Not Too Much, Not Too Little: Finding the Goldilocks of Vitamins and Minerals

Ever wonder if you're getting the right amount of vitamins and minerals during pregnancy or breastfeeding? Like Goldilocks, you don't want too little or too much — you want ***just right***. Even though it took Goldilocks multiple tries to find the right size chair and the right bowl of porridge, it doesn't have to take you that long to find the right amount of vitamins and minerals for you!

Everyone has a 3% chance of developing a birth defect during pregnancy. Getting the right amount of vitamins and minerals FOR YOU is not expected to increase the risk for issues during pregnancy and it is not expected to increase the risk for side effects during breastfeeding.

Most people in the United States get some vitamins and minerals in their diet. However, your healthcare provider might have specific goals for you to get certain amounts of a vitamin or mineral, particularly during pregnancy or breastfeeding. One way to get that extra support during pregnancy is to take a prenatal vitamin that has at least 600 mcg of folic acid (for more information on folic acid, check out our fact sheet: https://mothertobaby.org/fact-sheets/folic-acid/.

If you also take other supplements, or drink juices and shakes that list vitamins on the nutrition label, you could be getting more than you need. Reading nutrition labels help you track how many vitamins and minerals you are getting into your body.

DRIs: What Are They?

DRI stands for Dietary Reference Intake. DRIs are a list of nutritional values that are used to guide people to make sure they are getting a well-balanced diet that supports their health. There are a couple different DRIs, but the ones that are used in this blog are called RDA and UL.

- **RDA (Recommended Dietary Allowance):** The average daily amount of a vitamin or mineral that most people need.
- **UL (Tolerable Upper Limit):** The maximum safe amount you can take in a day without raising the risk of side effects.

Not every vitamin and mineral has an RDA or UL. For the vitamins and minerals that do have DRIs, it's typically recommended to aim for the RDA every day, unless your healthcare provider tells you differently. For the ones that do have DRIs, they can change based on age or when pregnant or breastfeeding. You will also get many nutrients from your regular diet, so supplements are intended to help fill in gaps — not overload your system.

Why Supplement Safety Matters

Supplements are regulated differently than prescription drugs. Even though the United States Food and Drug Administration (FDA) regulates supplements, the FDA doesn't check every product for safety or effectiveness before it goes on the shelf. This means labels may not always tell the whole story, and some products could include unknown or unlisted ingredients.

Talk to your healthcare provider before taking a supplement to make sure you are getting the right amount of vitamins and minerals to support your health. You can contact MotherToBaby to get more information on a supplement you are considering.

Have more questions about supplements or exposures during pregnancy or breastfeeding? You can reach a teratogen-information specialist at MotherToBaby.org.

DRIs for Vitamins and Minerals During Pregnancy and Breastfeeding:

Name	RDA-pregnancy	UL-pregnancy	RDA-lactation	UL-lactation
Biotin	14+ years old: 30 mcg	Unknown	14+ years old: 35 mcg	Unknown
Boron	Unknown	14-18 years old: 17 mg 19+ years old: 20 mg	Unknown	14-18 years old: 17 mg 19+ years old: 20 mg

Calcium	14-18 years old: 1,300 mg 19+ years old: 1,000 mg	14-18 years old: 3,000 mg 19+ years old: 2,500 mg	14-18 years old: 1,300 mg 19+ years old: 1,000 mg	14-18 years old: 3,000 mg 19+ years old: 2,500 mg
Choline	14+ years old: 450 mg	14-18 years old: 3,000 mg 19+ years old: 3,500 mg	14+ years old: 550 mg	14-18 years old: 3,000 mg 19+ years old: 3,500 mg
Chromium	14-18 years old: 29 mcg 19+ years old: 30 mcg	Unknown	14-18 years old: 44 mcg 19+ years old: 45 mcg	Unknown
Copper	14+ years old: 1,000 mcg	14-18 years old: 8,000 mcg 19+ years old: 10,000 mcg	14+ years old: 1,300 mcg	14-18 years old: 8,000 mcg 19+ years old: 10,000 mcg

Folic Acid	14+ years old: 600 mcg DFE	14-18 years old: 800 mcg 19+ years old: 1,000 mcg	14+ years old: 500 mcg DFE	14-18 years old: 800 mcg 19+ years old: 1,000 mcg
Iodine	14+ years old: 220 mcg	14-18 years old: 900 mcg 19+ years old: 1,100 mcg	14+ years old: 290 mcg	14-18 years old: 900 mcg 19+ years old: 1,100 mcg
Iron	14+ years old: 27 mg	14+ years old: 45 mg	14-18 years old: 10 mg 19+ years old: 9 mg	14+ years old: 45 mg
Magnesium	14-18 years old: 400 mg 19-30 years old: 350 mg 30+ years old: 360 mg	9+ years old: 350 mg*	14-18 years old: 360 mg 19-30 years old: 310 mg 30+ years old: 320 mg	9+ years old: 350 mg*

Manganese	14+ years old: 2.0 mg	14-18 years old: 9 mg 19+ years old: 11 mg	14+ years old: 2.6 mg	14-18 years old: 9 mg 19+ years old: 11 mg
Molybdenum	14+ years old: 50 mcg	14-18 years old: 1,700 mcg 19+ years old: 2,000 mcg	14+ years old: 50 mcg	14-18 years old: 1,700 mcg 19+ years old: 2,000 mcg
Niacin	14+ years old: 18 mg NE	14-18 years old: 30 mg 19+ years old: 35 mg	14+ years old: 17 mg NE	14-18 years old: 30 mg 19+ years old: 35 mg
Omega-3 fatty acids	14+ years old: 1,400 mg	Unknown	14+ years old: 1,300 mg	Unknown
Pantothenic acid	14+ years old: 6 mg	Unknown	14+ years old: 7 mg	Unknown

Phosphorus	14-18 years old: 1,250 mg 19+ years old: 700 mg	14+ years old: 3,500 mg	14-18 years old: 1,250 mg 19+ years old: 700 mg	14+ years old: 4,000 mg
Potassium	14-18 years old: 2,600 mg 19+ years old: 2,900 mg	Unknown	14-18 years old: 2,500 mg 19+ years old: 2,800 mg	Unknown
Riboflavin	14+ years old: 1.4 mg	Unknown	14+ years old: 1.6 mg	Unknown
Selenium	14+ years old: 60 mcg	14+ years old: 400 mcg	14+ years old: 70 mcg	14+ years old: 400 mcg
Thiamin	14+ years old: 1.4 mg	Unknown	14+ years old: 1.4 mg	Unknown
Vitamin A	14-18 years old: 750 mcg RAE 19+ years old: 770 mcg RAE	14-18 years old: 2,800 mcg 19+ years old: 3,000 mcg	14-18 years old: 1,200 mcg RAE 19+ years old: 1,300 mcg RAE	14-18 years old: 2,800 mcg 19+ years old: 3,000 mcg

Vitamin B6	14+ years old: 1.9 mg	14-18 years old: 80 mg 19+ years old: 100 mg	14+ years old: 2.0 mg	14-18 years old: 80 mg 19+ years old: 100 mg
Vitamin B12	14+ years old: 2.6 mcg	Unknown	14+ years old: 2.8 mcg	Unknown
Vitamin C	14-18 years old: 80 mg 19+ years old: 85 mg	14-18 years old: 1,800 mg 19+ years old: 2,000 mg	14-18 years old: 115 mg 19+ years old: 120 mg	14-18 years old: 1,800 mg 19+ years old: 2,000 mg
Vitamin D	14+ years old: 15 mcg (600 IU)	14+ years old: 100 mcg (4,000 IU)	14+ years old: 15 mcg (600 IU)	14+ years old: 100 mcg (4,000 IU)
Vitamin E	14+ years old: 15 mg	14-18 years old: 800 mg 19+ years old: 1,000 mg	14+ years old: 19 mg	14-18 years old: 800 mg 19+ years old: 1,000 mg

Vitamin K	14-18 years old: 75 mcg 19+ years old: 90 mcg	Unknown	14-18 years old: 75 mcg 19+ years old: 90 mcg	Unknown
Zinc	14-18 years old: 12 mg 19+ years old: 11 mg	14-18 years old: 34 mg 19+ years old: 40 mg	14-18 years old: 13 mg 19+ years old: 12 mg	14-18 years old: 34 mg 19+ years old: 40 mg

(This chart has last been updated on 9/29/2025)

Note: The UL for magnesium only applies to supplements. You can safely get more from food since the RDA includes dietary magnesium.

