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COGNITIVE AND MENTAL PERFORMANCE

EFFECTIVENESS OF CAFFEINE, PHOSPHATIDYLSERINE, GREEN TEA CATECHINS AND L-THEANINE IN TOP SPORTS AND EVERYDAY LIFE

SPONSER offers two products targeting enhanced cognitive performance and improved concentration: <u>MENTAL</u> <u>FOCUS</u> with phosphatidylserine, L-theanine and catechins and <u>ACTIVATOR</u> with high-dose caffeine. How do the individual substances work?

CAFFEINE

The effect of caffeine has been widely researched. Science has shown in numerous studies caffeine's beneficial effects if consumed in a sufficient dose:

- better cognitive and mental performance
- · increased ability to concentrate
- improved attention and alertness
- · increased short-term aerobic performance

PHOSPHATIDYLSERINE

Another, less known substance that also contributes to improved mental performance is phosphatidylserine (PS). This is a specific phospholipid fraction of lecithin. The substance is found naturally in egg yolk, innards, brain, but also in muscle meat, milk and peanut butter. Industrially, lecithin and its various fractions are mostly extracted from soya. The advantage here is that, unlike caffeine, phosphatidylserine does not have any undesirable side effects such as potentially increased nervousness and prolonged adrenaline effects.

CATECHINS AND L-THEANINE

Catechins (polyphenols) and the amino acid L-theanine also have a positive effect on cognitive performance. Both substances are typical, natural components of green tea. L-theanine increases the brain wave activity associated with relaxation and reduces those that influence stress perception and nervousness. This may be the reason why people who react nervously to coffee do not feel such effects with green tea of the same caffeine content. The positive effects of green tea and its ingredients include:

- no increased nervousness
- improved concentration and focus
- · increased precision and learning ability
- · less stress and fatigue
- · increased memory and reaction capacity
- · better sleep quality

WHICH ATHLETES MAY BENEFIT?

Substances that promote mental and cognitive performance are particularly useful for athletes whose sport-specific skills are based on complex movement sequences and on an outstanding interaction between the central nervous system and muscles, i.e. require high concentration and coordination skills. Often the mental strength and cognitive focusing ability gives an athlete the small decisive advantage when it comes to top results in elite sport.

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Typical sports include:

- Golf
- Shooting
- Tennis and other ball sports
- Motorsports
- Martial arts
- Gymnastics
- Water diving
- Curling and bowling

Moreover, cognitive performance characteristics such as attention, focus, learning and memory are important factors in a performance and competitive world. Therefore, people in work, education and school also benefit from the effectiveness of the above-mentioned substances.

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