

Preparation and characterisation of nanoemulsions and solid lipid nanocarriers for carotenoid extracts



Carotenoids are well-known for their antioxidant properties and associated health benefits. Emulsions and lipid dispersions are a convenient way of incorporating hydrophobic carotenoids into water-continuous foods such as e.g. fortified smoothie-type drinks. At the same time, it is well known that the choice of ingredients and delivery system will influence the chemical stability and bioavailability of the carotenoids once ingested.

Oil in water nanoemulsions and solid lipid nanodispersions containing carotenoid-rich super critical CO₂ extracts from *Dunaliella* were prepared by means of high shear technique. These formulations were physically stable and are able to protect carotenoids against oxidative degradation upon storage.

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

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