

# COLLA MOUV PLUS®

The Granted **Props** by All Needed **Blocks** 



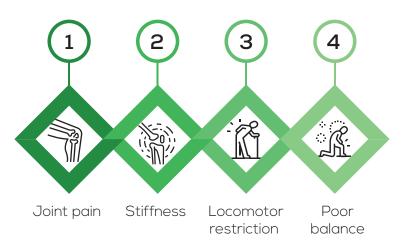




# What is OA?

Osteoarthritis (OA) is the commonest form of arthritis. However, the age of disease onset, sequence of joint involvement and disease progression vary from person to person.<sup>1</sup>

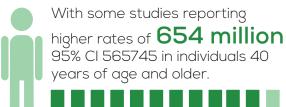
# Symptoms:2



# **Global Incidence:**

Globally, approximately **528 million** people are affected by OA.







The knee is the most commonly reported site of OA, with an estimated **3,650,000** (3,150,000 to 4,170,000) prevalent cases in 2019 <sup>3</sup>

# OA is An Age-Related Disease:

According to the American Association of Neurological Surgeons (AANS):

50% of people over the age of 65 show evidence of OA in at least one joint on their X-rays studies  $^4$ 









# The Granted **Props**by All Needed **Blocks**

CollaMouv Plus® is The ALL-in-ONE formula that contains all required ingredients to provide extra support for joints' health against Osteoarthritis

## CollaMouv Plus® contains:

- Hydrolyzed collagen type II
- Glucosamine sulfate
- Chondroitin sulfate
- Rosehip extract
- Nettle extract
- Sodium hyalurnate plus essential vitamins



# CollaMouv Plus® will bring against OA disease:



Powerful Synergetic impact to support joints

Anti-inflammatory effect comparable to NSIADS

COLLA MOUV PLUS®

High safety and tolerability

Better compliant and cost effective





# **Powerful synergetic impact:**

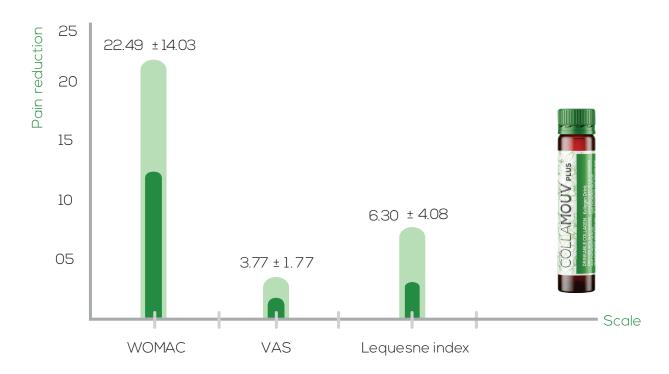
# 1 Impact on pain and functional capacity.

Effectiveness of Hydrolyzed Collagen, Chondroitin Sulfate, and Glucosamine in Pain Reduction and Functional Capacity in Osteoarthritis Patients<sup>7</sup>

An observational, open, multicenter clinical trial with a single treatment group aimed to evaluate the effectiveness of hydrolyzed collagen, chondroitin sulfate, glucosamine sulfate in 130 patients with osteoarthritis (OA) of the knee

### Results

After 6 months of treatment, a reduction of pain was recorded by 3.77  $\pm$  1.77 points (p < .0001) in the VAS index, 6.30  $\pm$  4.08 points (p < .0001) in the Lequesne index and 22.49  $\pm$  14.03 points (p < .0001) in the WOMAC index



# **Conclusion:**

Treatment with this combination significantly reduces pain and improves locomotor function in patients with OA of the knee and/or hip.







# Impact on synovial fluid features.

Effect of an oral hyaluronic acid, chondroitin sulfate, hydrolyzed collagen type II on synovial fluid features and clinical indices in knee osteoarthritis 8

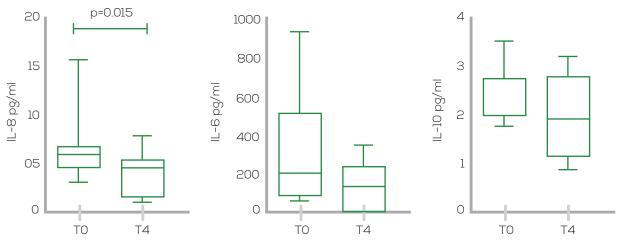
Two groups of OA patients (N.30) were divided to take a combination of containing hyaluronic acid, chondroitin sulfate, hydrolyzed collagen type II and the other group (Control group) was only submitted to arthrocentesis.

