



## Edible Oleogels: Structure and Health Implications

*From Academic Press and AOCS Press*

 Download

 Read Online

### **Edible Oleogels: Structure and Health Implications** From Academic Press and AOCS Press

In an effort to provide alternatives to trans and saturated fats, scientists have been busy modifying the physical properties of oils to resemble those of fats. In this fashion, many food products requiring a specific texture and rheology can be made with these novel oil-based materials without causing significant changes to final product quality. The major approach to form these materials is to incorporate specific molecules (polymers, amphiphiles, waxes) into the oil components that will alter the physical properties of the oil so that its fluidity will decrease and the rheological properties will be similar to those of fats. These new oilbased materials are referred to as oil gels, or “oleogels,” and this emerging technology is the focus of many scientific investigations geared toward helping decrease the incidence of obesity and cardiovascular disease.

- Presents a novel strategy to eliminate trans fats from our diets and avoid excessive amounts of saturated fat by structuring oil to make it behave like crystalline fat.
- Reviews recent advances in the structuring of edible oils to form new mesoscale and nanoscale structures, including nanofibers, mesophases, and functionalized crystals and crystalline particles.
- Identifies evidence on how to develop trans fat free, low saturate functional shortenings for the food industry that could make a major impact on the health characteristics of the foods we consume.

 [Download Edible Oleogels: Structure and Health Implications ...pdf](#)

 [Read Online Edible Oleogels: Structure and Health Implicatio ...pdf](#)

# Edible Oleogels: Structure and Health Implications

*From Academic Press and AOCS Press*

## **Edible Oleogels: Structure and Health Implications** From Academic Press and AOCS Press

In an effort to provide alternatives to trans and saturated fats, scientists have been busy modifying the physical properties of oils to resemble those of fats. In this fashion, many food products requiring a specific texture and rheology can be made with these novel oil-based materials without causing significant changes to final product quality. The major approach to form these materials is to incorporate specific molecules (polymers, amphiphiles, waxes) into the oil components that will alter the physical properties of the oil so that its fluidity will decrease and the rheological properties will be similar to those of fats. These new oilbased materials are referred to as oil gels, or “oleogels,” and this emerging technology is the focus of many scientific investigations geared toward helping decrease the incidence of obesity and cardiovascular disease.

- Presents a novel strategy to eliminate trans fats from our diets and avoid excessive amounts of saturated fat by structuring oil to make it behave like crystalline fat.
- Reviews recent advances in the structuring of edible oils to form new mesoscale and nanoscale structures, including nanofibers, mesophases, and functionalized crystals and crystalline particles.
- Identifies evidence on how to develop trans fat free, low saturate functional shortenings for the food industry that could make a major impact on the health characteristics of the foods we consume.

## **Edible Oleogels: Structure and Health Implications From Academic Press and AOCS Press** **Bibliography**

- Sales Rank: #6867769 in Books
- Published on: 2001-04-29
- Original language: English
- Dimensions: 9.50" h x 6.25" w x 1.00" l, 1.52 pounds
- Binding: Hardcover
- 352 pages

 [Download Edible Oleogels: Structure and Health Implications ...pdf](#)

 [Read Online Edible Oleogels: Structure and Health Implicatio ...pdf](#)

## Download and Read Free Online Edible Oleogels: Structure and Health Implications From Academic Press and AOCS Press

---

### Editorial Review

#### About the Author

Alejandro Marangoni is a professor and Canada Research Chair in Food and Soft Materials Science at the University of Guelph. His work concentrates on the physical properties of foods, particularly fat crystallization and structure. He has published over 200 refereed research articles and six books. He is the recipient of many awards including a 1999 Premier's Research Excellence Award, the first Young Scientist Award from the AOCS (2000), a Canada Research Chair (2001, renewed in 2006), two Distinguished Researcher Awards from the Ontario Innovation Trust (2002), a Career Award from the Canadian Foundation for Innovation (2002), an E.W.R. Steacie Memorial Fellowship (2002)-given to the top six Canadian scientists from all disciplines-and the T.L. Mounts Award from AOCS in 2004. Dr. Marangoni is a past chair of the Natural Sciences and Engineering Research Council of Canada's Plant Biology and Food Science Grant Selection Committee, member of NSERC's E.W.R. Steacie Memorial Fellowship selection committee, Editor-in-Chief of Food Research International (Elsevier), an Associate Editor of the JAOCS (Springer), and an editorial board member of Food and Function (RSC), Food Digestion (Springer) and CyTA-The Journal of Food (Taylor and Francis). Dr. Marangoni has co-founded three high-technology companies and is the co-recipient of the 2008 Guelph Partners of Innovation "Innovator of the Year" award for his discovery of a platform technology for the manufacture of structured oil-in-water emulsions. Dr. Marangoni has recently been appointed a Tier 1 Canada Research Chair in Food, Health, and Aging.

