova, I, Muchová, J, Nagýová, Z, Wang, D, Li, J, Országhová, Z, Michael, DR, Plummer, SF, Duračková, Z. *Eur J Clin Nutr*. 2015; 69(3): 373-379.
20. Hepburn, NJ, Garaiova, I, Williams, EA, Michael, DR, Plummer, S. *Benef Microbes*. 2013; 4(4): 313-7.
21. Plummer, S, Weaver, MA, Harris, JC, Dee, P, Hunter, J. *Int Microbiol*. 2004; 7(1): 59-62.

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