

Mothers and Milk

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Episodes with many speakers are harder to make and much more rewarding. They are also harder to transcribe, which is why I chose to transcribe the whole thing, including my interstitial bits.

Jeremy: Hello and welcome to another episode of Eat This Podcast with me. Jeremy Cherfas. I've been planning this episode for quite a while now, almost a year. It's about the simplest and most important food chain imaginable. One person makes food, literally makes it, and another person eats it, and it provides far, far more than mere nutrition. I'm talking about mother's milk. Ask a professional. Is mother's milk the best food for a baby?

Lawrence Weaver: I'd like to say categorically yes, looking at non-nutritional as much as nutritional outcomes. The prevalence of infections or the resistance to infection in breastfeeding babies, the patterns of growth, the neurodevelopment, eyesight, intelligence, maternal bonding and the health of the mother. These are all factors that get babies off to a better start. And a better start generally leads to a better outcome later on.

Jeremy: And so, when a mother can't feed her baby.

Katie Flynn: It does leave me feeling like I'm not measuring up, that somehow I did something wrong, that I'm a failure. I mean, not all the time, but ... but in my worst moments, this is how I feel. That I'm, I'm in some way less of a mother because I cannot produce enough milk to feed my own son.

Jeremy: That's Katie Flynn, a friend of mine, and a newish mother who graciously agreed to talk to me. And before her, Lawrence Weaver, a paediatrician and consultant on milk and formula for the World Health Organization.

And that food chain tying mother to infant can be as simple as possible. But it can also be long, extended and fragile. And that's one reason this episode has taken me so long to pull together, because of the dire shortage in the United States of infant formula, a decidedly simple alternative to mother's milk. It started with contamination at one of the largest formula factories in the US.

Just think about that: bacterial contamination of the perfect baby food. I thought it would be quickly sorted out, but almost a year later, the shortage rumbles on and it's gone far beyond contamination. So at this point, I finally had to decide that it adds little to the story. And what is that story?

Lawrence Weaver: Right back to the ancients who wrote about it. They always emphasise, the first thing they say about infant feeding, is that the best thing is mother's milk.

Jeremy: Lawrence Weaver wrote *White Blood: A History of Human Milk*. And while the ancients agreed that mother's milk was best, it didn't have to be the baby's own mother.

Lawrence Weaver: If a baby is not going to be breastfed, the wet nurse is the next best thing. If you look at the Romans, for instance, domestic slaves, who are really live-in servants and so on, a nurse might look after the child of a well-to-do Roman matron. It became popular among the less well-to-do, the professional classes in Italy, for instance, in the 14th and 15th centuries, merchants and businessmen and so on. They employed wet nurses, and the arrangements are usually made between the father of the child and the husband of the wet nurse. So there was a sort of a business really, [that] laid down the law about the qualities of the wet nurse, described all throughout history. People looked for healthy young mothers who were well endowed, came from a nice family, were fit and well, and had no signs of disease and so on. But there weren't that many. You had to take what you could.

Amy Brown: Women have breastfed each other's babies for ever.

Jeremy: Amy Brown is professor of maternal and child health at Swansea University in Wales, and she told me that wet nursing for money was not nearly as common as wet nursing in the community.

Amy Brown: It's what always used to happen. If a baby couldn't be breastfed by their own mother, they would hopefully be breastfed by somebody else. Because otherwise, in the days before sanitation and formula, they would probably have died. So it's something that as a species we're just used to doing. It's just, with the advent of formula and kind of hygiene concerns and more awareness of how diseases are potentially spread, I would say that it's not so common as it used to be.

Jeremy: Amy Brown's getting a little ahead of my story by mentioning formula, which is effectively a third choice. In the beginning, there were really only two choices: mother's milk, not necessarily the infant's own mother, or a mother of a different species, cow or goat or sheep. For animal milk, when you start offering it makes a difference.

Lawrence Weaver: To rear a child from birth on cow's milk is extremely unsuccessful, generally. But introducing diluted cow's milk, say at about three or four months, if it's relatively clean, it's better than nothing and babies survived.

