

OP-06: How do online and street vended lunch packets compare with nutritional recommendations for non-communicable disease prevention?

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Introduction: Out-of-home food consumption has increased significantly over the last few years. The aim of this study was to analyse the energy, macronutrients, fibre and sodium content in lunch packets obtained from the Colombo Municipal Council Area.

Methods: Of all available online vendors selling lunch packets (n=40), twenty were randomly selected. A further eight street food vendors were conveniently selected. Three packets were obtained from each vendor, homogenised and analysed. A total of 28 samples were analysed for sodium content using flame-photometry. Contents were weighed to analyse energy, macronutrient and fibre using food composition tables and to assess adequacy of food groups in relation to food based dietary guidelines.

Results: The mean sodium content of food was 147.6 (SD=20.7) mg/100g. There was no significant difference in sodium content between online and street vended packets. Packets were categorised as chicken, fish, egg and vegetarian packets. Packets consisted of four, five or six accompaniments, and gravy was included in some. Sodium content in chicken lunch packets was significantly higher (p=0.008) than fish lunch packets. Packets with six curries had significantly higher sodium content than packets with four (p=0.012) or five (p=0.003) curries. The sodium content was significantly higher (p=0.006) in packets with gravy than without. Also, 25.0% of packets had a sodium content above recommendation. Majority of packets had carbohydrate (89.3%) content above recommendation, while fibre (64.3%) and fat (75%) content were below recommendations. Only 14.26% had protein content below recommendations, while 74.1% were above or within recommendation for the vegetable group.

Conclusions: While one fourth of packets had sodium above the acceptable limit, inclusion of gravy increased the sodium content. Majority of packets did not satisfy fibre recommendations and exceeded recommendations for carbohydrate, indicating reduced healthfulness with respect to recommendations for non-communicable disease prevention.

Keywords: energy content, nutrient composition, sodium content, online vendors