Process for the cultivation of microorganisms of the genus Thraustochytriales

Abstract

The invention relates to an optimized method for the production of PUFAs by cultivating microorganisms belonging to the group of Stramenopiles in a fermentation medium that is pH-stabilized using calcium carbonate and comprises 3-15 g/L CaCO3, whereupon the PUFAs are isolated from the microorganisms and/or the medium. The invention particularly relates to novel optimized media having a different CaCO3 content. By using adequate quantities of CaCO3, the process can be significantly simplified during fermentation while greater quantities of DHA can be obtained at an increased oil content in the biomass. They allow microorganisms belonging to the Stramenopiles to be fermented without controlling the pH, thereby substantially improving and significantly simplifying PUFA production.