Jeremy: The problem is that different species have milk with different composition. That's the balance of proteins, fats and sugars. Cow's milk has much more protein and a lot less sugar and other carbohydrates than human milk, which tastes thinner and sweeter. As a result, for centuries there was little people could do apart from diluting cow's milk, as Lawrence Weaver said. But by the middle of the 19th century, chemists could measure the differences, and that quickly delivered results.

Lawrence Weaver: Once people started trying to modify the composition of milk and change cow's milk to look like — in inverted commas — more like human milk, they were on their way to producing something more safe.

Jeremy: Safe and better for babies. Modified cow's milk opened the door to Henri Nestlé and his commercially successful milk flour for infants, which was launched in 1867.

Lawrence Weaver: And by the First World War, really the formulae of various sorts had taken over from wet nursing, wet nursing comes to an end, really.

Jeremy: There's a common thread to commercial wet nursing and formula. And not just that they're a substitute for mother's milk. Both cost money, if you want good quality. Formula has been a lifesaver for millions, but a disaster for women without much money, without even access to clean water. And even for women who can afford it, contaminated formula can be catastrophic. I know that, and I'm appalled by it. But that's not what this episode is about. So let's just accept that formula can be a miracle.

More recently, as medicine has learned how to care for very premature babies, there's an entirely new need for some alternative to mother's milk. The baby may be too young to suckle, and the mother may not yet be ready to produce milk. That's what happened to my friend Katie and her son.

Katie Flynn: He was six weeks early. He was six weeks early. He had a good weight. He was about 5 pounds 3 ounces. And my placenta failed. So they had to deliver immediately. I started bleeding at 5 a.m. and we rushed to the hospital and they operated immediately. As a type 1 diabetic, it was always going to be an arduous climb for me because type 1 diabetics are typically under-producers. And that coupled with my early delivery and the fact that I lost so much blood during the C-section, I just don't produce nearly enough to sustain him.

Jeremy: Katie's son was in a neonatal intensive care unit, a NICU, where feeding, nourishing, the newborn is a crucial concern and one that's been studied by Lindsay Naylor of the University of Delaware.

Lindsay Naylor: Most preterm infants have not developed the suck-swallow-breathe that's necessary to feed at the breast or the chest. And so there's usually a nasogastric tube. So the tube that goes up the nose is doing exactly that, it is providing human milk directly to the stomach of the infant. It's not always possible, right? I wouldn't say that human milk is exclusively used in the NICU, but it is very much encouraged by the neonatologists and the nursing staff in the NICU, to try as hard as they can to encourage parents to pump, to provide milk for their infant, because it is considered the best first food.

Katie Flynn: So I started pumping the day after my C-section. Nothing happened for a couple of days, and they have lactation consultants who periodically check in on you, ask you what your goals

are. And this quite flamboyant sort of Eastern Bloc woman came in and helped me find the, quote unquote, rivers of milk in my breasts, which are not rivers. They're trickles. But she helped sort of extract the colostrum, and I was able to put that on a Q-Tip. And then because he was in a little ... essentially a little closed bassinet, I was able to feed it to him through the hole in the bassinet.

Jeremy: That colostrum, the very first milk, is really important in transferring some of the mother's disease resistance to the baby. And it's one reason why paediatricians like Lawrence Weaver say breast is best. Colostrum is also one reason why medical staff in the NICU that Lindsay Naylor studied did what they could to encourage mothers to produce milk. But it isn't easy.

Lindsay Naylor: It is a co-production process, where the baby helps with the stimulation of what's called letdown, which allows the milk to be present. And so if you can't get that that mother-infant dyad together, then it's very difficult to make that happen. And in fact, a number of parents that I spoke to will actually ... they might pump at the bedside. And that really helps to stimulate that milk production.

Jeremy: Katie's son was in the NICU for nearly four weeks.

Katie Flynn: So I would say for the first two full weeks, the only nutrition he was getting was occasionally from my colostrum, but everything was being fed through his veins. So there was there was sort of no outside milk that he was getting. It was just sort of like critical nutrients.

Jeremy: That's a little unusual. But in any case, once they got home, Katie was able to make use of the kind of community wet nursing that Amy Brown said used to be so common. But this time it was brought right up to date.

