

Haruan Biomedical Products for Skin Diseases

Award Winner



A carnivorous and air breathing tropical freshwater fish locally known as Haruan *Channa striatus* is indigenous to Malaysia, and this is an important criterion for development of haruan based biomedical products. Although other species of the same family Channidae as haruan is also found in almost every country in the Asiatic region, but none is yet to be fully utilized for the biomedical products. The white boneless meaty tender taste makes *C. striatus* as good source of protein with a high 78.32 ± 0.23 %, a low 2.08 ± 0.08 % and 0.265 ± 0.013 mg Vitamin A per total lipid, and menu fish in many countries in the region. Haruan contains almost all of the nutritional minerals, with high content of Arachidonic Acid (AA) 20:4 ω 6 that is related to the potential of haruan for wound healing. More interestingly, haruan also contains docosahexaenoic acid (DHA) 22:6 ω 3 which is now being recognized as the compound responsible to reduce cholesterol in human, and not eicosapentaenoic acid or EPA 22:5 ω 3. This will be one of the main focuses of the biomedical products and on the future R&D into pharmaceutical products.

The haruan based body scrub for exfoliation dermatitis such as sclerosis, psoriasis, eczema and etc., has also won a medal. However, a conclusive clinical trial is required for pharmaceutical listing and patent.

Haruan contains all the 17 essential amino acids required for healing and the substantial amount of glycine, one of the most important components of human skin collagen, and together with other amino acids to form a polypeptide or perhaps other macromolecules that is or are associated and responsible for growth and healing. Furthermore, haruan's extract has a mild antimicrobial, antifungal, induced platelet aggregation and interestingly produces a dose-dependent antinociceptive property, which is essential in healing processes. All these biochemical, physiological and pharmacological properties of *C. striatus* have beyond doubt contribution towards, tissue repair, growth and healing.

Biomedical Products for Skin Diseases: body scrub, cream, lotion and antiseptic powder. The products are based on the formula that won the MINDEX/INNOTEX 1996 awards, and are purely for treatment of skin diseases namely sclerosis, eczema, psoriasis, pimples, insect bites, rushes and allergy.

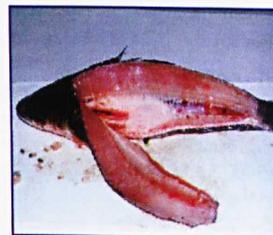
Haruan Byproducts: personal care - cosmetic and health food products. Haruan extracts and herbal portion will be blend and formulated together as by-products namely personal care products, health food and supplementary.



Haruan *Channa striatus*



Samples of haruan tablet and capsules



Haruan fillet



Other products in this category would be shower gel or bath lotion, beauty soap, body lotion, cream and loose powder Haruan lotion and cream; haruan fillet, tablets and capsules.

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