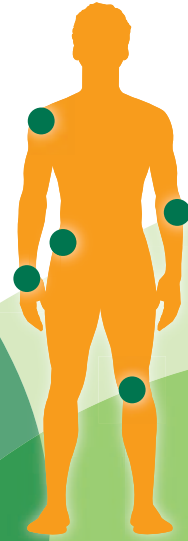




the nature network®

Martin Bauer Group



Product Concept motion

Synergy Formula

Extract from the Mediterranean rose hip +
collagen hydrolysate + vitamin C



The natural power of rose hips

The rose hip, that is the red fruit of the dog rose (*Rosa canina* L.), has been known and appreciated since time immemorial. It grows all over the world and has a surprisingly diverse range of uses, in teas, jams and fruit jellies. Rose hips are frequently used for cold and flu because of their considerable vitamin C content. But there is more to the rose hips than that: the secondary plant metabolites such as tannins, fruit acids and carotenoids have a positive effect on the health of joints. The skin of the Mediterranean rose hip is the plant part used in the extract FB9440 which was shown to be superior to a combination of skins and the seeds. The extraction process exploits the full natural potential of the Mediterranean rose hip. At the Martin Bauer Group, we also use controlled, integrated cultivation methods for our

raw material and ensure a consistently high quality. The extraction process uses specific purification techniques to exploit the full natural potential of the rose-hip skins. All these specific company owned technologies demonstrate our expertise in the extraction technology of plant material. Proof of the effect of the rose-hip special extract FB9440 is provided by in-vitro measurements (inhibition of the leukotriene synthesis, inhibition of the cyclooxygenases, inhibition of the enzymatic joint cartilage degeneration by positive influence to matrix metalloproteases and inhibition of interleukin-1beta, interleukin-6 and prostaglandin-E2). The in-vitro tests have shown the anti-inflammatory and analgesic effects of the rose hip extract FB9440.

Success with synergy

To have a powerful effect on the health of joints the product concept **motion** includes a second bio-active nutrient. The new, patent applied formula (W002009/080778) developed by Finzelberg not only prevents degeneration of extracellular cartilaginous tissue and smoothenes the surface of the joint cartilage, it

also has an anti-inflammatory effect. The innovative health concept **motion** is the fruit of a long term project resulting in a new generation for dietary supplements supporting joint health with the choice of an instant powder or RTD-applications.

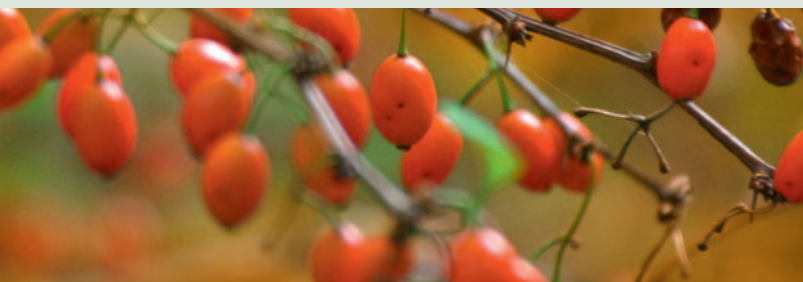
Wide range of uses

The product concept **motion** is a new generation of a product concept after options with glucosamine. In its formulation **motion** combines ingredients that work to provide balanced and sustainable support for natural joint health. The product concept **motion** simultaneously activates natural processes/pathways to cartilage formation and protection and supports the maintenance of natural joint functionality*. Thanks to its positive mechanisms and synergies it is the concept of first choice for different target groups:

- ▶ Healthy, active people who deal with occasional joint stresses from exercise and physical activity
- ▶ Amateur and professional athletes
- ▶ People with sensitive joints or occasional joint discomfort
- ▶ Seniors to achieve more comfort in motion

Advantages of motion – the natural joint formula:

- ▶ Helps to balance and promote the natural inflammation response of the joints
- ▶ Support of natural mediator and balanced enzyme activity in the joints
- ▶ Support of the natural balance of de- and re-generation process of joint cartilage by activating natural processes for cartilage formation
- ▶ Increased mobility and range of **motion**
- ▶ Maintenance of natural flexibility and cushioning of the joints
- ▶ Enhanced quality of life by improved joint comfort and functionality



