

Endorphins - The Body's Natural Narcotic



Circulating throughout your body are natural hormones that relax you when stressed and relieve pain when you hurt. Most mothers don't even know these biologic labor assistants exist and, more important, that they can influence when and how these hormones are released. In the 1970s researchers studying drug addiction stumbled upon the presence of specialized areas in the brain, called receptor sites, for morphine like substances. They discovered endorphins (from *endogenous*, meaning "produced in the body," and *morphine*-like substances), chemical pain relievers produced in the nerve cell that attach to receptor sites on the cell blunting the sensation of pain in these cells. Here's what we know about these natural remedies and how they can work for you.

- Endorphin levels go up during contractions in active labor (especially during the second stage of labor), are highest just after birth, and return to prelabor levels by two weeks postpartum.
- Endorphin levels were found to be highest during vaginal deliveries, less high in cesarean births in which the mother had also labored, and lowest in cesarean births performed before mother's labor had begun.
- Endorphin levels are elevated in newborns who had signs of fetal distress during delivery. The baby also receives these natural pain relievers during birth.
- Endorphin levels are increased during strenuous exercise, and there is no activity in the world more strenuous than labor.
- As an added benefit, endorphins stimulate the secretion of prolactin, the relaxing "mothering" hormone that regulates milk production and gives a woman a boost in interacting with her baby. Researchers believe that it is a combination of these hormones that contribute to the "birth high".
- Endorphins may account for the "high" mothers experience after a birth when sleep eludes them. Also it seems possible that a mother having a surgical birth without going through labor may experience lower hormone levels after birth, which could account for the sometimes observed delay in milk supply after a cesarean birth.
- Endorphins are tied to a person's emotions. Unresolved stress and anxiety may increase the body's stress hormones (catecholamines), which counteract the relaxing effects of the endorphins.
- Like commercially produced narcotics, endorphins behave differently from woman to woman. This may be why some women are more sensitive to pain than others.
- Instead of the periodic "blast" you get with injectable narcotics (often making you groggy), your endorphins give you steady assistance throughout labor.

Laboring mothers who are aware of these hormonal effects describe their feelings as "naturally drugged". Set the birthing conditions that let these labor helpers work for you.