

Food Neophobia

Sierra L. Kolle

Nutrition, Dietetics and Exercise Science, Concordia College, Moorhead, MN

Introduction

Food neophobia is a serious problem that is often overlooked by parents and health professionals alike. The word neophobia comes from the Greek words *neos*, meaning “new”, and *phobein*, meaning “to fear”.¹ Neophobia is more severe than simply picky eating. Children exhibiting food neophobia refuse only unfamiliar foods due to fear of eating something they’ve never had before, whereas picky eaters refuse to eat both familiar and unfamiliar foods. Food neophobia impacts 50-70% of children between the ages of two and six years. Kids with food neophobia may choose to eat nothing rather than try something new, and this can lead to nutrient deficiencies. Additionally, food neophobia may persist into adulthood, continuing to cause deficiencies.¹ Unfortunately, the food groups most commonly associated with food neophobia are fruits and vegetables!



Using Research to Reduce Neophobia

Multiple studies^{2,3,7} have reported positive results of using sensory-based nutrition education to reduce food neophobia by increasing exposures to new foods. Sensory-based education incorporates all five senses to help children become more comfortable trying new foods.

Approaches to Reduce Food Neophobia

- ❖ School gardens
- ❖ Food sampling games
- ❖ Fruit and vegetable coloring sheets
- ❖ Grocery store tours
- ❖ Meet the farmer
- ❖ Farmer’s market visit
- ❖ Scavenger hunts
- ❖ Cooking classes
- ❖ Parental education/cooking classes

What Does the Research Show?

Study 1

In a study looking at the food patterns of 560 children for sixteen days, children in the intervention group exhibited less food neophobia than children in the control group.²

- ❖ Intervention group: Subjects were shown motivational videos, read letters of encouragement and were rewarded for consuming a small portion of both a fruit and a vegetable.
- ❖ Control group: Subjects were provided with fruits and vegetables, but had no other intervention.

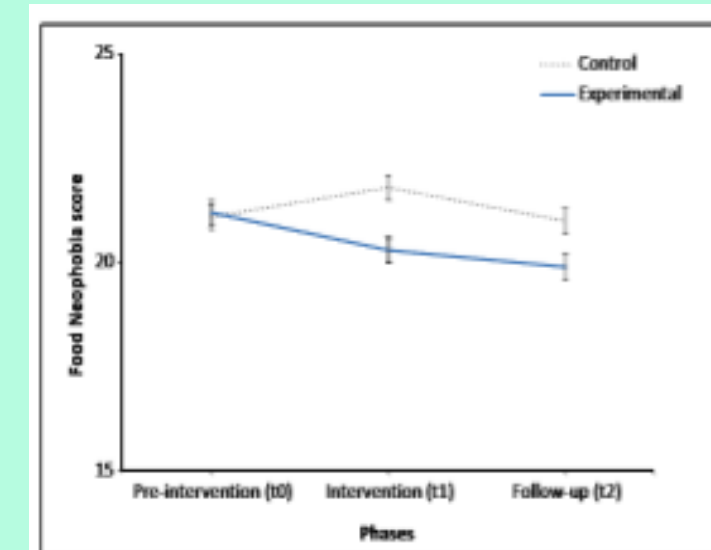


Fig. 3. Food neophobia score (range 0-40) <5MM for experimental and control groups, at pre-intervention, intervention phase and follow-up.

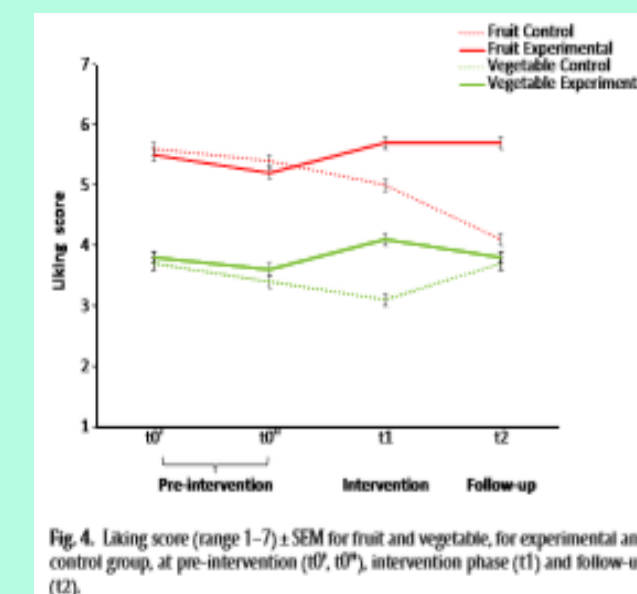


Fig. 4. Liking score (range 1-7) <5MM for fruit and vegetable, for experimental and control groups, at pre-intervention (0), intervention phase (1) and follow-up (2).

