### SupportMax Joint contains HydroCurc<sup>™</sup> not just curcumin

#### Why?

**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**.

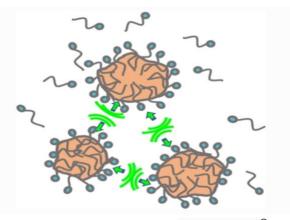
**Curcuminoids** are powerful **antioxidants** which exert **anti-inflammatory**, **antioxidant**, **and pro-apoptotic actions**. Whilst some inflammation is a necessary response for adaptation to the stimulus of exercise, chronic low-grade inflammation is associated with the onset of **pain and chronic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

#### Slide 2

Curcumin has low bioavailability due to **low gastro-intestinal absorption** and **rapid metabolism** as mentioned above. These problems have been overcome with **HydroCurc<sup>TM</sup>** 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.



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



Curcumin coated with LipiSperse® allowing particles to disperse in water





https://youtu.be/cZ8oTCdLILc



#### Slide 4

#### 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<sup>TM</sup> containing LipiSperse<sup>®</sup>

There have been various outcomes of studies performed to assess the effect of curcumin in combination with **LipiSperse**<sup>®</sup>. 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, **HydroCurc™** 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<sup>TM</sup> a clinically proven and scientifically validated form of curcumin combined with LipiSperse<sup>®</sup> 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!



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

#### Slide 6

#### 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 **HydroCurc<sup>TM</sup>** 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: 10.1055/s-2006-957450.

HydroCurc<sup>™</sup> Proven to be the world's most bioavailable curcumin in a single dose

#### There are multiple causes of joint pain

- Ankylosing spondylitis
- Avascular necrosis
- Bursitis
- Carpal tunnel syndrome
- Charcot foot
- Diabetic cheiroarthropathy
- Fibromyalgia
- Frozen shoulder
- Gout
- Hypothyroidism
- Lyme disease

- Osteoarthritis
- Osteoporosis
- Overuse injury
- Psoriatic arthritis
- Reactive arthritis
- Rheumatic fever
- Sarcoidosis
- Sprains
- Tendinitis
- Tenosynovitis



#### Slide 8

**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 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.



"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.

#### Slide 10

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!

## HydroCurc<sup>™</sup> https://www.hydrocurc.com/science

Doi: <u>10.1007/s00394-018-1766-2</u>. Doi: <u>10.1080/19390211.2020.1796885</u>.

Doi: 10.3390/foods6100092.

# **HYDROCURC**