Scientifically confirmed positive health effect

2011

An exploratory human study¹ was conducted with the patent applied active formula (rose-hip special extract FB9440 and collagen hydrolysate FORTIGEL® (average molecular weight 3000 Da)) with the participation of 50 participants (58% female, 42% male, average age 60.6, average BMI: 29.7, average osteoarthritis grade 3.0). After 6 weeks, clear pain reduction was achieved. After 12 weeks, 75% of participants reported a marked feeling of wellbeing and enhanced mobility with less pain.

2012

Administration monitoring using the food supplement jointsol® (rose-hip special extract FB9440 and collagen hydrolysate with average molecular weight of 3000 Da)². The study was a multi-centric non-interventional human study with an adjuvant therapy option over a period of 12 weeks with 108 participants (70% female, average age 65.4 average BMI 28, knee arthritis, grade 1-2). The study parameter used is the WOMAC Index (Western Ontario and McMaster Universities Arthritis Index). The pain score is used as the primary parameter; secondary parameters are joint mobility (goniometry) and a medication diary.

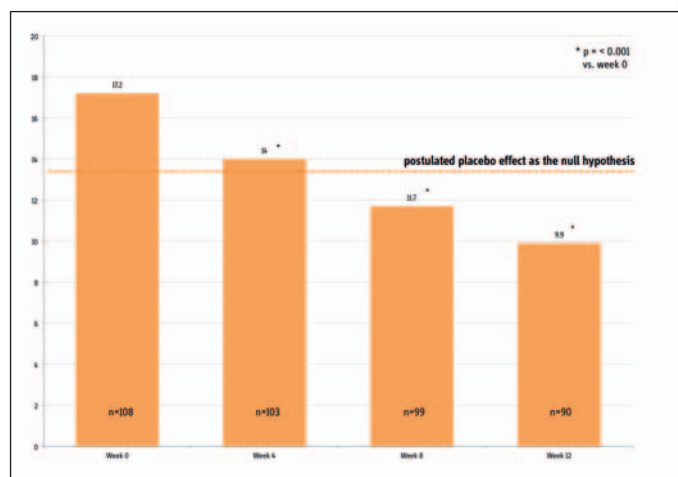
The result: significant reduction of the WOMAC pain score from 17.2 to 9.9 points with accelerated onset of action. Significant increase of mobility from 4.1 points to 7.7 points. Reduction of physical disfunction interference from 57.7 to 32.9 points. The goniometric data show a 3.0° improvement. It was possible to reduce basic medication with pain killers and non-steroidal anti-inflammatory drugs (NSAIDs) by consuming the jointsol® food supplement. As a result of the increase in flexibility, mobility and range of **motion** it is possible to improve the joint comfort and functionality by usage the new concept **motion** as a supplement.

The benefits of the health concept motion

- ▶ Maintenance of joint comfort
- ▶ Increased mobility and range of **motion**
- ▶ Improved load bearing ability of joints
- ▶ Support of the natural regeneration process of the joints
- ▶ Improved quality of life

References:

1. Nutraceutical Ingredients-Singapore; <http://www.nci-health.com/general/prodinfo.aspx>
2. Feistel B, Walbroel B, A purified rose hip extract – effective in a new joint health concept Phytotherapeutika 2012 Vienna, Z Phytother 2012, 33 (Suppl.1): 15



WOMAC pain score for the worse affected knee





motion – promotes joint mobility and joint resilience

Our products:

- ▶ **motion plus** – the original (flavored and with sugar)
- ▶ **motion plus** – flavored and without sugar

Marketing Services:

- ▶ **motion** – advertisement available
- ▶ **motion** – packaging design available

phytonutraceutical solutions

Functional ingredients and concepts ready to use for nutritional supplements

Finzelberg GmbH & Co. KG
Koblenzer Strasse 48–56
56626 Andernach
Germany
Phone: +49 2632 924-00
Fax: +49 2632 924-040
welcome@finzelberg.com
www.martin-bauer-group.com