

46th Annual Scientific Meeting of the Nutrition Society of Australia, 29 November – 2 December 2022, Sustainable nutrition for a healthy life

Managing cow's milk allergy in early children's education and care

S.L. Vale^{1,2,3}, T. Marrollo⁴, L. Matwiejczyk⁴, A. Devine^{5,6}, R. Sambell^{5,6}, H. Roberts^{1,3} and M. Netting^{7,8,9}

¹National Allergy Strategy, Balgowlah, NSW, Australia,

²The University of Western Australia, Crawley, WA, Australia,

³Australasian Society of Clinical Immunology and Allergy (ASCIA), Balgowlah, NSW, Australia,

⁴Flinders University, Adelaide, SA, Australia,

⁵School of Medical and Health Science, Edith Cowan University, Perth, WA, Australia,

⁶Nutrition & Health Innovation Research Institute, School of Medical and Health Science, Edith Cowan University, Perth, WA, Australia,

⁷Women and Kids Theme, South Australian Health and Medical Research Institute, North Adelaide, SA, Australia,

⁸Discipline of Paediatrics, Faculty of Health and Medical Sciences, The University of Adelaide, Adelaide, SA, Australia and

⁹Women's and Children's Hospital, North Adelaide, SA, Australia

Food allergy affects up to 10% of Australian infants.⁽¹⁾ Safe and reliable Early Childhood Education and (ECEC) services are important as 46.7% of children aged 0–5 years attend some form of regulated ECEC service.⁽²⁾ Therefore, it is likely a 'first' anaphylaxis could occur in an ECEC setting and managing food allergies and the risk of anaphylaxis needs to be prioritised in this environment.⁽³⁾ Many children with food allergies are at risk of anaphylaxis, therefore, it is important that food allergies are appropriately managed in this setting. Cow's milk allergy is a challenging food allergy to manage in the ECEC, and in particular long day care (LDC) services, as milk makes an important dietary contribution which supports an infant and young child's growth and development⁽⁴⁾ and is included in many familiar recipes and convenience products. This research aimed to identify if and how many children with cow's milk allergies attend LDC, and what measures were in place to manage cow's milk allergy. A national online survey of ECEC services was conducted by the National Allergy Strategy in July 2021. ECEC service managers were emailed information about the survey and the survey link directly using Qualtrics software. A total of 615 LDC services responded to the survey (7.4% response rate; $n = 615/8,333$). The majority (89.4%, $n = 480/537$) of LDC services reported having at least one child with a food allergy enrolled and the most common food allergies were peanut, egg and cow's milk, with a median of two children with allergies enrolled per service. On the day that children with food allergies attended, 42% of LDC services excluded specific food allergens. 225 LDC services reported to use alternative ingredients for children with cow's milk allergy, with 13.8% ($n = 31$) reporting that they use lactose-free alternatives (which contain cow's milk protein and is not considered a suitable alternative for children with a cow's milk allergy). In conclusion, children with cow's milk allergy are attending LDC services and there is confusion about appropriate alternatives for cow's milk when substitutions are being made by the LDC service. Training LDC staff, to manage food allergies is a critical step to mitigate risk, and the potential catastrophic event. Resourcing should be directed to the dissemination of nationally standardised anaphylaxis and food allergen management training, which demonstrates how to avoid cross contamination and exposure to allergens in the kitchen, at mealtimes and in LDC rooms. Best practice guidelines exist for managing anaphylaxis in this setting and regular dissemination of these guidelines by peak bodies should be considered a priority. Furthermore, developing training for ECEC Assessment and Rating organisations, to assist with the identification of 'at risk' practices, would be an important professional development topic.

References

1. Osborne NJ, Koplin JJ, Martin PE, *et al.* (2012) *Clin Exp Allergy* **40**, 1516–1522.
2. Department of Education (2022). Child care in Australia report: March quarter 2021. Available from: <https://www.education.gov.au/child-care-package/early-childhood-data-and-reports/quarterly-reports/child-care-australia-report-march-quarter-2021>
3. Hua T, Sambell R, Wallace R, *et al.* (2020) *J Paediatr Child Health* **56**, 394–399.
4. National Health and Medical Research Council (2013) Australian dietary guidelines. Canberra: NHMRC. Available from: <http://www.nhmrc.gov.au/guidelines-publications/n55>