

# Vitamins & breastmilk

Do babies need vitamin D?

BY ALICE HOHL

**N**ew parents intent on exclusively breastfeeding their babies are facing a new issue—liquid vitamin D supplements, which are increasingly being recommended for breastfed babies.

The extra vitamin D is needed to prevent rickets, a once common disease marked by soft or deformed bones. Vitamin D helps the body absorb calcium, which strengthens bones.

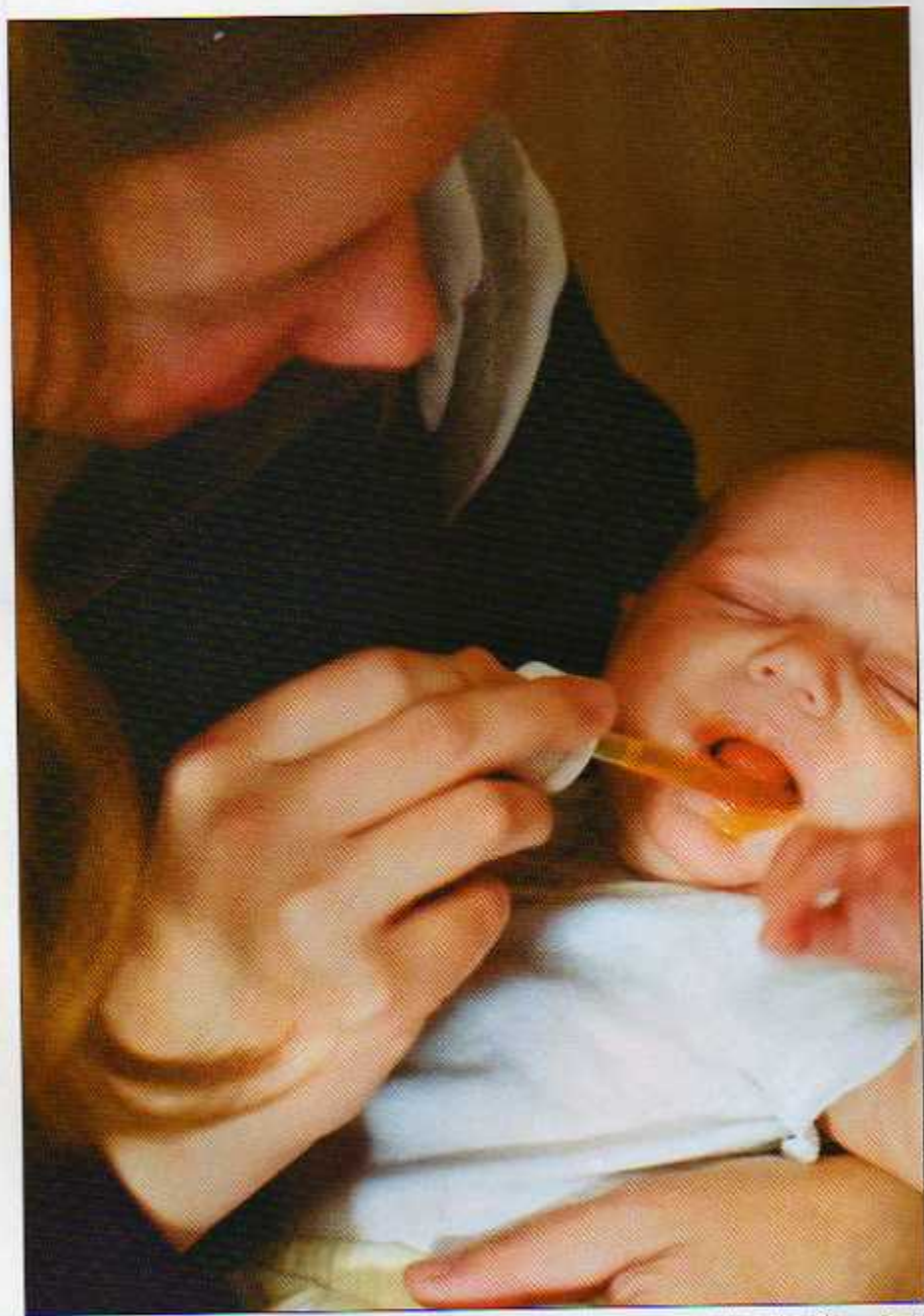
This comes at the same time the American Academy of Pediatrics is reiterating its support of breastfeeding. A policy statement issued in mid-March says: "Breastfeeding ensures the best possible health as well as the best developmental and psychosocial outcomes for the infant."

Still, most experts agree breastfed babies need extra vitamin D—especially African-American babies, whose darker skin makes it harder to absorb the vitamin from the sun. But vitamin D supplements are not profitable in the United States, so companies manufacture a one-size-fits-all multivitamin drop, says Dr. Lawrence Gartner, chairman of the section on breastfeeding for the American Academy of Pediatrics and professor of pediatrics and obstetrics and gynecology at the University of Chicago.

