Why is SupportMax Joint one of Strom's favourite products and why might it become one of yours?

SupportMax Joint contains **natural ingredients**, formulated to **keep you training**, helping to prevent conditions such as **tendonitis**, tennis elbow or runner's knee being your limiting factor of performance. **SupportMax Joint** takes a double- faceted approach by **reducing** the **inflammation** and the **soreness** or **pain** you feel in the short-term, whilst **promoting healing** and **preserving joint integrity** in the long-term. Most people look to **SupportMax Joint** when soreness has become a problem, but would it be better taken daily knowing **prevention** is better than cure?

Synovial joints are the freely movable ones at the wrists, shoulders, ankles, knees, and hips. Joint inflammation can be a result of breakdown of articular cartilage, the smooth (hyaline), slippery tissue that covers the ends of bones where they come together to form joints. Cartilage acts as a shock absorber and the smooth surface allows the bones to glide over each other, but it can be damaged by injury or normal wear and tear. There can be a reduction in the viscoelasticity of the fluid found in the cavities of synovial joints. Synovial fluid has the texture of egg white and functions as a biological lubricant, and biochemical pool through which nutrients and regulatory cytokines traverse. One molecule secreted into synovial fluid is hyaluronan ('hyaluronic acid', one form of hyaluronan). The molecules in synovial fluid allow low friction and low wear between the articular cartilages and regulate inflammation and tissue repair.

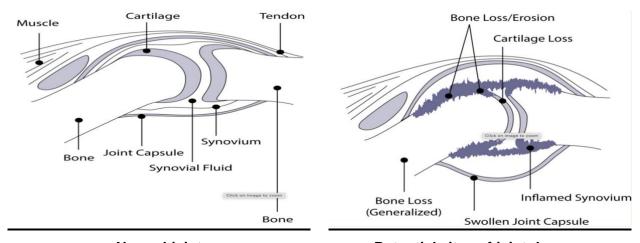


"SupportMax Joint has a potent anti-inflammatory effect."

BEST TAKEN AWAY FROM OR BEFORE TRAINING

Available in powder or capsule, a full serving once a day will give you 40 servings from a tub.

SupportMax Joint aims to reduce inflammation, limit collagen breakdown and cartilage loss, and support synovial fluid



Normal joint

Potential sites of joint damage

What does SupportMax Joint contain?

Glucosamine Sulphate 1400 mg

Research suggests chronic supplementation with glucosamine sulphate effectively reduces the rate of collagen joint tissue breakdown and physical signs and symptoms of osteoarthritis.

Glucosamine sulphate is the pharmaceutical derivative of the naturally occurring amino monosaccharide glucosamine in **cartilage and synovial fluid**. Supplemental forms are made from shellfish. It is used to treat a variety of **inflammatory conditions** including **osteoarthritis**. Chronic supplementation has been found to **reduce** the progression of **joint space narrowing**, improving symptomatic joint stiffness, pain, and limited function.

While most studies have evaluated the effectiveness of glucosamine supplementation in relief of symptoms in lower limbs, there is evidence showing improvement of symptoms in osteoarthritis of the spine.

Doi: 10.1007/s00296-012-2416-2. Doi: 10.1001/archinte.162.18.2113. Doi: 10.1016/s1063-4584(05)80006-8. Doi: 10.1001/archinte.163.13.1514.

HydroCurc[™] 1400 mg

Curcumin is an **anti-inflammatory polyphenol** found in **turmeric**, probably most well-known as the yellow colour spice, nick-named 'Indian Saffron', in curry. It has long been used in holistic Ayurveda and Chinese medicine as a **nutraceutical**. Curcumin contains curcuminoids which can be extracted from turmeric to improve potency and bioavailability, important as curcumin is hydrophobic and **poorly absorbed** in water. This challenges the pharmaceutical significance and therapeutic viability of curcumin as it has **low gastro-intestinal absorption** and **rapid metabolism**.

Curcuminoids are powerful **antioxidants** which exert **anti-inflammatory**, **antioxidant**, **and pro-apoptotic actions**. Whilst some inflammation is a necessary response for adaptation to the stimulus of exercise, chronic low-grade inflammation is associated with the onset of **pain and chronic disease**. Unfortunately, the low bioavailability of curcumin limits the therapeutic outcomes.

