PART 1 OXIDATION IN ANIMAL PRODUCTS

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C Faustman, S Yin and N Tatiyaborworntham, University of Connecticut, USA and B M Naveena, National Research Centre on Meat, India
- Introduction and compositional considerations
- Lipid oxidation in red meat
- Meat protein oxidation
- Antioxidant mediation of red meat oxidation
- Future trends
- Sources of further information and advice
- References

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N Botsoglou, Aristotle University of Thessaloniki and E Botsoglou, University of Thessaly, Greece
- Introduction
- Oxidation of poultry meat and eggs
- Effect of oxidation on the sensory quality of poultry meat and eggs
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- Effect of oxidation on the shelf life of poultry meat and eggs
- Strategies to protect poultry meat and eggs against oxidation
- Future trends
- Sources of further information and advice
- References

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I Medina and M Pazos, Instituto de Investigaciones Marinas CSIC, Spain
- Introduction
- Oxidation of fish and fish products
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- Protecting fish and fish products against oxidation
- Future trends
- Sources of further information and advice
- References

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S E Duncan and J B Webster, Virginia Polytechnic Institute and State University, USA
- Introduction
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- Processing and storage conditions contributing to oxidation of milk and dairy products
- Photooxidation of milk and dairy products
- Oxidation of dairy products
- Packaging of milk and dairy products
- Future trends
- Sources of further information and advice
- References

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C Jacobsen, Technical University of Denmark, Denmark
- Introduction
- Oxidative flavour deterioration of omega-3 enriched foods
- Prevention of oxidation in fish oil and omega-3 polyunsaturated fatty acid (PUFA) enriched foods
- Conclusions
PART 2 OXIDATION IN PLANT-BASED FOODS AND BEVERAGES

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B Matthäus, Federal Research Institute for Nutrition and Food, Department for Lipid Research, Germany
- Introduction
- Lipid oxidation
- Importance of oxidative processes on the quality of edible oils
- Evaluation of the oxidative state of edible oils
- Effects of oxidation on sensory and nutritional quality of edible oils
- Effect of processing on the oxidative stability of edible oils
- Protection of edible oils against oxidation
- Conclusion
- Sources of further information and advice
- References

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- Introduction
- Oxidation during the frying process
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- Acknowledgements
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F Shahidi and J A John, Memorial University of Newfoundland, Canada
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- Controlling lipid oxidation using structured emulsions
- Conclusions
- References

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- Sources of further information and advice
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*C Hall, North Dakota State University, USA*
- Introduction
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- Future trends
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- Future trends
- Sources of further information and advice
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*C W Bamforth, University of California, USA*
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- The chemistry of flavour change in beer
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- Managing oxidation in wine
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**PART 3 ANTIOXIDANT DELIVERY IN FOODS AND BEVERAGES**

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*M A Augustin and L Sanguansri, CSIRO, Australia*
- Introduction
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- Design of encapsulation systems
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_C Nerin, CPS-University of Zaragoza, Spain_

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- The production of active packaging
- Measuring the antioxidant capacity of active packaging
- Advantages and disadvantages of the different technologies of antioxidant active packaging
- Applications of antioxidant active packaging
- Future trends
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