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Gammanol Forte™

Gammanol Forte™ is a source of gamma oryzanol, a naturally occurring mixture of plant sterols and free ferulic acid esters derived from rice bran. Research indicates that gamma oryzanol has a plethora of functional effects. In addition to its best known actions of promoting increases in lean muscle mass and enhancing endorphin release, the sterol component of gamma oryzanol has noted effects on modified sterols such as testosterone, oestrogen, progesterone, DHEA, etc. It has been known to support normal, healthy cholesterol levels, provide support for those having hormonal fluctuations associated with menopause, increase human growth hormone activity (as measured using insulin growth factor I [IGF-I]), and act as a potent antioxidant. It has also been shown to have a normalising effect on gastric functioning, particularly on gastric and duodenal mucosa. Not all gamma oryzanol is created equally. While gamma oryzanol may be sourced from corn or barley, Biotics Research chooses to use gamma oryzanol from rice bran, as it results in a superior product free from common allergens. Biotics Research Corporation processes gamma oryzanol utilising a highly specialised fractionation process (FRAC®) that vastly improves the bioavailability of the ferulic acid component. In addition to this marked improvement in bioavailability is the synergistic effect with **Gammanol Forte™**'s combination of gamma oryzanol and FRAC®, with its proprietary tableting base. Laboratory findings reveal a combined antioxidant effect that is far superior to the antioxidant status of either constituent on its own. Collectively, **Gammanol Forte™** may just be one of the most versatile supplements you've never heard about.



Research Pertaining to Other Topics of Interest

Vitamin D for Chronic Kidney Disease (CKD)? In otherwise healthy individuals, vitamin D deficiency associates with a higher risk of mortality for all causes, despite normal serum calcitriol. This extends beyond the recognised adverse impact of vitamin D deficiency on calcium and phosphate homeostasis predisposing to secondary hyperparathyroidism, bone loss and vascular calcification. Vitamin D deficiency also associates with an early onset of disorders of aging including hypertension, insulin resistance, autoimmune disorders, cancer, and organ damage due to excessive systemic inflammation causing atherosclerosis, vascular stiffness, renal lesions, and impaired DNA-damage responses. Because the kidney is essential to maintaining serum levels of calcitriol [the most potent endogenous endocrine activator of the vitamin D receptor (VDR)] and 25-hydroxyvitamin D (for local rather than systemic VDR activation), the frequency and severity of all the above mentioned disorders markedly increase in CKD.

Dusso AS. Update on The Biologic Role of The Vitamin D Endocrine System. *Curr Vasc Pharmacol* 2013 May 16.