

COURSE : PREVENTION OF OXIDATION IN MEAT FAT

Summer Program

COURSE TUTOR

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COURSE OVERVIEW

It is considered that meat fat affects the quality of meat. Increasing level of fat in meat generally increases the palatability of meat. However higher level of meat fat, especially the fat having greater amounts of polyunsaturated fatty acids causes to develop oxidative rancidity. Oxidative rancidity involves lipid oxidation in which the many kinds of fat develop rancid flavor components in the presence of oxygen and an array of meat constituents. The formation of oxidative compounds will depend on the species, the diet that the animal fed, processing procedures and ingredients used. In addition to affecting palatability factors such as meat flavor and color, lipid oxidation produces compounds which may have adverse biological effects. The possible cardiotoxicity of cholesterol oxidation products has been suggested as playing a role in coronary heart disease. A lot of studies suggest that polyunsaturated fatty acids may increase the risk of cancer because of their greater propensity for autoxidation. In order to solve these problems of lipid oxidation, there are many studies that attempted to improve oxidative stability of meat fats. In this course, I would like to talk to you about the following topics,

1. Mechanisms of lipid oxidation
2. Prevention of oxidation during meat processing
3. Improvement of oxidative stability in meat fat through animal feeding

TEXTBOOKS AND READINGS

There will be no set of textbook for this course. Required readings will be pass out each time it is needed.

COMMUNICATIONS

The course tutor's details are as follows:

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