

## **Effect of fat types on the structural and textural properties of dough and semi-sweet biscuit**

### **Abstract**

Fat is an important ingredient in baking products and it plays many roles in providing desirable textural properties of baking products, particularly biscuit. In this study, the effect of fat types on dough rheological properties and quality of semi-sweet biscuit (rich tea type) were investigated using various techniques. Texture profile and extensibility analysis were used to study the dough rheology, while three-point bend test and scanning electron microscopy were used to analyse the textural characteristics of final product. TPA results showed that the type of fat significantly influenced dough textural properties. Biscuit produced with higher solid fat oil showed higher breaking force but this was not significantly different when evaluated by sensory panel. Scanning electron microscopy showed that biscuit produced with palm mid-fraction had an open internal microstructure and heterogeneous air cells as compared to other samples.