

Nausea and vomiting of pregnancy

DESCRIPTION

Mild to severe nausea with or without vomiting is not uncommon during the first trimester of pregnancy. Approximately 50% of women experience these symptoms at some time during pregnancy. Nausea may occur at any time of the day but is most common in the morning, thus the term "morning sickness". Considering the many hormonal and metabolic changes that take place to permit normal growth of the fetus, plus the emotional adjustment to incipient motherhood, the occurrence of these symptoms is not surprising. Nausea almost always stops after the first 12–14 weeks of pregnancy.

Mild symptoms of nausea and vomiting during the first trimester are linked to the numerous hormone changes that occur during pregnancy and are a positive indicator of a healthy pregnancy. If nausea and vomiting are quite severe or last longer than the first trimester, emotional stress may also be a factor.

FREQUENT SIGNS AND SYMPTOMS

- Mild to severe nausea with or without vomiting, usually during the first 3–4 months of pregnancy.
- Nausea occurs most frequently in the morning (morning sickness), but may occur at any time.
- Nausea almost always stops after the first trimester but, although rarely, may continue throughout the pregnancy.

CAUSES

- **Numerous metabolic and hormonal changes that occur during pregnancy:**
 - levels of both progesterone and other hormones rise during pregnancy.
 - progesterone causes involuntary muscles to relax, which also slows the movement of food through the stomach and intestines.
 - changes in hormone levels may also affect the area in the brain that induces vomiting.
 - in many women, blood sugar is lower during early pregnancy, which contributes to gastrointestinal upset.

■ **Emotional stress:** physiologically, pregnancy is hard work. The addition of negative psychological factors has been shown to increase susceptibility to and duration of nausea and vomiting:

- in a study of 86 women, a significant increase in nausea and vomiting during the first trimester was noted in those women whose pregnancies were unplanned or undesired.
- those women whose problems continued into the third trimester were also significantly more negative in their assessment of their relationships with their own mothers.

RISK INCREASES WITH

- Emotional stress
- Large meals
- Skipping meals
- Certain odors (perfumes, gasoline, cooking odors) or foods may be particularly upsetting.
- Cigarette smoke is a very common trigger of nausea and vomiting during pregnancy.

PREVENTIVE MEASURES

- **Ask for help.** Women, particularly those who are having an unplanned or undesired pregnancy, or who have a poor relationship with their own mother should ask for help. It is quite reasonable to ask for help from family and friends. Consulting with a qualified counselor for assistance in resolving any conflicts is also recommended.
- **Eat small, frequent meals** (see Diet below).
- **Try to identify any odors or foods that aggravate nausea and avoid them.**
- **Don't smoke cigarettes** and ask your family not to smoke around you.

Expected outcomes

Nausea and vomiting should lessen significantly within 2–3 hours and should cease within a few days.

TREATMENT**Diet**

- Place a small, easily digested snack, such as a whole-grain cracker or piece of dry wholegrain toast at the bedside. Eat immediately after waking, before getting up in the morning.
- Eat a small snack at bedtime and another if waking to use the bathroom during the night.
- During the day, eat a healthful snack as often as every hour or two:
 - think of snacks as a mini-meal that is balanced with a small portion of a high-protein food along with some fruit, vegetable and/or whole grain.
 - choose organically grown food whenever possible.
 - snack examples: 1–2 tsp of nut butter on apple slices or celery; a small handful of unsalted nuts such as almonds, walnuts or cashews mixed with raisins; a quarter-sandwich; a small piece of cheese or 1/2 cup cottage cheese and a piece of fruit; a cup of plain yogurt topped with a spoonful of granola and/or some fruit; a cup of split pea soup topped with wholegrain croutons.
- Avoid processed foods as they are typically high in fat, salt, sugar, and chemicals, and low in fiber, vitamins and minerals.

Nutritional supplements

- **Vitamin B₆**: vitamin B₆ is extremely important in breaking down and eliminating excessive amounts of pregnancy-related hormones:
 - in a recent double-blind study, 342 women less than 17 weeks pregnant were given either 30 mg of B₆ or placebo. After 5 days of treatment, nausea and vomiting were significantly reduced in almost two-thirds of those receiving B₆. However, more than one-third taking B₆ still experienced nausea and vomiting. A better recommendation may be a larger dose of B₆ and its use in combination with ginger (discussed below).
 - dosage: 25 mg b.i.d.–t.i.d.
- **Vitamins K and C**: when used together, these two vitamins have shown considerable clinical effectiveness. In one study, 91% of patients experienced no further nausea or vomiting within 72 hours; dosage: vitamin K: 5 mg q.d.; Vitamin C: 250 mg t.i.d.

Botanical Medicines

- **Zingiber officinale (ginger)**: ginger has a long history of being very useful in alleviating symptoms of gastrointestinal distress, including the nausea and vomiting of pregnancy.

- compounds in ginger called *gingerol*, *shogaol*, and *galanolactone* are the source of ginger's anti-nausea effects on the digestive tract, which have been demonstrated to be even more effective than Dramamine (dimenhydrinate).
- in the digestive tract, gingerol and galanolactone block receptor sites for 5-HT₃, a precursor of serotonin, which causes smooth muscle contraction.
- a clinical study has found ginger to be effective against the most severe form of pregnancy-related nausea and vomiting, *hyperemesis gravidarum*:
 - the dosage used in this double-blind cross-over trial was four 250 mg capsules of ginger root powder q.d. for 4 days.
 - of the 27 women with hyperemesis gravidarum in early pregnancy (less than 20 weeks) who participated in this study, 19 experienced significant relief.
- ginger is not only effective but the small dose required is extremely safe, in contrast to antiemetic drugs used in pregnancy, which may cause severe birth defects.
- most research studies have used 1 g of dry powdered ginger root – a relatively small dose compared to the dietary consumption of ginger in India at a daily dose of 8–10 g.
- fresh or freeze-dried ginger root or extracts standardized to contain 20% gingerol and shogaol may be even more effective.
- dosage: choose one of the following forms and take the recommended dosage q.d.:
 - dry powdered ginger: 1–2 g
 - standardized ginger extract containing 20% gingerol and shogaol, 100–200 mg.

Drug-herb interaction cautions

- **Zingiber officinale (ginger)**:
 - plus *oral drugs*: in rats, ginger increases absorption of oral drugs, such as extract with sulphaguani-dine, in the small intestine.

Physical medicine

- **Acupressure**: acupressure, the application of pressure to acupuncture points, has been shown to help relieve the nausea and vomiting of pregnancy:
 - in one study of 16 pregnant women with morning sickness, the use of acupressure wristbands (elastic wristbands with hardened plastic balls applied to acupuncture sites on the wrist) for 5 days relieved morning sickness for 12 of the 16 women.
 - acupressure wristbands are available at most drugstores.