SF changes were evaluated by measuring local inflammatory indices, cytokines IL-1 $\beta$ , IL-8, IL-6, IL-10

### Results

The treated group with the combination showed a reduction of IL-8 (p=0.015), IL-6 and IL-10 levels after collection of synovial fluid and improvement in the clinical indices WOMAC (p<0.01), Lequesne (p=0.014) and VAS pain (p<0.01)

On the contrary, no significant changes were found in the control group., while no changes in cytokines were observed in the control group



Changes in IL-8, IL-6 and IL-10 SF after 4-weeks of treatment

### **Conclusion:**

A combination of hyaluronic acid, chondroitin sulfate, hydrolyzed collagen type II can improve some clinical parameters and affect cytokine concentrations in SF in patients with knee OA







# Provide comparable anti-inflammatory effects to NSAIDS:



Chondroitin sulfate is as effective as celecoxib and superior to placebo in symptomatic knee osteoarthritis: The Chondroitin versus Celecoxib versus Placebo Trial <sup>13</sup>

A prospective, randomized, 6-month, 3-arm, double-blind, double-dummy, placebo and controlled trial assessing changes on 604 OA patients

### **Result:**

Pain reduction in VAS score in the CS group (-42.6 mm) and in celecoxib group (-39.5 mm) was significantly greater than the placebo group (-33.3 mm) (p=0.001 for CS and p=0.009 for celecoxib)



# **Conclusion:**

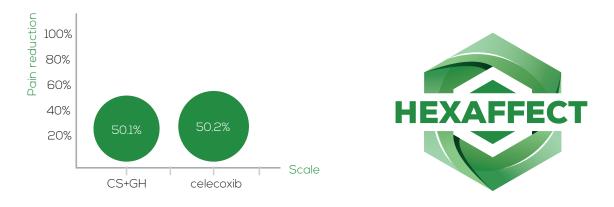
CS is superior to placebo and similar to celecoxib in reducing pain and improving function over 6 months in symptomatic knee osteoarthritis (OA) patients.



Glucosamine plus chondroitin showed comparable efficacy to celecoxib in patients with painful knee  $\mathsf{OA}^{\,\mathtt{g}}$ 

Combined chondroitin sulfate and glucosamine for painful knee osteoarthritis: a multicenter, randomized, double-blind, non-inferiority trial versus celecoxib on 606 OA patients

The adjusted mean change 95% CI in WOMAC pain was -185.7 (-200.3 to -171.1) 50.1% decrease with CS+GH and -186.8 (-201.7 to -171.9) 50.2% decrease with celecoxib



# **Conclusion:**

Both groups elicited a reduction >50% in the presence of joint swelling; a similar reduction was seen for effusion.

**50 mg of Nettle Extract** is as effective as 150 mg of diclofenac at reducing the clinical symptoms of acute arthritis <sup>10</sup>



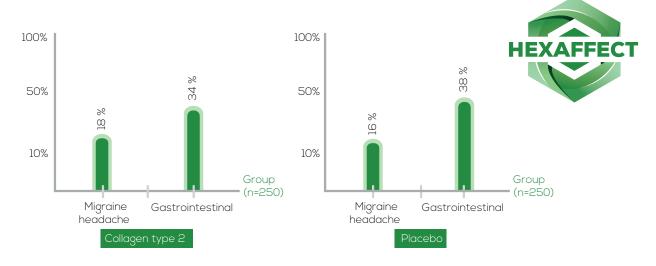
The anti-inflammatory power of **Rosehip** is reported to be similar to that of indomethacin, although its mode of action is different <sup>11</sup>

For pain with physical activity and functional performance, hyaluronate sodium may be superior to NSAIDs 12



# Safety of CollaMouv Plus®

A randomized controlled trial on the efficacy and safety of a food ingredient, collagen hydrolysate, for improving joint comfort 14



**Conclusion:** There is no statistically different between Collagen group vs placebo in terms of adverse events





For Forty-three randomized controlled trials including **4,962** participants treated with chondroitin and **4,148** participants given placebo or another control were included. The majority of trials were in knee OA<sup>15</sup>

Chondroitin in combination with glucosamine did not result in statistically significant differences in the numbers of adverse events, withdrawals due to adverse events, or in the numbers of serious adverse events compared with placebo or with an active control.



