

Fatty acid composition of selected street foods commonly available in Malaysia

ABSTRACT

Despite growing evidence of increased saturated and trans fat contents in street foods, little is known about their fatty acid (FA) compositions. This study aimed to analyse the saturated fatty acids (SFAs), monounsaturated fatty acids (MUFAs), polyunsaturated fatty acids (PUFAs), and trans fatty acids (TFAs) content of 70 selected and most commonly available street foods in Malaysia. The street foods were categorised into main meals, snacks, and desserts. TFAs were not detected in any of the street foods. Descriptively, all three categories mainly contained SFAs, followed by MUFAs, and PUFAs. However, the one-way ANOVA testing showed that the differences between each category were insignificant ($p > 0.05$), and each FA was not significantly different ($p > 0.05$) from one to another. Nearly half of the deep-fried street foods contained medium to high SFAs content (1.7 g/100 g–24.3 g/100 g), while the MUFAs were also high (32.0–44.4%). The Chi-square test of association showed that the type of preparation methods (low or high fat) used was significantly associated ($p < 0.05$) with the number of SFAs. These findings provide valuable information about fat composition in local street foods for the Malaysian Food Composition Database and highlight the urgency to improve nutritional composition