

## Tailored Triglyceride Oils for Food Industry Applications

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Solazyme, Inc. is a renewable oil and bioproducts company that transforms a range of low-cost plant-based sugars into high-value triglyceride oils. Headquartered in South San Francisco, Solazyme's renewable products can replace or enhance the properties of oils derived from the world's three dominant sources – petroleum, plants and animals.

Utilizing an industrial biotechnology platform that harnesses the oil-producing capabilities of microalgae, Solazyme's technology is capable of using industrial fermentation equipment to efficiently scale and accelerate microalgae's natural oil production time from weeks to a few days. By feeding proprietary oil-producing microalgae simple plant sugars in industrial fermentation vessels, the company is in effect utilizing "indirect photosynthesis", in contrast to the traditional open-pond approaches most often associated with microalgae.

Solazyme's technology allows optimization of the oil profiles to meet specific application requirements. By controlling carbon chain lengths, saturation levels and the presence of functional groups, Solazyme's technology impacts important oil characteristics such as: viscosity, oxidative stability, solid fat content profiles and pour points, creating oils and fats with superior performance characteristics. Solazyme is also utilizing its technology platform to generate innovative food solutions based on tailored microalgal triglyceride oils such as: more sustainable sources of existing products, alternatives to animal fats, natural product extenders e.g. cocoa and shea butters, and functional alternatives to partially hydrogenated vegetable oils as well as palm oil fractions. Solazyme's tailored microalgal oils also enable saturated fat reduction in packaged food products, provide healthier fats and oils for consumer use, and oils with enhanced cooking life in food service operations.