

100% PLANT-BASED ALTERNATIVE TO COLLAGEN

## What is Collagen?

- Collagen, obtained from animal sources including fish, is the main structural protein in the extracellular matrix. Collagen is composed of Amino Acids and provides structural support to skin, hair, nails, ligaments and tendons.
- As we age, Collagen production slows and Collagen quality diminishes. Even by the age of 25 collagen levels start to deplete. By the age of 50, collagen levels are typically lost by around 50%.
- A reduction in Collagen level and quality results in wrinkle formation and skin loses its firmness and tone. It also compromises the skin's barrier and causes dryness, breakouts and blemishes.





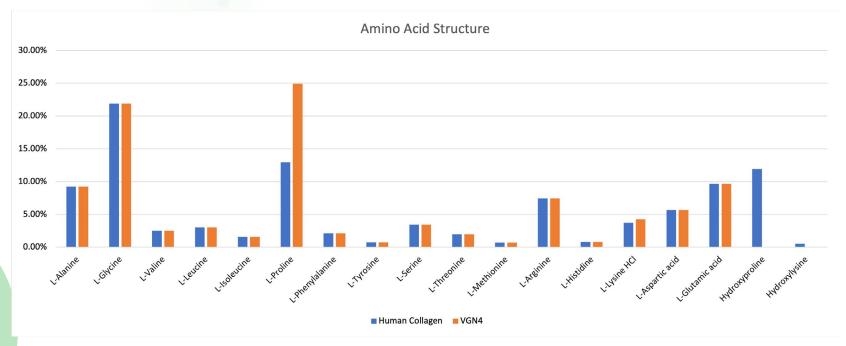
## Origin & Process

- Unlike Collagen, which is from animal sources, Vollagen® is 100% plant-origin. It is produced using a proprietary, multistep fermentation process with a starting material of Corn (non-GMO).
- The fermentation process allows us to obtain the exact combination and ratio of amino acids that we desire.
- This allows us to produce a cold water-dispersible powder. This is in stark contrast to the simply combining the equivalent individual amino acids, which exhibit very low solubility.
- Vollagen® is suitable for all demographics, including the Vegan and Vegetarian markets.



## Comparison with Collagen Amino Acid structure

- Vollagen<sup>®</sup> is composed of the same 16 key Amino Acids as Human Collagen<sup>1\*</sup>
- The blue bars show the levels and ratios of amino acids in Human Collagen, the orange bars show the levels and ratio of Amino Acids in Vollagen<sup>®</sup>.
- Hydroxyproline and Hydroxylysine are formed by enzymatic conversion of Proline and Lysine in the body. In Vollagen® VGN4 we have elevated the levels of Proline and Lysine accordingly, identical composition of Vollagen®.



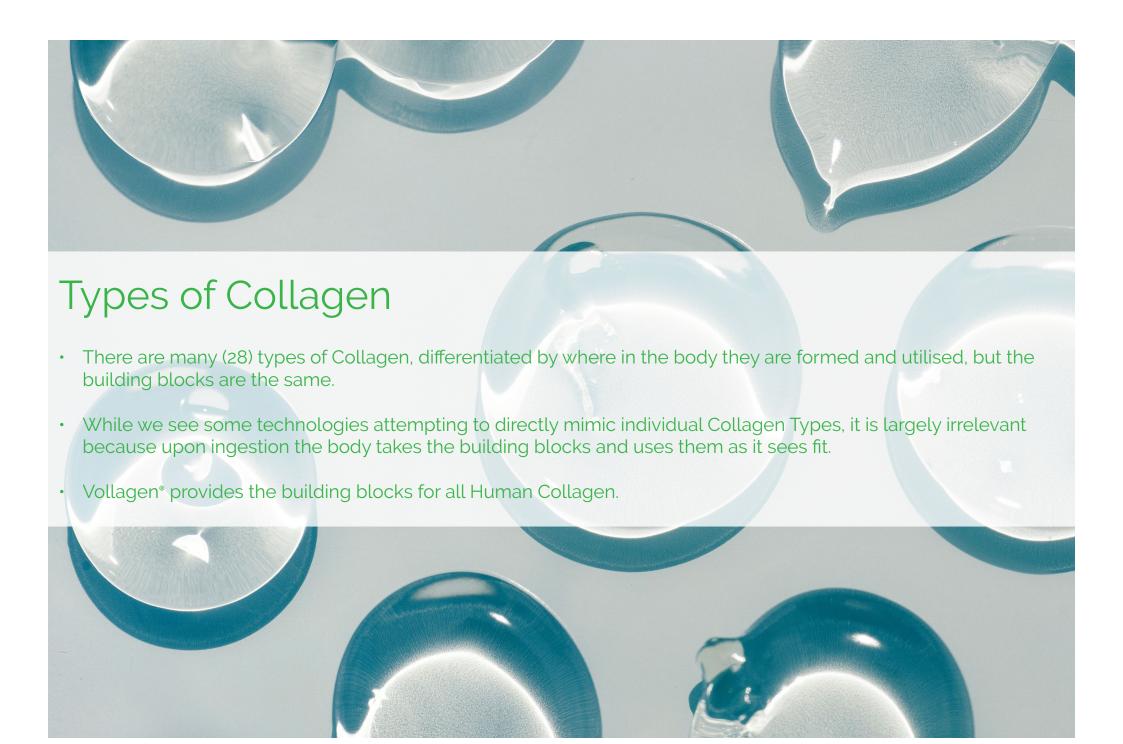
<sup>1</sup>Source: The Amino Acid Composition of Mammalian Collagen and Gelatin. J.E. Eastoe, The British Gelatine and Glue Research Association.

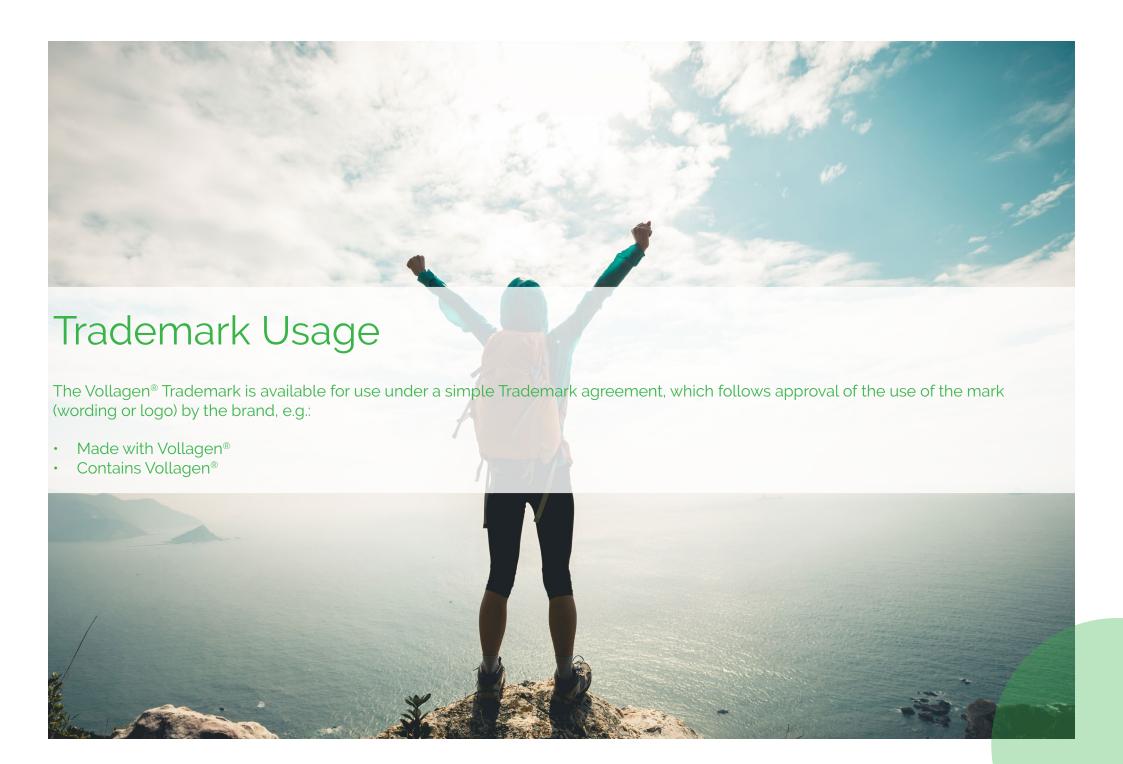


## Mode of Action

- Collagen in its native form can't be absorbed by the body and so Marine Collagen is popular because it is hydrolysed to free the amino acids.
- This is the exact aim of Vollagen®; to deliver the complex of Collagen Amino Acids for the body to utilise and to stimulate the body's creation of further Collagen. Just without the animal-origin or hydrolysis.









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