

Swiss company derives DHA and EPA from algae

17/03/2006 - A new Swiss company is claiming to have found a way to derive omega-3 containing both EPA and DHA from algae, which could place suppliers whose product is derived from fish oil under price pressure.

Water4 teamed up with a technology partner to develop a process that is oil and water based, involves no chemicals and uses the whole [algae](#). This, Tom Brudenell-Bruce of marketing partner [Eau Plus](#) told NutraIngredients.com, results in a product that is 99 per cent pure.

Brudenell-Bruce could not disclose the name of the technology partner, and told NutraIngredients.com that patent applications are in the process of being made.

"Fish stocks are dwindling, and there are alternatives out there," he said. Moreover, he said that production costs for the product is significantly cheaper to produce than fish oil [omega-3](#).

"We will be able to undercut the fish oil market," he said. *"We would expect to take the biggest share of this market."*

In the first instance Eau Plus is introducing the EPA/DHA in finished supplement form, with a view to offering it as an ingredient in about 12 months time.

At that time, it will be pursuing the infant formula market as well as dietary supplements. It is expected that there will be considerable interest from makers of products aimed at vegetarians, and also from those who are concerned about potential contaminants in fish oil.

The finished products, called Algae Pure, are marketed in Europe only over the [internet](#), through Eau Plus. This is because regulatory approval in Europe requires full public disclosure of the production process, which the company is not prepared to do since it is not yet protected by patents.

However the company is working with the FDA to gain approval as a new dietary ingredient (NDI) in the US, and the supplements are also expected to be available at retail in other countries, such as Australia, South Africa and Japan.

Other companies, such as Martek Biosciences and Lonza, are already offering algae-derived omega-3 as a dietary supplement, but Brudell-Bruce pointed out that their products contain only [DHA](#), not EPA as well.

Some argue that there is no need to consume both EPA and DHA since the human body converts EPA to DHA anyway. But Brudell-Bruce maintains that since both are present in fish, which have formed part of the human diet for millennia, humans have adapted to consume both and this is therefore preferable.

At the moment, the algae is grown in ponds by a third party, and capacity is two-and-a-half tonnes a month. In six months time, Brudenell-Bruce expects capacity to have increased to eight-and-a-half. Processing capacity is 40 tonnes a month.

As it expands, growing and the processing of the algae will be brought in-house.

The omega-3 product is just one of several products on the launch-pad. Next January a water containing a high concentration of seaweed (10 per cent per litre) will be launched. The seaweed is processed using the same technology, and 17 kg yields just one kg of concentrate.

Brudell-Bruce said that the process allows for the reduction of iodine in the seaweed to safe levels, while still maintaining the same levels of vitamins and minerals.

Two other algae products are also in development, one with high levels of vitamin B12 and the other with high levels of D2.