

Reducore™



CLINICAL APPLICATIONS

- Supports Natural GLP-1 Activation
- Promotes Healthy Postprandial Glucose Responses
- Encourages Feelings of Satiety
- Supports Healthy Weight Management
- Supports Muscle Composition and Maintenance

ENDOCRINE HEALTH

Reducore™ is a science-backed formula developed to support key aspects of metabolic health, including glycemic regulation, muscle maintenance, and healthy body composition. It combines clinically studied fibers, polyphenols, amino acids, and functional nutrients to address the interconnected roles of the gut, muscle tissue, and glucose metabolism in sustaining energy balance. This formula reflects modern, multi-dimensional approaches to metabolic support by promoting GLP-1 production, encouraging microbial diversity, supporting muscle preservation, and helping maintain healthy insulin sensitivity and response. Reducore™'s integrative design mirrors the current understanding that gut health, muscle integrity, appetite regulation, and glucose balance are physiologically connected. Its ingredients are organized into three synergistic blends—**BiomeFuel Blend**, **Muscle Support Blend**, and **Glycemic Control Blend**—each contributing to a well-rounded foundation for metabolic resilience.

BiomeFuel Blend†

Emerging research continues to reveal the critical role of the gut microbiome in regulating key aspects of metabolic function, including glucose metabolism, energy balance, and body composition. Gut microbes contribute to the digestion of otherwise indigestible fibers, producing short-chain fatty acids (SCFAs) that influence insulin sensitivity, appetite regulation, and inflammatory signaling. In particular, microbial metabolites such as butyrate play a key role in gut-liver axis communication and support healthy blood sugar dynamics. A balanced and diverse microbial ecosystem is also

associated with better intestinal barrier function, improved satiety hormone signaling, and enhanced metabolic flexibility. The BiomeFuel Blend in Reducore™ is designed to nourish beneficial microbes and support these interconnected pathways, to help maintain healthy glucose metabolism, weight regulation, and metabolic resilience.

Resistant Tapioca Dextrin (FiberSMART®)†

FiberSMART® is a clinically studied, digestion-resistant soluble fiber derived from tapioca. As a prebiotic, it selectively nourishes beneficial gut bacteria such as *Bifidobacterium* and *Akkermansia muciniphila*, which are associated with metabolic and intestinal health. Research shows it supports SCFA production, including butyrate, a metabolite linked to favorable gut-liver axis signaling and improved glucose regulation.¹ FiberSMART® promotes a healthy postprandial glycemic response and feelings of fullness by supporting GLP-1 and PYY signaling.² It has also been shown to improve stool consistency and digestive regularity, promoting overall digestive comfort.³

Resistant Potato Starch (Solnul®)†

Solnul® is a clinically studied, prebiotic-resistant starch that promotes microbial diversity and intestinal health. In a four-week trial, daily intake of 3.5 g led to significant increases in beneficial gut microbes such as *Bifidobacterium* and *Akkermansia muciniphila* with improvements in stool regularity and consistency.⁴ *Bifidobacterium* species are known to contribute to healthy immune function, intestinal barrier integrity, and the production of SCFAs.^{5,6,7} *Akkermansia muciniphila*, in particular, has been linked to enhanced gut

† 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.

barrier function and metabolic balance, including support for healthy glucose metabolism and weight regulation.⁸

Allulose†

Allulose is a rare sugar with a negligible caloric value that has been shown to influence postprandial glucose and insulin levels.^{9,10} It may support glucose uptake into tissues and hepatic glucose metabolism without contributing to fatty storage.¹¹ Allulose also contributes to improved glycemic variability and may support long-term metabolic flexibility.¹²

Oat Beta Glucan†

Oat beta glucan is a soluble, viscous fiber derived from oat cell walls that supports healthy post-meal metabolic responses. By forming a gel-like matrix in the digestive tract, it slows gastric emptying and the absorption of carbohydrates, which contributes to a more balanced glycemic curve and extended satiety. This mechanism also supports healthy insulin dynamics and lipid metabolism.^{13,14} Clinical research has shown that regular consumption of oat beta glucan promotes favorable metabolic markers in individuals seeking to maintain blood glucose and lipids for cardiovascular health.¹⁵

Muscle Support Blend†

Skeletal muscle is a metabolically active tissue that plays a central role in glucose uptake, insulin sensitivity, and energy expenditure. Preserving muscle mass is essential not only for physical function and strength but also for maintaining metabolic flexibility and supporting a healthy body composition. This becomes particularly important during periods of caloric restriction, intermittent fasting, or with advancing age—when muscle loss is greatest and can contribute to poor health outcomes. Supporting muscle health helps maintain resting metabolic rate, enhances nutrient partitioning, and plays a protective role in long-term weight maintenance. The Muscle Support Blend in Reducore™ is formulated to promote muscle protein synthesis (MPS) and provide critical cofactors involved in energy metabolism, offering comprehensive support for metabolic resilience and healthy aging.

