## MetabolicZyme



Item # 74960 Available in bottles of 900 tablets

## The Possible Benefits of MetabolicZyme, a Food Supplement

- Provides both pancreatic enzymes and plant-based proteolytic enzymes for broad-spectrum enzymatic support
- Provides support for healthy digestion and circulation
- May help modulate the immune function

## **Description**

MetabolicZyme is a powerful enzyme formulation, with both broad-spectrum pancreatic enzymes and plant-based proteolytic enzymes. It provides nutrients that support healthy digestion, circulation, and modulate the immune function.

Pancreatin contains three major groups of enzymes which digest the three major kinds of food substance: amylases digest carbohydrates, lipases digest fats, and proteases (proteolytic enzymes) digest proteins. Trypsin and chymotrypsin are proteolytic enzymes derived from pork pancreas. Pepsin is a proteolytic enzyme found in the stomach. Besides their role in digestion, the enzyme family includes catalysts that participate in virtually every bodily process. Proteolytic enzymes may play a role in the immune response by digesting the protein coating of cells identified as invaders, so that the immune system can detect and dispose of them. Some proteolytic enzymes may support recovery from bruises, and after surgery.

Papain is obtained from papaya, and bromelain from pineapple. Both predominantly break down proteins. Bromelain has also been used to help support circulation, the cardiovascular system, and joint health. Rutin is a flavonol glycoside comprised of the flavonol quercetin and the disaccharide rutinose. Rutin can help strengthen capillaries and may support circulation. Rutin also has powerful antioxidant activity, with the ability to disarm reactive oxygen species including superoxide radicals and ferrous cations. It modulates the respiratory burst of neutrophils, helps maintain healthy levels of reduced glutathione, prevents oxidation of vitamin C, and may inhibit lipid peroxidation.

Venus' fly trap appears to have immunomodulatory properties. Venus' fly trap extract supports healthy

macrophage production and activity, modulating the efficiency of the immune system by increasing the helper to suppressor ratio. There is also evidence that it can support healthy circulation and heart function, help emulsify fats and support lipase activity, and provide antioxidant activity. The active ingredients include quercetin, myricetin, amino acids, bile salts, formic acid, naphthoquinones, plumbagin, 3-chloroplumbagin, hydroplumbagin glucoside and droserone.

Shiitake mushroom is a source of peptidoglycans which act as immunological adjuvants to stimulate immune response. The principal active constituent of shiitake is the polysaccharide lentinan (beta–1,3–glucan), which has been researched in Japan and elsewhere as an healthy immune support substance. Shiitake also contains a polysaccharide known as KS–2, and a polypentose, Ac2P, both of which are currently under investigation for effects on immune parameters. Shiitake is an interferon inducer and increases the activity of the protective antioxidant enzyme superoxide dismutase (SOD).

The isoflavones (phytoestrogens) MetabolicZyme include genistein, daidzein and glycitein, standardised in their free isoflavone forms, which are more easily absorbed than bound isoflavones (glycoside form). Genistein and daidzein have similar bioactive properties, and are classified as very weak oestrogens. Isoflavones modulate endogenous oestrogen activity through their affinity for oestrogen receptor sites, and can have oestrogenic or anti-oestrogenic activity, through either supply of weak oestrogenic activity or competitive inhibition of oestrogen receptors. Besides hormone modulation, genistein and daidzein may support aspects of the healthy immune response.

Serving size: 1 tablet

Servings per container: 900

## **Amount per serving:**

| Pancreatin (8X USP)                                  | 100    | mg  |
|--|--------|-----|
| Amylase  | 20,000 | USP |
| Protease   | 20,000 | USP |
| Lipase   | 1600   | USP |
| Papain (530 DU/g)                                    | 60     | mg  |
| Rutin  | 50     | mg  |
| Bromelain (1200 DU/g)                                | 45     | mg  |
| Shiitake Mushroom Powder                             | 25     | mg  |
| Trypsin  | 24     | mg  |
| Venus' Fly Trap (Dionaea muscipula) (Leaves) Extract | 10     | mg  |
| Pepsin (10M X)                                       | 10     | mg  |
| Isoflavones  | 10     | mg  |
| Chymotrypsin (1000 USP/mg)                           | 1      | mg  |

Other ingredients: Dicalcium phosphate, cellulose, ethyl cellulose, magnesium stearate, silicon dioxide.

**Suggested Use:** As a food supplement, 1 to 3 tablets with meals, or as directed by a healthcare

practitioner.

