

A Good Night's Sleep: The Possible Association Between the Early Introduction of Food and Infant Sleep - Frankly Speaking EP 90

Transcript Details

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Dr. Frank Domino:

Nancy comes in today with Amanda, her six-month old, for her six month well child check. Amanda appears to be thriving and is maintaining her growth curve and meeting all milestones. You begin to discuss the introduction of solids into the baby's diet and Nancy tells you, "I actually started her on baby cereal about six weeks ago, she was waking up every night at the 3:00 AM and was hungry and breastfeeding didn't seem to make her sleep through the night. My best friend told me to give her some cereal before bed. And it's made all the difference. She's been sleeping through the night ever since and everyone is happier. She is now getting cereal and stage two baby food. I've noticed my breastfeeding supplies seems to be decreasing. So I've also added some formula in."

Dr. Domino:

Hi, this is Frank Domino, Professor in the Department of Family Medicine and Community Health at the University of Massachusetts Medical School, and joining me today is Susan Feeney, Assistant Professor and coordinator of the Family Nurse Practitioner Program at the University of Massachusetts Medical School's Graduate School of Nursing. Susan, thanks for coming today.

Susan Feeney:

Thanks for having me, Frank.

Dr. Domino:

Wow, I must say, I've had the same experience with patients in my practice. Before we get into what's new in the area of feeding and formula, can you tell us what the current recommendations are about the introduction of solids to infants?

Susan Feeney:

Well, there's a global recommendation. The World Health Organization and the American Academy of Pediatrics say that they would really prefer women to breastfeed exclusively for the first six months of life. That's the ideal. Now, if you drill down the American Academy of Pediatrics says you can start at between four and five months in certain cases, but in general, it really is this, the push is for exclusive breastfeeding for six months. And the reason is, it's that it's sort of considered the perfect food. It's well balanced, it's well absorbed, the iron that's in it is well absorbed. And we know that babies from a developmental standpoint, both their GI tract and renal system, they can't have a lot of the different foods until they get a little bit older. So that is really the recommendation. And there's also been some concern that possibly an early onset of food before six months, this has been some general ideas, is that it might put kids at risk for atopic disease, eczema, asthma, possibly celiac. And then there's also been the concern that babies that are bottle-fed with formula or fed early might have a higher risk of obesity.

Dr. Domino:

So the current guidelines are to exclusive breastfeeding for the first six months because there might be some concerns about earlier introduction of foods.

Susan Feeney:

Sure, right.

Dr. Domino:

So what is does this new paper tell us?

Susan Feeney:

So this is a study from the UK, and it was a... It had about 1200 babies and it was randomized into two arms, and there were, the one arm was what they call standard introduction so these were moms who did not... They only breastfed exclusively six months. And then the experimental arm, if you will, where moms who were given instructions on introducing solids early and they would... Some of them were even a little earlier than four months, but most of them started between four and five months maintaining breastfeeding and also introducing solids, and they were pretty strict about the first week was non-allergenic foods, and then they actually started some of the more allergenic foods in subsequent weeks. So that would be peanuts, hen eggs, sesame and that kind of thing, and actually cow's milk but in small amounts.

But that was one study. But they also had a secondary analysis where they sent out questionnaires to moms, a validated questionnaire from the World Health on sleep quality. And it looked at how long the baby slept and how many awakenings did they have? And then they also had an analysis of the moms also figured would indicate their assessment of the child's sleep. Was it good, was it problematic, and was it... Or seriously problematic? Meaning that they were sleep... Waking up frequently during the night. They also looked at mom satisfaction.

And what they found was the babies that were... Had early introduction, had a small but significant improvement in length of sleep and number of awakenings. So they had a few less wakenings per night, slept longer, a small amount, but enough and that the other thing that was pretty impressive is quality of life indexes for moms who saw their babies as having significant sleep problems improved significantly. The other thing they found is once at six months, both arms became... Came together. Both... Had breastfeeding and solids. And what they found is those babies who had sleep issues, who got better on the early introduction, were able to sustain there, for the most part, sustain a improved sleep cycle compared to those who had the standard introduction.

Dr. Domino:

So, to summarize, the children that received the early introduction of solids slept a few minutes more. They had a decrease in the amount of wakenings at night. And for those children with serious sleep disorder, the parents felt their quality of life improve by the early introduction of the solids. So that's pretty interesting. So now, this is somewhat in conflict with the current recommendations, how do we apply this clinically?

