

Do skin care interventions stop infants from developing eczema and allergies?

Clinical Question	How effective are skin care interventions, such as emollients, for primary prevention of eczema and food allergy in infants?
Bottom Line	<p>This review found that skin care interventions such as emollients probably do not influence the development or time to onset of eczema in healthy term infants by age one to two years. There is however evidence to suggest that they may increase the risk of skin infection (moderate-certainty evidence) with 50/1000 developing skin infections with standard care comparative to 67/1000 developing skin infections in the intervention group. This suggests that regular application of emollients or other skin care interventions probably is not necessary for healthy infants, unless there are other specific reasons for using such products.</p> <p>The review could not draw conclusions about the impact of skin care interventions on IgE-mediated food allergy by age one to two years (very low-certainty evidence) as only one study had food allergy diagnosed by oral food challenges, and in this study, only 29% of eligible participants attended underwent the oral food challenges.</p>
Caveat	Although 33 studies were included in the review, only 17 reported outcomes relevant to this review. Of these 17 studies, only eight reported the primary outcome of cumulative incidence of eczema by one to three years. However, as this review conceptualised prior to 2017 two of the largest studies included the outcomes respecified in this review and also provided individual patient data (IPD) along with another five included studies allowing for assessment of both study factors and individual participant factors that may have influenced results. This IPD approach has strengthened the evidence presented.
Context	Eczema and food allergy are common health conditions that usually begin in early childhood and often occur together in the same people. Genetic variations that damage skin barrier function are associated with both eczema and food allergy. It is unclear whether interventions designed to improve the skin barrier in infants, either by enhancement or by promotion of the barrier through hydration via directly applied topical products such as emollients or moisturisers or through reduction of potential damage to the skin barrier and consequent dryness through various means such as avoiding soaps or reducing water hardness are effective in preventing eczema or food allergy.
Cochrane Systematic Review	Kelleher MM, Cro S, Cornelius V, Lodrup Carlsen KC, Skjerven HO, Rehbinder EM, Lowe AJ, Dissanayake E, Shimojo N, Yonezawa K, Ohya Y, Yamamoto-Hanada K, Morita K, Axon E, Surber C, Cork M, Cooke A, Tran L, Van Vogt E, Schmitt J, Weidinger S, McClanahan D, Simpson E, Duley L, Askie LM, Chalmers JR, Williams HC, Boyle RJ. Skin care interventions in infants for preventing eczema and food allergy. Cochrane Database of Systematic Reviews 2021, Issue 2. Art. No.: CD013534. DOI: 10.1002/14651858.CD013534.pub2. This review contains 33 trials with a total of 25,827 participants.

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Systematic review link:

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013534.pub2/full>