

FACT SHEET i-flex™

Key facts

- Name: i-flex™
- 100% rosehip powder
- Improves joint health
- No known side effects

Indication & efficacy

i-flex™ is a unique dietary supplement containing a 100% natural rosehip powder from *Rosa canina L.* that has been shown to maintain joint health – soothing and aiding mobility and flexibility.

i-flex™ contains a unique ingredient complex that includes GOPO®, a patented active ingredient of “galactolipids” containing glycosides of mono- and diacylglycerids as well as bioflavonoids, vitamins and minerals.

Unlike other rosehip products, i-flex™ uses a patented manufacturing process to preserve this delicate complex of active ingredients, so that you gain all the benefits of the ingredient complex in promoting joint health.

Product development

The roots of i-flex™ can be retraced over 20 years, when a Danish farmer discovered the joint soothing effect of rosehip powder. The company HybenVital ApS systematically cultivated and developed a product, which led to the invention of a sophisticated manufacturing process and drying technique that is patent protected today.

This highly promising product has been marketed in Europe very successfully under the label LitoZin™. Within a short time it has become a “shooting star” in major European markets such as France and Germany. DSM Nutritional Products* plans to replicate this success in the rest of the world with i-flex™, a premium product positioned for the joint health market.

Dosage

- 120 and 200 capsules
- Intake Recommendation: 2 x 3 capsules daily

Clinical Research

Unlike most nutritional supplements, specially processed rosehip powder has consistently been shown in clinical trials to reduce joint pain and stiffness and to improve flexibility and mobility as scored by WOMAC [1, 3, 4, 5, 8, 9]. Its effects were detected in as little as 3 weeks [4] and in more than 80% of the people who used it [3, 4]. In a meta-analysis [10] (n=360) of four independent clinical trials, the authors concluded that specially processed rosehip powder used as a food supplement significantly reduced pain (p<0.004) and disability (p<0.003) [10]. In fact, the level of pain relief was found to be in the same range as that of the NSAIDs paracetamol (acetaminophen) and aspirin (acetylsalicylic acid) [10]. Two of the clinical trials concluded that specially processed rosehip powder also improved day-to-day life, general well-being and energy levels in people with pre-existing joint problems [3, 4]. The clinical studies carried out with specially processed rosehip powder included more than 400 patients [1, 2, 3, 4, 5, 6, 7, 8, 9] and revealed no relevant side effects nor known interactions with standard arthritis medications. Additionally, 40-50% of the people who used the specially processed rosehip powder reported a reduced consumption of pain-killers and anti-inflammatory drugs [3].

Main Studies

- 1 Winther K, Rein E, Kharazmi A The anti-inflammatory properties of rose-hip [In Process Citation] *Inflammopharmacology* (Switzerland), 1999, 7(1) p63-8.
- 2 Kharazmi et al. *J Nat Prod* 2003; 66: p994-995.
- 3 Rein E, Kharazmi A, Winther K A herbal remedy, Hyben Vital (stand. powder of a subspecies of *Rosa canina* fruits), reduces pain and improves general wellbeing in patients with osteoarthritis--a double-blind, placebo-controlled, randomised trial. *Phytomedicine* (Germany), Jul 2004, 11(5) p383-91.
- 4 Winther K, Apel K, Thamsborg G A powder made from seeds and shells of a rose-hip subspecies (*Rosa canina*) reduces symptoms of knee and hip osteoarthritis: a randomized, double-blind, placebo-controlled clinical trial. *Scand J Rheumatol* (Norway), Jul-Aug 2005, 34(4) p302-8.
- 5 Kharazmi A, Winther K Rose hip inhibits chemotaxis and chemiluminescence of human peripheral blood neutrophils in vitro and reduces certain inflammatory parameters in vivo [In Process Citation] *Inflammopharmacology* (Switzerland), 1999, 7(4) p377-86.
- 6 Larsen E, Kharazmi A, Christensen LP, et al. An antiinflammatory galactolipid from rose hip (*Rosa canina*) that inhibits chemotaxis of human peripheral blood neutrophils in vitro. *J Nat Prod* (United States), Jul 2003, 66(7) p994-5.
- 7 Halvorsen BL, Holte K, Myhrstad MC, et al. A systematic screening of total antioxidants in dietary plants. *J Nutr* (United States), Mar 2002, 132(3) p461-71.
- 8 Warholm O et al. *Curr Therap Res* 2003; 64 p21-31.
- 9 Rossnagel K et al. *Ann Rheum Dis* 2007; 66(Suppl II) p603 [Abstract].
- 10 Christensen R et al. *Ann Rheum Dis* 2007; 66(2) p495 [Abstract].

* DSM Nutritional Products has the exclusive rights for global¹ marketing and distribution of standardized rosehip powder from Hyben Vital ApS, which will be marketed as i-flex™.

¹excludes Europe