Therefore, most babies are being given vitamins they don't need, such as A and C.

It's not harmful, but it's not necessary, either, says Ruth Lawrence, a pediatrics professor at the University of Rochester School of Medicine in New York.

"Vitamin supplements are not recommended for a breastfed baby," says Katy Lebbing, a certified lactation consultant at La Leche League. "The exception might be vitamin D. Vitamin D is not meant to be in breast milk. The way



Josh Hawkins/Chicago Parent

The American Academy of Pediatrics recommends vitamin D drops for breastfed babies to prevent rickets. But the bitter-tasting drops also contain vitamins breastfed babies don't need, doctors say. Here, writer Alice Hohl gives drops to her daughter.

*Alice Hohl, a former Chicago-area mom, now lives in Ohio with her husband and 9-month-old daughter.*



babies are supposed to get vitamin D is sunlight. In this area, we don't usually see a problem unless the baby has very dark skin or never ever gets outside."

Most doctors agree breastfed babies should get the drops, but hospital policies differ on when and how.

In the confusion, advocates worry mothers will get the wrong message and decide against breastfeeding.

And doctors have yet to address how to get babies to swallow these bitter drops.

It's confusing. I should know.

When I gave birth to my daughter in mid-December at Loyola University Medical Center, I was determined to breastfeed.

I was shocked when a hospital employee brought my daughter back from the nursery with a bottle of vitamin drops she was supposed to receive once a day.

"Some babies don't like the taste, so what we do in the nursery is just mix them in a little formula and put it in the nipple of a bottle," she said.

Formula? Bottles? I couldn't believe it—but I was in no condition to protest.

The next day I asked the lactation consultant about the vitamins. She told me most babies don't get enough vitamin D from the sun. For formula-fed babies, it's not a concern, since vitamin D is added to formula. But breastfed babies need the drops.

She said I could give the vitamins straight from a dropper, but I should put them in the side of my baby's mouth so she wouldn't choke and get them in her lungs, causing pneumonia.

When I tried to give her the drops, she gagged and choked, wheezed and sputtered. I got them down, but then she spit up the drops, along with her last feeding.

My husband and I tried different ways to get her to take the orange-colored drops. Once he stuck the dropper in her mouth as I nursed her, but I was afraid she would think my milk tasted bad and refuse the breast.

Our pediatrician agreed that she should have the drops. But after a few more days of watching her spit up orange goo, I gave up. When we pressed our pediatrician, she said since my daughter is so fair-skinned, holding her in the light a few minutes a day would be enough.

Whom was I to believe?



Writer Alice Hohl was shocked to learn she'd have to give her newborn daughter vitamin D drops because she was breastfeeding.

Josh Hawkins/  
Chicago Parent

### Inconsistent practices

The American Academy of Pediatrics began advising in April 2003 that babies receive vitamin D supplements "beginning within the first two months."

Some hospitals—such as Loyola—begin at birth.

At Edward Hospital in Naperville, preemies get vitamins in the nursery. Full-term babies are sent home with vitamins but don't get them at the hospital, says Nicole Tracy, a pediatric dietician.

Other hospitals, such as Northwestern Memorial Hospital, Advocate Christ Medical Center and Hope Children's Hospital, feel it's too much to ask a mother to worry about the drops right away and give them at the follow-up visit.

Oak Lawn pediatrician Zoe Alikakos says most parents give the vitamins from the dropper without difficulty. She is especially vigilant during the winter, when babies are less likely to be in the sun.

### Supplements in the real world

During a 2001 conference at the Centers for Disease Control and Prevention in Atlanta, doctors and researchers discussed racial differences in babies' need for vitamin D supplements. Everyone acknowledged rickets strike more African-American babies, yet the American Academy of Pediatrics recommends the same thing for all babies.

Breastfeeding advocates at La Leche League disagree with this recommendation. They say treating each mother and baby as a "unique pair" lessens the need for supplements.

Lebbing also takes issue with hospitals giving the drops in a bottle nipple. "Putting it in a nipple can set you up for a nipple confusion situation," she says.

Babies also receive supplements in other countries. In Germany, vitamin D is put on the mother's nipple once a day before nursing.

In Canada, a vitamin D-only drop is available, says Gartner, which tastes better than the multivitamin drops here. Gartner says doctors should prescribe drops without the bitter-tasting B vitamin.

But Dr. James Raettig, medical director of the Newborn Nursery at Loyola, says it doesn't matter which solution is given, and that there is no evidence to suggest drops interfere with breastfeeding. He says it is not hospital procedure to administer the drops in formula.

Gartner says the academy's advisory on vitamin D supplements is open: "The way the wording is—within the first two months—allows leeway. For many mothers having to start the baby out the first few days when they're just getting into the breastfeeding, giving the drops was just one more burden."

Gartner says a healthy mother taking prenatal vitamins during pregnancy gives her baby enough vitamin D through the placenta to last two months. Unfortunately, he says, many women don't take prenatal vitamins.

