

important in preventing life-threatening reactions in children with peanut allergy than peanut-free policies are.

Conclusion

Peanut exposure at school, unless peanut is ingested, is unlikely to cause a reaction. In addition, no significant difference has been observed in the percentage of accidental exposures to peanut that occur at schools that prohibit versus allow peanut. Other policies, such as proper hand-washing and prohibiting food sharing, might be equally effective. In addition, our focus should be shifted to proper education about recognition and treatment of allergic reactions when they do occur.

Peanut is only one of several common allergens in children. In fact, a survey of 132 children noted milk to be the most common cause of food-allergy reactions in children.¹¹ It might not be possible to completely eliminate all offending allergens from schools attended by children with allergies. It should be possible, however, to implement policies to protect our children and educate school staff to treat a reaction should it occur. 🌿

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CLOSING ARGUMENTS – YES

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- Peanut exposure is unlikely to cause a systemic reaction unless peanut is ingested.
- The rate of accidental exposures and reactions to peanut in schools does not differ between schools that prohibit peanut and schools that allow it.
- Peanut-free policies might create a false sense of security.
- Other policies (such as no food sharing and proper hand-washing) are more likely to successfully reduce the risk of accidental exposure.

NO Peanut allergy is common in children and the most common cause of death related to food allergy in North America.¹ Serious accidental exposures at school can occur, and there is a systemic lack of school preparedness to treat subsequent reactions. In addition, especially in the younger years, there is risk of allergen contact from other activities (such as crafts). As a result, peanut should be banned from schools, especially in the early school years.

Risks and policy deficits

Serious accidental exposures at school do occur. School-aged children spend as much as half of their waking hours attending school,² so the possibility of an allergen exposure while there is considerable. One study reported that children with food allergies experience accidental allergen exposures and allergic reactions in schools, with 18% of children having had at least 1 reaction at school within the past 2 years. Thirty-six percent of the reactions involved 2 or more organ systems, with 32% involving wheezing and as many as 15% requiring treatment with epinephrine.³ However, of the 80 participating schools, only 33% had not made an accommodation for children with food allergy. A study conducted in 109 school districts in the state of Massachusetts reported that epinephrine was administered in 115 cases over a 2-year period.⁴

There is a systemic lack of school preparedness to treat allergic reactions. Published guidelines on the management of children with food allergies in schools and other child care settings recommend a personalized written emergency plan and a prescription for epinephrine. Despite these guidelines, substantial deficiencies have been noted, including a lack of staff education on preventive measures and emergency treatment of allergic reactions, a lack of written allergy action plans or failure to use them, and a lack of epinephrine for administration during life-threatening reactions.⁵⁻⁸

Considerable variability has been demonstrated in North America with respect to school preparedness to treat anaphylaxis. Recently, a survey of schools in the United States reported that 11% had had an occurrence of 1 or more anaphylactic events.⁹ Schools differed substantially in their preparedness to manage anaphylaxis, with large disparities in staff training and permission to treat. Thirty-six percent reported that only selected staff were trained in anaphylaxis recognition. Most schools (54% [3024 of 5578]) permitted only certain staff to administer epinephrine, although percentages varied (range 4% to 100%). Some of this variability also occurs in Canada, given differing provincial policies, although it has not been as well studied. Hence, the risk to children with peanut allergy is not insignificant. Policies like these will only work if there is adherence to them, and there is clearly a lack of adherence demonstrated.

In addition, peanut allergen is very robust in the environment. While it has been clearly demonstrated that cleaning easily removes peanut allergen,¹⁰ without any cleaning, detectable Ara h 1 was present on a table surface for 110 days.¹¹ There is concern about whether there is an adequate work force to adhere to this cleaning guideline in real life in schools.


Removing peanut from the classroom makes sense, especially in the early school years. There is some evidence that peanut-free policies are somewhat effective. For example, in a study of 252 children with peanut allergy, while reactions at school were rare, the only reaction that occurred was at a school that allowed peanut.¹² A study of accidental exposures to peanut noted that while more reactions occurred at schools prohibiting peanut, most children also attended schools prohibiting peanut, so that the overall proportion of children who had a reaction at school was marginally lower in schools that prohibited peanut compared with schools that allowed it (0.9% vs 2.8%).¹³

Given the lack of adherence to policies it is very reasonable to support a ban on peanut in certain situations, such as in the early school years. Children in the first 2 years of school should not be left responsible for their own safety, as they rely on adults to guide them in all other aspects of their day-to-day well-being. Teachers have numerous responsibilities in the classroom. They will always need to pay special attention to children with food allergies, which might be difficult at times. If children eat in their classrooms there is a risk that surfaces, books, and toys, which then might be used by a child with peanut allergy, could be contaminated. As previously noted, peanut protein can remain stable in an environment for 110 days if there is no washing. While touching a contaminated surface might not trigger a severe reaction, children often put toys or their hands in their mouth after contact with contaminated items, which could lead to ingestion with a subsequent allergic reaction. It is not realistic to expect a child to avoid touching any surface that might contain peanut residue. Young children might also share foods. A ban of peanut products entirely in younger grades is reasonable if there is a child with severe peanut allergy in the class.

Banning peanut does not mean that schools can then be lax about their other policies, however. Hand-washing and cleaning surfaces of tables after eating makes sense to reduce contamination of surfaces and should continue. For younger children this might also be very difficult and require more supervision than is available.

Conclusion

For very young children with peanut allergy, the learning environment should be free of peanut. In addition, food for classroom parties should be safe for children with

peanut allergy. The same should be true of food rewards and any kind of craft project involving food (such as peanut butter bird feeders). While no ban can be policed completely, it makes sense to ask for cooperation from families in the junior school grades. 

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Competing interests
None declared

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CLOSING ARGUMENTS – NO

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- Serious exposures at school, including anaphylactic reactions, do occur.
- School policies to treat allergic reactions might have deficits, increasing the importance of removing peanut from the environment.
- Young children have a risk of exposure through means other than ingestion (such as contact with a toy).
- Children should not be held responsible for their own safety at school.