K52 GLUTENFLAM®

Supports Digestion and Inflammatory Responses of Gluten and Casein Compounds

BENEFITS OF PRODUCT

- Supports specific digestion of gluten and casein compounds
- Supports intestinal lining inflammatory cascade caused by gluten and dietary antigens

USE OF PRODUCT

This product is designed to support gluten and casein digestion; specifically, with the DPP IV enzyme. Additionally, this product may be used to quench the inflammatory intestinal response that occurs in gluten exposure with specific flavonoids. This product is not to be used in place of a gluten- or casein-free diet, but rather to be used to digest hidden sources of gluten or to aid in digestion and during inflammation promoted by unexpected exposures.

OTHER PRODUCTS TO CONSIDER

Other formulas can be used in conjunction with **GlutenFlam® (K52)** to support inflammatory response and healing from gluten exposure. **Gastro-ULC™ (K29)** can be used to support healing and repair of the intestinal mucosa lining. **ClearVite-SF® (K24)** can be used to aid in gastrointestinal recovery, hepatic detoxification, and during systemic inflammation. Consider **NeuroFlam® (K46)** for nutritional support during gluten-triggered neuroinflammation and brain fog.

DIRECTIONS

Adults: Take 2-3 capsules with meals. Also, take 1 capsule nightly on an empty stomach to digest hidden sources of gluten exposure. Take 2 capsules several times a day if exposed to gluten to aid with digestion and inflammatory responses.
Children: Take 1 capsule with meals.

Supplement Facts

Serving size 1 vegetarian capsule
Servings per container 60

	Amount Per Capsule	% DV
Flavoguard® Proprietary Blend	**70 mg**	
Quercetin		*
Aloe Vera extract (leaf)		*
Luteolin		*
Apigenin		*
Lycopene		*
Proprietary Enzyme Blend	**440 mg**	
DPP IV peptidase blend (Protease I, II, III, IV, V derived from A. oryzae/niger, A. Bacillus subtilis, A. Carica papaya)		*
Amylase I (derived from A. oryzae)		*
Amylase II (derived from B. subtilis)		*
Glucoamylase (derived from A. niger)		*
Cellulase (derived from Trichoderma reesei)		*

*Daily Value (DV) not established.

Other ingredients: Vegetarian capsule (HPMC), vegetable cellulose.

KEY INGREDIENTS RESEARCH COMMENTARY

DPP IV (DIPEPTIDYL PEPTIDASE IV)

DPP IV is involved in the degradation of proteins such as gliadin (grain protein) and casein (dairy protein) and in modulation of the immune response. Research has demonstrated that supplementation with DPP IV with trace quantities led to rapid destruction of the gluten peptides and provided therapeutic effects for gluten-sensitive subjects.

Research evaluating DPP IV enzyme activity measured in intestinal mucosal biopsy specimens of Celiac disease and malabsorption subjects discovered that the enzyme was found to be less active. Additionally, the amount of DPP IV enzyme activity in the intestine correlated with the grade of mucosal damage in Celiac disease patients and malabsorption syndrome patients. The role that DPP IV plays in intestinal activity, gliadin peptide exposure, and immune activation has also been demonstrated in autism neuroimmune dysregulation.

BRUSH BORDER ENZYMES

Brush border enzymes, amylase, cellulase, and glucoamylase (derived from A. niger), can be effective in digesting carbohydrates, proteins, and fats without causing irritation and digestion of the intestinal walls in compromised malabsorption or Celiac disease subjects. Theoretically, heavy dose pancreatic enzymes are not suggested with compromised or severe intestinal permeability due to their ability to digest the intestinal wall.

FLAVONOIDS FOR GLUTEN RESPONSE

The gluten response in the intestinal tract with gluten-sensitive and Celiac disease subjects promotes a severe inflammatory cascade. Several key antioxidant flavonoids have been shown to be specific in quenching this response. Lycopene and quercetin have demonstrated the ability to minimize macrophage activation induced by gliadin and IFN-gamma. Gut microflora responses trigger tumor necrosis factor-induced intercellular adhesion molecules and may be inhibited by the flavonoid, apigenin. Quercetin has been shown to have specific activity against antigen-induced histamine secretion in intestinal mast cells. The flavonoid, luteolin, has demonstrated the ability to minimize lipopolysaccharide-induced NF-kappaB signaling and gene expression by blocking IkappaB kinase activity in intestinal epithelial cells and dendritic cells as well as TNF-alpha and IL-8 on colon epithelial cells.

Formula Info Page

DIETARY SUPPLEMENT

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