

# First 1,000 Days of Life: Relationship Between Early Life Nutrition and Future Health Outcomes

Webinar Questions Answered by Nicole Avena, PhD

- Is there any link to food aversions during pregnancy and the baby not liking or having an allergy to that food?

Based on the research we know, there is no connection to pregnancy food aversions and baby food preference or allergies. Pregnancy food aversions are usually caused by the mother's hormones and do not affect baby.

- Any thoughts/suggestions/research on baby-led weaning vs. introduction to pureed foods?

Baby-led weaning, when done safely and correctly, has been shown to improve baby's fine motor skills and self-feeding ability at a faster rate than other feeding practices. However, I do think that people need to keep in mind that not all foods are baby friendly. For example, many sauces contain excessive amounts of sodium, which a small baby would not be able to handle. If you are eating a healthy diet with fresh foods, then starting off with offering your child soft foods, like boiled and cooled broccoli, sweet potato, or carrots, and avocado can be a great practice. Also, softer foods can prevent choking and teach baby how to pick their own food up and bring it to their mouths. This also goes alongside modeling. Baby watching mom eat her food shows them how to eat their food. Pureed foods aren't inherently bad for a baby, and I think a lot depends on the developmental stage and age of the child.

- Is it known if the nutrition of breastmilk is largely impacted by reheating in crockpot of water (which is often what's needed at childcare centers)?

A crockpot so to speak of water should never be hot. When reheating breastmilk, it is best to place the container in a bowl of warm, not hot, water for nutrients that are heat-sensitive to maintain their value. Also, mothers and care takers should never microwave breastmilk. This can cause hot spots and can lead to burns in the baby's mouth.

- Something that wasn't discussed was the feeding environment for those from lower socioeconomic environments with limited access and ability to buy "healthy" foods. What would you recommend to these families who ask what to do in controlling their food environment?

This is a great point and something that we need to do more about societally. Many people with children live in food deserts, and access to healthy foods is limited due to access or income. However, there are some things that parents can keep in mind if they have limited resources. Provide as much color as possible when selecting foods for your baby. Color allows for baby to be exposed to different nutrients, through an eye-catching environment (color). Along with the different visuals, colorful foods allow for baby to receive a variety of nutrients. A vegetable is still a vegetable, even if it is canned or frozen. Many grocery stores offer produce flash frozen, which preserves all the nutrients in the fresh

produce! This would be a great way to model and feed your baby a variety of vegetables, fruits, and flavors.

- Is there a time of the day/mealtime that is best when beginning to introduce solids?

Whenever baby begins to show interest in solids, which can include reaching, salivation around guardian's meals, and lip licking, this would be a good time to start solids. The time of day is not as important, but most moms begin with solids as "snacks" or complimentary foods. For example, a baby's new feeding schedule with solids can look like a morning bottle, a morning snack of mashed banana, an afternoon bottle, an afternoon snack of mashed sweet potato, and an evening bottle. If presenting a new food, it is important to do so with baby's hunger cues in mind.

- I've seen a concept of not restricting sweets severely or using them as a reward or giving sweets only if they finish all of dinner can lead to kids not being obsessed with sweets over time. I'm not finding this to be true for my little one. Any thoughts?

A lot of this depends on personality and other family factors. I think that teaching children to be aware of how much sugar they are eating and have the control to be able to say "no" when offered if they know that they have already had enough, is a skill that may differ among children and also may take time to develop. I am not an advocate for completely restricting sweets, as the goal is to teach our children how to manage in a world where these things exist and are a big part of our food environment.

- Is BLW and precursor to Intuitive Eating?

Baby led weaning has been said to be a milestone learning skill for intuitive eating. I think, when done correctly, BLW can be a great practice to get kids to eat healthy.

- What are the best foods to develop the infant's microbiome?

Breastmilk is the best start to developing a strong immune system and building a diverse microbiome. When introducing solid foods, it is important to incorporate a variety of fruits and vegetables, with different types of fiber (soluble and insoluble). This allows for the gut microbiota to flourish and maintain balance. These foods can include banana, potato, broccoli, carrots, peas, avocado, pears, squash, and apples. Avoid starting your baby on processed baby cereals; they contain added sugars and stabilizers which can disturb their growing microbiome.

- Infant cereal used to be one of the first foods introduced years ago. What are your thoughts about introducing those types of foods?

Fruits and vegetables are most important when it comes to micronutrient content and gut health. Cereal grains contain little fiber (unless added artificially) and can hold sneaky added sugars. Aim for whole foods as your baby's first foods.

- Early introduction of common allergen foods has been shown to reduce the development of food allergies (milk, egg, fish, peanut, soy). Do you cover those foods in exposure schedules?

Introducing allergens in small portions and alone with no other foods or seasonings is ideal. It does not matter the order unless there is a known family history of allergens to a certain food in childhood. When introducing these foods, keep a close eye on your child while eating and up to 2 hours. Some children's skin is the only thing that will react to a food allergy, and therefore keeping a close eye on how baby looks, is acting, and their temperament will allow you to rule out an allergy. If there is a suspected severe allergy to a food, seek medical attention immediately. If a mild reaction occurs, call your child's pediatrician or allergist to confirm a diagnosis. It isn't advised to offer solids to babies before 6 months. If there is a family history of allergies, then some doctors will offer foods earlier, but this should be done under the supervision of a pediatrician or allergist.

- I recently listened to a webinar regarding introducing allergen foods at 4-6 months, with a big emphasis on 4 months to prevent food allergies. What are your thoughts on introducing a powdered base mixture, such as Spoonful One at 6 months as you introduce veggies first?

I do not think it is necessary to introduce allergens at 4 months old, unless there is a family history of allergies, in which case the pediatrician/allergist can direct the parent on how and when to offer any foods. Children should do not start on solids until about 6 months of age and introducing foods too early that may cause a reaction can be detrimental to their underdeveloped immune system and gut. Unless your child's pediatrician recommends introducing solids and allergens early, a good time frame to do so is between 6-12 months of age.

- What is your opinion of the combinations of vegetables & fruits that are blended and in the squeezable pouches?

I think they are a great option for busy moms on the go! Anything is better than processed foods, so fruits and veggies that are pre-prepared in a squeezable pouch can be helpful. Make sure your choice of squeezable has no added sugar or ingredients. The only ingredients should be the fruit and vegetables. Also, these could be a challenge if your child cannot hold the pouch themselves yet, as mom would have to contribute to helping feed. I do think it is important that babies are offered vegetables only (without the sweet fruit) so that they can also become familiar with the taste of vegetables.