Where Can I Find More Information?

MotherToBaby has fact sheets on a couple of the common vitamins and minerals that might be found in a multivitamin or a prenatal vitamin. For more detailed information on a specific vitamin or mineral, check out our fact sheets below:

- **Folic acid** – https://mothertobaby.org/fact-sheets/folic-acid/
- **Iodine** – https://mothertobaby.org/fact-sheets/iodine-pregnancy/
- **Iron** – https://mothertobaby.org/fact-sheets/iron/

- **Vitamin A** – https://mothertobaby.org/fact-sheets/vitamin-a/
- **Vitamin B12** – https://mothertobaby.org/fact-sheets/vitamin-b12/
- **Vitamin C** – https://mothertobaby.org/fact-sheets/vitamin-c/
- **Vitamin D** – https://mothertobaby.org/fact-sheets/vitamin-d/
- **Vitamin E** – https://mothertobaby.org/fact-sheets/vitamin-e/
- **Vitamin K** – https://mothertobaby.org/fact-sheets/vitamin-k/
- **Zinc** – https://mothertobaby.org/fact-sheets/zinc/

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https://odphp.health.gov/our-work/nutrition-physical-activity/dietary-guidelines/dietary-reference-intakes

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Not Too Much, Not Too Little: Finding the Goldilocks of Vitamins and Minerals

Emily called MotherToBaby and confided, “My husband and I are thinking about getting pregnant…I am so excited but scared, too. I am wondering what I can do to make it more likely we will have a healthy pregnancy and baby.”

I assured Emily that we ***love*** it when people call ahead of their pregnancy and ask these questions. Preconception health is a topic that does not receive as much attention as it deserves, and it is important for both Emily and her husband. Good preconception health care can impact fertility and make it easier to conceive, and also helps to improve pregnancy outcomes and the health of the baby.

Here is a preconception prep guide– because if you are ready to have a baby, you want to take steps now to keep you and your baby as healthy as possible:

- **Make a pre-conception checkup appointment:** Begin by making an appointment about three months in advance with your obstetrical care provider. At that appointment you can confirm you are in good health. If you have any chronic conditions such as high blood pressure, thyroid disease, depression or diabetes you and your provider can make sure the condition is being managed effectively and confirm that any prescription or over-the-counter medications you are taking can be continued in the pregnancy. If you have a question about medications during pregnancy, MotherToBaby can help by providing you with information to bring to your appointment.

- **Begin taking a prenatal vitamin:** If you are not already taking a vitamin with folic acid this is a great time to start. The Centers for Disease Control and Prevention (CDC) recommend that all women who can become pregnant take a vitamin containing 400 micrograms of folic acid; this helps reduce the chances for certain birth defects such as spina bifida (when the spinal cord does not form properly).

- **Review your vaccine status**: During your preconception checkup, make sure that you are up to date on vaccinations such as the MMR (measles, mumps, rubella), Tdap (tetanus, diphtheria, whooping cough), influenza, and COVID. Planning ahead makes it more likely you will not get ill during pregnancy and helps protect the baby from getting infections from parents after birth.

- **Get your body fit for pregnancy:** Get regular exercise and consider whether you and your partner are at your preferred weight. If not, make plans to remedy that prior to attempting to get pregnant. You can also learn

more about a healthy diet and nutrition. This is something that may improve fertility in both parents and lay the groundwork for a healthy pregnancy.

- **Eliminate harmful exposures:** It goes without saying that this is a great time to make lifestyle changes such as reducing use of alcohol, tobacco, and recreational drugs. Addressing stress and mental health concerns up front can improve fertility, make the whole pregnancy experience better, and prepare you for the excitement and hard work of parenthood.