Katie Flynn: We had the good fortune of hiring a postpartum doula prior to giving birth, and her sort of main job is to help with learning how to breastfeed and nurse, if that's something you wanted to do, and get the most out of it.

Jeremy: And if there really isn't enough milk, as there wasn't for Katie, the doula goes into action.

Katie Flynn: The doula put me in touch with other doulas who had people, clients that they were working with, and it's this wonderful group of young mothers who, for whatever reason, they can't feed their own children, their own infants, their milk. So they offer sort of a gift economy. They just give you their milk because they want somebody to benefit from it. And so for the first three months, he subsisted solely on donor milk and my own milk. And in addition to it being an incredibly magnanimous, generous gift, you form this instant bond because it is so intimate, you know what I mean? And, you know, I continue to text them and check in on them and how their children are doing. And we send pictures back and forth. And it's this really sweet, sort of not very well-known way to get your child the nutrition that he needs.

Jeremy: Even the doula network sometimes does fail to deliver the goods.

Katie Flynn: We also have purchased twice now milk from a milk bank, which is a more commercialised, pasteurised version of breast milk. And it is insanely expensive. You know, it's \$15 for 100 millilitres of milk and they'll send you one shipment of ten of those bottles per week. And that's not even a single day's worth of milk for my son. So it's \$150 for 85% of his daily intake, basically. It's really expensive.

Jeremy: That's because commercial milk banks get milk from mothers at different stages of lactation, and then they manipulate the composition, a bit like formula, to make it a closer match for the baby of the mother who's buying it. And they pasteurise it too. And all that, they say, costs money, although volunteer milk banks don't do all that reformulation and their milk seems to be a reasonable substitute.

Katie Flynn: I am continuing to pump. We dispensed with nursing because it was an extra step. The process is really an involved one. You have to clean all of your pump parts and then you have to you have to nurse the baby and then you have to feed the baby with a bottle and then you have to pump. It's called a triple feed. And you do that if you don't produce enough, because the baby is not going to receive a full feed while you nurse him, but you still want to produce more milk. So you have to pump. So it's just it's a really long process and then you've to clean everything again and then it's time to go again. So if you want to have any sort of life, you sort of can't nurse.

And so I opted to just pump and then bottle feed, and then my husband Mark can help out with that too, which is great.

Jeremy: As Katie said, one reason she stopped nursing is that it was such a palaver that if she wanted any kind of life, it would be impossible. But even if she could nurse, there's a good chance she'd run into problems.

There was a montage of news clippings here about the fuss that erupts over babies feeding from their mothers in public.

Amy Brown: There are lots of different reasons why people seem to be against it.

Jeremy: Amy Brown is as puzzled as I am.

Amy Brown: A big one is the sexualization of the female body. But that one doesn't really make sense either, because the female body is everywhere. There are posters of breasts. You know, there are adverts of breasts. You see far more breasts on the beach. They advertise everything from cars to burgers to everything. So it can't actually be about seeing a female breast.

I think it's something about some sort of strange conflict between the idea of a mother and her baby and then the woman as a sexual creature. I don't think people could sort of match that in their minds sometimes. And I think it leads to this strange belief that she's doing something wrong because people who think that women shouldn't breastfeed in public don't think they shouldn't breastfeed. They think they just shouldn't be doing it out in front of others. It doesn't really make a lot of sense. The more you dig, the more you think this is a bit odd.

Lindsay Naylor: I would say in the United States, in particular, in the UK as well, but I'll speak to the United States context because this is not a universal thing, right?

Jeremy: Indeed, the United States and the United Kingdom are kind of outliers. Here's Lindsey Naylor.

Lindsay Naylor: I think we have a really long history of trying to police and surveil women's bodies in particular. And so that extends to feeding babies. It's seen as something that should be somehow

policed. Suddenly, someone's opinion about whether or not they think it's appropriate suddenly is the most important opinion in the room.

Jeremy: And there's something else that really surprised me.

