

fermented nutrients for better bioavailability

product background

Your gut microbiome plays an important role in your overall health. Fermented foods may help support a healthy gut microbiome, and help you stay healthy too. Ashland glycoprotein matrix-bound, GPM™ nutrients are made in a patented process from a nutrient-dense broth that is cultured, converted, and bio-transformed by yeast into an easily digested, highly active, natural food rich in the target nutrient. We make GPM™ nutrients that are soy-free and are either "USDA Organic" or "Made with Organic Ingredients"*.

















bound to food source



key features and benefits

- may show increased absorption and bioavailability
- whole food matrix is gentle on the stomach
- o individual nutrients are either "USDA Organic" or "Made with Organic"* compliant
- o soy-free formula
- suitable for vegan** and vegetarians
- o formula is gluten-free and non-GMO†
- kosher and halal certified
- o fermented nutrients are a product differentiator

how are fermented nutrients different from traditional nutrients?

Nutrients bound to a food source may be more bioavailable. Fermented nutrients may release more slowly, over time. This is particularly important for water-soluble vitamins like B-complex vitamins and Vitamin C, which are either used by the body or quickly excreted. In addition, some consumers report that fermented nutrients are easier to digest. Most conventional vitamins and minerals recommend you take them with food to prevent stomach upset. GPM™ nutrients tend not to cause stomach upset; they already contain the food component.

GPM™ nutrient solutions

Our GPM[™] nutrients are suitable for all commonly used applications - tablets, capsules, gummies, chewable tablets. Ashland solvers are available to answer any questions you may have about formulating with GPM™ nutrients.

With over 30 vitamins and minerals in our product portfolio, we have a fermented nutrient to meet a majority of consumer needs.

In addition to single ingredients, we also have several premixed blends to help jump start your formulations. Those current premixes are women's multi, men's multi, prenatal and energizing premixes. Ashland solvers are also able to create custom blends of any of our GPM[™] fermented nutrients to meet a customer's specialized needs.







soy-free gpm[™] product line

USDA "made with organic" (>70%, <95% organic)

soy free manganese (5.0%) plus gpm

soy free magnesium (5.0%) plus gpm

soy free vitamin B-1 (25%) plus gpm

soy free paba (25%) plus gpm

soy free vitamin A 50,000 IU/GM gpm plus

soy freee lutein 10% gpm plus

soy free gpm methylcobalamin 0.5%

soy free gpm vitamin D3 900,000 IU

soy free gpm vitamin C granular (25%)

soy free boron (1.0%)

soy free potassium (5%) plus gpm

soy free zinc (5%) plus gpm

soy free iron (5.0%) plus gpm

soy free choline as choline chloride (18%) plus gpm

soy free calcium (5%) plus gpm

soy free vitamin C (25%) plus gpm

soy free vitamin B-6 (20%) plus gpm

soy free vitamin B-2 (10%) plus gpm

soy free pantothenic acid (25%) plus gpm

soy free niacinamide (25%) plus gpm

soy free nat. vitamin E acetate

(250 IU per GM) plus gpm

soy free nat, beta carotene

(50,000 IU per GM) plus gpm

USDA "certified organic" (>95% organic)

soy free molybdenum (0.2%) plus gpm

soy free selenium (0.1%) plus gpm

soy free iodine (lodide 1.5%) plus gpm

soy free copper (1.0%) plus gpm soy free folic acid (1%) plus gpm

soy free chromium (0.2%) plus gpm

soy free vitamin K-1 (1%) plus gpm

soy free vitamin D-3 (100,000 IU/G) plus gpm

soy free vitamin B-12 (0.5%) plus gpm

soy free biotin (0.5%) plus gpm

soy free gpm vitamin D2 (100000 IU/g) 0.25%

soy free selenium 0.15%



















regional centers

North America

Wilmington, DE USA Tel: +1 877 546 2782

Europe

Warsaw, Poland Tel: +48 22 3955345

India

Maharashtra Tel: +91 22 62828700

Asia Pacific

Shanghai, China +86 021 6090 6606

Middle East, Africa

Istanbul, Turkey Tel: +90 216 538 08 00

Latin America

Mexico City, Mexico Tel: +52 55 52 76 6110 São Paulo Brazil Tel: +55 11 36 49 0400

ashland.com/contact

- ® Registered trademark, Ashland or its subsidiaries, registered in various countries
- ™ Trademark, Ashland or its subsidiaries, registered in various countries
- © 2021, 2023, Ashland / HW21-001.2

The information contained in this brochure and the various products described are intended for use only by persons having technical skill and at their own discretion and risk after they have performed necessary technical investigations, tests and evaluations of the products and their uses. Certain end uses of these products may be regulated pursuant to rules or regulations governing medical devices, drug uses, or pesticidal or antimicrobial uses. It is the end user's responsibility to determine the applicability of such regulations to its products.

All statements, information, and data presented herein are believed to be accurate and reliable, but are not to be $% \left\{ 1,2,...,n\right\}$ taken as a guarantee of fitness for a particular purpose, or representation, express or implied, for which seller assumes legal responsibility. No freedom to use any patent owned by Ashland, its subsidiaries, or its suppliers is to be inferred.

