

***Formulated to enhance digestion of problematic proteins
and minimize effects from starch consumption****

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ProtectZyme™ is an exciting combination of digestive support compounds designed to minimize the adverse effects from occasional consumption of gluten, dairy, soy, and egg proteins in individuals who are sensitive to them, as well as to curb the detrimental effects of consuming excessive amounts of starchy foods and sucrose.* However, it will not affect the absorption of glucose or fructose. It is not intended for those with celiac disease or severe gluten allergies, but rather, for individuals with milder sensitivities and intolerances, who experience unpleasant symptoms after consuming foods that contain gluten.

In an ideal world, we would completely abstain from foods that don't agree with us. But this is a tall order, and even under the best circumstances, traveling, dining out, and the inevitable cross-contamination of foods mean that even when individuals with food sensitivities are especially vigilant about avoiding offending foods, they may still be exposed to problematic compounds. ProtectZyme™ is an ideal product to use preventatively when the source of a meal is unknown, and also for the occasional planned consumption of allergenic foods containing hard-to-digest proteins, such as gluten or casein.

ProtectZyme™ contains two active ingredients, Glutalytic® and Synetrim® CQ, both of which are patented compounds with substantiated structure/function claims.

Glutalytic®

Glutalytic® is a unique proteolytic enzyme blend that combines both endopeptidases and exopeptidases in order to target both the internal and external peptide bonds that make up the gluten protein. It has been designed to create the correct endopeptidase cleavage pattern near the long chain amino acids that need to be hydrolyzed by the exopeptidase. This produces rapid and near complete degradation of gluten in the stomach and upper GI tract, thus potentially reducing the symptoms associated with gluten exposure in sensitive individuals. Estimates suggest non-celiac gluten sensitivity may affect as much as 6% of the U.S. population (18 million people), with individuals spending thousands of dollars on efforts to treat their array of symptoms piecemeal due to being misdiagnosed or undiagnosed. Total avoidance of gluten may be unrealistic for these individuals, who do not experience the debilitating symptoms of celiac disease but who nevertheless risk uncomfortable physical or psychological effects after consuming gluten, and who may be willing to "tolerate" the discomfort in order to occasionally enjoy their favorite foods or participate in social events. Glutalytic® may make these occasional dietary derailments less problematic.

Glutalytic® is active over a wide range of pH—2.0-8.0—making it effective in the stomach, duodenum and upper GI tract. Data from the manufacturer of Glutalytic® show that 10 g of purified gliadin were 99% hydrolyzed within 90 minutes of ingestion, and before it reached the lower GI tract. Compared to DPPIV alone, additional exo- and endopeptidases in Glutalytic® result in greater than doubling of the breakdown of gliadin.¹ Glutalytic® also improves digestion of proteins in egg, soy, and milk, which are common sensitivities.

In an unpublished randomized, double-blind, placebo controlled study from Kennesaw State University, individuals with self-reported gluten sensitivity experienced fewer gluten-related symptoms after taking Glutalytic® compared to placebo.² (Improved symptoms included stomach pains, rumbling in the stomach, bloating, headaches, food cravings, and poor energy levels.)

The proteolytic enzymes in Glutalytic® are effective for facilitating digestion of dairy, soy, and egg proteins in addition to gluten, so this product may provide additional support for individuals with sensitivities to these other hard-to-digest proteins.

Owing to its effects on facilitating protein digestion and inhibiting breakdown and absorption of starch-derived glucose, ProtectZyme™ may be beneficial for*:

- Limiting sensitivity reactions to problematic foods
- Weight loss/weight management
- Satiety/appetite control
- Blood sugar balance
- Minimizing GI distress
- Mood enhancement/emotional eating

Synetrim® CQ

This ingredient is a concentrated extract of the stems and leaves of *Cissus quadrangularis*, a perennial plant of the grape family, also known as veldt grape or devil's backbone. It is the only *Cissus quadrangularis* (CQ) extract patented for weight loss and improved metabolic functions. It exerts its weight loss effects primarily via inhibition of specific digestive enzymes, namely, alpha-amylase, alpha-glucosidase, and pancreatic lipase.³ By inhibiting starch breakdown into glucose and the cleavage of sucrose into glucose and fructose, CQ may reduce the glycemic and insulinogenic impact of starch and sucrose-containing foods. However, the absorption of the monosaccharides glucose and fructose from foods such as fruits and fruit juices is not affected by Synetrim®.

A double-blind placebo controlled study showed that in overweight individuals, 150 mg of CQ taken twice daily before meals for ten weeks resulted in impressive reductions in body weight, body fat percentage, waist circumference, and fasting blood glucose.⁴ Another double-blind RCT had similar findings: compared to placebo, a formula containing CQ (albeit along with other helpful nutrients, such as green tea extract, chromium, and B vitamins) administered for eight weeks resulted in reduced body fat percentage, body weight, and waist circumference in overweight and obese subjects. The effects were even more dramatic when the CQ formula was combined with a calorie controlled diet (at 2100 calories). Significant improvements were also observed in blood lipids, fasting glucose, and C-reactive protein.⁵ Adverse events in the CQ arms of these studies (headache, lack of sleep, and intestinal gas in a small number of subjects) did not differ between the treatment and placebo groups, and CQ is "exceedingly safe and free of adverse effects at the doses commonly used."⁶

The dual activity of alpha-amylase and alpha-glucosidase inhibition is unique and differentiates Synetrim® CQ from other common "starch blockers," wherein inhibition of starch digestion is the only mechanism of action. Because it reduces the absorption of starch-derived glucose after a carbohydrate-rich meal, Synetrim® CQ may help maintain healthy blood glucose already in the normal range. Additionally, CQ has been shown to increase synthesis of endogenous opioids and serotonin,^{3,7} which may promote enhanced feelings of emotional well-being, potentially reducing the tendency toward mood-induced overeating (with "comfort foods" typically being high in carbohydrates and inflammation-promoting industrial fats).

Supplement Facts

Serving Size 2 capsules
Servings Per Container 30

Amount Per Serving	% Daily Value
Glutalytic®	350 mg *
Endo-Peptidase Complex	75,000 HUT/500 SAPU *
Exo-Peptidase Complex	125 DPPIV *
Synetrim® CQ (<i>Cissus quadrangularis</i>)(stem and leaf) [standardized to contain 2.5% phytogenic ketosterones]	300 mg *

*Daily Value not established.

Other Ingredients: Microcrystalline cellulose, capsule (hypromellose, water), silicon dioxide.

Recommended Use: Take two capsules per day before a meal, or as directed by your health care practitioner.

For a list of references cited in this document, please visit:

<https://www.designsforhealth.com/techsheet-references/protectzyme-references.pdf>

Glutalytic® is a registered trademark of Deerland Enzymes.

Synetrim® CQ is a registered trademark of Icon Group, LLC and is protected under US Patent 7,175,859 and patents pending.

Dosing recommendations are given for typical use based on an average 150 pound healthy adult. Healthcare practitioners are encouraged to use clinical judgement with case-specific dosing based on intended goals, subject body weight, medical history, and concomitant medication and supplement usage. Any product containing botanical substances has the potential for causing individual sensitivities. Individual monitoring, including liver function tests, may be appropriate.

***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.**

To contact Designs for Health, please call us at (860) 623-6314, or visit us on the web at www.designsforhealth.com.