



mobilee[®]
enjoy moving

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Mobility: a growing market

Consumers of all ages are increasingly concerned with keeping physically active as a way to keep healthy. However, many of them have mobility problems.



43% of consumers aged 40 to 65 suffer from joint discomfort.¹

MIDDLE AGED ADULTS



MENOPAUSAL WOMEN

4 out of every 5 menopausal women report joint discomfort, as a result of decreased oestrogen production.²



Exercise is a risk factor for developing joint and muscle conditions. Studies have shown that running 30km/week multiplies the probability of developing osteoarthritis by 2.4.³

SPORTY PEOPLE



It is estimated that 45% of people over 65 suffer from joint problems¹ and 25% suffer from sarcopenia, the loss of muscle mass due to aging.⁴

SENIORS

What is Mobilee®?

Mobilee is a patented ingredient with a high concentration of hyaluronic acid that supports mobility.

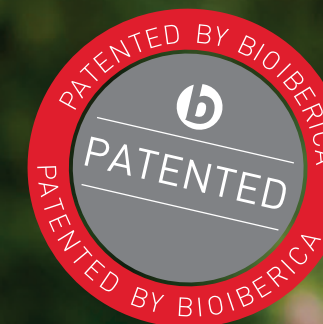
More than hyaluronic acid

Mobilee® is a rooster comb extract, naturally rich in:

Hyaluronic Acid (60-75%)

Polysaccharides (>10%)

Collagen (>5%)



Rooster Comb Extract,
naturally rich in
Hyaluronic Acid
and other polysaccharides
and collagen

How does Mobilee® work?

Mobilee® increases the synthesis of hyaluronic acid

In joint discomfort conditions there is a reduction in the quantity and quality of hyaluronic acid in the synovial fluid of the joints.⁵

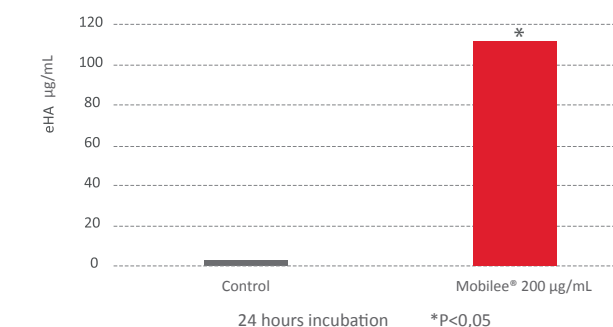
Hyaluronic acid is a key molecule in joint lubrication.⁶

Mobilee® stimulates the synthesis of endogenous hyaluronic (eHA) acid in synovial cells.⁷ (Figure 1)

More potent than fermentation hyaluronic acid

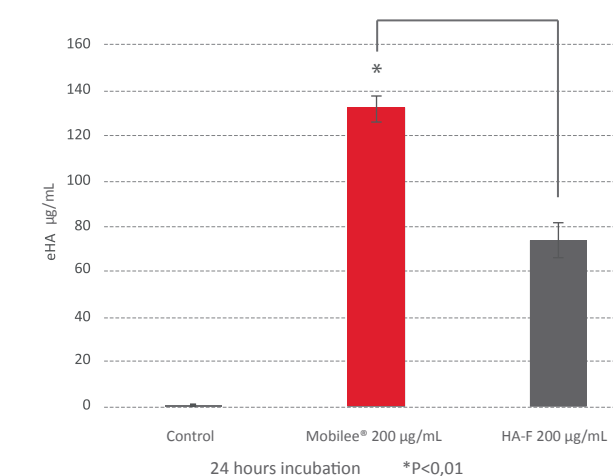
The effect of Mobilee, stimulating the endogenous synthesis of hyaluronic acid is more potent than the effect of pure fermentation hyaluronic acid.⁸ (Figure 2)

Figure 1. Effect of Mobilee® on the synthesis of eHA in human osteoarthritic synoviocytes.



Graphic adapted from the Torrent A, et. al. Osteoarthritis Cartilage. 2009;17(11):S277-278.

Figure 2. Effect of Mobilee® and fermented HA on endogenous synthesis of HA in human osteoarthritic synoviocytes.



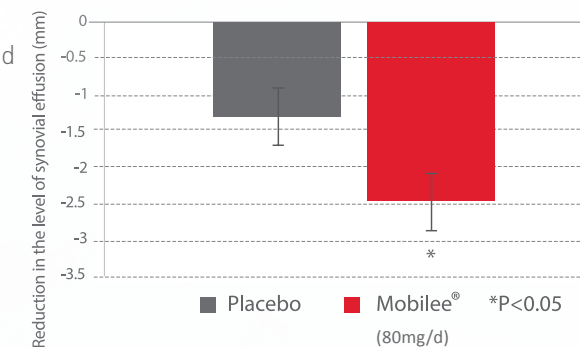
Graphic adapted from the Torrent A, et al. Osteoarthritis Cartilage. 2009;17(11):S278-279.

Mobilee® scientific evidence

Mobilee® is the result of years of research carried out by Bioiberica. The efficacy of Mobilee® has been demonstrated in more than 10 scientific publications⁷⁻¹⁸. It has been shown that Mobilee® improves mobility by reducing joint discomfort¹⁴ and increasing muscle strength¹³.

