

Pr*o*Tec  
Nutra

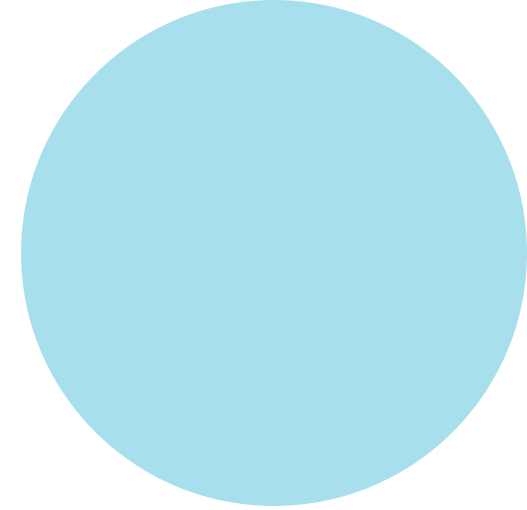
Phytodroitin™

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1 0 0 % P L A N T - B A S E D A L T E R N A T I V E T O  
C H O N D R O I T I N

# What is Chondroitin?

- Chondroitin is one of the building blocks of cartilage – the tough tissue that acts as a shock absorber around the joints in humans. It's chondroitin's job to help your cartilage hang on to water – increasing its elasticity.
- Chondroitin is a mucopolysaccharide composed of a chain of alternating sugars. It is a structural component of cartilage and provides much of its resistance to compression.
- It's traditionally sourced from shark, bovine, porcine or avian cartilage.
- Many studies suggest that chondroitin has clinical benefits in reducing pain from arthritis and joint stiffness.






## What is Phytodroitin®?

- Phytodroitin® is a plant-based alternative to Chondroitin suitable for Vegan and Vegetarian products, but also broader demographic products due to widespread concern about Chondroitin's animal origin/sustainability.
- Phytodroitin® is a complex blend of algal extracts that are shown to mimic the mucopolysaccharide structure of chondroitin.
- Phytodroitin® is supplied as a free-flowing compressible powder. It is also cold water dispersible.
- Recommended daily dose of 400mg.



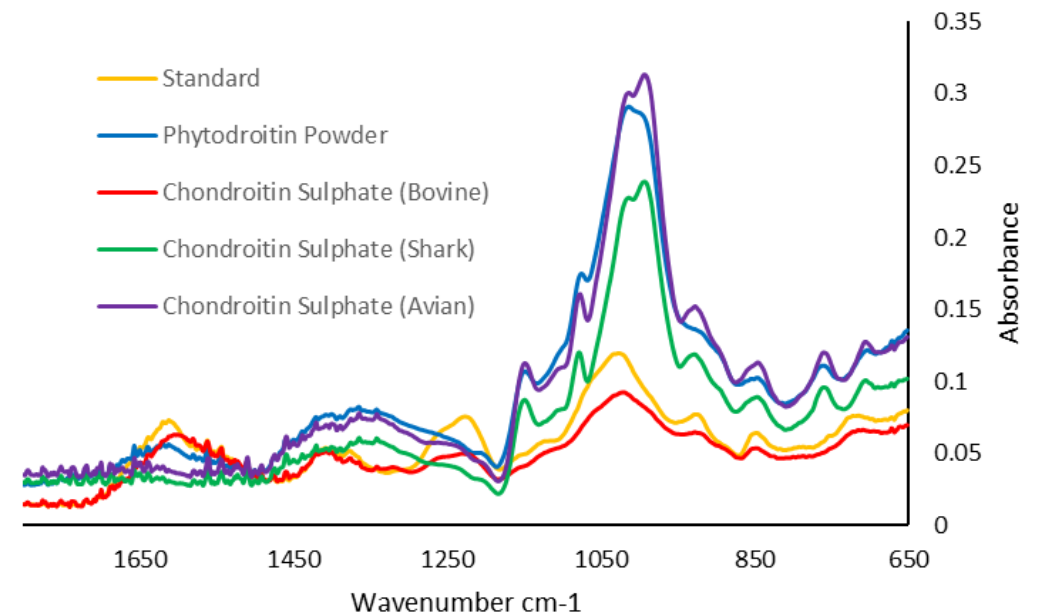


## Origin & Process

- Phytodroitin® consists of a fermentation-origin polysaccharide comprising of glucuronic acid and N-acetylglucosamine together with specific, mucopolysaccharide-rich algal extracts.
  - The result is a 100% non-animal alternative to Chondroitin, making it perfect for consumers looking for a plant-based option.
  - Phytodroitin® is produced and manufactured in the United Kingdom.
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# Phytodroitin<sup>®</sup> Research Study

- We engaged Nottingham Trent University (NTU) in the UK to compare the mucopolysaccharide structure of Phytodroitin<sup>®</sup> with Chondroitin.
- NTU used Frontier Transform Infrared (FTIR) spectroscopy, sampling of the powders being performed using the attenuated total reflectance technique.
- The results show Phytodroitin<sup>®</sup> to be almost identical in mucopolysaccharide structure to Chondroitin Sulphate of Shark origin, and particularly Chondroitin of Avian origin.







## Benefits of Phytodroitin®

**Phytodroitin® could be beneficial in a wide range of Nutritional supplement products for:**

- Sports performance
- Osteoarthritis and rheumatoid arthritis treatments
- General Bone & Joint health
- Ageing Consumers

Phytodroitin® is registered with the Vegan Society

A person wearing a green jacket, black leggings, and a backpack stands on a rocky cliff edge. Their arms are raised in a 'V' shape against a bright, cloudy sky. The background shows a vast blue ocean and distant landmasses under a clear sky.

# Trademark Usage

The Phytodroitin® Trademark is available for use under a simple Trademark agreement, which follows approval of the use of the mark (wording or logo) by the brand, e.g.:

- Made with Phytodroitin®
- Contains Phytodroitin®

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