

1. Record Nr.	UNINA9910633983703321
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Titolo	Demystifying emulsifiers as additives through molecular gastronomy : a contribution to rise consumer sovereignty / / Ligia Rebelo Gomes, Claudia Silva and Catarina D. Simoes
Pubbl/distr/stampa	London : , : IntechOpen, , 2021
ISBN	1-83968-960-9
Descrizione fisica	1 online resource (112 pages)
Disciplina	641.5
Soggetti	Molecular gastronomy
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. Introduction -- 2. Interfacial tension and emulsions -- 2.1 The critical micelle concentration -- 3. E473 and E471 classes of additives -- 3.1 Sucrose esters of fatty acids (sucrose esters), E473 -- 3.1.1 Common uses for sucrose esters -- 3.1.1.1 Preparations based in oil/water emulsions -- 3.1.1.2 Preparations based in oil/water emulsions with significant sugar content -- 3.1.1.3 Aerated oil/water emulsions preparations -- 3.1.2 Examples for the use of sucrose esters in molecular gastronomy -- 3.1.2.1 Preparation of a butter cream -- 3.1.2.2 Cream bubbles -- 3.1.3 Safety and maximum daily intake -- 3.2 Mono- and diglycerides of fatty acids (E471) -- 3.2.1 Common uses for mono- and diglycerides of fatty acids -- 3.2.2 Examples for the use of mono- and diglycerides of fatty acids in molecular gastronomy -- 3.2.2.1 Mono- and diglycerides of fatty acids to prepare "olive oil foam" -- 3.2.3 Safety and maximum daily intake -- 4. Conclusions -- References.
Sommario/riassunto	According to the Food and Agriculture Organisation of the United Nations, one third of food produced annually for human consumption results in food losses or wastage, which is environmentally degrading, economically unviable, ethically incorrect, and does not contribute to sustainable development. The use of additives can help prevent the waste of food that is still fit for consumption in a world where about 16% of the world's population goes hungry. Food additives may overcome the problem of limited supply of natural ingredients, increase

the shelf life of foods and simplify the complex cooking procedures. To raise the consumer's knowledge about food additives, this work presents and explain in a simple manner some physical/chemical properties of emulsifiers, namely fatty acids esters and sucrose esters of fatty acids. Moreover, this work reviews and illustrates, recurring to recipes of molecular gastronomy, how these additives are used in food preparation to achieve and maintain certain desirable characteristics, how they contribute to obtain a better result in final preparation, and how they can be used in modern cuisine. Preparations coming from the discipline of molecular gastronomy have been chosen since they are based on laboratory related procedures and only use few ingredients, including an additive.

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