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# Magnesium & Vitamin B6

## TOP bioavailability and safety

### Product Information

- A balance of magnesium is vital to the well-being of all organisms.
- Vitamin B6 is important for protein metabolism, the biosynthesis of amines and formation of blood cells.
- Piperine is used for boosting effect of active ingredients.

### Benefits

- The high bioavailability of Magnesium
- The high bioavailability of Vitamin B6 (real vitamin – P5P)
- EFSA statement



### Health Claims

**Magnesium:** contributes to normal functioning of the nervous system; to normal muscle function; to normal protein synthesis; to normal psychological function; to the maintenance of normal bones; has a role in the process of cell division; contributes to the maintenance of normal bones; to the normal formation of connective tissue; to the protection of cells from oxidative stress.

**Vitamin B6:** contributes to normal functioning of the nervous system; to normal homocysteine metabolism; to normal protein and glycogen metabolism; to normal psychological function; to normal red blood cell formation; to the normal function of the immune system; to the reduction of tiredness and fatigue; to the regulation of hormonal activity.



# Magnesium & Vitamin B6

## Product Formulation

Compound	Recommended intake 1 tablet	RDI (Recommended daily intake) in % [EC recommended daily allowance]
Magnesium	188 mg	50 %
Vitamin B6 – P5P	1,4 mg	1
Piperine	5 mg	No RDA established
Bamboo fibers	20 mg	No RDA established



### Packaging solution

#### Bulk

- 20 kg per the plastic bag in box

#### Blister

- PVC foil/Alu foil
- Format: 90 mm x 65 mm mg/10 tbl in blister

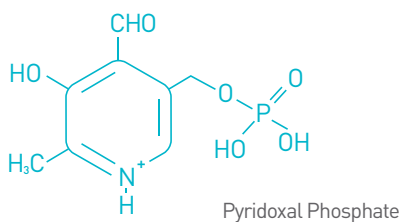
#### Bottle

- PET 100 ml/white (+ labelling)
- 30/60 tbl.



## Pyridoxine 5' phosphate

Pyridoxal, pyridoxamine and pyridoxine are collectively known as vitamin B6. All three compounds are efficiently converted to the biologically active form of vitamin B6, pyridoxal phosphate. This conversion is catalyzed by the ATP requiring enzyme, pyridoxal kinase.



#### Background:

Pyridoxine 5'-phosphate is an essential cofactor in various transamination, decarboxylation, hydrolysis of glycogen and synthesis pathways involving carbohydrate, sphingolipid, amino acid, heme and neurotransmitter metabolism. It is also necessary for neurotransmitter production, playing a key role in dopamine, noradrenalin, serotonin, GABA and glutamate production.

The requirement for vitamin B6 in the diet is proportional to the level of protein consumption ranging from 1.4 – 2.0 mg/day for a normal adult. During pregnancy and lactation the requirement for vitamin B6 increases approximately 0.6 mg/day.

Pyridoxine deficiency causes blood, skin and nerve changes. This vitamin is unique in that both deficiency and excess can use peripheral neuropathy.

## The life saving value of pyridoxal-5-phosphate (P5P) and magnesium

- P5P is more effective for carpal tunnel syndrome than surgery
- P5P along with magnesium and piperin has a significant effect reducing tingling of fingers, hands, toes and burning feet
- P5P and magnesium improve symptoms in autistic children

#### Magnesium

- Citrate
- Amino chelate

#### Film coating with PIPERINE

- Fast dissolution of coating layers thanks to graft polymer PVA/PEG
- 20% of PIPERINE is in coating layer for PREINCUBATION of enzymes (Pgp, CYP)

#### Remaining CYP3A Activity

