

a fórmula



GLISODIN®

SOD vegetal contra o
estresse oxidativo

Estudos



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GLISODIN®

SOD vegetal contra o estresse oxidativo

DESCRIÇÃO

Forma biodisponível de superóxido dismutase (SOD) 100% vegetal, derivada do melão cantaloupe (*Cucumis melo* L.) associada à gliadina, proteína extraída do trigo.

MECANISMO DE AÇÃO

A SOD reduz o estresse oxidativo ao catalisar a dismutação do superóxido em oxigênio e peróxido de hidrogênio. Por possuir estrutura molecular frágil, é facilmente destruída pela acidez estomacal e enzimas digestivas, assim, com a gliadina presente no **Glisodin®**, esta ocasiona a proteção da SOD perante o trato gastro digestivo promovendo sua absorção. O **Glisodin®** ocasiona a proteção da função cognitiva contra o estresse, previne doenças relacionadas à síndrome metabólica, atua na prevenção do estágio pré-clínico da aterosclerose ao inibir a inflamação vascular diminuindo o risco de doenças cardiovasculares, diminui o acúmulo de ácido lático durante o exercício e promove a modulação imunológica. Na pele, reduz os sinais de envelhecimento, auxiliando na manutenção da integridade estrutural da pele e do colágeno, na prevenção de alergias, na preparação da pele a exposição solar, além de reduzir as alterações de hiperpigmentação pós-inflamatória e solar.

INDICAÇÕES

- ✓ *Anti-aging* dérmico, envolvendo hidratação, elasticidade e integridade do colágeno;
- ✓ Hiperpigmentação pós inflamatória;
- ✓ Performance física;
- ✓ Inflamação vascular;
- ✓ Melhora cognitiva e de doenças degenerativas.

DOSE USUAL

Recomendação oral de 250 a 1000mg ao dia de **Glisodin®**.

SUGESTÕES DE FÓRMULAS

Glisodin® (<i>Cucumis melo</i> L.).....	150mg
Vitamina E.....	20mg
Polypodium Leucotomos.....	360mg
BioBlanc.....	100mg
LN ² IN.....	200mg
Vitamina C.....	200mg
DNA Ecopur.....	10mg

Modo de uso: 1 dose ao dia.
Indicação: pós-procedimento universal.

Glisodin® (<i>Cucumis melo</i> L.).....	500mg
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Modo de uso: 1 dose ao dia.
Indicação: melhora da performance física.

PRINCIPAIS REFERÊNCIAS

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GLISODIN[®]

ESTUDOS CLÍNICOS

A single center, pilot, double-blinded, randomized, comparative, prospective clinical study to evaluate improvements in the structure and function of facial skin with tazarotene 0.1% cream alone and in combination with GliSODin[®] Skin Nutrients Advanced Anti-Aging Formula

BACKGROUND: Superoxide dismutase (SOD) reduces the reactive oxygen species formation associated with oxidative stress. An imbalance between free radicals and antioxidants can lead to accelerated aging. GliSODin[®] Skin Nutrients Advanced Anti-Aging Formula (GAAF) is an SOD-containing dietary nutricosmetic formulated with other nutraceuticals that promote improvements in the structure and function of the skin, including hydration, elasticity, structural integrity, and photoaging caused by oxidative stress. Tazarotene cream 0.1% (TAZ) is a United States Food and Drug Administration-approved drug indicated for use in the mitigation of facial fine wrinkling, facial mottled hyper- and hypopigmentation, and benign facial lentiginos when taken in conjunction with a comprehensive skin care and sun avoidance program. **OBJECTIVE:** To determine if the antioxidant, anti-aging, hydrating and skin-rejuvenating properties of GAAF complement the retinoic actions of TAZ to improve the structure and function of facial skin. **METHOD:** A 90-day comparative study of ten subjects with facial photodamage; daily topical application of TAZ was used in combination with three capsules of GAAF (780 mg each) or placebo orally, with food, per the randomization allocation. **RESULTS:** After 90 days of treatment, TAZ alone and in combination with GAAF improved fine wrinkles (\downarrow 1.2 versus 2.0), mottled hyperpigmentation (\downarrow 2.2 versus 2.8) and overall photodamage (\downarrow 1.0 versus 1.8), as well as patient-reported response to treatment (\downarrow 2.0 versus 1.6). At week 12, TAZ/GAAF combination treatment (Group A) versus TAZ treatment alone (Group C) was of significant clinical benefit, with respect to fine wrinkling (14.7%/41.7%), overall photodamage (15.6%/53.0%), skin moisture (19.1%/103.2%), skin elasticity (12.8%/87.7%), and response to treatment (8.8%/21.4%). **CONCLUSION:** The study suggests GAAF in combination with TAZ is safe and provides significant clinical benefit with relative improvement in facial fine wrinkling, overall photodamage, skin moisture and elasticity.

