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## Assessment of energy and nutrient content of a recipe food box for schoolchildren – “Nutrition in a BRITE Box ©”

D. Bhakta<sup>1</sup>, H. Mulrooney<sup>2</sup>, I. Sattaoui<sup>1</sup>, A. Aghili<sup>1</sup>, I. Illingworth<sup>1</sup>, R. Ranta<sup>3</sup>, N. Nancheva<sup>3</sup>, R. Dawson<sup>4</sup> and N. Dawson<sup>4</sup>

<sup>1</sup>*School of Human Sciences, London Metropolitan University, London, UK,*

<sup>2</sup>*School of Life Sciences, Pharmacy & Chemistry, Kingston University London, London, UK,*

<sup>3</sup>*School of Law, Social and Behavioural Sciences, Faculty of Business and Social Science, Kingston University London, London, UK and*

<sup>4</sup>*Voices of Hope, Kingston, London, UK*

BRITE Box<sup>®</sup> is an innovative initiative, borne from the pandemic to alleviate food insecurity for schoolchildren and their families<sup>(1)</sup>. Pre-weighed ingredients, sufficient for cooking a complete meal for a family of five, are supplied weekly for a period of one school year, accompanied by easy-to-follow, low-cost recipes. The scheme is administered by schools in SW London and currently reaches 1700 people per week<sup>(1)</sup>. The aim of the study was to assess the energy and nutrient content of a typical BRITE Box and compare with guidelines.

We analysed a preliminary 21 recipes using dietary software (*Nutritics, 2023*) and compared the government guidelines for food standards for schools<sup>(2)</sup> and energy and nutrient content against the Caroline Walker Trust (CWT) nutrient based guidelines for children ages 9–12 years (for after-school meals)<sup>(3)</sup>. Amounts of ingredients were entered using the published recipe and divided by the number of servings to obtain the nutrient content per serving size.

The recipe boxes met the government standards: providing adequate sources of protein from meat, fish, eggs, or beans; at least two servings of vegetables; plenty of unrefined starchy foods and some dairy food. Average energy content per serving of the BRITE Box (465 kcals, SD 108) were broadly within recommended levels (boys 419 kcals; girls 359 kcals) as was total fat intake (15.5 g, SD 10.6), saturated fat (5.2 g, SD 5.9) and total CHO (56 g, SD 16.9). The protein content was relatively high per serving (25.5 g, SD 10.7 vs 7 g minimum requirement, for both boys and girls). Iron (2.9 mg, SD 0.86) and zinc (2.5 mg, SD 1.5) met requirements as did calcium (BRITE Box 153 mg, SD 102 vs boys 160 mg; girls 140 mg). Fibre per serving (only NSP reported in CWT guidelines) was high (6.7 g SD 3.5 vs minimum requirements of 3.4 g boys and 2.9 g girls) and Vitamin C (54.2 mg, SD 29.6) and folate (70 mcg, SD 27.7) exceeded requirements. The sodium content fell within the recommended guidelines (BRITE Box 461, SD 104 mcg vs 430 mcg boys & girls). A caveat has to be applied in the interpretation of the findings as the BRITE Box scheme only provides one meal a week whereas the CWT guidelines are based on average requirements over a period of a week.

Our preliminary findings show that the boxes are nutritionally adequate and are particularly beneficial because of the provision of fresh vegetables which are often lacking from traditional food parcels<sup>(4)</sup>. The recipe boxes also have reported added benefits, they provide an opportunity to learn to cook, introduce new flavours, new foods, encourage family bonding and enhance life skills<sup>(5)</sup>.

### Acknowledgments

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### References

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