1 **Objective**
To determine the efficacy of the oral administration of yoghurt supplemented with Mobilee® in healthy individuals with mild joint discomfort.

2 **Methods**
84 participants with mild knee pain (VAS between 30 and 50 mm), were included in a randomized, placebo-controlled, double-blind, parallel intervention trial. 40 participants received daily a low-fat dairy product with 80 mg of Mobilee® and 40 participants consumed the same low-fat dairy product without supplement during 3 months. The knee muscle function was determined by peak torque, total work, and mean power in flexion and extension at angular velocities of 180º/s and 240º/s using an isokinetic dynamometer Biodex System 4. Synovial liquid volume was measured by an echography and pain evolution was assessed by VAS.

3 **Results**
80 subjects (30 men and 50 women; mean age 42.52±13.16 years) were analyzed by Intention-To-Treat. Results show a general tendency to greater improvement for participants supplemented with Mobilee®. In additional exploratory sub-analysis, people over 50 taking the supplemented yoghurt showed a significant increase in peak torque measured in flexion at 180º/s compared to placebo (P=0.032). When dividing the sample according to gender, men supplemented with Mobilee®, independently of age, significantly improved all isokinetic parameters studied as compared to placebo (P<0.05), except maximum peak torque at 240º/s.

At 3 months, synovial effusion was reduced in the supplemented group whereas it increased in the placebo group.

4 **Conclusions**
Long-term consumption of a low-fat dairy product supplemented with Mobilee® improves muscle function suggesting lower pain and a better performance of the flexor and extensor muscles of the affected knee, thus providing new dietary therapeutic perspectives.

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**Fig 1.** Change in muscular strength (peak torque) in subjects older than 50, in flexion at 180º/s.

**Fig 2.** Change in muscular strength (peak torque) in men, in flexion at 180º/s.

**Fig 3.** Increase in mean power compared to baseline values (W) for knee extension at 240º/s.

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**Bibliography:** Pending for publication