

DNActive®

Fermented Salmon Milt Extract



Introduction

DNActive® is fermented DNA from salmon milt – a highly unique dietary ingredient with potential benefits across a wide variety of health and wellness categories. DNActive® can be used to create both dietary supplements and cosmetic formulas that will stand out from the competition. Consumed in Japan for centuries, this traditional delicacy known as “shirako” is now available as a clean, fermented, powdered dietary ingredient. DNActive® contains protamines – small arginine-rich nucleic proteins – which are similar in structure to human protamines.

Features & Benefits

Extracted from wild-caught salmon

Enzyme fermented

Clean, pure, spray-dried powder with little to no taste or odor

Clinical & Scientific Studies

Although no significant clinical studies have been conducted to date, several animal studies indicate the potential for salmon milt across several health and wellness categories. Human skin studies have shown benefits for use as a cosmetic ingredient.

- **Anti-Aging** – effects on mitigating age-related declines in learning and memory have been demonstrated ^[1,2].
- **Anti-Inflammatory** – several anti-inflammatory markers, including IL-1 β , TNF- α , COX-2, iNOS, and PGE2, were significantly suppressed in an animal model ^[3].
- **Cellular Immunity** – animal studies support the suppression of T-cell and lymphocyte activity ^[4,5].
- **Endurance** – longer running distance and higher glycogen content were observed in animal studies ^[6].
- **Liver Support** – improved liver function was shown in animal model of non-alcoholic fatty liver disease ^[7]. Also, improved hepatic function was seen after alcohol consumption in mice ^[8].
- **Topical Use** – several studies on human skin show protection against UV absorption, reduced skin roughness, increased generation of hyaluronic acid and promotion of collagen production ^[9,10,11,12].

Formulating with DNActive®

- **Dietary Supplement** – Oral doses of 100-500 mg are recommended. DNActive® can be combined with other complementary ingredients to further enhance the benefits of the formula.
- **Cosmetic** – Use at a level of 1% in cream or lotion.
- **Clean label** – Can be labeled as "DNActive® fermented nucleic acids (from salmon)."

Applications

Dietary supplements

Functional foods

Candies & gummies

Source

DNActive® is an acid-extracted and enzyme-digested salmon milt from wild-caught salmon. It is spray-dried into a fine powder.

References

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6. https://www.jstage.jst.go.jp/article/nskkk/55/10/55_10_510/_article/-char/ja/
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Structure/Function Claims

Maintains cellular function

Supports enhanced endurance

Supports liver function

Protects and beautifies skin

Supports anti-aging

May reduce inflammation

Safety & Regulatory

Salmon milt has been consumed as a traditional delicacy in Japan for centuries. DNActive® is an NDI (New Dietary Ingredient) exempt from notification.

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