Effects of oral supplementation with plant superoxide dismutase extract on selected redox parameters and an inflammatory marker in a 2,000-m rowing-ergometer test

Abstract: The aim of this study was to investigate the effect of plant superoxide dismutase extract (GliSODin[®]) supplementation on the balance of oxidants and antioxidants in the serum and erythrocytes of competitive rowers. The double-blinded study included 19 members of the Polish rowing team who were participating in a preparatory camp. Subjects were randomly assigned to the supplemented group (n = 10), who received 2 capsules (500 mg) of GliSODin[®] extract once daily for 6 weeks, or the placebo group (n = 9). At the beginning and end of the study, subjects performed a 2,000-m maximum-effort test on a rowing ergometer. Blood samples were taken from the antecubital vein before each exercise test, 1 min after completing the test, and after a 24-hr restitution period. The following redox parameters were assessed in erythrocytes: superoxide dismutase (SOD) activity, glutathione peroxidase activity, and concentrations of thiobarbituric-acid-reactive substances. In addition, creatine kinase activity and total antioxidant capacity were measured in plasma samples, lactate levels were determined in capillary blood samples, and C-reactive protein and lactate dehydrogenase concentrations were measured in serum. After supplementation, SOD activity was significantly higher (p = .0037) in the supplemented group than the placebo group, and C-reactive protein was significantly (p = .00001) lower in athletes receiving GliSODin[®] than those in the placebo group. In conclusion, supplementation with an extract rich in SOD activity promoted antioxidant status and protected against increased inflammation in the serum of professional rowers but had no effect on oxidative damage induced by exhaustive exercise.



GliSODin®, a vegetal sod with gliadin, as preventative agent vs. atherosclerosis, as confirmed with carotid ultrasound-B imaging

Abstract: Prevention of cardiovascular disease should target high-risk subjects based on genetic/familial factors, blood chemistry, blood pressure, body mass index (BMI), and a history of/or current cigarette smoking. We selected active adults (n=76) aged 30-60 and investigated these risk factors, in order to recommend preventive measures. Another interesting variable is the preclinical status or atheroma of the arterial (carotid) wall or lumen. We also investigated the presence of oxidative stress in, and the anti-oxidant status of these subjects. We studied the anti-oxidative efficacy of superoxide dismutase (SOD) and variations of malondialdehyde (MDA). Supplementation with GliSODin®, a vegetal SOD associated with gliadin, was effective in controlling the thickness of the carotid artery intima and media layers as measured by ultrasonography-B. We could demonstrate the preventive efficacy of GliSODin® at a preclinical stage in subjects with risk factors of cardiovascular disease.

Supplementation with gliadin-combined plant superoxide dismutase extract promotes antioxidant defences and protects against oxidative stress

Abstract The potential benefits to health of antioxidant enzymes supplied either through dietary intake or supplementation is still a matter of controversy. The development of dietary delivery systems using wheat gliadin biopolymers as a natural carrier represents a new alternative. Combination of antioxidant enzymes with this natural carrier not only delayed their degradation (i.e. the superoxide dismutase, SOD) during the gastrointestinal digestive process, but also promoted, in vivo, the cellular defences by strengthening the antioxidant status. The effects of supplementation for 28 days with a standardized melon SOD extract either combined (GliSODin®) or not with gliadin, were evaluated on various oxidative-stress biomarkers. As already described there was no change either in superoxide dismutase, catalase or glutathione peroxidase activities in blood circulation or in the liver following non-protected SOD supplementation. However, animals supplemented with GliSODin® showed a significant elevation in circulated antioxidant enzymes activities, correlated with an increased resistance of red blood cells to oxidative stress-induced hemolysis. In the presence of Sin-1, a chemical donor of peroxynitrites, mitochondria from hepatocytes regularly underwent membrane depolarization as the primary biological event of the apoptosis cascade. Hepatocytes isolated from animals supplemented with GliSODin® presented a delayed depolarization response and an enhanced resistance to oxidative stress-induced apoptosis. It is concluded that supplementation with gliadin-combined standardized melon SOD extract (GliSODin®) promoted the cellular antioxidant status and protected against oxidative stress-induced cell death.

Oral supplementation with melon superoxide dismutase extract promotes antioxidant defences in the brain and prevents stress-induced impairment of spatial memory

Abstract: The purpose of this study was to investigate the effect of antioxidant ingestion on stress-induced impairment of cognitive memory. Male C57BL/6 mice were divided into four groups as follows: (1) control mice (C mice) fed in a normal cage without immobilization; (2) restraint-stressed (RS mice) fed in a small cage; (3) vitamin E mice (VE mice), mice were fed in a small cage with a diet supplemented with vitamin E; (4) GliSODin® mice (GS mice) fed in a small cage with a diet supplemented with GliSODin®. RS, VE and GS mice were exposed to 12 h of immobilization daily. Five weeks later, spatial learning was measured using the Morris Water Maze (MWM) test. After water maze testing, we performed immunohistochemical analysis using 4-hydroxy-2-nonenal (4-HNE) and an anti-Ki67 antibody. 4-HNE is a marker of lipid peroxidation. RS mice showed impaired spatial learning performance and an increased number of 4-HNE-positive cells in the granule cell layer (GCL) of the hippocampal dentate gyrus when compared to C mice. Moreover, RS mice showed a decreased number of Ki67-positive cells in the subgranular zone (SGZ). GS mice showed better spatial learning memory than RS mice. The number of 4-HNE-positive cells in the GCL of GS mice was significantly less than that of RS mice. The number of Ki67-positive cells in the SGZ of GS mice was significantly greater than that of RS mice. These findings suggest that GliSODin® prevents stress-induced impairment of cognitive function and maintains neurogenesis in the hippocampus through antioxidant activity.



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