Curcumin has low bioavailability due to **low gastro-intestinal absorption** and **rapid metabolism** as mentioned above. These problems have been overcome with **HydroCurcTM** by developing a delivery technique for orally ingested curcumin. **LipiSperse**[®] is a novel delivery system composed of a mixture of surfactants, polar lipids and solvents which enable the normally hydrophobic curcumin to disperse in cold water. Once dispersed in water, **LipiSperse**[®] goes on to prevent the curcumin from sticking together and clumping.

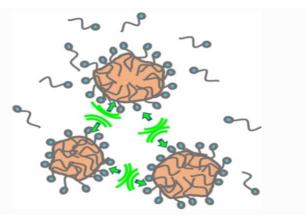




https://youtu.be/cZ8oTCdLILc



Pure curcumin sticking together on the surface of water and not dispersing



Curcumin coated with **LipiSperse**[®] allowing particles to disperse in water

A bit more on LipiSperse®

In a study of 18 healthy volunteers (9 female, 9 male), plasma concentration for total curcuminoids was increased threefold with **LipiSperse**® when compared to a standard curcumin product. The participants were not using any curcuminoid products outside of the trial and curcuminoid foods were restricted. This outcome using **LipiSperse**® reflected previous investigations supporting increased bioavailability of curcumin using delivery systems versus raw curcumin.

And back to HydroCurc™ containing LipiSperse®

There have been various outcomes of studies performed to assess the effect of curcumin in combination with **LipiSperse**[®]. They range from facilitating a quicker return to exercise training, allowing a higher training intensity than a placebo by reducing postexercise pain, modulating inflammatory pathways and reducing lactate accumulation in an exercising population.

In combination with iron, **HydroCurcTM** has been found to increase brain derived neurotropic factor (BDNF), important in learning and memory and reduce inflammatory markers associated with oxidative stress and systemic inflammation.

SupportMax Joint contains HydroCurc[™] a clinically proven and scientifically validated form of curcumin combined with LipiSperse[®] to overcome the challenges of absorption, improving solubility, transmembrane permeability, long-term stability, and plasma half-life.



Other
'bioavailable'
curcumin products
use up to 80%
excipients, HydroCurc®
uses only 10% excipients
which means more
curcumin per
dose!



HydroCurc[™] Proven to be the world's most bioavailable curcumin in a single dose

HydroCurc[™] https://www.hydrocurc.com/science.

Doi: 10.1007/s00394-018-1766-2.

Doi: 10.1016/j.msec.2017.03.226.

Doi: 10.2147/CIA.S58535.eCollection.2014.

Doi: 10.3390/foods6100092.

Doi: 10.1080/19390211.2020.1796885.

Doi: <u>10.3390/antiox9080645</u>. Doi: <u>10.3390/nu14030712</u>.

Further benefits of curcumin − and HydroCurcTM

- Anti-bacterial
- Anti-parasitic and anti-malarial
- Improved FEV1 values reducing airways inflammation and obstruction in asthma
- Reduces the mechanisms of action in the progression of Alzheimer's Disease
- Neuroprotective in chronic inflammatory autoimmune diseases
- Co-administration with iron increases serum BDNF contributing to learning and memory
- Anti-arthritic
- Reduction in chronic itching in pruritis (dry skin, skin disease, allergies, diabetes)
- Promotes beneficial gut bacterial strains and microbial diversity
- Activates favourable biological pathways through production of gut bacterial metabolites

Doi: 10.1111/j.1140-1681.2011.05648.x.

Doi: 10.7860/JCDR/2014/9273.4705.

Doi: 10.3233/JAD-170188.

Doi: 10.1016/j.intimp.2010.08.013.

Doi: 10.1017/S0007114511006544.

Doi: 10.3390/antiox9080645.

Doi: 10.3390/nu13062004.

Black Pepper Extract 10 mg

SupportMax Joint has been specifically designed to include black pepper extract.

But I thought Rick said it shouldn't be included with everything!

And it shouldn't! In combination with **HydroCurcTM** it ensures higher bioavailability as the curcuminoids can be in the body for longer. It reduces **glucuronidation**.

By reducing the rate of metabolism in the liver and intestinal wall, a dose of 2 g/ kg curcumin in combination with 20 mg increased bioavailability 2000%. The extent of this absorption and bioavailability had no adverse effects.

Doi: <u>10.1055/s-2006-957450</u>.

Cissus Quadrangularis 750 mg

Cissus Quadrangularis a shrub traditionally used in Ayurveda medicine, is also found to grow in Malaysia, Sri Lanka, Thailand, and Africa where it is known as 'Bone Setter' in reference to its' bone and joint healing traits. It is an antioxidant phenolic containing triterpenoids and flavonoids as well as other bioactives such as resveratrol.

