

Like Mama Bears, Nursing Mothers Defend Babies With A Vengeance

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Women who breast-feed are far more likely to demonstrate a “mama bear” effect — aggressively protecting their infants and themselves — than women who bottle-feed their babies or non-mothers, according to a new study in the September issue of [Psychological Science](#), a journal of the Association for Psychological Science.

And when breast-feeding women behave aggressively, they register a lower blood pressure than other women, the study found. The results, the researchers say, suggest that breast-feeding can help dampen the body’s typical stress response to fear, giving women the extra courage they need to defend themselves.

“Breast-feeding has many benefits for a baby’s health and immunity, but it seems to also have a little-known benefit for the mother,” said Jennifer Hahn-Holbrook, a postdoctoral fellow in the UCLA Department of Psychology and the study’s lead author. “It may be providing mothers with a buffer against the many stressors new moms face while at the same time, giving mothers an extra burst of courage if they need to defend themselves or their child.”

But the aggression demonstrated by breast-feeding mothers has its limits, Hahn-Holbrook added.

“Breast-feeding mothers aren’t going to go out and get into bar fights, but if someone is threatening them or their infant, our research suggests they may be more likely to defend themselves in an aggressive manner,” she said.

The breast-feeding mothers’ reaction is known as “lactation aggression” or “maternal defense” in mammals.

Hahn-Holbrook was aware that non-human female mammals, including macaques, rats, mice, hamsters, lions, deer, sheep and others, display more aggression when they are lactating than at any other reproductive stage, but she couldn’t find any research that tested that reaction in people. So she decided to set up the first experiment to study lactation aggression in humans.

For the study, researchers recruited three groups of women — 18 nursing mothers, 17 women who were feeding formula to their babies and 20 non-mothers. Each woman was asked to compete in a series of computerized time-reaction tasks against a research assistant posing as an overtly rude study participant. The women’s infants were supervised in an adjoining room.

Upon winning a round in the competition, the victor was allowed to press a button and deliver a loud and lengthy “sound blast” to the loser — an act of aggressiveness. The researchers found that breast-feeding mothers delivered sound blasts to the rude research assistant that were more than twice as loud

and long as those administered by non-mothers and nearly twice as loud and long as those by bottle-feeding mothers. This was true both before and after the breast-feeding mothers nursed their infants.

The researchers also measured participants' stress levels via blood pressure during the experiment. Breast-feeding mothers' systolic blood pressure was found to be approximately 10 points lower than women who were feeding formula to their infants and 12 points lower than non-mothers.

Previous research in non-human mammals has shown that lactation enables heightened defensive aggression by down-regulating the body's response to fear, a phenomenon that benefits the survival of both mothers and their offspring. The lower blood pressure seen in the breast-feeding mothers during acts of aggression, the researchers say, is an indication that the same mechanism is likely at work in humans as well.

Co-authors of the study included Julianne Holt-Lunstad, a psychology professor at Brigham Young University; Colin Holbrook, a postdoctoral fellow and research associate in the UCLA Department of Anthropology; Sarah Coyne, a professor of family life at Brigham Young University's School of Family Life; and Ernest Lawson, a professor at Queen's University Belfast.