

# Vitamin B1-B6-B12 Tablets

## **Vitamins B1 (Thiamine), B6 (Pyridoxine), and B12 (Cobalamin)**

are indispensable factors in the metabolism of the nervous system and the brain, essential in maintaining cognitive functions and neurotransmission.<sup>[1]</sup> These three B vitamins could enhance physical strength, brainpower and resistance and stimulate appetite. B vitamins supplement is suitable for those get fatigue easily or need to be mentally agile in their jobs.<sup>[1-3,5,7]</sup>

## **Vitamin B1 (Thiamine) is good for nervous system, muscle and brainpower**

Thiamine, a water-soluble B-group vitamin, is necessary for maintaining normal appetite.<sup>[2]</sup> It functions as a coenzyme in the conversion of carbohydrates and certain amino acids to provide energy for muscle, brain and nervous tissue.<sup>[1,3]</sup> Therefore, thiamine could modulate cognitive performance and help avoid muscle fatigue and body tiredness, also promote health of the brain and the nervous system. Thiamine deficiency has been associated with chronic alcoholism.<sup>[3,4]</sup> Consumption of tea and coffee would also increase the requirement for thiamin intake.<sup>[4]</sup>

## **Vitamin B6 (Pyridoxine) facilitates activities of over 100 enzymes**

Vitamin B6 plays a role in the processing and metabolism of proteins, fats and carbohydrates. It is also required for the proper growth and development of the brain, nerves, skin, and many other parts of the body.<sup>[5]</sup> The major form of vitamin B6 in the tissues is PLP. PLP is a coenzyme for more than 100 enzymes involved in amino acid metabolism, neurotransmitter synthesis and heme biosynthesis.<sup>[3]</sup> It helps maintain a sufficient supply of hemoglobin and at the same time its antioxidant activity protects the red blood cells and lens cells from oxidative damage.<sup>[6]</sup> Vitamin B6 may also help relieve depression, irritability and tiredness of premenstrual women.<sup>[7]</sup>

## **Vitamin B12 (Cobalamin) is essential for red blood cell formation and normal neurological function**

Vitamin B12 acts as a cofactor for enzymes. An adequate supply is essential for normal blood formation and neurological function.<sup>[3]</sup> It participates in methyl conversion and folic acid metabolism, facilitates blood cell and nerve cell metabolism and neurotransmitter synthesis to ensure normal function of the central nervous system.<sup>[1,3,8]</sup>

Some individuals, especially the elderly or people with digestive tract disorders, may be unable to absorb naturally occurring vitamin B12 effectively.<sup>[3,8]</sup> They may need to take supplements in order to meet their dietary requirement. People with B12 deficiency may experience impaired mental functions and depression.<sup>[9]</sup> Supplementation with B12 may improve cerebral and cognitive functions in the elderly.<sup>[1]</sup>

## **Main functions of the combination of vitamins B1, B6 & B12:**

- ▶ Boost energy supply to muscle, brain and nervous tissue <sup>[1,3,5]</sup>
- ▶ Improve cognitive performance <sup>[1,3]</sup>
- ▶ Promote appetite and improve mood <sup>[2,7]</sup>
- ▶ Antioxidant to maintain healthy cells <sup>[6]</sup>
- ▶ Provide coenzyme for synthesis of heme and blood cells <sup>[3]</sup>

## **Recommended daily dose:**

Adults take 1 tablet daily or as recommended by physicians.



## **References:**

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