Amino L40®†

Amino L40® is a leucine-rich, vegan-friendly blend of essential amino acids (EAAs) formulated to stimulate muscle protein synthesis. Leucine and other EAAs are required not only for tissue repair and MPS but also for supporting mitochondrial biogenesis, enzyme production, and the synthesis of apolipoproteins involved in lipid transport. This is particularly relevant in the context of calorie restriction, intermittent fasting, or aging populations where maintaining lean muscle mass is critical for metabolic health and glucose metabolism. Several studies have shown that a leucine-enriched EAA

blend like Amino L40® is more effective than whey protein alone at stimulating MPS, particularly in older adults. Volpi et al. demonstrated that older adults experienced significantly greater MPS from an EAA blend than from whole protein, suggesting that EAAs bypass some of the anabolic resistance seen with aging.¹⁶ Churchward-Venne et al. showed that leucine content, not just total protein, is the key driver of postprandial MPS, making leucine-rich blends more efficient than even high-quality proteins.¹⁷ Dreyer et al. found that ingestion of a leucine-enriched EAA and carbohydrate mixture after resistance exercise significantly enhanced mTOR signaling and MPS, underscoring the unique anabolic advantage of leucine-rich formulas over standard protein supplements.¹⁸

Additionally, Wilkinson et al. found that leucine-enriched essential amino acid (LEAA) blends, even at doses as low as 1.5 g, were highly effective at stimulating MPS in older women, both at rest and following resistance exercise. Their study demonstrated that the MPS response to 1.5 g or 6 g of LEAAs was comparable to a 40 g dose of whey protein, highlighting that the presence of leucine—rather than total protein quantity—is the critical factor driving anabolic signaling. These findings support the use of leucine-rich EAA blends as an efficient strategy for maintaining muscle health in aging populations.¹⁹

Magnesium Glycerophosphate†

Magnesium plays a pivotal role in insulin receptor function and glucose transport. The glycerophosphate form supports metabolic function and muscle energy production, with enhanced bioavailability and GI tolerability.^{20,21} Adequate magnesium supports muscle relaxation and healthy insulin sensitivity.^{22,23}

Glycemic Control Blend†

Managing postprandial glucose fluctuations is an important aspect of maintaining metabolic health and overall wellness. A systemic review and meta-analysis indicate that postprandial glucose levels have a strong correlation with long-term markers of glucose balance, such as HbA1c, even more so than fasting glucose levels.²⁴ Elevated postprandial glucose has also been associated with increased oxidative stress and may influence vascular health over time.²⁵ Supporting a healthy postprandial glucose response can help promote balanced energy levels and contribute to the maintenance of cardiovascular and metabolic function as part of a healthy lifestyle.

Mulberry Leaf Extract (Reducose®)†

Reducose® is a clinically studied, standardized extract of mulberry leaf that supports healthy post-meal glucose responses. By inhibiting alpha-glucosidase enzymes in the small intestine, it slows carbohydrate breakdown and absorption, helping to moderate blood glucose and insulin responses following meals.^{26,27} This mechanism makes Reducose® a valuable ingredient for maintaining glycemic balance without contributing to hypoglycemia.

Multiple randomized, double-blind, placebo-controlled trials in healthy adults demonstrated that mulberry leaf extract—specifically Reducose®—significantly reduces postprandial glycemic and insulinemic responses. Lown et al. showed that a single dose of Reducose® lowered postprandial glucose and insulin levels by up to 40% following a high-carbohydrate meal.²⁸ Similarly, Thondre et al. found that mulberry leaf extract significantly reduced blood glucose and insulin levels at multiple time points after a 75 g sucrose load, decreasing the glucose and insulin incremental area under the curve (iAUC) by 42% and 40%, respectively, and reducing peak glucose and insulin by approximately 40%, all without any reported adverse effects.²⁹

Prickly Pear Fruit Juice and Nopal Leaf Powder†

Prickly pear (*Opuntia* spp.) has been shown in clinical trials to help buffer postprandial glycemic fluctuations.^{30,31} Its naturally occurring pectins and antioxidant flavonoids contribute to healthy glucose metabolism by supporting intestinal carbohydrate processing and oxidative balance. Its traditional use is now supported by research that underscores its role in maintaining metabolic equilibrium, particularly in the context of modern diets high in refined carbohydrates.