- **Evaluate your home and work environment:** If you and your partner are exposed to toxic substances like lead in your work or home environment, working to reduce those exposures is very effective when done ahead of the pregnancy.

MotherToBaby has many resources for Emily and her husband – and you! We have fact sheets on medications, herbal agents and supplements, diabetes and other health conditions, illnesses and vaccinations, occupations such as veterinarian and dental, exercise, paternal exposures, and cosmetics (sunscreen, skin creams, nail polish, hair dye). There are also useful blogs and podcasts, and whole web pages on various conditions, and if you have questions, our information specialists are here to help.

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"I just found out I'm pregnant. Can I keep drinking my energy shake in the mornings?"
"My doctor gave me the go-ahead to work out. Okay to have a protein shake after the gym?"
"My immunity-boosting drink is a life-saver. Can I keep using it while I'm pregnant?"

These are common questions during pregnancy, and ones that we hear a lot at MotherToBaby. Perhaps you've wondered the same thing yourself. As teratogen information specialists, we provide facts about how a woman's exposure in pregnancy might affect her developing baby. So, when we get questions about shakes, powders and other nutritional supplements in pregnancy, we look to the research. And that research, or lack of it, leads us to caution women against drinking that favorite nutritional shake while they're pregnant. Here's why:

Lack of FDA approval
Nutritional shakes and powders fall under the category of "supplements." Supplements aren't approved by the U.S. Food and Drug Administration (FDA) in the way that food and medicines are. The FDA does set out safety requirements for supplements, but the manufacturers are responsible for ensuring that their own products meet those requirements (kind of like a home builder inspecting their own house.) This means that shake makers and other manufacturers can put their products on the market without proving their safety, or even showing that the products actually do what they claim they will. Once a supplement is on the market, the FDA relies mostly on consumers' reports to alert them of side effects or other problems that could lead to warnings or recalls.

This is not to say that all supplement makers are unscrupulous or careless. Many manufacturers go above and beyond the FDA requirements for safety, and stand behind the purity and efficacy of their products. But the lack of oversight has allowed supplements to wind up on shelves despite being contaminated with bacteria, pesticides or heavy metals (such as lead), or having mislabeled ingredients or amounts of those ingredients. These inconsistencies can be dangerous, especially for people who take medications that might interact with unknown ingredients, or for pregnant women who need to avoid potentially harmful additives that can affect the baby.

Lack of studies in pregnancy
Nutritional shakes often contain vitamins, herbs, plant derivatives and other goodies intended to boost energy, strengthen immunity or have other positive health effects. But these additives are often listed on the label as "herbal blends" or "proprietary blends," meaning that the individual ingredients are not revealed. And even if they are listed individually, some of those ingredients may have been studied in pregnancy, while others have not. The lack of studies means we don't know if they might have harmful effects on a developing baby or otherwise increase risks in pregnancy.

For example, some ingredients may be "generally recognized as safe (GRAS)" when eaten in the amounts usually found in food, but they could increase the risk of miscarriage when used at high concentrations in pregnancy. The concentration of a plant-derived ingredient can vary from batch to batch, depending on the growing and harvesting conditions of the plant. So in the end, you can't be sure what you and your developing baby are getting with that shake.

Nutritional needs in pregnancy
A varied, healthy diet along with a daily prenatal vitamin recommended by your healthcare provider should give you all the vitamins, minerals and other nutrients that you and your growing baby need during pregnancy. Adding the extra vitamins found in that shake to your diet might result in exceeding the daily recommended amounts for pregnancy. On the flip side, if you are using a nutritional shake as a meal substitute, you might be missing essential nutrients that you and your baby should be getting from food. Always talk to your healthcare provider about the best way to meet your specific nutritional needs during pregnancy.

So, what to do about that container of protein powder sitting in your pantry or those bottles of energy shake taking up space in the fridge? Our advice? Find a new home for them until after you've delivered and are no longer breastfeeding. After all, you want to give your pregnancy a "fair shake," right?

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It was late on a Tuesday when a chat came in from Dr. Rodriguez. “My patient is taking a medication for epilepsy. She is planning a pregnancy and I’ve seen from some sources she may need to take more folic acid to help prevent birth defects. Does she need to be on a higher dose?” As teratogen information specialists, we receive many inquiries regarding folic acid; and it was understandable why this healthcare provider was confused as the guidance isn’t exactly straightforward.

What is folic acid?

Folic acid is the lab made form of folate. Folate is a B9 vitamin. Folate and folic acid help the body create new cells and can lower the chance of having a child with a class of birth defects called neural tube defects, which are problems with the brain and spinal cord. The neural tube forms very early in pregnancy (around 4 to 6 weeks after the first day of the last menstrual period), so it’s important that any woman who could become pregnant get enough folic acid at least one month ***BEFORE*** she gets pregnant. In the United States many of our foods, such as breakfast cereal, bread, pasta, and rice are fortified with folic acid, which meant the vitamin has been added to the food. According to the Centers for Disease Control and Prevention (CDC), folic acid fortification programs have led to a 35% decrease in the rate of neural

tube defects! We also get folate, which is the naturally occurring form of Vitamin B9, from foods like dark leafy greens, beans, citrus fruits, and nuts. However, only about 50% of this form is bioavailable (able to be absorbed and used by the body) so additional intake, in the form of a supplement, is recommended by organizations like the CDC and National Institutes of Health (NIH).

How much is needed?

The CDC recommends that all women of reproductive age get at least 400 mcg (0.4 mg) of folic acid each day. Once pregnant, organizations like The NIH and the United States Preventative Services Task Force (USPSTF) recommend that women who are pregnant get 600 to 800 mcg (0.6 to 0.8 mg) of folic acid per day. This amount can usually be met by taking an over-the-counter prenatal vitamin; a higher amount is not recommended for most pregnant women.

Women who have previously had a pregnancy affected by a neural tube defect (NTD) should take a higher dose of folic acid if they are planning to become pregnant again. The CDC and the American College of Obstetricians and Gynecologists (ACOG) recommends 4,000 mcg (4 mg) per day for these individuals. This higher dose should be started at least one month before becoming pregnant and should be continued through the first three months of pregnancy.

So what about Dr. Rodriguez's patient who was on an anti-epileptic drug (AED) for her seizure disorder? Many, but not all, medications in the AED class are known as "folic acid antagonists." This means that they can interfere with how the body absorbs and uses this important vitamin. If someone becomes pregnant while taking a folic acid antagonist, they may have lower levels of folic acid in their body and their pregnancy could be at higher risk of neural tube defects. That said, there is no great research that shows that taking extra folic acid would lower the risk of NTDs for women taking folic acid antagonists. So, should a woman taking an AED stick with the 400 mcg per day that is already recommended for everyone, or take more just in case it could be helpful?

Let's look at the current professional recommendations:

- The American Academy of Neurology and the American Epilepsy Society guidelines state that all women of childbearing age, with or without epilepsy, should be supplemented with at least 400 mcg (0.4 mg) of folic acid per day prior to conception and during pregnancy. They go on to say there is not enough data to know if taking folic acid at doses higher than 400 mcg offer greater protective benefits for women on AEDs.

- The American College of Obstetricians and Gynecologists (ACOG) recommends 4000 mcg (4 mg) of folic acid per day for individuals at increased risk of having a baby with a NTD, which includes women with seizure disorders.

- The Centers for Disease Control and Prevention (CDC) only recommends a higher dose of folic acid for those with a history of a pregnancy affected by a NTD.

- The U.S. Department of Health and Human Services (Office of Women's Health) recommends talking to your doctor to determine the right dose of folic acid if you are taking a medication for epilepsy.

Clear as mud, right? The current consensus seems to be that there is no consensus. Some groups recommend a higher dose while others do not. In situations like this where there is no clear consensus from the professional groups, it comes down to weighing the risks vs. benefits. The risks include the fact that higher doses of folic acid are not well studied in pregnancy, could mask a B-12 deficiency, and may actually make some medications less effective. The benefits of taking more are theoretical (not proven). A higher dose of folic acid ***might*** be protective in preventing birth defects while on a folic acid antagonist, but there is not enough research to know if this is true. Ultimately, much more data will be needed to come up with clear guidelines for women with epilepsy.

