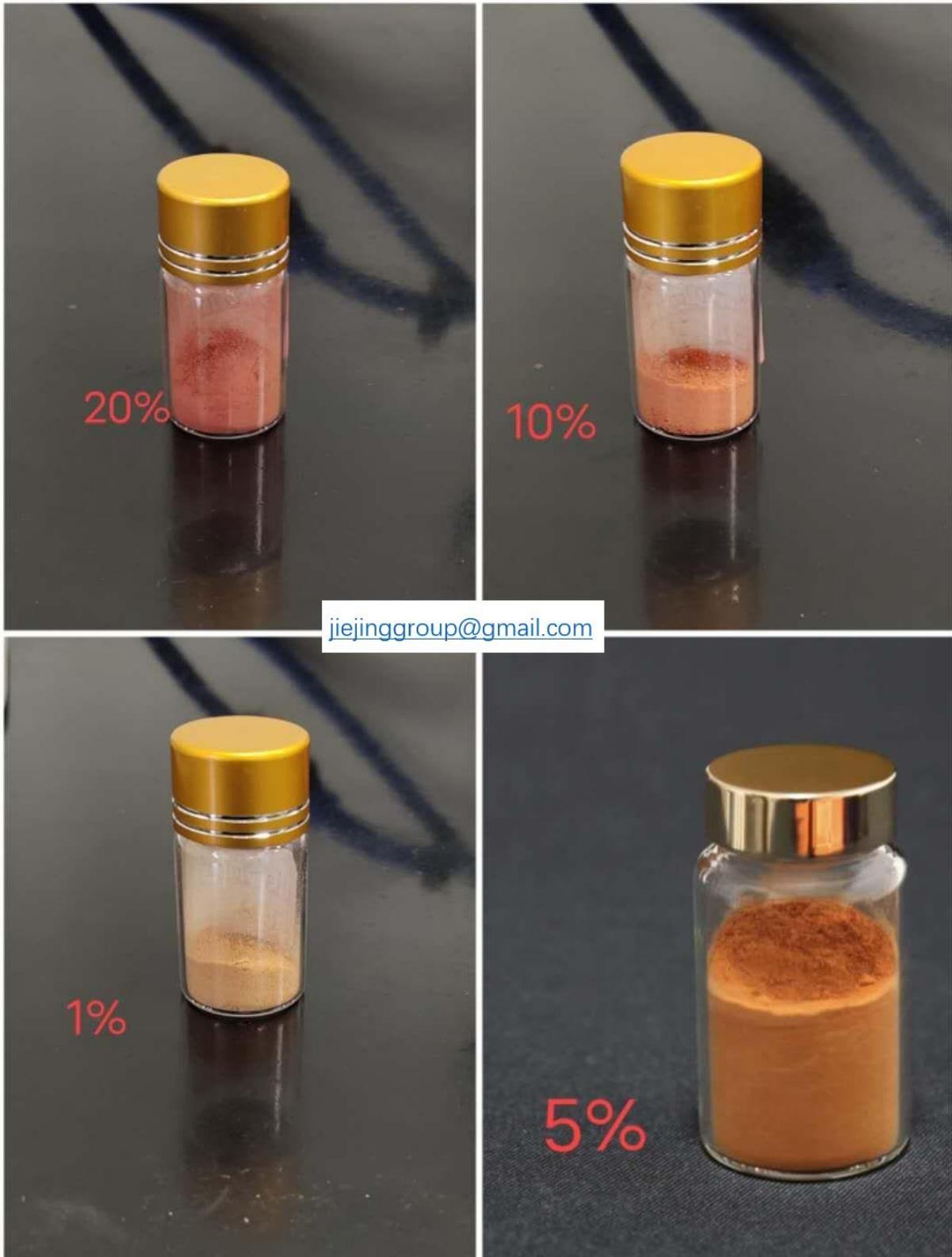


## Fucoxanthin extract



Fucoxanthin is a carotenoid pigment existing in brown algae, diatoms, gold algae and yellow algae. It is widely available in various algae, marine phytoplankton, aquatic shellfish and other animals and plants. Fucoxanthin is a marine pigment carotenoid in algae, belongs to an oxygenated derivative of carotene, namely lutein. It is a natural pigment, Fucoxanthin color varies orange, orange red to brown red with the purity from low to high. Fucoxanthin extract mainly sold in powder or oil with different assay like 1%, 5%, 10%, 20%, 40%, 50%, even more higher purity.

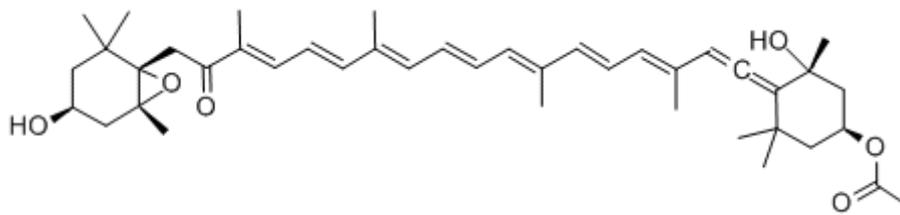


Fucoxanthin Molecular formula  $C_{42}H_{58}O_6$ ,

Fucoxanthin molecular weight 658.91,

Fucoxanthin CAS number 3351-86-8.

Fucoxanthin Structural formula:



### **Fucoxanthin extract Main botanical origin:**

Laminaria japonica、Undaria pinnatifida、Sargassum fusiforme、Sargassum honeri.

### **Fucoxanthin extract ingredients application**

The current study found that: fucoxanthin has effects of anti-tumor, anti-inflammatory, anti-oxidation, weight loss, neuronal protection, increasing the content of ARA (arachidonic acid) and DHA (docosahexaenoic acid) in mice. Fucoxanthin is widely used in medical, skin care and beauty products and supplement products. For example:

Fucoxanthin can be used as a weight-loss health product, and it is believed that the mechanism of weight loss of fucoxanthin is that fucoxanthin can eliminate fat accumulation in two ways: Fucoxanthin activates the protein called UCP1, which promotes lipolysis. Fucoxanthin also stimulates the liver to produce DHA that lowers cholesterol levels. Generally speaking, it is to suppress the production of "yellow fat" in the human body and convert yellow fat into "white fat";

Fucoxanthin can also be applied to all kinds of foods, such as butter, pies, green tea cakes and other baked goods, fucoxanthin playing a role in increasing product color and functionality;

Fucoxanthin For egg yolk colorants, skin care and beauty products;

As a medicine, Fucoxanthin is used for the treatment of cancers such as skin cancer, colon cancer, prostate cancer, liver cancer, and the like, and Fucoxanthin has also been found to have a certain improvement in Parkinson's disease and Alzheimer's disease.

At present, the most prevailing types are fucoxanthin 1%, 5%, 10% in forms of powder or oil at international market. The end-products are mainly functional foods and cosmetics.

Major vendors of the fucoxanthin (CAS 3351-86-8) market includes Nutraceuticals, PoliNat, Shandong Jiejing Group Corporation. Among of them Shandong Jiejing Group Corporation make fucoxanthin extract with highest purity by HPCL. The fucoxanthin color is dark red. Fucoxanthin is in form of powder or oil, assay 1% 5% 10% 20% 40% 50%, 98% of fucoxanthin by HPLC, widely used for food industry, cosmetics industry, pharmaceutical industry, supplement industry.

High purity of fucoxanthin: