

Starting Complementary Foods: Infant Feeding Series

Healthy feeding behaviors for infants and toddlers promote healthy growth as well as social, emotional, and cognitive development. Responsive parenting starts in infancy when caregivers recognize and respond to their baby's cues, helping the baby feel safe and secure.

These responsive parenting techniques are an integral part of the feeding relationship when a baby is developmentally ready to start complementary foods. Providing a warm and nurturing feeding environment allows infants to try new tastes and textures and to learn to like healthy foods.

When to start complementary foods:

The American Academy of Pediatrics and other health organizations recommend that complementary foods be introduced once the infant has reached key developmental milestones. These milestones are reached by most babies between 4 to 6 months of age. Complementary foods should not be introduced prior to 4 months of age, yet the [FITS study](#) found that over 40% of infants were introduced to complementary foods before they were 4 months old. The main reason given for this early food introduction was ***perceptions that the infant was old enough, was always hungry and would sleep longer***. Repeating messages about normal sleep patterns, why babies cry, and recognizing cues during early infancy, may help discourage early introduction of solids.

Developmental milestones for starting complementary foods:

- Sits without support and has good head and neck control
- No longer automatically pushes pureed foods out of the mouth with the tongue
- Munches or chews and uses the tongue to move pureed foods to the back of the mouth for swallowing
- Brings hands and toys to the mouth for exploration
- Watches others as they eat

When to offer anticipatory guidance at WIC:

An ideal time to provide anticipatory guidance about the developmental readiness for starting solid foods is at the WIC visit around 3 months of age. If mom brings her baby to WIC, you can collaboratively discuss each milestone and talk about whether her baby has reached the milestone. Video clips of babies can also be useful.

Examples of possible videos:

- First solids feeding—[not developmentally ready](#)
- First solids feeding—[developmentally ready](#)
- Readiness signs showing babies: [Readiness signs for starting solid foods](#)

First foods to offer:

Around 6 months, a baby's nutritional needs can no longer be met by breast milk or formula alone. This is the reason complementary foods are started. This is especially true for iron and zinc for breastfed babies. Introduction of solid food also helps with other development, such as baby's social skills.

What to start with and how:

- Start with 1-2 teaspoons of a single ingredient, pureed or mashed food. Wait 2-3 days before starting another new food.
- Exclusively breastfed babies need to get started on foods that are **rich in iron and zinc** by 6 months. Iron-zinc fortified baby cereals and pureed/mashed meats are recommended as first solid foods for exclusively breastfed babies.
- After introducing iron/zinc rich foods, **there is no particular order that solid foods need to be introduced.**
- Continue to feed iron and zinc rich foods daily.

A caution about language:

Every profession has language or lingo that may be confusing to others, especially those who may not speak English as their first language. Examples of potentially confusing language about starting solid foods include:

- **“Solid Foods”** When most people hear the word “solid,” they think of something that is hard. Instead, consider describing the texture of the food.
- **“Complementary foods”** is a higher literacy word, and may not be a word that WIC participants are familiar with in the context of starting solid foods with their baby. Instead describe the food as smooth or runny.
- **“Baby food”** in some cultures, refers to only jarred baby food. Powdered infant cereal would not be included in this definition. Other cultures may not be familiar with jarred baby food, and may think that it is expected or superior to offering pureed fresh foods.
- **“Breastfeed exclusively for the first 6 months and then introduce complementary foods.”** This can be confusing for some parents, making them think that breastfeeding should be stopped because solid foods are being introduced.
- Finally, you may have heard these statements, **“baby foods are just about tastes and textures, not about nutrition”**, or **“foods before one are just for fun”** implying that starting solid foods isn’t important. Although the majority of calories will continue to come from breastmilk or formula, solid foods are introduced to provide needed nutrients, especially iron and zinc. Delaying solids could result in nutritional deficiencies or developmental delays of important feeding skills, and is not recommended.

For additional practical information about responsive parenting and feeding guidelines for caregivers, see the Appendix section of [Feeding Guidelines for Infants and Young Toddlers: A Responsive Parenting Approach](#)

Putting it into practice:

Sample Conversation: First time parents; Anna is 3 months old, growth good; mom is exclusively BF

CPA: Hi Claudia and Hector, I’m so glad you were able to come in today. Look at Anna! She’s a happy baby--look at her smile and laugh! How is breastfeeding going for you and Anna?

Claudia: It's going well! I can't believe how easy it is, compared to when we first started. I'm glad I stuck it out. Now I don't worry so much—Anna lets me know when she wants to nurse, and so I just feed her whenever she wants it.