Susan Feeney:

Well, from what I could glean from the AAP and from the World Health is that as long as... That we should be actually engaging our parents at an early age, like when the babies are two months. And really talking to them about... First of all, giving them an idea of what a normal sleep pattern is for an infant and that perhaps there may be a point where they wanna introduce foods prior to six months, no sooner than four months but prior to six months. And it should be done in individual basis. And certainly if you have parents where a baby is not sleeping well and the perception is poor quality of life, you know that can impact bonding and function and can have a snowball effect; that perhaps in those cases, we may help advise our moms and dads to start introducing foods before six months.

The other thing that was interesting is there... As I mentioned before, there was a concern that early introduction of foods might be associated with atopic disease, and with gluten... Celiac disease. And a metanalysis that was done found that actually waiting till after six months to introduce gluten types of foods might have had a higher increase with celiac. Children that had those introduced between four and six months had less risk of celiac, which sort of goes along with the peanut allergy concept, is that kids who were very high risk for peanut allergies, we found that if we introduce peanuts between four and six months, they have a less risk of having a peanut allergy and we now know that all children should be exposed to peanuts between six and 11 months to reduce the risk.

So I think it's... That we just need to keep doing more work on this. I think when we realize, when I went and looked there's not a lot of evidence on to support the absolute that babies need to be fed for six months exclusively with breast milk. The thing that is a concern is once you start supplementing with food, there is a risk, especially women who work who don't have access to pumping all the time, that their breast milk may decrease. So that is a concern and I think we need to talk to moms about that. So helping to support them because we do want them to be on breast milk for at least 12 months, even though they're gonna be eating and taking in more solids and taking milk.

Dr. Domino:

Well, Nancy seems to be very happy with how things are going. So it's probably not necessary to make any new interventions. Amanda is growing well, her growth chart looks great. What else besides starting this conversation early can we do to help babies sleep through the night?

Susan Feeney:

Well, I think also telling parents that some children don't have the neurological stability to sleep through the night, that they may wake a little bit and maybe if they're waking up, it might not be because they're hungry. They may be wet, they may be cold, we don't put blankets on babies anymore, they're in these blanket sleepers, but sometimes they can get cold, they can be bunged up in their clothing, that is not necessary that they are hungry when they wake up at a 3 o'clock. So, maybe a soothing kind of behavior or untangling them from their sleeper might be all that needs to be done. And anticipatory guidance for the parents saying, "You know, it may be as sad as it sounds five months before they really sleep a six-hour period a time," and giving them a realistic expectation, but it's hard to do when you're working and maybe you have more children at home.

So you really have to balance that. And I think it's engaging them early and saying what are your views on feeding, what have you done in the past, what have you heard? Because they're gonna get advice from their grandparents, their aunts and uncles, the women next to them on the bus, everyone's gonna give them advice. And so you really want them to like, "give me a call. Let's talk about this, let's talk about it if you start to feel frustrated that the baby is waking up, call the office."

Dr. Domino:

I think you're exactly right. I try to make a point of around two to three months to remind parents that the soonest you expect the baby to sleep through the night is around four months of age. And I say very clearly that I want them to set up a regular bedtime routine that you try to keep all the time, because if you don't, if you play it by ear, and then you... The baby's not sleeping through the night, and you try to use anything, it may be a little bit harder to adopt a new pattern for both the baby's sleep and your self image, your ability to

feel good about yourself. Well, Susan, this is great. Any final thoughts on what we should be doing about this?

Susan Feeney:

Well, I just think, just as we've been saying, we've been really stressing that it sounds like it would be not unreasonable in certain situations to help parents come up with a feeding schedule after four months, as long as they have the ability to sit up with support, that they have some head and neck control, that they look interested in food, babies will open their mouth, that you know... The other thing that is very important is if you start to feed a child before six months, is learning the cues of their own satiety, like we tend to wanna overfeed kids. One more bite in the bowl, you wanna give it to them, but if they turn their head away, that's their way of saying, don't feed me. So really helping parents see that, so that we don't overfeed children as well.

Dr. Domino:

Good advice for adults as well. [laughter] Thank you very much, Susan.

Susan Feeney:

My pleasure.

Dr. Domino:

Practice pointer: Engage parents of infants around two months of age, about what's to be expected with regard to their child sleeping through the night and proper feeding. And for more timely relevant and practical medical education, check out Pri-Med.com.