Major Fatty Acid Composition of Commercial Semi-sweet Biscuit

Abstract

Total fat contents, fatty acid composition and percentages of saturated (SFA), monounsaturated (MUFA) and poly-unsaturated (PUFA) fatty acid were analyzed in ten commercial semi sweet (rich tea type) biscuits using gas chromatography mass spectrometry (GC/MS). Total fat content determined was slightly different with the fat content declared by the manufacturer. Major fatty acids present were palmitic, oleic and linoleic acids. Stearic and myristic fatty acids were also detected but with lower proportion (below 1.5 %). The results obtained show a great variance in the percentages of fatty acids (g/100 g total fatty acids). From the different brands of semisweet biscuit, four of the samples contained a high proportion of saturated fatty acids and six samples contained a high proportion of unsaturated fatty acid.