



Allergy and dishwashers

The hygiene hypothesis postulates that early childhood exposure to microbes induces tolerance and decreases allergies. A questionnaire-based study examined the relationship between allergic diseases (asthma, eczema and allergic rhinoconjunctivitis) in Swedish children aged 7–8 years and five facets of diet or eating habits, which might affect microbial exposure.¹ These were dishwashing practices (by hand or machine), fermented food (sauerkraut or fermented cucumber), farm food (eggs, meat, unpasteurised milk), home cooking and breastfeeding. The response rate was 56% (1029 questionnaires returned of 1838 distributed). Only 12% of families washed dishes by hand, but this was associated with a 43% reduction in any allergic disease (95% CI 15–63%) compared with machine washing. Eczema was reported in 23% of children of hand-washing and 38% of dishwashing families ($P = 0.001$), and asthma in 1.7% and 7.3%, respectively ($P = 0.011$). Both eating fermented food and buying foods directly from farms further reduced total allergy. The associations were adjusted for known potential confounders; however, there remains the potential for reverse causation and the possibility that the presence of eczema itself might alter the preferred method of dish washing. The lesson for families who want to reduce the risk of their children developing allergic diseases seems to be to go back to the kitchen sink.

Reference

1 Hesselmar B *et al.* *Pediatrics* 2015; **135**: e1–6. doi: 10.1542/peds.2014–2968.

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Attention deficit hyperactivity disorder associated with increased mortality

A diagnosis of attention deficit hyperactivity disorder (ADHD) is associated with a twofold increase in mortality, according to a large Danish cohort study, which used national registers to follow 1.92 million individuals, including 32 061 with ADHD, from their first birthday.¹ Information on cause of death was available for 79 of 107 deaths; 25 (31.6%) died from natural causes and 54 (68.4%) from unnatural causes, including 42 accidents. Even after adjusting for confounders, ADHD was associated with an increased mortality rate ratio (MRR 2.07, 95% confidence interval (CI) 1.90–2.50; $P < 0.0001$). After individuals with oppositional defiant disorder, conduct disorder, and substance use disorder were excluded, ADHD remained associated with increased mortality (MRR 1.50, 1.11–1.98) and the increased risk was greater in girls and women (2.85, 1.56–4.71) than in boys and men (1.27, 0.89–1.76). Mean age at ADHD diagnosis was 12.3 years, which seems late. Mortality risk was higher within 5 years of diagnosis (MRR 2.45–3.75), but persisted throughout life. Adult diagnosis of ADHD conferred a higher risk of death, possibly identifying a more severe subset of disease manifestation. The study was not powered to assess whether rates of suicide differed from the general population. It is unknown if treatment of ADHD with psychostimulants affects the mortality risk.

Reference

1 Dalsgaard S *et al.* *Lancet* 2015; (published online Feb 26.) DOI: [http://dx.doi.org/10.1016/S0140-6736\(14\)61684-6](http://dx.doi.org/10.1016/S0140-6736(14)61684-6).

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