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Lower levels of sunlight link to allergy and eczema

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Increased exposure to sunlight may reduce the risk of both food allergies and eczema in children, according to a new scientific study published this week.

Researchers from the European Centre for Environment & Human Health, along with several Australian institutions, have found that children living in areas with lower levels of sunlight are at greater risk of developing food allergies and the skin condition eczema, compared to those in areas with higher UV.

The research team used data from a study of Australian children and analysed how rates of food allergy, eczema and asthma varied throughout the country. As well as finding a link between latitude and allergies to peanut and egg, the results showed that on average children in the south of the country are twice as likely to develop eczema as those in the north.

The report builds upon existing evidence that suggests exposure to the sun may play a role in rising levels of food allergy and eczema. Sunlight is important because it provides our body with the fuel to create vitamin D in the skin, and locations closer to the equator typically receive higher levels of sunshine. Australia is a particularly good place for this type of study as it spans nearly 3000 miles from north to south, with a large variation in climate, day length and sun strength - from Queensland in the north to Tasmania in the south.

Dr Nick Osborne, who led the research, believes these findings provide us with an important insight into the prevalence of food allergies and eczema, which appear to be on the increase. Dr Osborne also cautioned that exposure to sunlight can vary for a host of reasons beyond latitude, such as local climate variations and behaviours, and these factors will also need to be considered.

He said "This investigation has further underlined the association between food allergies, eczema and where you live. We're now hoping to study these effects at a much finer scale and examine which factors such as temperature, infectious disease or vitamin D are the main drivers of this relationship. As always, care has to be taken we are not exposed to too much sunlight, increasing the risk of skin cancer."

More information: Osborne NJ, Ukoumunne OC, Wake M, Allen KJ. Prevalence of eczema and food allergy is associated with latitude in Australia. *Journal of Allergy and Clinical Immunology* 2012:In Press. www.sciencedirect.com/science/ … ii/S0091674912000796

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