Figure 1. Differences in food neophobia scores between intervention and control groups

Figure 2. Differences in liking scores of fruits and vegetables between the intervention and control groups

Study 2

An Australian study utilized the VERTICAL (Vegetable Education Resource to Increase Children’s Acceptance and Liking) program in their research, which is another form of sensory-based nutrition education.³

- ❖ Intervention group: Educational program that consisted of five 1-hour sessions focusing on vegetable exposure and role-modeling.
- ❖ Results showed that children in the intervention group increased knowledge about vegetables, could better verbalize sensations and were more willing to try new vegetables than children in the control group.

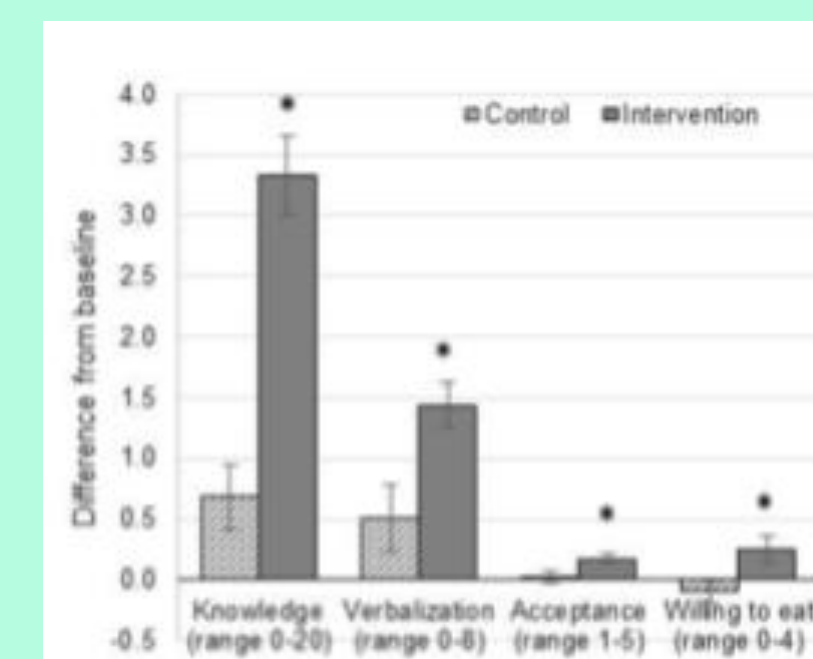


Figure 3. Differences between intervention and control groups in four categories.

Conclusion

Food neophobia is a serious problem, as it can negatively impact children’s health and wellbeing. It is important to take steps to reduce food neophobia in order to increase the chance of kids having lifelong healthy eating habits.

Many studies have found that using sensory-based learning methods can reduce food neophobia in children. Most schools have already implemented their own nutrition programs and have found great success!

As an RDN, you can advocate for and implement these sensory-based programs in your schools or communities. Parents also need to be educated on what they can do at home to help their child overcome their food neophobia.

As a parent, you can use recommendations from the list provided on this poster. It is important to not only be supportive of your child, but to also be a role model and set a good example!



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For Further Information

Please contact me at Skolle1@cord.edu with any questions or comments! Thank you!

School Programs in Action

← **Farm field trips** – This is a fun option for sensory-based education. A study was done to demonstrate the effects these field trips have on children. The kids took pre-surveys and post-surveys.⁷

Rainbow salad bars - Schools have started incorporating salad bars into their lunch lines that offer students a wide variety of options. Staff report that the kids are loving it and enjoy the ability to choose whatever they want.⁴

Voting on menu items - A high school in Illinois has allowed their students to sample different dishes and vote on their favorites, which are then incorporated into their school menu. These dishes expose students to a variety of new foods with different global influences.⁵ This allows students to try new foods and have items on their menu that they really like.

Interactive, lively shows - A nationally acclaimed rock ‘n’ roll nutrition show called, Jump with Jill, is appearing in select schools in Michigan this year. This program, which utilizes songs about nutrition, has had great results getting kids excited about fruits and vegetables. During the shows, the students take a pledge to try a new vegetable each week. “I didn’t know how good they are for you,” stated Mandoky, an eleven-year-old, who just learned about how important vegetables are for the skin, eyes and hair.⁶

Question	Yes(%)
Did you see any vegetables today that you haven’t eaten before that you would like to try?	39
Did you eat anything today that you haven’t eaten before?	59
Did you eat anything today that you didn’t think you would like, but did like?	28
Is there anything else about the farm or the plants you would like to learn more about?	22
Did you learn about or taste any vegetables today that you would like your family to start eating?	39

Table 1. Post-survey answers of 5th graders after farm field trip