There have been studies investigating the proliferation of **osteoblasts**, where increased osteogenic activity has **reduced corticosteroid signalling**, preserving **anabolism** of bone tissue. This resulted in the improvement of fractures and a reduction of pain. There has also been notable reduction of losses in **bone thickness and bone strength** due to estrogenic activity.

Cissus Quadrangularis has analgesic effects, reducing joint pain associated with exercise.

Doi: <u>10.4103/0974-8520.175542</u>. Doi: <u>10.4103/0975-5950.94466</u>. Doi: <u>10.3810/psm.2013.09.2021</u>.

Further benefits of cissus quadrangularis

- Joint and bone health in menopause
- Antioxidant and anti-microbial
- Anti-convulsant used in traditional treatment of epilepsy and smooth muscle relaxant

Doi: 10.1089/109662003322233495.

Doi: 10.1590/S1807-59322009001000010.

Doi: 10.1002/jcb.23016.

Doi: 10.1016/j.jep2006.10.019. Doi: 10.3109/19390210903534962.

Vitamin C 250 mg

Vitamin C plays an essential role in the healing of bones, tendons, and ligaments. It is a co-factor for enzymes needed for collagen synthesis. Additionally, vitamin C acts as a powerful antioxidant reducing cell apoptosis during the inflammatory phase. Some studies have reported vitamin C can induce tendon-derived stem cell mobilisation, osteoblast growth and differentiation, and fibroblast stimulation, whilst others suggest an increase or acceleration in collagen synthesis compared to controls.

Doi: <u>10.1177/2325967118804544</u>. Doi: <u>10.3945/ajcn.116.138594</u>.

Hyaluronic Acid 200 mg

Hyaluronic acid is a high molecular weight polysaccharide produced by **fibroblasts** and specialist tissue **cells** and is recognised as a supplement to **maintain joint health**. Hyaluronan separates most body tissue surfaces that slide along each other. A 1% solution is **like jelly**, but when put under pressure it moves easily and can be passed through small spaces. It is a **pseudo-plastic** material that has various roles and takes different forms in the body, one is an acid. In osteoarthritis the

amount and concentration of hyaluronan is reduced and when the joint is under pressure the **synovial fluid** is less able to form a **protective layer**. The addition of hyaluronic acid provides **lubrication and mechanical support** by filling the space of the joint and alleviates pain and symptoms.

Hyaluronan **protects the joints** from oxidative damage from free radicals and cellular debris. It also inhibits angiogenesis preventing vascularity of the joint cavity. Hyaluronic acid may influence immunological reactions and have a direct influence on the **pain receptors** within the joint.

Inflammation resulting from oxidative stress degrades hyaluronan and reduces its' viscoelastic properties.

Oral administration of hyaluronic Acid has been found effective in the **relief of symptoms** in osteoarthritis, helping **restore physical function**.

Doi: 10.2478/intox-2013-0019.

Doi: 10.1097/MD.0000000000024252. Doi: 10.11138/ccmbm/2015.12.1.031.

Doi: 10.4137/CMAMD.S12743.

SupportMax Joint best use tips:

Strom's SupportMax joint is a well dosed formulation, and we suggest trying the product with 1 full serving once a day. It has a potent anti-inflammatory effect so may be best taken before or away from exercise to maximise the adaptative responses to training.

There are multiple causes of joint pain

- Ankylosing spondylitis
- Avascular necrosis
- Bursitis
- Carpal tunnel syndrome
- Charcot foot
- Diabetic cheiroarthropathy
- Fibromyalgia
- Frozen shoulder (adhesive capsulitis)
- Gout
- Hypothyroidism
- Lyme disease
- Osteoarthritis
- Osteoporosis
- Overuse injury
- Psoriatic arthritis
- Reactive arthritisRheumatic fever
- Sarcoidosis
- Sprains
- Tendinitis
- Tenosynovitis

SupportMax Joint is effective don't suffer with joint pain!

Joint pain can be debilitating in which various mechanisms combine. SupportMax Joint contains ingredients which work synergistically to support the body, reducing inflammation and the soreness or pain you feel, promoting healing, preserving joint integrity from synovial fluid production and viscosity, and reducing the rate of collagen joint tissue breakdown.

The natural ingredients in SUPPORTMAX JOINT have a wide range of additional health benefits associated with inflammatory disorders.

To LEARN more about STROM or for more information on their products visit their YOUTUBE or STROMUCATION.COM education site.

If you have any further questions, please don't hesitate to ask!