Discussion

Pure Joint Support provides primary support for joint lubrication and comfort in the face of aging, normal wear and tear, and robust physical activity. This unique formula addresses the health of the total joint, including articular cartilage (highly specialized connective tissue), the synovial membrane (a thin layer of tissue that contains synoviocytes), and the synovial fluid (the fluid that lubricates the joint). Providing early support for the joint’s cartilage matrix can tip the balance in favor of anabolism (building up) versus catabolism (breaking down). A proprietary blend of ingredients makes Pure Joint Support the early “go-to” formula for healthy joint maintenance.*

Hyal-Joint® This proprietary complex is rich in high-molecular–weight hyaluronic acid, along with polysaccharides and collagen. Hyaluronic acid (HA), the principal component of Hyal-Joint, is a lubricating substance produced naturally in the body.[1] It is found in abundance in the synovial fluid and extracellular matrix of joints where it reduces friction between cartilage surfaces and helps balance the body’s normal response to inflammation. Hyaluronic acid helps maintain the quality of the synovial fluid and the integrity of the synovial membrane, both key factors in the health of the joint itself. Oral HA is absorbed in the small intestine and has yielded positive results in human, animal, and cell studies.[9,10] Cell studies suggest that high-molecular–weight HA has a positive effect on the body’s normal response to inflammation due to downregulation of IL-8, iNOS, aggrecanase-2, and TNF-alpha gene expression.[11] In vitro efficacy studies found Hyal-Joint to be two to four times more effective than fermented HA in stimulating the synthesis of endogenous HA and improving the concentration and viscous properties of joint fluid.[12]

Research on Hyal-Joint has yielded positive outcomes.[8] In humans, a randomized, double-blind, placebo-controlled trial indicated that oral Hyal-Joint (80 mg/d) resulted in significant improvements in WOMAC (Western Ontario and McMaster Universities Osteoarthritis) scores compared to baseline, with a greater magnitude of improvement in physical function and total symptoms when compared to placebo. Hyal-Joint was found to improve several markers of quality of life in the study as well.[13] Oral supplementation with Hyal-Joint resulted in a decrease in synovial effusion and occasional pain when compared to other treatment.[14] Three-month supplementation with Hyal-Joint improved joint mechanics and muscle function (determined through isokinetic testing), promoting increased comfort and joint mobility.[15] Animal studies have yielded promising results suggesting that Hyal-Joint supports joint tissue at the cellular level and reduces synovial effusion.[16] Hyal-Joint was found to lower levels of prostaglandin E2 (PGE2) in human fibroblasts cells which, in turn, may balance the body’s normal response to inflammation.[17]

Hesperidin A citrus bioflavonoid that has been studied for its balancing effect on the body’s normal response to inflammation, hesperidin (HES) is often combined with other therapeutic agents.[18] Research suggests that oral HES can support joint health; when administered, it significantly improved all clinical parameters measured.[19] Suppressed clinical scores, and improved histological features in the animal model.[20] Hesperidin administration was associated with the suppression of T-lymphocyte proliferation and IL-2 production; downregulation of IL-1, IL-6, and TNF-alpha; and amelioration of pathological changes in a targeted rat population.[21]

Xanthohumol Hops are used traditionally to promote relaxation and healthy mood.[19] However, current research suggests that hop extract, particularly xanthohumol (XN), helps balance the body’s normal response to inflammation and supports joint health.[20-22] Specifically, XN was found to be superior to other hops-derived compounds (including isoxanthohumol) for inhibiting hyaluronic acid export, inhibiting proteoglycan and collagen loss, and balancing the body’s normal response to inflammation in bovine chondrocytes.[23] XN appears to suppress production of nitric oxide, IL-1α, and TNF-α; induce nuclear translocation of Nrf2; and increase cellular glutathione.[24] Furthermore, XN appears to confer additional support for balancing the body’s normal response to inflammation by downregulating cellular toll-like receptor 4 (TLR4) protein content.[25] Pure Joint Support contains a concentrated extract of xanthohumol.*

*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.
**Supplement Facts**

<table>
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<tr>
<th>Amount Per Serving</th>
<th>%Daily Value</th>
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<tr>
<td>SynovX Performance Proprietary Blend</td>
<td>492.5 mg **</td>
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<tr>
<td>Hesperidin (from Citrus sinensis/fruit), Hyal-Joint® (proprietary natural complex rich in high-molecular-weight hyaluronic acid, other polysaccharides, and collagen), and xanthohumol (from Humulus lupulus/hop cones)</td>
<td>** Daily Value not established.</td>
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**Other Ingredients:** HPMC (capsule), rice flour, ascorbyl palmitate, and silica.

**Directions**

Take one capsule twice daily, or as directed by your healthcare practitioner.

Consult your healthcare practitioner prior to use. Individuals taking medication should discuss potential interactions with their healthcare practitioner. Do not use if tamper seal is damaged.

**References**


**Does Not Contain**

Wheat, gluten, corn, soy, dairy products, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, or preservatives.

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