

Can Fats Make You Happy?

Omega-3s and Your Mental Health Pregnancy, Postpartum and Beyond

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Becoming a mother can be wonderful—and highly stressful. Sleepless nights, breastfeeding difficulties, a history of abuse or trauma, low partner support, or a baby with health problems are all stressors that can put you at risk for depression. Fortunately, there are some steps that you can take to help you cope.

You Are What You Eat: Fatty Acids and Depression

Does it seem like more and more people you know are depressed? You're not imagining things. Depression is on the rise—both here and abroad. And much of this increase is due to what we eat. Over the last century, we've increased the amount of Omega-6 fatty acids in our diets, while simultaneously decreasing the amount of Omega-3s. Omega-6s are found in vegetable oils, such as corn and safflower oils, and are a staple of many processed foods. Omega-3 fatty acids are polyunsaturated fats found in plant and marine sources, and most women in industrialized countries are deficient in them (Kiecolt-Glaser et al., 2007). As a result, we are at risk for a whole host of problems—including depression. And pregnant and postpartum women are especially vulnerable.

Inflammation in Pregnant and Postpartum Women

This change in our diets does bad things to our bodies. While we need some Omega-6s, most Americans and others in industrialized nations get way too many. And excessive Omega-6s increase inflammation (Kiecolt-Glaser et al., 2007), which increases risk of depression (Robles et al., 2005). This is especially true for pregnant and postpartum women (Groër & Morgan, 2007).

During the last trimester of pregnancy, inflammation levels naturally rise in anticipation of birth. These inflammatory cells have a good purpose: they help your body prepare for labor and also help you fight infection after your baby is born. In addition, normal postpartum stressors, like sleep deprivation, can raise inflammation levels. This is part of our normal stress response. But when combined with the changes associated with pregnancy and postpartum, inflammation levels can get too high.

Inflammation can potentially lead to another problem for pregnant women: preterm birth. In one study, women who were depressed during their pregnancies have more than double the risk of having a preterm baby (Dayan et al., 2006), and inflammation is the likely culprit (Cousson-Read et al., 2005).

Your inflammation levels are also more likely to be too high if you do not have enough Omega-3s in your diet. Most people do that by eating fish. In countries where people eat between a pound and pound and a half of seafood per week, men and women have significantly lower rates of major depression (Tanskanen et al., 2001), bipolar disorder (Noaghiul & Hibbeln, 2003), and even suicide (Sublette et al., 2006) than in countries where people eat less than that amount. Fish consumption also impacted rates of postpartum depression in a study comparing rates of PPD in 22 countries (Hibbeln, 2002).

Omega-3s also lower inflammation by lowering the number of cells in our blood stream that cause it (known as pro-inflammatory cytokines). Researchers found that people with high levels of Omega-3s in their blood had low levels of inflammation. In contrast, people with low levels of Omega-3s had higher levels of inflammation (Ferrucci et al., 2006). Interestingly, when pregnant women who were at risk for preterm birth were given eggs enriched with an Omega-3 (DHA), the length of their pregnancies increased by an average of six days (Smuts et al., 2003).

Pregnant and postpartum women are especially likely to be deficient in Omega-3s because babies need these fatty acids for their developing nervous systems. Writing about mothers in Australia, Rees and colleagues (2005) observed that babies need



about 67 mg a day of DHA for their development. In contrast, Australian mothers were consuming about 15 mg a day—well under what was required. Mothers' bodies will divert mothers' stores of DHA to their babies while they are pregnant. But as a result, mothers' stores become more depleted with each pregnancy, further increasing their risk of depression (Freeman et al., 2006).

So how can you get more Omega-3s in your diet?

Omega-3s are Not Created Equal EPA, DHA and Depression

Go into any well-stocked supermarket and you will see a dizzying array of foods that are fortified with Omega-3s: eggs, cereal, soy milk, snack bars, orange juice. It seems to be today's new "super supplement." With regard to depression, Omega-3s are not all created equal. If you are interested in Omega-3s for depression, it's important to know what you are buying. Many products that list Omega-3s contain alpha-linolenic acid (ALA). ALA is the Omega-3 found in flaxseed, walnuts and other plant sources. It is an essential fatty acid and is beneficial to cardiovascular health. But it is not effective in either the prevention or treatment of depression (Bratman & Girman, 2003). If you want the anti-depressant effects of Omega-3s, you must look for foods or supplements containing the long-chain Omega-3 fatty acids: EPA and DHA.

Fortunately, there are many sources of EPA/DHA that are safe to take while pregnant and breastfeeding. In fact, I prefer to recommend the supplements over eating more fish because it is impossible for consumers to tell whether fish contains contaminants. Supplements, in contrast, are specifically tested for them.

Some supplements contain DHA alone, which can help prevent depression. Fish-oil supplements contain both EPA and DHA and have been used to treat depression, sometimes in conjunction with medications. If used with medications, they boost the effectiveness of the medications. Sources of both pharmaceutical grade and over-the-counter fish-oil products verified by the U.S. Pharmacopeia are widely available (see list below). Be sure to discuss any supplements you take, including Omega-3s, with your health care provider as they can potentially interact with a small number of prescription medications.

In summary, long-chain Omega-3 fatty acids can have a major impact on your mental health. Make Omega-3s part of your daily diet. If you do, you'll discover what many others have learned: that the right kind of fat can indeed make you happy—and help you cope with the stresses and strains of new motherhood.

Sources of Contaminant-Free EPA/DHA

Pharmaceutical-Grade Fish Oil (EPA & DHA)

- Carlson Labs (www.CarlsonLabs.com)
- Vital Nutrients (www.VitalNutrients.net)

Brands of Over-the-Counter Fish-Oil Supplements verified by the U.S. Pharmacopeia (www.usp.org)

- Berkley & Jensen, Equaline, Kirkland Signature, Nature Made, NutriPlus

Vegetarian DHA Supplements

- Nature's Way DHA (www.NaturesWay.com)
- O-mega-Zen-3 (www.Nutru.com)

Prenatal Supplements with DHA

- OptiNate (First Horizons Pharmaceutical)
- Citracal Prenatal + DHA (Mission Pharmacal)

Recommended Dosages

200-400 mg minimum DHA for prevention of depression

- This recommended amount may prove to be on the low side. In cultures where women eat a lot of fish, the average DHA that they consume is 1,000 mg/day.

1,000 mg EPA for treatment of depression

U.S. Food and Drug Administration

- Generally Recommended as Safe (GRAS) Levels:
- 3,000 mg DHA/EPA

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