

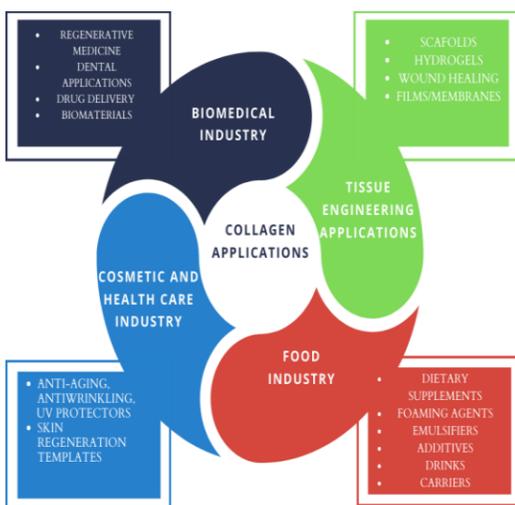
Waste to wealth: Collagen from fish scales

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Product Background

- Fish Collagen is a functional molecule that can be modified and developed in different forms and can be used in various fields, from food, cosmetics to biomedical and regenerative medicine.
- Collagen has earned a spot in the age of advanced materials due to their properties: bioavailability, biocompatibility, weak antigenicity and the similarity to inorganic polymers.

Benefits/Usefulness/Applicability



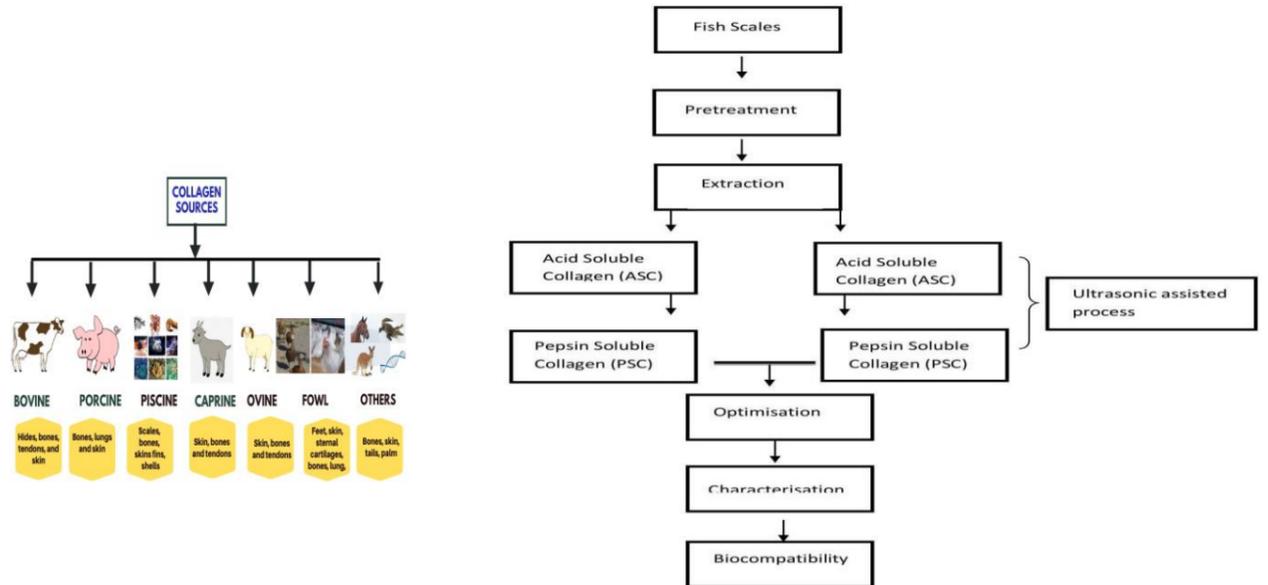
Status of Innovation

- Lab Report/Documentation

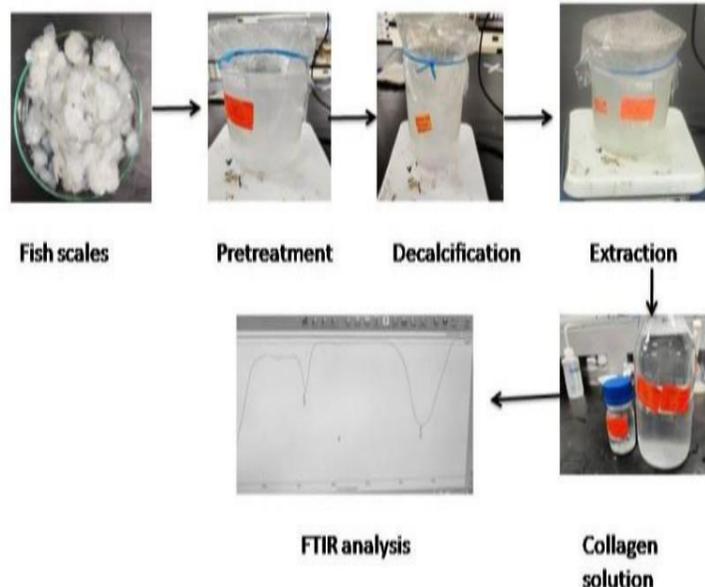
Collaborators

- UMP keraglow

State of the Art/ Methods



Product Image and Product Characteristics/Results

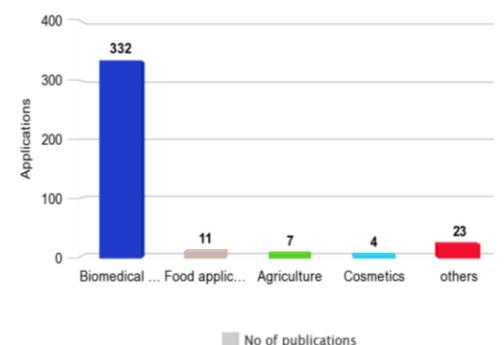


Environmental Impact

- Collagen is found in substantial quantities in by-products or wastes with negative environmental influence but with high potential.
- A large amount of fish waste is discarded by burning or burying or disposed in garbage without taking many efforts, there arise harmful effects to the environment.
- This not only creates waste load problem in Malaysia but it affects the entire world and becomes a globalized issue

Marketability & Commercialisation

- The demand for the collagen is assumed to rise due to growing end-use applications, shifting user choices and lifestyles, increasing disposable income, and increasing awareness concerning health. The figure below represents the number of publications in reference to each application.



Cost Analysis

Key players operating in the marine collagen market, as profiled in the study, include

- Gelita AG
- Rousselot
- Nitta Gelatin, Inc. etc.

Due to the rise in the end-use applications, the collagen market is projected to grow at a CAGR of above 8.0% from 2020 to 2026.