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Discretionary foods contribute around a third of sodium intake in Australian long day-care.

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Early childhood is an important time for establishment of dietary habits, including preferences for sugary or salty foods.[1–3] Children aged 2–3 years are known to over-consume sodium by ~50% compared to the age specific recommended upper level of intake.[4–6] Discretionary foods, characterised by high saturated fat, added sugar, and salt content which provide minimal nutritional value, are not recommended in long day-care settings.[7–8] Since children can consume up to 67% of their dietary intake whilst at long day care (LDC) centres,[9–11] this study aimed to determine (i) how sodium contribution differed between core foods and discretionary foods across different meal occasions; and (ii) the main contributors to sodium in the food provided. Thirty LDC services in metropolitan Perth, Australia were recruited via convenience sampling. A cross sectional audit measuring food provision over two consecutive days was conducted by weighing raw ingredients provided at each meal occasion; morning tea, lunch and afternoon tea, to determine sodium contribution and its deriving food category (core or discretionary). Dietary analysis was conducted using FoodWorks and sodium contribution was assessed using one sample Wilcoxon signed-rank and Kruskal–Wallis one-way ANOVA tests (SPSS). Core and discretionary foods were identified using the Australian Guide to Healthy Eating. The median (IQR) amount of sodium provided by LDC services per child across all meal occasions on average was 768 (569 to 1,077) mg/day. This represents 77% of the recommended UL of 1000 mg/day for children aged 1–3 years and is higher than the recommended 500 mg/day value ($p < 0.001$). Sodium from core foods contributed 62% of the total sodium provided while sodium from discretionary foods contributed 38%. Cheese, bread, stock powder, soup mix and processed meats were the top five food contributors to sodium, contributing 45% of total sodium intake. Lunch contributed the greatest amount of sodium overall, also contributing the greatest amount from discretionary ingredients. Overall, total median daily sodium was significantly over-provided ($p < 0.001$). There is an opportunity to reduce sodium intake from LDC menus by replacing discretionary foods, particularly at lunch and afternoon tea meals, with plant-based options.

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