Acacia and Carob Fiber (Inavea™)†

Inavea™ is a unique prebiotic fiber blend composed of acacia and carob fruit fibers that supports the gut–metabolism axis. It has been shown to promote microbial diversity and SCFA production, particularly butyrate, which is associated with gut barrier integrity and metabolic signaling.³² Inavea™ has also demonstrated support for inflammatory balance and satiety, making it a multifaceted tool for promoting overall metabolic health in the context of postprandial glucose support.³³

Directions

Mix 1 scoop (8.1 grams) with 2-4 ounces of water or your preferred beverage before meals or as directed by your health care professional. Use with liquids below 140°F for best results.

Does Not Contain

Gluten, yeast, synthetic colors or artificial flavors.

Cautions

Do not consume this product if you are pregnant or nursing. Consult your physician for further information. As with all dietary supplements, some individuals may not tolerate or may be allergic to the ingredients used. Please read the ingredient panel carefully prior to ingestion. Cease taking this product and consult your physician if you have negative reactions upon ingestion.

Supplement Facts^{V1}

Serving Size 1 Scoop (8.1 Grams)

Servings Per Container About 30

	Amount Per Serving	% Daily Value
Calories	20	
Total Carbohydrate	6 g	2%*
Dietary Fiber	4 g	14%*
Magnesium (as Magnesium Glycerophosphate)	50 mg	12%
BiomeFuel Blend	5 g	
Resistant Tapioca Dextrin		**
Resistant Potato Starch (Solnul®)		**
Allulose		**
Oat Beta Glucan		**
Muscle Support Blend	1.2 g	
Amino Acid Mix (Amino L40®)		**
Magnesium Glycerophosphate		**
Glycemic Control Blend	1 g	
Prickly Pear (<i>Opuntia ficus-indica</i>) Fruit Juice Powder (Cacti-Nea™) (Organic)		**
Acacia Gum (<i>Acacia senegal</i>) Fiber and Carob (<i>Ceratonia siliqua</i>) Fiber (Inavea™)		**
Mulberry (<i>Morus alba</i> L.) Leaf Extract (Reducose®)		**
Nopal (<i>Opuntia ficus-indica</i>) Leaf Powder (NeOpuntia™) (Organic)		**

* Percent Daily Values are based on a 2,000 calorie diet.

** Daily Value not established.

Other Ingredients: Lemon Juice Powder, Natural Flavor, Malic Acid, Citric Acid and Rebaudioside M.

