

### **Characteristics of collagen**

Collagen works as the body's glue by holding everything together and is responsible for healing the body, providing a protective coating for vital organs, producing new cells and improving strength, flexibility and stability.

Collagen is the primary structural protein for the body's connective tissue, cartilage, tendons and ligaments which helps knee joints function properly.

Collagen levels in the body begin to decrease after the age of 40, which can lead to weakened cartilage causing joint pain and inflammation.

## Type II collagen

Type II collagen is a major collagen found in cartilage.

Chicken cartilage collagen contains the sulfates chondroitin and glucosamine, both of which are essential for assisting with cartilage support in joints. Native CT-II<sup>™</sup> is derived from chicken cartilage and is a standardised form of Undenatured Type II collagen.

**Dosage**: 40mg once a day

### **Potential Areas for Use**

- Osteoarthritis
- Post-surgery pain
- Back Pain
- Joint Pain

### **Differentiated value**

Undenatured Type II collagen	Glucosamine
Small, easy to swallow pill	Large pill
Taken once a day	Taken 2 to 3 times a day
Daily 40mg dose	Daily 1500mg dose
Greatest decrease on WOMAC scale	Moderate decrease on WOMAC scale

1 Lugo, J.P., et al, (2016). Efficacy and tolerability of an undenatured type II collagen supplement in modulating knee osteoarthritis symptoms: a multicentre randomized, double-blind, placebo-controlled study. *Nutrition Journal*, *15*(14). doi:10.1186/s12937-016-0130-8

2 Western Ontario McMaster Universities Osteoarthritis Index

3 Visual Analogue Scale

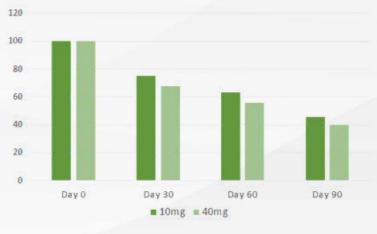
# **Clinical Evidence**

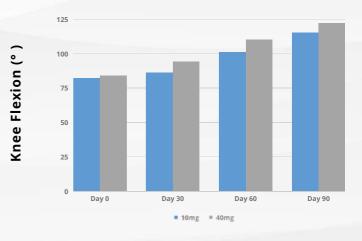
#### Native CT-II<sup>™</sup> to treat patients with osteoarthritis: Unpublished study

70 test subjects consumed either 10mg or 40mg of Native CT-II<sup>™</sup> for 90 days. Researchers recorded their WOMAC and VAS scale scores after day 30, 60 and 90. Results showed that the group taking 40mg of Native CT-II<sup>™</sup> had a higher decrease in their WOMAC and VAS scores, which shows that Native CT-II<sup>™</sup> is an effective treatment for knee arthritis and joint pain.

Mean WOMAC score after duration day:

Mean VAS score after duration day:



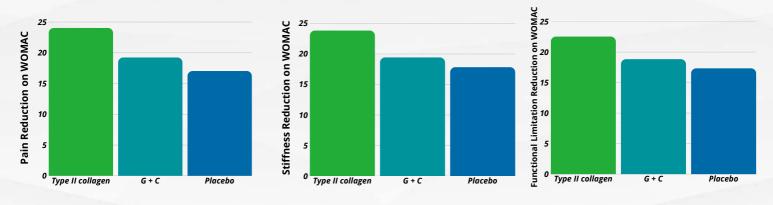


Researchers also measured knee flexion in test subjects and found that taking 40mg of Native CT-II<sup>™</sup> was more efficient than 10mg for improving knee flexion in patients with knee arthritis.

#### Undenatured Type II collagen :

Supporting studies show that Undenatured Type II collagen is more effective in assisting joint health and treating joint pain than glucosamine and chondroitin.

Over a 180 day study, researchers measured volunteers' knee osteoarthritis symptoms on the WOMAC scale. Subjects taking 40mg of Undenatured Type II collagen showed a significantly reduced WOMAC score compared to groups taking 1500mg of Glucosamine and 1200mg of Chondroitin, and placebos.



**Lipa Pharmaceuticals** began in 1995 as a small family business with a firm belief that our success could only be measured by the growth and success of our customers.

We are now **Australia's first choice for complementary medicines manufacturing** and have won Seven prestigious Manufacturer of the Year awards from the sectors industry association – Complementary Medicines Australia.

As a contract manufacturer for Australia's biggest vitamin brands, **our extensive services offer full supply chain management from product concept to market launch**. This includes but is not limited to Product Development, Regulatory and Compliance Support, Research and Development, Quality Management, Stability Programs, Manufacturing and Packaging Solutions.

### INGREDIENT

Native CT-II™

### **RECOMMENDED DAILY DOSE**

40mg a day

### TARGETS

- Osteoarthritis
- Joint Pain
- Joint Health
- Joint Flexibility

## CONTAINS

Undenatured Type II collagen

# APPLICATION

- Tablets
- Capsules
- Softgels

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