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Antioxidants and Oxidative Stability in Fats and Oils

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Message from the Guest Editor

This Special Issue aims to report recent antioxidant strategies to protect edible fats and oils from lipid oxidation. The combination of antioxidants with different functions seems to be reasonable to act in the different stages of the oxidative process. In recent years, spontaneous formation of reverse micelles of amphiphilic minor components and trace water in oils has been reported to play a decisive role in lipid oxidation. Due to the elevated surface area, it is in these colloids where oxidation reactions seem to predominate. The migration and concentration of polar antioxidants at reverse micelles appears to be the reason why polar antioxidants are more effective in oils than lipophilic antioxidants. Interactions of antioxidants which each other may result in synergistic effects. Therein, such interactions should take place at the colloidal interfaces, and therefore supramolecular interactions of antioxidants with reverse micelles should have an important role in preventing or retarding lipid oxidation in oils.



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Special Issue



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Message from the Editor-in-Chief

It has been recognized in medical sciences that in order to prevent adverse effects of "oxidative stress" a balance exists between prooxidants and antioxidants in living systems. Imbalances are found in a variety of diseases and chronic health situations. Our journal *Antioxidants* serves as an authoritative source of information on current topics of research in the area of oxidative stress and antioxidant defense systems. The future is bright for antioxidant research and since 2012, *Antioxidants* has become a key forum for researchers to bring their findings to the forefront.

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