

## **SUMMARY**

As the risk of consuming high amounts of dietary fat is increasing, there is a significant increase in the interest in low-fat cheeses in the recent years. However, fat reduction causes some quality defects, including textural, functional and sensory problems in cheese.

The purpose of this study was to determine the factors determining the quality of reduced-fat cheeses and strategies to control the quality characteristics of such cheeses through the use of microparticulated whey proteins, inulin or milk fat fractions.

The increased addition of process water is a method of lowering the fat content of commercial cheeses, which affects the sensory profile of the final product. The analysis of texture parameters and sensory profile showed that partial replacement of fat with water reduces hardness and improves the texture of low-fat cheeses, increasing their quality. The addition of fat mimetics, such as microparticulated whey proteins along with inulin, allows cheeses to have physicochemical characteristics similar to full-fat products. The use of milk fat fractions makes it possible to differentiate the fatty acid profile of cheeses.

The results of the study indicates that reduced-fat ripened cheeses can be a good choice for consumers, due to their reduced caloric value and, at the same time, higher protein content in relation to classic cheeses.