

Why Breastfeeding and Omega-3s Help Prevent Depression in Pregnant and Postpartum Women

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Researchers have recently made some amazing discoveries about postpartum depression. And these findings have practical implications for you. We've known for some time that common stresses of new motherhood, such as sleep deprivation, pain, and psychological trauma, all increase the risk of depression. What's new is the realization that inflammation is the factor that ties all the other risk factors together. Pregnant and postpartum women are particularly vulnerable to these effects because their inflammation levels normally rise during the last trimester of pregnancy—a time when they are also at high risk for depression. This may also explain why depressed women are at higher risk for preterm birth. Inflammation helps prepare the body for labor by ripening the cervix and causing contractions. If it's elevated because of depression, it can trigger preterm labor. In contrast, interventions that lower inflammation can also lower the risk of preterm birth.

This new research suggests two important and related goals for preventing and treating postpartum depression: reduce maternal stress and reduce inflammation. These are described below.

Reduce Maternal Stress

Since stress triggers inflammation, the first goal is to reduce maternal stress. And that's where breastfeeding comes in. Current research indicates that breastfeeding protects maternal mood—and it does that is by reducing stress. Breastfeeding lowers stress hormones and provides a nice stress buffer for mothers each time they feed. There is one important caveat to these findings, however: mothers get the stress-lowering effects of breastfeeding only when it is going well. Breastfeeding problems—particularly pain—increase stress and the risk of depression.

Reduce Inflammation

The second recommendation for preventing or treating depression is to reduce inflammation. Interestingly, most effective treatments for depression are also anti-inflammatory. These include St. John's wort, standard antidepressants, and even cognitive therapy. Another way you can lower inflammation is to take the Omega-3 fatty acids EPA and DHA. Because they are anti-inflammatory, they help prevent depression. Unfortunately, many pregnant and breastfeeding women, particularly in industrialized countries, don't eat a lot of fish and as a result are deficient in EPA and DHA.

Because these fatty acids are essential for babies' development during pregnancy, women's bodies preferentially divert them to their babies, meaning that the babies get the stores mothers have. But with each pregnancy, the mothers are further and further depleted.

Seafood is the prime source of EPA and DHA. Unfortunately, the very women who need these fatty acids the most must limit the amount of fish they eat because of contaminants (assuming they even like fish). Most mothers cannot safely eat enough seafood while pregnant or breastfeeding to achieve an antidepressant effect, which is between a pound and a pound and a half per week. Fortunately, there are a growing number of contaminant-free sources including fish-oil supplements, and vegetarian prenatal vitamins and fortified foods. The U.S. Pharmacopeia is one reliable and neutral source of information on brands of EPA and DHA that are safe for pregnant and breastfeeding women (www.USP.org). A detailed listing of other products can be found at BreastfeedingMadeSimple.com. The minimum recommended dosage is 200 to 400 mg of DHA for the prevention of depression and 1000 mg of EPA for treatment (often used in addition to medications). If you're thinking about taking EPA and DHA, you should discuss it with your health care provider. ALA, the Omega-3 found in flax seed and other plant sources, does not prevent or treat depression. ALA is the parent Omega-3 fatty acids, but it is too far removed metabolically from EPA and DHA, and is therefore not sufficiently anti-inflammatory to have the depression-lowering effect.

Conclusions

Recent research has identified inflammation is a key factor in depression and it is triggered by both physical and psychological stress. Postpartum women are particularly at risk because their inflammation levels are already high in the last trimester of pregnancy, and this elevation continues throughout the postpartum period. Two approaches may prevent depression or reduce its severity: lowering maternal stress and reducing inflammation. Breastfeeding has been shown to reduce stress and protect maternal mood—when it's going well. If you are having difficulties, promptly addressing breastfeeding problems can protect your mental health. In addition, since most treatments for depression are compatible with breastfeeding, it can be preserved in most cases.



Interventions that lower inflammation are also effective in preventing or treating depression. Proactive use of anti-inflammatory treatments increases mothers' resilience to stress, which can prevent depression from occurring in the first place.

For further reading

Kendall-Tackett, K.A. A new paradigm for depression in new mothers: The central role of inflammation and how breastfeeding and anti-inflammatory treatments protect maternal mental health. *Int Breastfeeding J* 2007; Mar., www.InternationalBreastfeedingJournal.com.

Kendall-Tackett, K.A. *Depression in new mothers, 2nd Edition*. London: Routledge, 2010.

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