



# Axtragyl®

## Specifically designed to deliver greater mobility

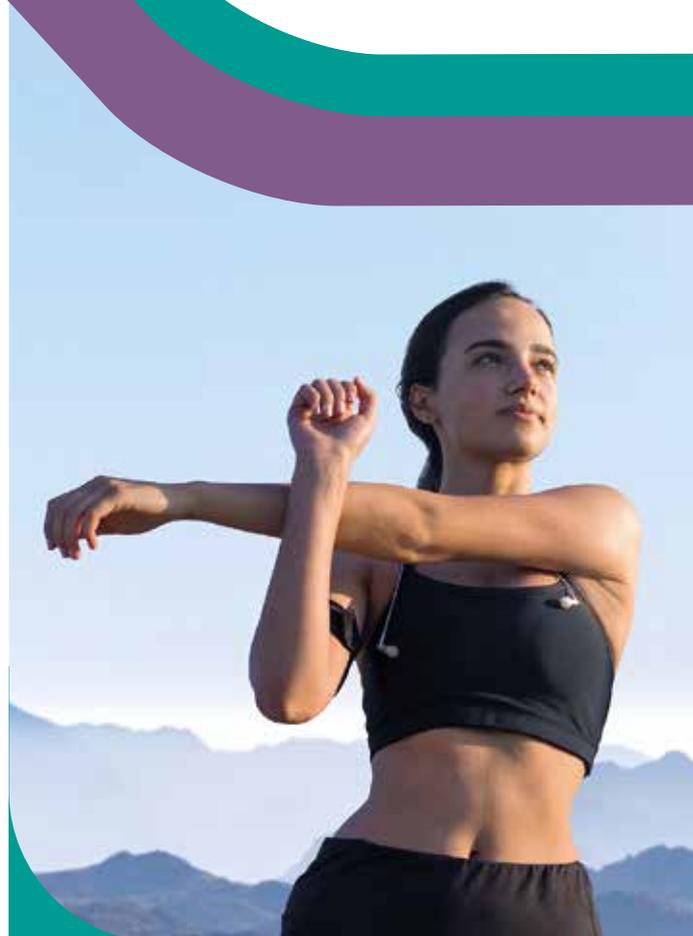
The ageing population and growing demand for **more holistic and wellness products** has recently resulted in an evolution of the joint and bone health market, with a **greater focus now being placed on overall mobility and quality of life.**

### **Mobility and flexibility are key for young consumers**

Traditionally the joint category has been targeted mainly to a senior population but **over the last few years younger consumers are increasingly looking for ways to support mobility as part of a healthy lifestyle**, as well as preventative measures that will maintain good joint, bone and muscle health.

In particular, **consumers have turned to natural, preventive solutions** with proven benefits supported by published research to strengthen joints, alleviate joint discomfort, and support post-workout recovery.

Popular nutraceutical ingredients added to formulations for joint support include glycosaminoglycans, especially chondroitin sulfate and glucosamine, turmeric, Boswellia serrata, omega-3 fatty acids as well as calcium and vitamin D.



With the aim of helping supplement companies to meet the emerging consumers behaviors in the mobility market space, **Giellepi offers Axtragyl®**, a fully characterized botanical ingredient designed to deliver greater mobility through a proven mechanism of action.

## Overview

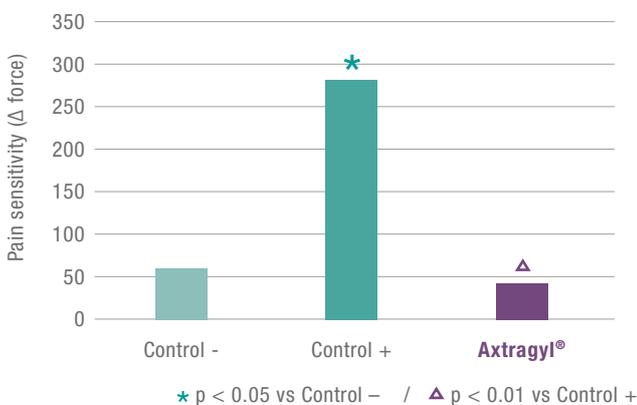
**Axtragyl® is a standardised 50% hydroalcoholic extract** derived from the root of *Astragalus membranaceus* Binge. It is an **innovative evidence-based ingredient designed** to ease joint discomfort allowing greater mobility.

Astragalus has been used in traditional Chinese culture for centuries for many conditions, including upper respiratory infections, allergic rhinitis, asthma, chronic fatigue syndrome, and chronic kidney disease, among others. It's also promoted to strengthen and regulate the immune system. It's native to northern China, where it still grows wild today.

## Mechanism of action and science

In two preclinical animal models of joint injury, Axtragyl® maintains joint health relieving pain sensitivity and supporting morphological recovery of the joint thanks to its anti-inflammatory, antioxidant and immune-modulating properties.

In an animal model, following mechanical pressure application measurement test (PAM), Axtragyl® was found to reduce sensitivity pain threshold of knee joint measured as  $\Delta$  force after 14-days treatment.



Maresca et al 2017

## Composition

Axtragyl® phytochemical composition has been fully characterized to ensure superior quality standard as well as **bioactivity of its specialized active constituents which include polysaccharides, flavonoids and saponins.**

## Key features



Next gen ingredient in the mobility market space



Phytochemically characterized extract



Acute and long-lasting benefits



Positively impacted biological markers associated with joint health, including TNF- $\alpha$  and IL-1 $\beta$



Works well as alternative/in combination with common ingredients used in joint health formulas