ID# 937030 243 Grams

References

1. Xu T, Huang W, Liang J, et al. Tuber flours improve intestinal health and modulate gut microbiota composition. *Food Chemistry: X* 2021;12:100145. doi:<https://doi.org/10.1016/j.fochx.2021.100145>
2. Ye Z, Arumugam V, Haugabrooks E, Williamson P, Hendrich S. Soluble dietary fiber (Fibersol-2) decreased hunger and increased satiety hormones in humans when ingested with a meal. *Nutr Res* 2015;35(5):39-400. doi:[10.1016/j.nutres.2015.03.004](https://doi.org/10.1016/j.nutres.2015.03.004)
3. Stewart ML, Nikhanj SD, Timm DA, Thomas W, Slavin JL. Evaluation of the Effect of Four Fibers on Laxation, Gastrointestinal Tolerance and Serum Markers in Healthy Humans. *Annals of Nutrition and Metabolism* 2010;56(2):91-98. doi:<https://doi.org/10.1159/000275962>
4. Bush JR, Baisley J, Harding SV, Alfa MJ. Consumption of Solnul™ Resistant Potato Starch Produces a Prebiotic Effect in a Randomized, Placebo-Controlled Clinical Trial. *Nutrients* 2023;15(7):1582. doi:<https://doi.org/10.3390/nu15071582>
5. Hidalgo-Cantabrana C, Delgado S, Ruiz L, Ruas-Madiedo P, Sánchez B, Margolles A. Bifidobacteria and Their Health-Promoting Effects. *Microbiology spectrum* 2018;73-98. doi:<https://doi.org/10.1128/microbiolspec.bad-0010-2016>
6. Bush JR, Alfa MJ. Consumption of resistant potato starch produces changes in gut microbiota that correlate with improvements in abnormal bowel symptoms: a secondary analysis of a clinical trial. *BMC Nutrition* 2024;10(1). doi:<https://doi.org/10.1186/s40795-024-00962-7>
7. Leser T, Baker A. Bifidobacterium adolescentis - a beneficial microbe. *Beneficial Microbes* 2023;14(6):525-551. doi:<https://doi.org/10.1163/18762891-20230030>
8. Everard A, Belzer C, Geurts L, et al. Cross-talk between Akkermansia muciniphila and intestinal epithelium controls diet-induced obesity. *Proceedings of the National Academy of Sciences* 2013;110(22):9066-9071.
9. Franchi F, Yaranov DM, Rollini F, et al. Effects of D-allulose on glucose tolerance and insulin response to a standard oral sucrose load: results of a prospective, randomized, crossover study. *BMJ Open Diabetes Res Care* 2021;9(1):e001939. doi:[10.1136/bmjdr-2020-001939](https://doi.org/10.1136/bmjdr-2020-001939)
10. Jenkins A, Au-Yeung F, Prancevic S, Campbell J, Vissers E, Wolever T. Comparison of Postprandial Glycemic and Insulinemic Response of allSWEET®, Non-GMO Allulose, Consumed Alone or When Consumed With Sucrose: a Randomized, Controlled Trial. *Curr Dev Nutr* 2022;6(Suppl 1):445. doi:[10.1093/cdn/nzac057.011](https://doi.org/10.1093/cdn/nzac057.011)
11. Lee D, Han Y, Kwon EY, Choi MS. d-allulose Ameliorates Metabolic Dysfunction in C57BL/KsJ-db/db Mice. *Molecules* 2020;25(16):3656. doi:[10.3390/molecules25163656](https://doi.org/10.3390/molecules25163656)
12. Fukunaga K, Yoshimura T, Imachi H, et al. A Pilot Study on the Efficacy of a Diabetic Diet Containing the Rare Sugar D-Allulose in Patients with Type 2 Diabetes Mellitus: A Prospective, Randomized, Single-Blind, Crossover Study. *Nutrients* 2023;15(12):2802. doi:[10.3390/nu15122802](https://doi.org/10.3390/nu15122802)
13. Paudel D, Dhungana B, Caffè M, Krishnan P. A Review of Health-Beneficial Properties of Oats. *Foods* 2021;10(11):2591 doi:<https://doi.org/10.3390/foods10112591>
14. Thondre PS, Shafat A, Clegg ME. Molecular weight of barley β -glucan influences energy expenditure, gastric emptying and glycaemic response in human subjects. *Br J Nutr* 2013;110(12):2173-2179. doi:[10.1017/S0007114513001682](https://doi.org/10.1017/S0007114513001682)
15. Whitehead A, Beck EJ, Tosh S, Wolever TM. Cholesterol-lowering effects of oat β -glucan: a meta-analysis of randomized controlled trials. *Am J Clin Nutr* 2014;100(6):1413-1421. doi:[10.3945/ajcn.114.086108](https://doi.org/10.3945/ajcn.114.086108)
16. Volpi E, Kobayashi H, Sheffield-Moore M, Mittendorfer B, Wolfe RR. Essential amino acids are primarily responsible for the amino acid-induced stimulation of muscle protein anabolism in healthy elderly adults. *Am J Clin Nutr* 2003;78(2):250-258. doi:[10.1093/ajcn/78.2.250](https://doi.org/10.1093/ajcn/78.2.250)
17. Churchward-Venne TA, Burd NA, Mitchell CJ, et al. Supplementation of a suboptimal protein dose with leucine or essential amino acids: effects on myofibrillar protein synthesis at rest and following resistance exercise in men. *J Physiol* 2012;590(11):2751-2765. doi:[10.1113/jphysiol.2012.228833](https://doi.org/10.1113/jphysiol.2012.228833)
18. Dreyer HC, Drummond MJ, Pennings B, et al. Leucine-enriched essential amino acid and carbohydrate ingestion following resistance exercise enhances mTOR signaling and protein synthesis in human muscle. *Am J Physiol Endocrinol Metab* 2008;294(2):E392-E400. doi:[10.1152/ajpendo.00582.2007](https://doi.org/10.1152/ajpendo.00582.2007)

