

Accepted Manuscript

Potential application of lipid organogels for food industry

Kamila Ferreira Chaves, Daniel Barrera-Arellano, Ana Paula Badan Ribeiro



PII: S0963-9969(17)30873-6
DOI: doi:[10.1016/j.foodres.2017.12.020](https://doi.org/10.1016/j.foodres.2017.12.020)
Reference: FRIN 7226
To appear in: *Food Research International*
Received date: 25 October 2017
Revised date: 4 December 2017
Accepted date: 8 December 2017

Please cite this article as: Kamila Ferreira Chaves, Daniel Barrera-Arellano, Ana Paula Badan Ribeiro , Potential application of lipid organogels for food industry. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. *Food Res*(2017), doi:[10.1016/j.foodres.2017.12.020](https://doi.org/10.1016/j.foodres.2017.12.020)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Potential Application of Lipid Organogels for Food Industry

Kamila Ferreira Chaves*¹, Daniel Barrera-Arellano¹, Ana Paula Badan Ribeiro¹

¹ Fats and Oils Laboratory, School of Food Engineering, University of Campinas, 13083-970, Campinas, SP, Brazil.

*corresponding author: chaves_kamila@yahoo.com.br phone: (+55) 32 98405 7801

ABSTRACT: Controversial issues regarding the role of *trans* fatty acids in food have led to progressive changes in the legislation of several countries to include more information for consumers. In response, the industries decided to gradually replace *trans* fat in various products with the development of fatty bases of equivalent functionality and economic viability to partially hydrogenated fats, causing, however, a substantial increase in the content of saturated fatty acids in foods. Today, the lipid science aims to define alternatives to a problem that is widely discussed by health organizations worldwide: limit the saturated fat content in food available to the population. In this context, organogels have been indicated as a viable alternative to obtain semi-solid fats with reduced content of saturated fatty acids and compatible properties for food application. The objective of this review was to present the studies that address the lipid organogels as an alternative for food application.

Keywords: organogels, structuring agents, saturated fatty acids, lipid bases.

List of abbreviations

EU - European Union

FDA - Food and Drug Administration

FHCO - Hard fat of cottonseed oil

FHCrO - Hard fat of crambe oil

FHPKO - Hard fat of palm kernel oil

FHPO - Hard fat of palm oil

FHSO - Hard fat of soybean oil

GRAS - Generally Recognized as Safe

SFAs - Saturated fatty acids

TAG - Triacylglycerol

TfAs - Trans fatty acids

Download English Version:

<https://daneshyari.com/en/article/8889575>

Download Persian Version:

<https://daneshyari.com/article/8889575>

[Daneshyari.com](https://daneshyari.com)