Amy Brown: When they compare male and female attitudes, it's often women who are more disgusted by it than men, which is just mind blowing, really. I think part of it is they may have internalised those sort of patriarchal and misogynistic views about women's bodies and how they should use them. And in some cases, I think they were told generations ago that they shouldn't breastfeed in public and find it really difficult to see now for all sorts of almost subconscious reasons, really. But it's certainly not just men. The latest research shows it's still about a third of the UK public who think that women shouldn't be allowed to breastfeed in public. And as I always say to them, Right. So you think that babies shouldn't be able to eat then?

Jeremy: But why? That's the bit I don't begin to understand.

Amy Brown: There's been quite a few interesting studies done around sexism and attitudes to breastfeeding in public. So one interesting study grouped two types of sexism, almost. So you had your kind of garden-variety sexism, where men just didn't like women having power and control in any way that they perceived. So they didn't like breastfeeding in public because it felt that it was women having rights and doing what they wanted and having the power to go out and feed their baby wherever they wanted. The other type was almost a kind of protective, putting women on a pedestal type of sexism, where these men really loved the idea of women breastfeeding, but as long as they did it in private and sort of, kind of, were meek and mild about it and did it privately. If they breastfed in public, they were seen to sort of fall off their pedestal as the perfect woman, because they were out there breastfeeding and exposing their body.

It goes back to that point of making the distinction between, is it a woman breastfeeding, or is it a baby eating? Because we always talk about a woman breastfeeding as if it's something she does for fun or a hobby or, you know, to be an exhibitionist for the day rather than just being her baby eating again.

Jeremy: It depends, of course, on how the baby's eating. There's no problem with the baby feeding from a bottle. And Amy Brown thinks

that it was the rise in formula that drove objections to breastfeeding in public.

Amy Brown: In the 1950s, formula milk got pushed so much, so breastfeeding rates really dropped, and the number of women who were just exclusively breastfeeding their baby was really, really low. So I think this is part of the contributor to it, that we weren't used to seeing it anymore. And at the same time, you have the rise of the breast used in advertising. And so I think what we became used to was seeing the breast in that form and not the breast in the way that it was meant to be, designed to feed babies with. And I think that's kind of how we got into this situation that when breastfeeding rates started to rise, no one was used to seeing it.

Jeremy: But it is perfectly legal in both the UK and the US and elsewhere too. A woman's right to breastfeed in public is enshrined in law. No matter what people may think.

Amy Brown: For some reason, we think it's a law that can be debated. So there's always kind of these surveys. Do you think a woman should be able to breastfeed in public? And it always makes me think, well, are you asking about other laws in that way? Should we have to wear seatbelts? You know, things like that? We don't ask it the same way.

What the research actually shows is that more women are worried about being approached and criticised than the number of women who actually ever are. They're worried about the reaction that they're going to get from other people. And when they see stories in the newspapers about women being asked to cover up or asked to leave a shop because they were breastfeeding, then that really increases our anxiety. And it makes me think about, well, why are the newspapers printing that story? What is the aim here? Is it to try and make women more anxious? I do wonder whether it's a tactic used by some formula companies to try and dissuade women from breastfeeding. If they keep asking the question about should women be able to breastfeed in public or making the suggestion that it's embarrassing or wrong, or you may face criticism, then that puts women off and then encourages them to buy more formula milk, etc.

Jeremy: That's pretty devious. But then we know what formula makers are capable of. The thing about formula is that it has been really, really good for babies as well as being really bad under other

circumstances. Lawrence Weaver points out that infant mortality dropped as the use of formula went up.

Lawrence Weaver: We've seen infant mortality go down from about 15 per 1000 to about 4 or 5 per 1000 in the 20th century, with the decline in breastfeeding in Europe and a rise in formula. It's the cleanliness really of formula that in the early days really saved babies lives.

Jeremy: Cleanliness compared to other substitutes, not to mother's milk, and, of course, when it is properly prepared. Now, I'm certainly not going to say women should or should not breastfeed. That's totally up to them and needs to be a decision they're comfortable with. And yet.

Lindsay Naylor: How is it that this particular thing that we kind of take for granted? Right, We're mammals, we lactate and there is a lot of evidence that demonstrates that feeding at the site of the body, so chest or breast feeding, does create a very strong bond between the lactating parent and child and that it is an important practice for both.

