

## **DPP-IV Enzyme + Complex - Product number B085 - 90 VeCaps**

### **Description**

Combination of 3 BioCore enzymes with DPP-IV activity and 13 other digestive support enzymes. This complex supports the digestion of gluten (gliadin), casein, proteins, fats, starch, (hemi) cellulose, various sugars, phytic acid / phytate, pectin and lactose. All enzymes in this product are produced by microbial fermentation; this product therefore does not contain any animal ingredients and is suitable for vegetarians.

### **Ingredients per capsule:**

BioCore DPP-IV:

Protease (Aspergillus oryzae) 30,000 HUT 30 mg

Protease (Aspergillus oryzae) 500 DPP-IV 60 mg

Protease (Aspergillus Melieus) 8.5 AP 10 mg

Other enzymes:

Amylase 8000 DU

Gluco-amylase 25.6 AGU

Protease 3.0 16 SAPU

Protease 4.5 39200 HUT

Protease 6.0 12000 HUT

Lipase 4800 FIP

Cellulase 4000 CU

Hemi cellulase 120 HCU

Alpha galactosidase 125 GalU

Pectinase 19.2 endo-PGU

Phytase 8 FTU

Xylanase 160 XU

Lactase 3250 U

**Ingredients:** enzymes. **Filler:** rice starch. **Anti-caking agents:** L-leucine, silicon dioxide. **Capsule wall:** HPMC.

**Usage and warnings:**

Adults take 1 capsule at the beginning of a meal, unless directed otherwise by a healthcare practitioner. Do not use during pregnancy and lactation. Do not exceed recommended dose and keep out of reach of children. Do not use in hypersensitivity to any of the ingredients in this product. A dietary supplement is not a substitute for a varied diet.

**Explanation of enzyme functions:**

DPP-IV (dipeptidyl peptidase IV) enzymes are involved in the digestion of dietary proteins such as gluten and casein and in the breakdown of the casomorphins and gluteomorphins that can arise from these proteins. Caseo and gluteomorphins are exorphins with opioid and immunoreactive properties.

Amylase cleaves (hydrolyses) starch and glycogen into disaccharides (maltose).

Glucoamylase breaks down disaccharides such as maltose into glucose and can split glucose at the end of starch molecules.

Proteases 3.0, 4.5 and 6.0 are a mixture of protein digesting enzymes that function both at an acidic pH (stomach) and at a more neutral and basic pH and consist of endo-peptidases and exo-peptidases. Endo peptidases are proteolytic (protein splitting) enzymes that break peptide bonds in the protein molecule, as opposed to exo peptidases, which break amino acid peptide bonds at the end of the protein molecule.

Lipase splits fats (especially triglycerides) into glycerol and fatty acids.

Cellulase breaks down cellulose into glucose. Cellulose is a fibrous substance in plant foods.

Hemi-cellulase breaks down hemi-cellulose into monosaccharides. Hemi-cellulose is fibrous carbohydrate and an important structural component in the cell walls of plant cells.

Alpha galactosidase supports the digestion of complex carbohydrates in beans, grains and starches.

Pectinases are pectin-degrading enzymes. Pectin is a polysaccharide in the cell wall of plants and fruits.

Phytase enzymes can break down phytate (phytic acid) in grains, legumes and seeds. Phytic acid is a phosphorylated inositol compound that can adversely affect the absorption of, for example, zinc and iron from the diet.

Xylanases are enzymes that break down polysaccharide beta-1,4-xylan into xylose, which breaks down hemicellulose, one of the major components of plant cell walls.

Lactase is the enzyme involved in the breakdown (hydrolysis) of lactose (milk sugar) into galactose and glucose.