Although my doctor suggested sunlight as an alternative, many pediatricians say sunlight cannot be relied upon. Because sunlight is difficult to measure, its effect on vitamin D

*continued on page 50*



# Vitamins and breastmilk

continued from page 49

absorption is hard to study. And there is the racial difference. Some doctors estimate African-Americans need 10 times the two-hour-per-week recommendation of sunlight.

Complicating matters, some studies show childhood sun exposure can be a risk factor for skin cancer.

"People say, 'Why don't you recommend 15 minutes of sun a day? That won't cause skin cancer,'" Gartner says. "Well, we don't know that. We do know that giving vitamin D drops is perfectly safe."

## The formula frenzy

Since formula is fortified with vitamin D, breastfed babies are at greater

risk for rickets. Some health professionals fear women will hear the wrong message: Their breastmilk is deficient.

Others worry that formula makers—already feeling the financial crunch as more women breastfeed—will push formula as a solution.

In fact, a leading manufacturer of baby vitamin supplements is Mead-Johnson, the maker of Enfamil. Poly-Vi-Sol, a liquid supplement with vitamin D, comes with the Enfamil logo displayed on the box. In Canada, Mead-Johnson manufactures vitamin D-only drops in packaging that implies human milk is deficient, Gartner says.

Manufacturers can't make big money from vitamin D since it can't be patented, Gartner adds, leaving formula companies looking to exploit the issue.



"The only ones interested in making [vitamin D] would do so to market a product that has a big profit margin, like formula," says Gartner, who notes that formula companies give large contributions to the academy.

Gartner, a breastfeeding advocate, worries if the drops are not given, rickets could make a comeback and create negative publicity for breastfeeding.

Although the recommendation had its intended effect in my case—educating me about rickets and vitamin D—the message may not be getting to those who need it most.

Chinita Williams, an African-American mother from Chicago's West Side, breastfed her daughter, Kourtney. Despite Kourtney's increased risk of rickets because of her skin color, Williams says she was told nothing about the disease or vitamin D last August when Kourtney was born at Gottleib Memorial Hospital in Melrose Park. Her doctor never mentioned them, either.

"If it's something that can affect her health, then, yes, I wish I'd known," Williams says. ☐



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Face it, crawling will only get you so far.



# What is rickets?

If you think rickets sounds like an old-fashioned disease, you're right. In the early 1900s, nearly 80 percent of children developed rickets—soft or deformed bones—according to Dr. Lawrence Gartner, chairman of the section on breastfeeding for the American Academy of Pediatrics and professor emeritus of pediatrics and obstetrics and gynecology at the University of Chicago.

Some doctors fear rickets may be on the rise as many babies fail to get enough vitamin D, which helps the body absorb the calcium it needs for strong bones.

"Rickets is a loss of calcium from bone," Gartner explains.

"What your body is trying to do is maintain a normal level of calcium in the blood. The body will take calcium out of bone to keep calcium levels high enough in the blood."

The onset of the Industrial Revolution and

migration of thousands of people to windowless tenement houses in dusty, smoke-filled cities caused an epidemic of rickets in the early 20th century.

Babies who didn't get enough sunlight were prone to the disease, since sunlight is a major source of vitamin D, which is found in few foods.

Many children became bowlegged. Some babies died as their rib cages became too soft to protect their lungs.

Along with bone deformities, rickets can also lead to soft skulls and delays in crawling and walking, according to the American Academy of Pediatrics.

To solve the problem, health officials directed milk suppliers to add vitamin D to milk. Cases of rickets decreased substantially.

Although the Centers for Disease Control and Prevention in Atlanta has concluded there are no reliable national data on the number of rickets cases in the United States, some doctors say rickets appears to be on the upswing.

Many parents shelter their children from cancer-causing sunshine throughout childhood. (Sunscreen filters out vitamin D, along with harmful rays.)

Residents of cities, where pollution is higher and opportunities for outdoor play are fewer, may not



realize their children are not getting enough vitamin D. Some parents also shy away from vitamin D-fortified cow's milk for themselves and their children.

Health officials are especially concerned about some minority populations. The darker a baby's skin, the more sunlight is required to absorb adequate vitamin D. Also of concern are girls and women whose religion or culture requires them to be completely covered and therefore receive almost no sunlight on their skin.

Vitamin D deficiency in the mother can also contribute to problems in babies since a fair amount of vitamin D is passed through the placenta from the mother at birth.

However, a mother probably cannot safely ingest enough vitamin D to pass on an adequate amount through her breastmilk.

Since breastmilk was never intended to be a source of the vitamin, little of it passes through breastmilk. Nature intended babies to receive their vitamin D from the sun, not their mother's milk.

Baby formula is fortified with vitamin D. Breastfed children can also receive vitamin D through supplemental drops.

Vitamin D influences how much calcium is absorbed in the intestines: Just 10 to 15 percent is absorbed if no vitamin D is present, but 30 to 80 percent is absorbed with vitamin D, according to the CDC.

Alice Hohl