



Fish Collagen Peptides

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Naticol® demonstrates clinically significant benefits in knee osteoarthritis

Osteoarthritis (OA) is described as a chronic degenerative condition that affects the joints and is responsible for pain, stiffness and impaired movement. It is the most prevalent joint disease. **By 2050, 130 million people will suffer from osteoarthritis worldwide (1).** Osteoarthritis prevalence is increasing due to population ageing (geriatric population growth) and some factors such as obesity, genetic predisposition and trauma (e.g. sport injuries). In this context, there's a strong and booming demand for supportive dietary supplements that can relieve pain, reduce inflammation and help to better joint mobility for increased quality of life.

COLLAGEN PEPTIDES AND OSTEOARTHRITIS

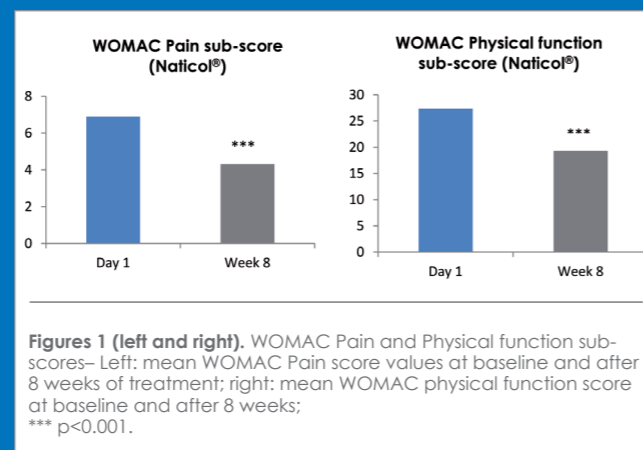
To date, there is no cure for osteoarthritis. The only available treatments aim at reducing symptoms as pain and inflammation, maintain joint mobility and limit the loss of function (2). More specifically, the literature reports that intra-articular administration of collagen in the knee of subjects with osteoarthritis demonstrated a significant local inflammation decrease (increase in T regs, IL-10 and decrease in IL-1β) and a mitigation in the symptoms inherent to the pathology (3). Similarly, oral administration of collagen hydrolyzates in mice with post-traumatic osteoarthritis inhibited synovial inflammation and induced cartilage regeneration (4). In this double-blind randomized, against placebo study, WEISHARDT has assessed the potential effects of its specific fish collagen peptides (Naticol®) on knee osteoarthritis, after an oral intake of 10g/day for 8 and 12 weeks.

NATICOL®, CLINICALLY PROVEN BENEFITS

This study was carried out on 30 volunteers mean-aged 61 years old, randomized in two groups to receive at once a day

10g dose of specific fish collagen peptides (Naticol®) or the placebo for 12 weeks. As a primary objective, improvement in treatment was assessed with reduction in Western Ontario McMaster Universities (WOMAC). Quality of life (QOL) scores and short physical performance battery (SPPB) scores from baseline to week 12 were also evaluated. Safety and tolerance were assessed.

WOMAC SUB-SCORES (PAIN AND PHYSICAL FUNCTION) ARE IMPROVED



The WOMAC sub-score for both pain and physical function was significantly decreased for 10g/d Naticol® after Week 8 (p≤0,001) while no significant change was recorded in the Placebo group. This low WOMAC sub- score indicates a lower degree of pain but also a lower degree of difficulty in physical function.

SAFETY AND GOOD TOLERABILITY

Naticol® tolerance (specific fish collagen peptides) was evaluated through a clinical examination and volunteer's questionnaire. Naticol® presented globally a good tolerance. Naticol® is obtained from enzymatic hydrolysis of the gelatin which is recognized as GRAS (generally recognized as safe). Naticol® is also highly absorbed due to its low molecular weight. It is free from fat, cholesterol, gluten and E-number (ideal for development of clean label products). Results of clinical studies demonstrate its good tolerance.

NATICOL® IN FOOD AND BEVERAGE APPLICATIONS

These clinical study results provide a scientific foundation for the development of functional food and beverages containing Naticol® and related to Joint health. Indeed, this clinical study shows Naticol®'s nutraceutical potential to support Joint health.

REFERENCES

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