

# FORTIGEL<sup>®</sup> for sustainable mobility

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- Scientifically proven to regenerate joint cartilage
- Stimulates the body's own mechanisms for maintaining healthy joints and optimum mobility
- Promotes joint health naturally with no side effects





## FORTIGEL<sup>®</sup> keeps people physically active and mobile

Today, every fourth person suffers from joint problems and the number is constantly increasing. The principal cause is wear and tear of the joint cartilage brought about by age, over exercise and stressed joints. But there is help available for those in need of joint support.

Developed by GELITA, FORTIGEL<sup>®</sup> is an innovative ingredient for the regeneration of joint cartilage. Collagenous protein makes up nearly 70% of cartilage mass. Optimized specific collagen peptides of FORTIGEL<sup>®</sup> have been proven to activate the growth of new cartilage by stimulating cells helping to ease joint discomfort and make the joints smooth and mobile. By keeping people physically active and mobile, FORTIGEL<sup>®</sup> can improve quality of life.

### FORTIGEL<sup>®</sup> promotes growth of cartilage tissue

Change in the joint cartilage after 3 months

The effectiveness of FORTIGEL® has been scientifically proven in numerous studies. According to published research, orally administered FORTIGEL® is absorbed intestinally and accumulates in cartilage. The ingestion of FORTIGEL® stimulates a statistically significant increase of cartilage tissue metabolism.



FORTIGEL<sup>®</sup> regenerates cartilage tissue in humans.

#### Penn State study confirms improvement of mobility with FORTIGEL®

At Penn State University (USA, 2008), 147 athletes were recruited who experienced activity-related joint pain. Those athletes (mean age 20.1 years) were subdivided into one group taking FORTIGEL® as a nutritional supplement and a control group taking a placebo for 24 weeks. The severity of symptoms was rated both by the treating physician and by the study participants with a visual analogue scale.

In this prospective, randomized, double-blind, placebocontrolled study, it was interesting to observe a statistically significant difference of pain perception between treatment and control groups. When utilizing alternative therapies such as hydrotherapy, massage and ice and heat packs, there was a clear-cut difference between the treatment and the placebo group in favor of the FORTIGEL® group. This was the first trial to show improvement of joint pain in healthy athletes treated with FORTIGEL®.

In summary, the studies confirm that the intake of FORTIGEL® results in improvement of mobility in healthy individuals.





#### McAlindon proves long term effect of FORTIGEL®

In a study published in March 2011 by McAlindon and colleagues, the long term effect of FORTIGEL® treatment on the composition of hyaline cartilage in individuals with early knee osteoarthritis was investigated. This prospective, randomized, double-blind, placebo-controlled pilot study was performed at the Tufts Medical Center in cooperation with Harvard University.

A specific type of magnetic resonance imaging (dGEMRIC) was utilized in order to visualize structural changes in cartilage tissue of the respective study participants. Overall, 30 subjects were randomized into one group receiving 10 g FORTIGEL® a day for 48 weeks and a control group receiving a placebo. Three MRI scans of the knee were performed on each subject, one at baseline, one at 24 weeks with the final scan at 48 weeks.

The analysis of the cartilage scans revealed a statistically significant increase in proteoglycan density in the medial and lateral tibial regions of the FORTIGEL® treated subjects compared to the placebo group. Results indicate that oral supplementation of FORTIGEL® has a direct impact on human cartilage tissue. This confirms previous experimental data and clearly demonstrates that specific orally administered collagen peptides can have an influence on cartilage tissue regeneration. It can be assumed that this observed effect is not limited to pathophysiological conditions, as indicated by additional clinical studies.



## FORTIGEL<sup>®</sup> preserves quality of life

Based on the presented data it can be concluded that the oral administration of FORTIGEL® has a beneficial effect on cartilage tissue. Consequently, FORTIGEL® collagen peptides can contribute to the maintenance of joint health and help to preserve mobility and quality of life.



### Technological properties

FORTIGEL® is a natural protein of neutral odor and taste that can be easily implemented into many applications. It provides excellent solubility and delivers clear solutions without interacting with other ingredients.

#### FORTIGEL<sup>®</sup> promotes

- natural food
- clean label (no E numbers)
- highly digestible food
- non-allergenic food



### Make innovative product ideas a reality!

FORTIGEL® can enhance the most diverse applications, including dairy products, functional foods, dietary supplements and beverages.

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