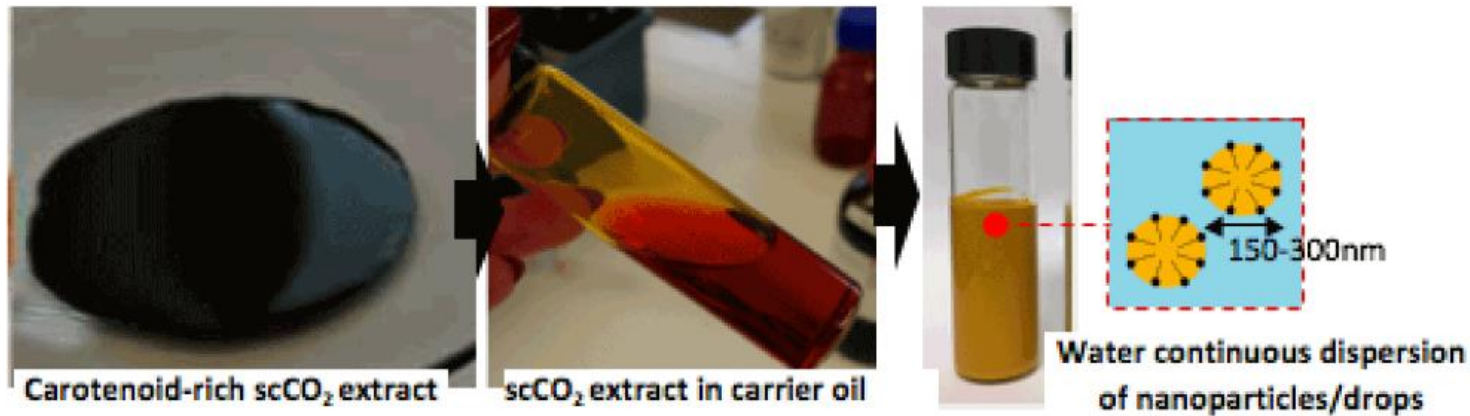


Isolation, properties and uses of Dunaliella starch



A method was developed that allowed for separation of 75% of the granular starch present in defatted Dunaliella powder (residue after extraction of carotenoids through scCO₂). This starch displays similar characteristics to starches from other botanical sources in terms of its crystalline character and functional properties as a thickener.

The small Dunaliella starch granules (ca. 3-1.5 μm median diameter) can be used as novel, edible stabilisers for the preparation of oil in water emulsions. Particle stabilised (Pickering) emulsions are of great commercial interest due to their robustness and high stability. Adsorption of the starch granules at the oil/water interface, and thereby their ability to stabilize emulsions, was attained through hydrophobic modification of the starch granules.

You can view more details in the [poster](#) "Products from microalgae: The formulator's perspective".

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