Because Dr. Rodriguez's patient was on carbamazepine, a folic acid antagonist that is associated with a higher chance for neural tube defects, she decided that she would have a thorough discussion of the risk vs. benefits of taking a higher dose of folic acid with her patient before she became pregnant. Dr. Rodriguez was glad she hadn't missed any overarching recommendations for women who need to take medication to control their seizure disorders during pregnancy. She ended her chat by saying: "It can be a challenge to keep up to date with all the recommendations. I'm so glad to have access to MotherToBaby to be able to ask questions like this."

MotherToBaby specialists are always happy to review the latest data and professional recommendations with healthcare providers and patients alike. If you have questions about folic acid, epilepsy medication, or any other exposures in pregnancy or lactation, please feel free to get in touch.

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If you are researching prenatal vitamins, we are guessing that you might be considering a pregnancy, or you just found out that you are pregnant. How exciting! We're also guessing that you have some questions. Pregnancy does that to a woman: it makes us start questioning the safety of everything that we used to take for granted. At MotherToBaby, we answer many types of questions about exposures during pregnancy and breastfeeding. But hands down, **the most common question I'm asked about involves *prenatal vitamins*.**

Many women ask me what brand of prenatal vitamins they should take or if the brand they are currently using is the right choice. With so many different prenatal vitamins available over-the-counter and by prescription, this is a very good question. We applaud you for doing your research. You are going to be a great Mom.

Prenatal Vitamin Tips

Before delving too much further, some basic tips. The **1st tip:** We recommend that you discuss your prenatal vitamin options with your healthcare provider, since she or he will know you and your health care needs the best. As mentioned, this will review prenatal vitamins for healthy women. Some women may have medical concerns that require a different nutrient intake.

The **2nd tip** that I always mention is that it may be easier ***and cheaper*** (depending on your healthcare insurance plan) to simply ask for a prescription for prenatal vitamins from your healthcare provider.

3rd tip: Do not buy a prenatal vitamin that contains herbal ingredients. Herbal products have not been well studied for use during pregnancy and breastfeeding. They are not regulated by the U.S. Food and Drug Administration (FDA) and there are no standard recommended amounts to take. In addition, purity of herbals found in over-the-counter products can be of concern. For more information on why herbals should be avoided, please see our MotherToBaby fact sheet on Herbal Products.

Prenatal vitamins are made up of vitamins and minerals. A healthy diet is the best way to get the vitamins and minerals that your body needs. But even if we eat a healthy diet, we might fall short on some nutrients during pregnancy. Prenatal vitamins help fill in the gaps and increased needs for vitamins and minerals during a pregnancy.

There are **Dietary Reference Intakes (DRI)** to help people know how much of each vitamin or mineral they should aim to get each day.

Some vitamins and minerals also have a recommended **Tolerable Upper Intake Level** (**UL**). The UL is designed to help us know the maximum recommended daily intake for a typical healthy person.

DRIs and ULs are there to help guide us in getting enough of a good thing but also to keep us from getting too much of a good thing.

As mentioned, vitamins should not be the only source of our nutrients. Therefore, your vitamin does not need to contain 100% of the DRI. Remember to take into account all sources of the vitamin or mineral when adding up your daily intake. This means including food sources as well as any other supplements you might take. DRI values can change by age, gender, and pregnancy and breastfeeding status. If you have a medical condition, talk to your healthcare providers/dieticians for your specific dietary needs.

Research on taking vitamins and mineral supplements at levels that are higher than the DRI and UL during pregnancy are limited. Because of the lack of information about taking high levels of vitamins and minerals in a pregnancy, it is generally recommended that pregnant women do not exceed the DRI unless your healthcare provider has prescribed it for the medical management of a specific deficiency or medical condition.

Now, we come to the main question: **What are the basic vitamins / minerals generally suggested for prenatal vitamins for healthy women, and how much of each vitamin and mineral do women need for pregnancy?**

Vitamins and Minerals

For pregnant women 19 years old and older, the first 5 vitamins/minerals listed below are the basic supplements from which healthy pregnant women might benefit. The DRI and UL for pregnancy are listed. Not all items have an UL.

