

TECHNOLOGY DESCRIPTION

This method is to extract collagen from abundant jellyfishes comprising alkaline and acidic treatment with and orderly sequence of physical and/or mechanical treatment and precipitation of collagen using salt solution.

TECHNOLOGY FEATURES

This process is economical and environmental friendly as it is performed without using expensive enzymes, hazardous chemicals and the price of raw materials is cheaper as compared to the current process. It also increases the yield (10 times), protein content (2 times), hydroxyproline content (2 times) while decreasing the production time (3 times) and impurity content (13 times). It uses a simple production process without the need of de-skinning, de-scaling, de-boning and de-fatting. The product obtained from this method is proved to be non-toxic, heavy metal free, hypoallergenic and stable at body temperature.

ADVANTAGES

- Economical
- Environmental friendly
- · Safe
- Simple production process
- · High yield and high quality product

INDUSTRY OVERVIEW

Prospects: Cosmetics, food and beverage, nutraceutical, medicine

Generally, the global collagen market was valued at USD648.2 million in 2012 and is projected to increase to USD891.8 million in 2017. Marine collagen brings the same benefits than the one obtained from mammalians, thus it is, and will be increasingly be, the preferred choice in many applications. Although it was wide sold in Europe, America, Japan and Korea since 2000, but the trend of marine collagen only arrived in Malaysia by 2006. On the basis of application, the market has been segmented into bone and joint health, nutraceuticals, cosmeceuticals, food and beverages, pet food, photography, pharmaceuticals and others. The market price of premier marine collagen is expected to be lower than pure native collagen which generally determined according to the type: MYR 75.00/mg (Type I, rattail), MYR 88.45/ mg (Type II, chicken cartilage), MYR 600.00/mg (Type III, human placenta), MYR 148.00/mg (Type IV, human placenta), MYR 478.50/mg (Type V, human placenta). Currently, a number of businesses like Nutra Choice Sdn. Bhd have supplied and manufactured marine collagen products in Malaysia.



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