

Abstract

# Nutrition and Physical Activity for Pre-Schoolers: Knowledge and Perspectives amongst Early Childhood Education Teachers <sup>†</sup>

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**Background:** Caregivers' knowledge of the links between nutrition, diet and physical activity is recognised as important for children's health and body size. Evidence is limited for early childhood education (ECE) teachers' knowledge about nutrition and physical activity for pre-schoolers, especially in New Zealand. Identifying knowledge gaps amongst teachers may direct professional development and obesity prevention strategies in childcare settings. Our aim was to measure ECE teachers' nutrition knowledge for pre-schoolers (2–5-year-olds); and their perspectives towards nutrition and physical activity.

**Methods:** Cross-sectional online validated questionnaire of New Zealand ECE teachers' nutrition knowledge for pre-schoolers. Knowledge was measured against Ministry of Health nutrition guidelines for pre-schoolers. Perspectives were assessed using Likert scales. Analysis included descriptive statistics, correlation and linear regression.

**Results:** Participants were ECE teachers ( $n = 386$ ) from New Zealand childcare centres. Teachers' knowledge of nutrition was lacking; overall score was  $22.56 \pm 2.83$  (mean  $\pm$  SD), or 61% correct. Age, qualification level, employment role and years of experience did not predict overall nutrition knowledge scores. Increased years of experience significantly predicted an increase in knowing that New Zealand nutrition and physical activity guidelines existed ( $B = 0.02$  [95% CI, 0.00–0.03],  $r^2 = 0.13$ ,  $p = 0.033$ ). Teachers' increased agreement in feeling they were confident talking about nutrition to parents significantly predicted an increase in overall nutrition knowledge scores ( $B = 0.34$  [95% CI, 0.06–0.63],  $r^2 = 0.15$ ,  $p = 0.019$ ). The belief that ECE teachers play a vital role in promoting pre-schoolers' healthy eating and physical activity was widespread. Teachers generally held positive perspectives towards feeding practices and perceived themselves to understand key physical activity concepts. Common barriers for ECE teachers' nutrition and physical activity knowledge included a lack of staff training, confidence and resources.

**Conclusions:** ECE teachers may lack nutrition knowledge for pre-schoolers in New Zealand, particularly with regards to basic nutrition recommendations (servings, food/beverage choices and portion sizes).



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