CPA: It sounds like you and Anna have figured out how to really communicate with each other.

Claudia: Yes. I've figured out that she really doesn't like wet diapers, so if she's fussing and not hungry, that's the first thing I check. She also likes to fuss in the evening when she's tired and is fighting sleep.

CPA: That's great. Sounds like Anna is good at communicating what she needs and breastfeeding is going well. What questions might you have about what to expect from Anna in the next 2-3 months?

Hector: I have a question. We are staying with my mom, and she keeps telling me to give Anna some rice cereal because it will help her sleep through the night. But we can't put cereal in a bottle, because she doesn't get bottles. She does wake up at least once during the night, and again really early in the morning. Should she still be doing that?

CPA: You are wondering whether Anna should still be waking up at night. Let's talk about what's normal for babies and sleep at 3 mo. and what you can expect by the time she's 6 mo. of age. Ok?

Claudia: Sure. I keep wondering if she's waking up because I'm breastfeeding her. I know my sister put cereal in the bottle. Maybe I need to top her off with a formula bottle before bed with some cereal in it.

CPA: (show Sleep section of Baby Behavior brochure) You may have seen this brochure when Anna was an infant. Let's look at the sleep section and see what's normal. At 3 mo., your baby will sleep more at night and wake up less often, but it's not until babies are closer to 6 months of age that they will sleep up to 6 hours at a time. Even 6 hours doesn't necessarily feel like they are "sleeping through the night".

What do you think? Does Anna sleep more at night than she does during the day? And is she sleeping for longer periods of time than she did 2 months ago?

Claudia: Oh yes, definitely. She only wakes up to nurse, and then goes right back to sleep, so it's like she knows it's night time.

CPA: Excellent. That sounds like she is absolutely doing what is expected at this age. She will sleep longer stretches as she gets older, but adding cereal or formula is not going to speed this up, and may even cause her to be fussy at night because her gut isn't ready to digest cereal.

Would you like to talk about some of the ways Anna will let you know that she is ready to start eating infant cereal and other smooth foods?

Claudia: Yes, that would be helpful.

CPA: Anna will show signs she's ready to start solid foods around 6 months. You want to wait until she can do all of the following things. (NE card)

- **Sits without support and holds head up without help**

CPA: What do you think? Do you think Anna is doing this yet?

Hector: Oh no, her head is pretty wobbly, and we tried putting her in a highchair and she toppled over.

CPA: How about, does she

➤ **Bring her hands and toys to the mouth?**

Hector: Well, she reaches towards things and is able to hold something that we put in her hand, but she's pretty awkward still, sort of bopping herself in the face.

CPA: So she's getting there, but not able to control her hand motions yet. How about, does she

➤ **Watch others as they eat?**

Hector: We sit her up with us, and she watches us.

CPA: Good for you! I bet she enjoys talking with you at the table.

CPA: We want to make sure that Anna is able to do all these things, before we start her on infant cereal and other smooth textured foods. I think we agree that she still needs to get better at sitting up, holding her head, and gain more control of her hands. She will likely do all of these things around 6 mo.

When you think she is ready, mix about 2 teaspoons of infant cereal with some breastmilk, making it nice and smooth. Offer it to Anna on a spoon. If she uses her tongue to move the cereal to the back of her mouth to swallow, this is another sign that she is ready. She might sort of suck it off the spoon at first—that's ok, but if she pushes it all out of her mouth, she might not quite be ready. Wait a week or so and try again.

Claudia: It's nice to know that Anna will let us know when she is ready. What do I give her besides the infant cereal? I heard that she should get vegetables before fruit or she won't eat her veggies.

CPA: Since Anna is breastfed, the most important foods to get started with are the infant cereal and the pureed meats, because these foods contain Iron which Anna needs more of by the time she's 6 months. We can talk more about introducing other foods and textures at your next appointment because Anna will just be getting started with solid foods at that time.

Claudia: Ok that sounds good. There's a lot to remember right now.

CPA: You're right! We talked today about sleep, and how its normal for Anna to still be waking up at night, and how Anna is going to let you know when she is ready for solid foods. When she is ready, we talked about starting her with some cereal and meats. What else might you be wondering about today?

Claudia: Nothing that I can think of. It's nice to know that Anna will let me know when she's ready for solid foods, and I'll wait until she shows me she's ready. I just won't let my mother-in-law know that she still wakes up to nurse at night since I know it is totally normal!

Hector: (smiles and give Anna a loving pat on the head)

CPA: Sounds like a plan! Thanks again for coming in, and bringing Anna with you!