Pregnenolone is a steroid hormone produced by the adrenal glands and other organs and also synthesized in the brain. Made from cholesterol within the mitochondria of cells, pregnenolone is converted into at least 150 steroid hormones, including progesterone, DHEA, the cortisones, the estrogens and testosterone. Research has shown that since pregnenolone influences the levels of other steroid hormones, its actions are linked to multiple body functions rather than one specific action.1-6

Pregnenolone appears to participate in a variety of functions, including energy, memory, mood, PMS and stress reduction, and arthritis relief. Women with PMS have reported improvement in their symptoms when taking pregnenolone a few days prior to the beginning of their menstrual cycle. Additional studies indicate that pregnenolone can improve sleep quality and decrease intermittent waking, reduce anxiety, and elevate mood and energy levels.1,3-8

Just as short-term memory and the ability to learn and memorize information declines with age, so do levels of pregnenolone—concentrations in the blood are an average of 60% lower at age 75 than at age 35. Thus, there may be a connection between low levels of pregnenolone and age-related cognitive decline.1-4,9

Human trials conducted in the 1950s indicated that pregnenolone might help restore memory and improve learning. Fortunately, recent animal studies have confirmed these early findings. In fact, studies using mice have shown pregnenolone to be one of the most potent memory-enhancing substances discovered thus far. In 1996, a follow-up human study conducted at St. Louis University demonstrated that a one-time dose of pregnenolone improved the performance of older men and women given memory tests. Scientists have yet to definitively explain how pregnenolone improves memory and learning ability. However, it seems clear that pregnenolone provides both an excitatory effect on the brain and an inhibitory action on GABA receptors that can block memory. Pregnenolone also appears to facilitate neurotransmitter activity.1,4,5,7,9-12

Research from the 1950s also established the beneficial effects of pregnenolone on arthritic conditions, including rheumatoid arthritis. Within 1-2 weeks, pregnenolone supplementation significantly improved symptoms of joint swelling, stiffness and pain associated with rheumatoid arthritis in at least 50% of study participants, with up to an additional 30% improving to a lesser degree. Although these initial results indicated great promise, pregnenolone research was all but discontinued, due to the growing focus on corticosteroid drugs. Today, however, there is renewed interest in pregnenolone, particularly since prescription drug treatment is associated with numerous side effects such as destruction of bone, immune suppression and high blood pressure.1,4,6,9

Preliminary research on the benefits of pregnenolone for the treatment of autoimmune disorders has uncovered intriguing results. One study showed that pregnenolone provided moderate to striking improvements in patients with lupus and scleroderma, particularly with respect to how these conditions affect the skin. Three out of four patients with lupus experienced a decrease in the redness of their skin lesions and a disappearance of skin rashes, especially those on the face. Likewise, both patients with scleroderma reported a softening of the skin on their face, forearms and hands and improvement in the texture and elasticity of their skin. It is interesting to note that pregnenolone levels are substantially reduced in patients with systemic lupus erythematosus, compared to healthy individuals. Corticosteroid treatment appears to further exacerbate pregnenolone deficiencies.4,5,13

Pregnenolone supplements are manufactured in laboratories from diosgenin, a substance obtained from the Mexican wild yam. Pregnenolone safety appears to be well-established, although side effects such as headache, insomnia and irritability have been reported with high doses. Nevertheless, pregnenolone is not recommended for use by pregnant women and children. In addition, since pregnenolone exhibits antagonistic effects on GABA receptors, individuals with a history of seizures should check with their healthcare professional prior to use. Pregnenolone may also inhibit the action of prescriptions drugs used to increase GABA activity such as neurontin.3,7-9

Each capsule of NSP’s Pregnenolone contains 10mg of pregnenolone, derived from wild yam root.

References: