

AQUAGELATIN: HALAL MARINE-BASED GELATIN FOR VERSATILE NUTRACEUTICAL AND COSMECEUTICAL APPLICATIONS

Technology Description

The technology is an enzyme-free jellyfish extraction which employs green method with minimal waste discharge process.

Technology Features

The jellyfish gelatin produced with this technology contains high protein (more than 80%) and low in ash contents (less than 2%) and high gelling strength. The process of producing the gelatin is Halal and from sustainable source. It is non-toxic and has good sensory properties. This technology could be the best solution for problems associated with gelatin produced from porcine and bovine sources. This technology is a value creation from underutilized local commodity, as it uses jellyfish which has little commercial value.

Advantages

- Raw material has little commercial value
- Non-toxic
- Employs environmental friendly process
- Low production cost
- No competitor

INDUSTRY OVERVIEW

Prospects: nutraceutical and cosmeceutical market

Generally, the global gelatin market has been increasing over the years and worth at USD1.77 billion in 2011. It is estimated to increase at a CAGR of 6.75% from 2012 to 2018. In terms of volume, 450.7 kilo tons of gelatins are projected to be produced by the year 2018. Although the production of marine gelatin is still in its infancy, contributing only about 1% of the annual world gelatin production, this segment is anticipated to be the fastest growing source segment in the period of 2014 to 2020. On the basis of application, the marine gelatin is expected to benefit mostly in nutraceuticals and cosmeceuticals. In cosmeceuticals, marine gelatin can have significant potential to variety categories of products particularly in skin care market as increasing numbers of anti-wrinkle cream and skin care products have been used in the recent years. Similarly, demand of marine gelatin for nutraceutical application is expected to increase as well, reaching 124.5 kilo tons by 2020 with a CAGR of 3.8% from 2014 to 2020.



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