- **Iron**: DRI: 27 mg. UL: 45 mg.
- **Calcium:** DRI: 1,000mg. UL: 2,500mg.Supplements should have at least 250 mg, but all women should be getting at least 1,000 mg per day of elemental calcium.
- **Folic Acid (Folate)**: DRI: 600 mcg (0.6 mg) to 800 mcg (0.8 mg).At least 400 mcg (0.4 mg) should be in your prenatal vitamin.
- All women who could become pregnant should be getting enough folic acid / folate, even if they are not currently planning on a pregnancy.
- **Iodine:** DRI: 220 mcg to 290 mcg. UL: 1,100 mcg.At least 150 mcg should be in your prenatal vitamin.
- **Vitamin D (calciferol):** DRI: at least 15 mcg (600 IU). UL 100 mcg (4,000 IU).

In addition to the above suggested supplements for prenatal vitamins, pregnant women should make sure they are getting enough of the vitamins / minerals listed below. If they cannot manage this with diet, then a supplement might help.

- **Vitamin A**: DRI 770 mcg. UL 3,000 mcg.
  - Vitamin A is found in two primary forms: plant-based carotenes (**beta-carotene**) and animal-based retinoids (**retinol**, retinal, retinoic acid, retinyl palmitate, and retinyl acetate).
  - Look for vitamin A that is from beta-carotene. Beta-carotene is less likely to build up toxic levels in the body than with retinoids. In addition, high levels of retinoids (**retinol**, retinal, retinoic acid, retinyl palmitate, and retinyl acetate) have been linked to an increased chance for birth defects.

- **B Vitamins**
  - There are eight B vitamins:

- Vitamin B_1 / thiamine: DRI: 1.4 mg
- Vitamin B_2 / riboflavin: DRI: 1.4 mg
- Vitamin B_3 / niacin: DRI: 18 mg
- Vitamin B_5 / pantothenic acid: 6 mg
- Vitamin B_6 / pyridoxine: DRI 1.9 mg
- Vitamin B_7 / biotin: DRI: 30 mcg
- Vitamin B9 / folic acid (already mentioned above)
- Vitamin B_{12} / cobalamin: DRI: 2.6 mcg

- These are a group of water-soluble vitamins, which means that your body will not store them. Therefore, it would be unlikely to reach a toxic level in the body. If you and your healthcare provider feel that you are unable to meet your DRI of the B vitamins through diet, then you should look for a prenatal vitamin that includes them. All prenatal vitamins should include at least folic acid (Vitamin B_9), which I mentioned earlier as an essential vitamin for pregnancy.
- **DHA/ Omega-3 Fatty Acids:** There is no clearly defined DRI, but in 2000 it was suggested that pregnant women should aim for 300 mg/day. The best way to get these is to include fish in your diet. MotherToBaby has a blog on eating fish in pregnancy. The FDA also has a guide on which fish are the best options to eat in pregnancy by breaking the fish into categories of Best Choices, Good Choices, and Choices to Avoid. The guide can be found here. However, if you do not get enough in your diet, your healthcare provider might suggest including a supplement for DHA during your pregnancy.
- **Vitamin E**: DRI: 15 mg. UL: 1,000 mg.
- **Vitamin C**: DRI: 85 mg. UL: 2,000 mg
- **Zinc**: DRI. 11 mg. UL: 40 mg.

It is recommended to start taking prenatal vitamins before you try to become pregnant; at a minimum, take folic acid daily. If you are already pregnant, start as soon as you learn about your pregnancy.

Again, if you have a medical condition (including but not limited to diabetes, celiac disease, eating disorders, substance misuse, malabsorption, irritable bowel, inflammable bowel, or history of bariatric surgery), talk with your healthcare providers about your specific nutritional needs.

Now that you are an expert in reading your prenatal vitamin label, you can tackle (with the advice of your health provider) selecting the one that is best for you. MotherToBaby is always available to answer questions about all exposures during pregnancy and breastfeeding. Pregnancy will bring wonder-filled moments for you and your family. MotherToBaby is here to help you and your healthcare providers to make it as stress-free as possible with up-to-date information on medications and more.

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