#### (FROM EDIBLE OLEOGELS)

Nissim Garti obtained his B.Sc., M.Sc., and Ph.D. from the Hebrew University of Jerusalem. He has been a full professor since 1990 and holds the Ratner Chair of Chemistry in the Department of Chemistry and Applied Chemistry. He also serves as a Board Member Elect and Director of the Hebrew University Governors Executive Board since January 2011. Nissim is the recipient of numerous prestigious awards including the Rockefeller Award, the Israel President Award for one of the most innovative inventions in 60 years of the existence of the country, Life-Time Achievement Award of the Food Society, the Chang Award of the AOCS, the Corporate Research Achievement Award of the AOCS for 2011, and many others. His achievements include publishing over 380 original (research) refereed papers in peer reviewed journals; writing over 60 review chapters in scientific books; granted over 80 patents; edited 7 books and additional 4 in preparation; invited to over 180 conferences as keynote, session, and invited speaker; and educated and tutored 38 Ph.D. students and 84 M.Sc. students. Nissim is a member of the board of directors of several academic institutions in Israel and consults for several Israeli and global industries. Nissim's expertise, competence, and active research is in colloid chemistry, emulsion technology, dispersed systems, delivery new vehicles, microemulsions and lyotropic liquid crystals, crystallization phenomena, interfacial reactions and reactivity, amphiphilic proteins, hydrocolloids, dendrimers, nutraceuticals, and food science.

#### (FROM COCOA BUTTER)

Nissim Garti is Professor of Chemistry at The Hebrew University of Jerusalem. One of the founders of Adumim Chemicals Ltd., NutraLease Ltd.-a company focused on a nano-encapsulation technology for nutraceuticals, and LDS (Lyotropic Delivery Systems). He received B.Sc., M.Sc. and Ph.D. degrees from The Hebrew University of Jerusalem, Israel, in 1969, 1971 and 1974 respectively. Garti was awarded: Life Time Achievement of the Israeli Association for Food Research and Technology, Tel-Aviv, 2009; The

Chung Scientific Award of the AOCS for Outstanding Scientific and Technology Achievements, Orlando, 2009; The Most Innovative Israeli Nanotechnology Award Winner of the CMNC Society, "Food Goes Nano-Liquid Nano Vehicles for Nutraceuticals solubilization and delivery," Chicago, USA, 2005; The Japanese Award for the Promotion of Senior Foreign Scientists, Hiroshima University, Hiroshima, Japan, 2003; The Best Invention and Innovation of The Hebrew University of Jerusalem 1997; The Most Innovative Food Ingredient Award in Europe (FIE), London, 1997; and The Japan Oil Chemical Society Forum Award for Outstanding Achievement, "Polymorphism in Fats," Nara, Japan, 1997. Professor Garti is the author of more than 400 publications and holds over 70 patents.

## **Users Review**

### **From reader reviews:**

#### **Shelly Rodriguez:**

This book untitled Edible Oleogels: Structure and Health Implications to be one of several books that will best seller in this year, that's because when you read this book you can get a lot of benefit in it. You will easily to buy this particular book in the book shop or you can order it by way of online. The publisher in this book sells the e-book too. It makes you easier to read this book, as you can read this book in your Smart phone. So there is no reason for you to past this book from your list.

#### **Nydia Kelly:**

Reading a reserve tends to be new life style within this era globalization. With reading you can get a lot of information that may give you benefit in your life. Having book everyone in this world can easily share their idea. Books can also inspire a lot of people. Plenty of author can inspire their own reader with their story or their experience. Not only the storyline that share in the textbooks. But also they write about the information about something that you need illustration. How to get the good score toefl, or how to teach your sons or daughters, there are many kinds of book that you can get now. The authors on earth always try to improve their proficiency in writing, they also doing some analysis before they write for their book. One of them is this Edible Oleogels: Structure and Health Implications.

#### **Darlene Johnson:**

The reserve with title Edible Oleogels: Structure and Health Implications has lot of information that you can understand it. You can get a lot of profit after read this book. This specific book exist new information the information that exist in this e-book represented the condition of the world today. That is important to yo7u to know how the improvement of the world. This specific book will bring you with new era of the glowbal growth. You can read the e-book with your smart phone, so you can read this anywhere you want.

#### **Joseph Lewis:**

You can find this Edible Oleogels: Structure and Health Implications by check out the bookstore or Mall. Merely viewing or reviewing it could possibly to be your solve challenge if you get difficulties for ones knowledge. Kinds of this e-book are various. Not only by means of written or printed but additionally can

you enjoy this book by e-book. In the modern era similar to now, you just looking by your local mobile phone and searching what their problem. Right now, choose your personal ways to get more information about your reserve. It is most important to arrange you to ultimately make your knowledge are still upgrade. Let's try to choose appropriate ways for you.

**Download and Read Online Edible Oleogels: Structure and Health Implications From Academic Press and AOCS Press  
#QZIJ0HA82F7**

## **Read Edible Oleogels: Structure and Health Implications From Academic Press and AOCS Press for online ebook**

Edible Oleogels: Structure and Health Implications From Academic Press and AOCS Press Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Edible Oleogels: Structure and Health Implications From Academic Press and AOCS Press books to read online.

### **Online Edible Oleogels: Structure and Health Implications From Academic Press and AOCS Press ebook PDF download**

**Edible Oleogels: Structure and Health Implications From Academic Press and AOCS Press Doc**

**Edible Oleogels: Structure and Health Implications From Academic Press and AOCS Press Mobipocket**

**Edible Oleogels: Structure and Health Implications From Academic Press and AOCS Press EPub**