Novel Food

HOCHSCHULE ANHALT University of Applied Sciences

Omega-3 fatty acids from microalgae

Biotechnologically produced.

Eicosapentaenoic acid EPA (C20:5) and docosahexaenoic acid DHA (C22:6) are particularly valuable nutritionally.

Essential fatty acids

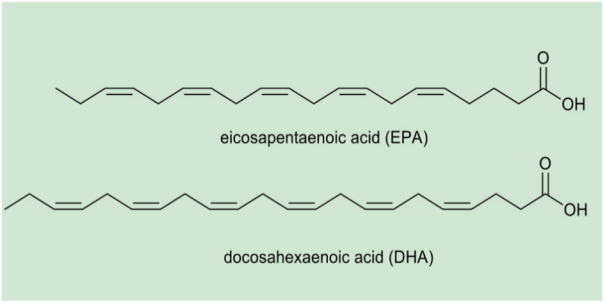
Polyunsaturated fatty acids, such as the long-chain omega-3 fatty acids EPA and DHA, are essential for humans and must be ingested with food. They ensure the fluidity of cell membranes, but also regulate inflammatory and immunological processes. They promote brain and vision development, improve blood circulation, stabilize heart muscle cells and thus reduce the risk of atherosclerosis, arrhythmias and heart attacks.

Algae oil instead of fish oil

Currently, fish, which absorb and accumulate EPA and DHA from microalgae through the food chain, are the most important source of omega-3 fatty acids. As the resource fish is limited and demand is increasing, biotechnologically produced algae oils are gaining importance.

Conclusion

Omega-3 fatty acids from phototrophically produced Diatoms and Eustigmatophyceae will find future application in dietary supplements, functional foods, pharmaceuticals and feeds.



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