### Fertility Enhancing Supplements

Take a daily dose of essential vitamins and minerals to supplement your diet, improve your egg or sperm quality, and increase your overall fertility. Many daily prenatal vitamins will contain most of those below. **Those highlighted are considered crucial.** 

### **Egg Health**

- Prenatal Vitamin: Everyone who wants to become pregnant should take a daily prenatal vitamin. We do not recommend a specific brand.
- Vitamin D: Your body needs vitamin D for better calcium absorption and immune system function, and overall hormonal balance. Foods high in vitamin D include eggs, fatty fish like salmon and sardines, diary products and cod liver oil. Also, natural sunlight is an excellent source of vitamin D, but always wear sunscreen to filter out harmful UVA and UVB rays that damage skin.
  - A normal dosage to start is 2000 IU a day. Your doctor will inform you if you should take a higher dose.
- Coenzyme Q10 (CoQ10): This antioxidant is made in the human body and is needed for basic cell function. It has been shown in studies to increase sperm motility and help protect cells from free radical damage, which may impact egg health as well. Food sources include seafood and organ meats, and oils from sesame and rapeseed.
  - A normal dosage is 200 mg three times a day.
- **Vitamin C:** Vitamin C can improve hormone levels pre and post ovulation and may provide luteal phase support. Vitamin C can also improve sperm quality and motility. Food sources include fruits and vegetables like red peppers, broccoli, cranberries, cabbage, potatoes, tomatoes, and citrus fruits.
  - o A normal dosage is 1000 mg a day.
- Folic Acid: This vitamin is important in cellular division as well as preventing a multitude of pregnancy complications and birth defects. Food sources include dark leafy green vegetables, various beans like black, navy, pinto, and garbanzo, and natural orange foods like oranges, cantaloupe, yams and sweet potatoes.
  - A normal dosage is 400 800 mcg a day.









- Iron: This vitamin helps regulate ovulation and egg health. It is also essential for pregnancy and your future baby. Food sources include lentils, spinach, tofu, sesame seeds, various beans like kidney, navy and garbanzo, raw pumpkin seeds, beef, and molasses.
  - A normal dosage is 30 mg per day.
- **Essential Fatty Acids:** Omega-3 fats can increase fertility by regulating hormones, increasing cervical mucous, promoting ovulation and increasing blood flow to the reproductive system. They also help boost the immune system. Food sources include salmon, herring, mackerel, shellfish, sardines, walnuts, flax seeds, and chia seeds.
  - o A normal dosage is 500-1000 mg of fish oil a day. Make sure to look at the label to make sure you are receiving 500-1000 mg of the specific oil a day to help determine how many pills to take daily.
- **Micronized DHEA:** Used to improve egg quality and quantity and potentially to increase IVF success rates. Watch for side effects of oily skin and excessive shedding of head hair. Discontinue after 6 months of use.
  - A normal dosage is 25 mg three times a day. Your doctor will let you know if this is appropriate for you.
- Vitamin B6: This vitamin helps regulate hormones and blood sugars, as well as
  helps alleviate symptoms associated with PMS and morning sickness. Food
  sources include tuna, bananas, turkey, liver, salmon, cod, spinach, bell peppers,
  collard and mustard greens, garlic, cauliflower, celery, cabbage, asparagus,
  broccoli, kale, etc.
- **Vitamin B12:** This vitamin can improve sperm quality and production, boost endometrial lining, and help regulate ovulation. Food sources include seafood and shellfish, beef, lamb, cheese, and eggs.
- **Selenium:** This antioxidant helps protect eggs and sperm from free radicals, which can cause chromosomal damage. It also helps in the creation of sperm. Food sources include fish, shellfish, liver, cremini mushrooms, and turkey.
- **Zinc:** Zinc works with enzymes in the body to keep everything functioning properly, including cell division and balanced hormone levels. Zinc also helps increase sperm levels and sperm quality.









Food sources include red meat, oysters, liver, sesame seeds, pumpkin seeds, yogurt, turkey, shrimp, and peas.

- Wheatgrass: Wheatgrass is full of antioxidants, vitamins and minerals. It can help detoxify the liver, strengthen blood, regulate hormones, reduce inflammation, and boost the immune system. Wheatgrass is best consumed in a liquid form as a juice, but powder and capsules are also effective. (check with your provider to make sure this is appropriate for you)
  - Wheatgrass should be discontinued once pregnant as it may contain bacteria due to its raw nature.

### **Sperm Health**

Sperm, like eggs, are affected by diet and supplements. Antioxidants play an especially important role as well, specifically Vitamin C and Fatty Acids.

- **Ejaculations:** It is recommended to have frequent ejaculations around the time of your partner's ovulation. Please do not go more than 3-4 days between ejaculations during that time. For most men, ejaculations can be 1-2 days apart and still be effective. Keeping the sperm "moving" allows for less storage time outside the testes where oxidative stress can lower sperm quality.
  - Your care team will also give personalized instructions depending upon the treatment type and semen analysis results.
- **Essential Fatty Acids:** Omega-3 fats can increase fertility by regulating hormones, increasing cervical mucous, promoting ovulation and increasing blood flow to the reproductive system. They also help boost the immune system. Food sources include salmon, herring, mackerel, shellfish, sardines, walnuts, flax seeds, and chia seeds.









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- Vitamin D: Your body needs vitamin D for better calcium absorption and immune system function, and overall hormonal balance. Foods high in vitamin D include eggs, fatty fish like salmon and sardines, diary products and cod liver oil. Also, natural sunlight is an excellent source of vitamin D, but always wear sunscreen to filter out harmful UVA and UVB rays that damage skin.
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Additional Supplements: There is evidence that nutrition and supplements affect fertility and this field of research is always changing. There are many other supplements that are available. Reproductive Science Center of the Bay Area focuses on those supplements that have strong evidence behind them. We have listed below other supplements below for both egg and sperm health that may help but we do not strongly recommend given lack of strong data.

#### **Egg Health**

- Melatonin 3mg at bedtime
- Myoinositol 2g BID
- L'Arginine 1000mg BID
- Vitamin E 400mg
- Pycnogenol 100mg

#### Sperm Health

- CoQ10 200mg BID
- L Carnitine 500
- Folic acid 400mcg







