Sympathetic and Parasympathetic Nervous Systems

GS15-4 Fermented Ginseng is the most powerful and fully balanced adaptogen known to modern science. Adaptogens are substances found in nature which help the body to adapt to stress. GS15-4 helps to create the critical balance and synergy in the body's autonomonic nervous system between the sympathetic and parasympathetic. This synergy allows the body to create homeostasis which supports cell renewal for optimal health and performance through long term use. (NOTE: Due to stress levels, additional servings of GS15-4 Fermented Ginseng may be needed at times maintain this critical balance.)
This document is written to help you understand your body.

OUR BRAIN AND NERVOUS SYSTEM

Our body is managed through our brain and nervous system which are separated into two parts: The **central nervous system** composed of the spinal cord and the brain itself. The **peripheral nervous system** which is the nerve fibers branching out from the spinal cord and the brain. The peripheral nervous system is further subdivided into the autonomic nervous system and somatic nervous systems.

AUTONOMIC NERVOUS SYSTEM

The **Autonomic Nervous System "ANS"** is a control system that acts largely unconsciously and regulates bodily functions such as the heart rate, digestion, respiratory rate, pupillary response, urination, and sexual arousal. The autonomic nervous system "ANS" has two divisions: the **sympathetic** nervous system, which accelerates the heart rate, constricts blood vessels, and raises blood pressure and the **parasympathetic** nervous system, which slows the heart rate, increases intestinal and gland activity, and relaxes sphincter muscles.

The **sympathetic nervous system SNS** is your performance system. It is what initiates the fight-or-flight mechanism of the body. This system also can supply nerves to other parts of the body like the lungs, eyes, alimentary canal, heart, kidneys, etc. This system will cause a rise in the heart rate and in the amount of secretions the patient produces. It will also raise the rennin secretions coming from the kidneys. The release of blood sugar from the liver will as well be stimulated which is deposited into the bloodstream to make the glucose accessible for consumption.

The **parasympathetic nervous system PNS** is the component that is accountable for the rest-and-digest stage of a our body. The nerve fibers of this subdivision are delegated to the smooth muscles, glandular tissues, and cardiac muscles. This system is accountable to stimulate the salivation process, tear production, defecation, digestion, and urination. Immunity and repair are supported by the PNS.

There are various parasympathetic and sympathetic disparities that exist. These two are identified to act in contrasting and complimentary. The PNS can constrict the pupils of the patient while the SNS dilates them. The SNS inhibits the secretion of saliva whereas the PNS stimulates this process. PNS decreases the pulse rate and slows down the blood pressure. On the contrary, the SNS increases the pulse rate and heightens blood pressure levels. The PNS can also constrict the bronchi. On the other hand, the SNS dilates them and increases their diameter. The PNS can stimulate the digestive system activity while the SNS inhibits its activity. The SNS enables urinary retention whereas the PNS can stimulate urination. The rectum is relaxed when the patient's PNS is activated. Inversely, the rectum is contracted when the SNS is stimulated.

These two systems react on the complementary situations in our lives. The Sympathetic Nervous System is stimulated for a person to accelerate the body to support mental and physical performance. The Parasympathetic Nervous System functions to decelerate the body supporting cell renewal. They are like our body's gas pedal and brake.