19. Wilkinson DJ, Bukhari SSI, Phillips BE, et al. Effects of leucine-enriched essential amino acid and whey protein bolus dosing upon skeletal muscle protein synthesis at rest and after exercise in older women. *Clin Nutr* 2018;37(6 Pt A):2011–2021. doi:10.1016/j.clnu.2017.09.008.
20. Ranade VV, Somberg JC. Bioavailability and pharmacokinetics of magnesium after administration of magnesium salts to humans. *Am J Ther* 2001;8(5):345–357. doi:10.1097/00045391-200109000-00008
21. Barbagallo M, Dominguez LJ, Galioto A, et al. Role of magnesium in insulin action, diabetes and cardio-metabolic syndrome X. *Mol Aspects Med* 2003;24(1-3):39–52. doi:10.1016/S0098-2997(02)00090-0
22. Volpe SL. Magnesium in disease prevention and overall health. *Adv Nutr* 2013;4(3):378S–383S. doi:10.3945/an.112.003483
23. Guerrero-Romero F, Rodríguez-Morán M. Magnesium improves the beta-cell function to compensate variation of insulin sensitivity: double-blind, randomized clinical trial. *Eur J Clin Invest* 2011;41(4):405–410. doi:10.1111/j.1365-2362.2010.02422.x
24. Ketema EB, Kibret KT. Correlation of fasting and postprandial plasma glucose with HbA1c in assessing glycemic control; systematic review and meta-analysis. *Arch Public Health* 2015;73:43. doi:10.1186/s13690-015-0088-6
25. Kwak JH, Paik JK, Kim HI, et al. Dietary treatment with rice containing resistant starch improves markers of endothelial function with reduction of postprandial blood glucose and oxidative stress in patients with prediabetes or newly diagnosed type 2 diabetes. *Atherosclerosis* 2012;224(2):457–464. doi:10.1016/j.atherosclerosis.2012.08.003
26. Hansawasdi C, Kawabata J. Alpha-glucosidase inhibitory effect of mulberry (*Morus alba*) leaves on Caco-2. *Fitoterapia* 2006;77(7-8):568–573. doi:10.1016/j.fitote.2006.09.003
27. Cui W, Luo K, Xiao Q, et al. Effect of mulberry leaf or mulberry leaf extract on glycemic traits: a systematic review and meta-analysis. *Food Funct* 2023;14(3):1277–1289. doi:10.1039/d2fo02645g
28. Lown M, Fuller R, Lightowler H, et al. Mulberry-extract improves glucose tolerance and decreases insulin concentrations in normoglycaemic adults: Results of a randomised double-blind placebo-controlled study. *PLoS One* 2017;12(2):e0172239. doi:10.1371/journal.pone.0172239
29. Thondre PS, Lightowler H, Ahlstrom L, Gallagher A. Mulberry leaf extract improves glycaemic response and insulaemic response to sucrose in healthy subjects: results of a randomized, double blind, placebo-controlled study [published correction appears in *Nutr Metab* (Lond). 2021 May 26;18(1):52. doi: 10.1186/s12986-021-00577-w.]. *Nutr Metab* (Lond) 2021;18(1):41. Published 2021 Apr 15. doi:10.1186/s12986-021-00571-2
30. Frati AC, Jiménez E, Ariza CR. Hypoglycemic effect of *Opuntia ficus indica* in non-insulin-dependent diabetes mellitus patients. *Phytother Res* 1990;4(5):195–197.
31. López-Romero P, Pichardo-Ontiveros E, Avila-Nava A, Vázquez-Manjarrez N, Tovar AR, Torres N. The effect of nopal (*Opuntia ficus indica*) on postprandial blood glucose, incretins, and antioxidant activity in healthy individuals: a randomized crossover trial. *Nutrients* 2014 Oct;6(10):4005–19.
32. Nexira. Improving digestive health and overall well-being with prebiotics. Nexira website. <https://www.nexira.com/improving-digestive-health-and-overall-wellbeing-with-prebiotics/>. Published March 2021. Accessed May 13, 2025
33. Larson R, Nelson C, Korczak R, et al. Acacia Gum Is Well Tolerated While Increasing Satiety and Lowering Peak Blood Glucose Response in Healthy Human Subjects. *Nutrients* 2021;13(2):618. doi:10.3390/nu13020618