Amy Brown: My own research looks at breastfeeding from a different perspective than just getting milk into the baby. It's about so much more than that. It's about recognising and supporting a woman, wanting to be able to use her body in that way. It's about her preferred way of mothering and connecting with her baby, because we know that once breastfeeding is established and off to a good start, it can be a really useful tool in caring for your baby because it's really quick. It's instant. It helps to soothe them. It's comforting. It's so much easier in that way than making up a bottle of formula.

Jeremy: Clearly there needs to be quite a shift in attitudes among society at large and among mothers. But the fact is that most mothers are perfectly capable of feeding their infants directly if they choose to. Which makes it an even greater shame, in my opinion, that some women who want to, can't.

Katie Flynn: There is so many expectations and there is so much stigma surrounding breastfeeding versus pumping versus nursing versus formula feeding versus bottle feeding. And there are all these societal expectations. And it does leave me feeling like I'm not measuring up, that somehow I did something wrong, that I'm a failure.

I mean, not all the time, but ... but in my worst moments, this is how I feel, that I'm in some way less of a mother because I cannot produce enough milk to feed my own son.

And it's something I desperately wanted to do. And I'm trying as hard as I can try. You know, I'm pumping seven times a day. I wake up in the middle of the night every night and pump, and it's just not enough. And in fact, my production has diminished instead of increased. And that feels like yet another layer of failure. And the research just isn't sort of conclusive in terms of formula versus breastfeeding after a certain number of months. And so I know intellectually that it's okay to feed him formula, but it doesn't feel right.

Jeremy: Equally, of course, there are women for whom breastfeeding doesn't feel right. And for women using a bottle like Katie Flynn, there's a bonus for their partner.

Katie Flynn: Yeah. Oh, I think he really enjoys it. You know, it's a way to bond and it's a way to feel like I'm actually doing something that is innately important for my own child. You know, this is ... I'm intrinsic to his survival, and I believe he really enjoys it.

Lindsay Naylor: There's just a very sort of singular way in which we're viewing technology. I guess that means that we kind of point to this and say one is better than the other. And I don't think that they necessarily have to be in a hierarchy, right? Medically, they already are. Right. We know that human milk, when it can be provided, is the best first food for infants.

Katie Flynn: Yes, I think all nursing mothers go out in public without worrying about coverage or anything and just full on nipples out. That's my feeling. And if I were able to nurse, that's what I would do.

Lindsay Naylor: But one of the things that I think doesn't get said enough is even though this is something that our bodies can do, it's difficult, you know. And it is hard work and it is intentional work and it doesn't always work. Right. And so, yes, there is that sort of expectation that to be a good parent, you're doing this thing. You're using your body the way it was made. Right. And so that's a dangerous road to go down as well, because not all bodies can do that. You know, if there's something that has been made for this exact purpose

through these modern technologies, aren't we supposed to adopt that?

Jeremy: Freedom of choice and support for that choice, whatever it might be.

Finally, a bit of good news. All the work that Katie and the people in the NICU put in and the donor milk from the doula network and her husband's help have resulted in a terrific baby.

Katie Flynn: He's doing great. He will be 16 weeks on Monday. And he's big boy. He's in the 86th percentile of weight and over 100th percentile in length. So he's great. And he's got a bad-ass scar on the side of his chest, so.

Jeremy: Katie Flynn, my thanks to her and of course, to Amy Brown and Lindsey Naylor and Lawrence Weaver for helping guide me through this thicket. Links to all of them and much more in the show notes at eatthispodcast.com/.

And about the formula contamination and shortage still playing out in the US, if you want to know more, the best thing you can do is to sign up for [Food Fix](#), a newsletter from Helena Bottemiller Evich. Again, I'll put a link in the show notes.

And finally. Yeah, I know I said finally a minute ago, but this really is finally, there is another aspect of bottle feeding that I didn't get into: bottles, unlike breasts, are see through. Here's Amy Brown.

Amy Brown: My PhD research was actually about that, looked at mothers' worries about how much milk the baby was drinking, not being able to see how much milk your baby had consumed from the breast, but you could in the bottle. And it is still a big worry and it is still a big part of the anxieties around stopping breastfeeding.

Jeremy: I've got lots more to share on that.

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