Early contact with dogs linked to lower risk of asthma

Earlier studies have shown that growing up on a farm reduces a child's risk of asthma to about half. Previous studies on the association of companion animals with future asthma risk have shown less conclusive results. Since dog ownership registration is mandatory in Sweden since 2001, we had the opportunity to assess this relationship in a nation-wide setting.

We studied the association between early exposure to dogs and farm animals and the risk of asthma including all children born in Sweden from 2001 to 2010 (n=1,011,051) using register data on dog and farm registration, asthma medication, diagnosis and other contributing factors for parents and their children. Our results confirmed the farming effect, and we also saw that children who grew up with dogs had about 10-13% less asthma than children without dogs as dog exposure during the first year of life was associated with a decreased risk of asthma at age 6 and in pre-school children ≥3 years.

Our data support the hypothesis that exposure to dogs and farm animals during the first year of life reduces the risk of asthma at age 6. This information might be helpful in decision-making for families and clinicians on the appropriateness and timing of early animal exposure. However, children with established allergy to cats or dogs should avoid them. Thanks to the population-based design, our results are generalizable to the Swedish population, and probably also to other European populations with similar culture regarding pet ownership and farming.

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