# Better compliant and cost effective

Since Geriatric people are the most patients expose and suffer from Osteoarthritis, many factors can adversely affect their medication continuity such as:



Financial burden due to polypharmacy



Multiple timings of medications



Fear of adverse drug effects



An important method for simplifying medical regime is to prescribe single daily dose of drugs  $^{\rm 6}$ 

Hence, CollaMouv Plus® with only one shot per day will support joints with all essential ingredients required against OA in a simplified and cost effective way without the need for any additional supplements









Ingredient	Role
Hydrolyzed Collagen type 2	Collagen type II is the main component of the joint cartilage Orally administered collagen can promote cartilage repair and reduce inflammation Collagen hydrolysate stimulates a statistically significant increase in synthesis of extracellular matrix macromolecules by chondrocytes (p < 0.05 compared with untreated ones)
Chondroitin Sulfate	<ul> <li>Chondroitin sulfate provides precursors to stimulate synthesis of articular cartilage and inhibits degradation and improves healing of articular cartilage.<sup>17</sup></li> <li>Chondroitin sulfate reduces inflammatory signs and symptoms and delays the progression of cartilage destruction in patients with osteoarthritis.<sup>18</sup></li> </ul>
Glucosamine Sulfate	<ul> <li>Glucosamine enhances the production of cartilage matrix components in chondrocyte culture, such as collagen type II <sup>19</sup></li> <li>Glucosamine increases hyaluronic acid production in synovium explants <sup>20</sup></li> <li>Glucosamine prevents collagen degeneration in chondrocytes by inhibiting lipoxidation reactions and protein oxidation <sup>21</sup></li> </ul>
Sodium Hyalurnate	<ul> <li>Is a derivative of Hyaluronic acid that exists in high amounts in the human body in the ECM of soft connective tissues <sup>22</sup></li> <li>Oral hyalurnate sodium can relief symptoms of osteoarthritis-affected knees, and is associated with a reduction in the use of NSAIDS and anti-pain drugs <sup>23</sup></li> <li>For pain with physical activity and functional performance, hyaluronate sodium may be superior to NSAIDs <sup>12</sup></li> </ul>
Nettle extract	<ul> <li>Nettle leaf, also called Urtica dioica, has been used in traditional medicine for many centuries and can reduce the pain and disability associated with osteoarthritis <sup>24</sup></li> <li>50 mg of stewed Urtica dioica plus 50 mg of diclofenac is as effective as 200 mg of diclofenac at reducing the clinical symptoms of acute arthritis <sup>10</sup></li> </ul>
Rose hip	<ul> <li>The rose hip or rosehip, also called rose haw and rose hep, is the accessory fruit of the various species of rose plant.</li> <li>Rosehip is very rich in vitamins (A, B, C, D, and E), minerals (Ca, Fe, K, Mg, Mn, S, Si, and Se), polyphenols, and has high antioxidant capacity <sup>25,26,27</sup></li> <li>Rosehip has anti-inflammatory actions that do not have ulcerogenic effects and do not inhibit platelets nor influence the coagulation cascade or fibrinolysis <sup>28</sup></li> <li>The Daily Telegraph stated that researchers have found that a powder made from Rosa canina (a wild variety of rosehip) is three times more effective than standard paracetamol at relieving pain</li> <li>The anti-inflammatory power of rosehip is reported to be similar to that of indomethacin, although its mode of action is different <sup>11</sup></li> </ul>
Vitamin C	<ul> <li>Vitamin C intake was shown to have a beneficial effect by reducing the bone size and bone marrow lesions, both of which are important in knee OA's pathogenesis <sup>29</sup></li> <li>Subjects within the lowest quartile of vitamin C intake had a 3.29 times higher risk of developing OA in their lifetime than did subjects in the high quartile (The recommended daily dose of vitamin C is 90 mg) <sup>30</sup></li> </ul>
Vitamin K	$\bullet$ There is a strong association between low plasma levels of vitamin K and increased prevalence of OA manifestations in the hand and knee $^{\rm 31}$
Calcium Carbonate	According to Johns Hopkins Arthritis center recommends using vitamin D and Calcium for those suffering from arthritis











# The Granted **Props**by All Needed **Blocks**

# CollaMouv Plus® is The All In One Formula that will provide several merits:

Support joints against OA disease with powerful synergetic effec

Anti-inflammatory effect comparable to NSIADS

COLLA MOUV PLUS®

Better compliant and cost effective

### Dose:

- a) One bottle per day after breakfast
- b) Shake well before use

# **Storage condition:**

Store in cold and dry place, do not exceed 25 °C

# Warning:

- a) Do not exceed the recommended daily dose
- b) Food supplements should not be used as a substitute for a varied and balanced diet and a healthy life style





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www.deutsche-heilmittel.de info@deutsche-heilmittel.de





# DENVIABLE COLLAGEN Kollogen Drink ENGINEEMEN HIT GLUCOSAMIN ENGINEEMEN