Extra calcium no help for lactating women

Breast milk is one of nature's great bargains. it's rich in protein, antibodies, and calcium-and it doesn't cost a thing.

Or does it? Studies show that mothers pay a price in making this baby ambrosia: Their bones lose density during lactation.

Although a woman on a sound diet generally replaces lost bone density after weaning her infant, scientists have wondered whether the problem could be avoided in the first place. Supple menting a lactating woman's diet with calcium seemed like a sure way to **pre**vent the loss.

Researchers at Children's Hospital Medical Center at the University of Cincinnati now find, however, that extra calcium does little to prevent bone loss during lactation or to hasten bone regrowth later.

Ironically, these findings emerge as a federal panel is calling for most people to consume more calcium. The Institute of Medicine at the National Academy of Sciences now recommends that people between the ages of 19 and 50 consume 1,000 milligrams a day; the average US. adult currently takes in 500 to 700 mg daily The group says that lactating women need not take any more calcium than other adults their age, a departure from its previous recommendation that such women consume an extra 400 mg daily

Part of this reasoning stems from studies such as the one in Cincinnati, where researchers compared 97 new mothers who were breast-feeding their infants with 99 who weren't. Half of each group received an additional 1,000 mg of calcium every day for 6 months: the others got an inactive substance. X rays of the lower vertebrae revealed that the bone density of lactating women decreased 4.2 percent, despite calcium supplements. Women not getting extra calcium saw a 4.9 percent drop. Both groups breast milk contained similar amounts of calcium.

"Women appear to lose quite a bit of bone in the first 3 months of lactation," says nutritionist and epidemiologist Heidi J. Kalkwarl a coauthor of the study.

Among the nonlactating women, those getting supplements saw bone density rise by 22 percent, while those not getting extra calcium saw an increase of 0.4 percent, the researchers report in the Aug, 21 NewEngland Journal of Medicine

A second phase of research, lasting from 6 to 12 months after the births, showed that among women who had nursed their babies, those who were still receiving extra calcium regained bone density only slightly faster than those not receiving supplements. Among women who hadn't nursed, those taking calcium also had slightly faster increases in bone density.

The study provides further evidence that hormones largely govern bone loss and regrowth, says Joan A McGowan of the National Institute of Arthritis and Musculoskeletal and Skin Diseases in Bethesda, Md. "In the absence of hormonal signals in early menopause or lactation, extra calcium doesn't make a difference." Estrogen, in particular, is sup pressed during lactation and menopause.

"A picture is beginning to emerge showing that human lactation is associated with alterations in calcium metabolism.. that are independent of dietary calcium intake," Ann Prentice of the Medical

Research Council in Cambridge. England, writes in the same issue of the journal.

Although breast-feeding doesn't seem to put women at risk of developing osteoporosis, or brittle bones, the study could spur research into bone **regrowth** strategies for older women, teen mothers-whose bones are still growing-and women who nurse twins or triplets, **Kalk**warf says.

The study raises hard questions for women who give birth in their forties and want to nurse, even though they may be approaching menopause, McGowan says. Studies show bone rebuilding can take 18 months. Will time run out on these women before they recoup bone density?

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