Reduction of synovial effusion

Clinical results have demonstrated that Mobilee® reduces synovial effusion after three months of treatment.

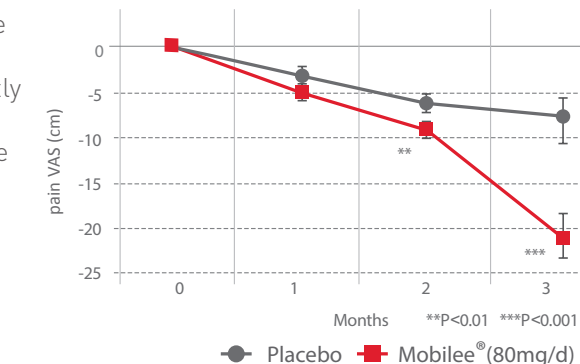


Degree of synovial effusion after 3 months compared to basal values (mean ± SD).

¹⁴ Sánchez J, et al. Genes Nutr. 2014 Sep;9(5):417.

Reduction of joint discomfort

Clinical results have demonstrated that Mobilee® significantly reduces joint discomfort from the second month of treatment.

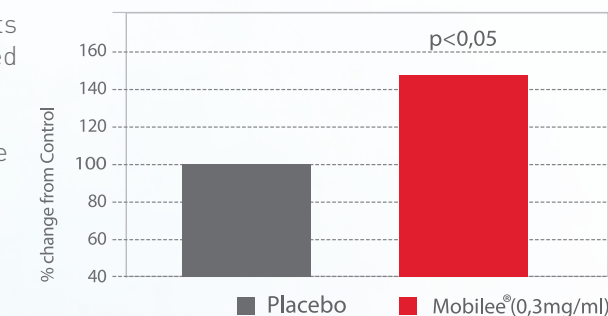


Time evolution of the pain intensity (VAS).

¹⁴ Sanchez J, et al. Genes Nutr. 2014 Sep;9(5):417.

Muscle cell proliferation

Pre-clinical results have demonstrated that Mobilee® significantly increases myocyte proliferation after 48h of incubation.

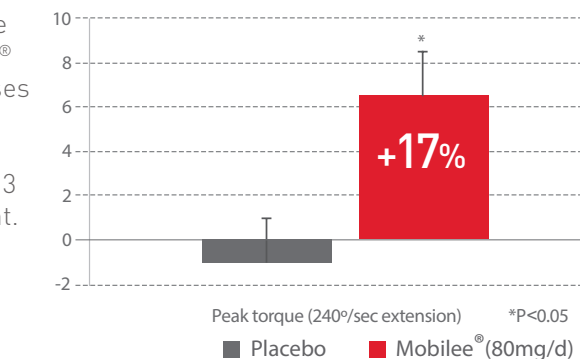


Effect of Mobilee® on myocyte proliferation under low-serum media (2% FBS)

¹⁰ Torrent et al. The FASEB Journal 2015, Vol. 29 no. 1 Supplement 737.4

Increase of muscle strength

Clinical results have shown that Mobilee® significantly increases muscle strength as measured by isokinetic test after 3 months of treatment.



Increase in maximum peak torque compared to baseline values (Nm) for knee extension at 240°/s.

¹³ Martinez-Puig D, et al. Mediterr J Nutr Metab. 2013.6:63-68.

Why Mobilee®?

1) Efficacy and safety

There is a significant body of scientific evidence supporting the efficacy and safety of Mobilee®.

Mobilee has been tested in:

- 5 clinical studies.^{13-16,18}
- 6 pre-clinical studies.⁷⁻¹²
- 1 nutrigenomic study.¹⁴
- 1 meta-analysis.¹⁷

2) Easy to formulate

Thanks to its low dose (80 mg) it can be easily included in formulations with other ingredients.

Moreover, Mobilee®'s excellent organoleptic properties make it suitable for any product format.

3) Solid regulatory framework

Mobilee® use in food and food supplements has been authorized by the main competent authorities:

- Europe: Novel food in dairy matrix (European Commission).
- USA: Generally Recognized as Safe (GRAS) status.
- Australia and New Zealand: Complementary medicine ingredient (TGA) and food ingredient (FSANZ).
- Brazil: Novel Food Ingredient



About Bioiberica

A life science company

Bioiberica is a global Life Science company specialised in the identification, extraction and development of biomolecules of high biological and therapeutic value for the pharmaceutical and nutraceutical industries. This specialisation has positioned Bioiberica among the leading Heparin API manufacturers and as a world reference in the research, production and sale of other animal derived APIs and ingredients such as Chondroitin Sulphate, Glucosamine, Hyaluronic Acid, Native Type II Collagen or Thyroid API.

Experts in joint health

Since 1975, Bioiberica has consolidated its position as world reference in joint health and mobility thanks to a constant commitment to science and research. Today, more than 20 million patients worldwide have been treated with our ingredients for joint health.

A partnership to succeed in mobility

Bioiberica places all of its medical, scientific and marketing knowledge about joint health and mobility at the client's disposal for the joint development of the market.

Your success is our goal!

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