**ENVIRONMENTAL FACTORS AND FERTILITY SUCCESS**

We recommend the following to maximize the success of your fertility treatment

**COQ10**

- 600 mg supplement per day recommended

- CoQ10 has been shown in studies to reduce oocyte aneuploidy

- Theralogix has following supplements:

NeoQ10 125 mg (equivalent to 750 mg CoQ10 due to higher absorption rate), recommend 1 pill/day for women mid 30s and younger)

OvaVite: includes 250 mg CoQ10 and folate, recommend 1 pill/day for women mid 30s or over

- Foods high in Coq10: fatty fish, brocolli, cauliflower, oranges, strawberries, soybeans.

- For patients using their own eggs to conceive

**OMEGA 3 FATTY ACIDS**

- 800 mg of EPA and 1200 mg of DHA daily recommended.

- May improve fertility outcome through an antioxidant effect

- Theralogix sells supplement called Theromega with 400 EPA/300 DHA; Recommend 2-3 pills/day

- Foods high in DHA: flax seeds, walnuts, soybeans, oysters, and salmon

**MELATONIN**

- 3 mg/night.

- Protects oocytes from oxidative stress.

- For patients using their own eggs to conceive

**DHEA Supplement**

- 25 mg 2 times a day (better absorption if taken with a meal containing some fat)

- May improve stimulation for poor responders. May also improve egg and embryo quality.

- Start 3-4 weeks prior to treatment cycle

- Women with PCOS, diabetes or hormone related cancers should not take DHEA. DHEA may interfere with insulin, sertralin, and many others.

- For patients using their own eggs to conceive

- Discontinue when pregnancy occurs

The above supplements can be purchased at www.theralogix.com using PRC code 104321.

**BIOTIN**

-We recommend patients **NOT** take biotin while undergoing fertlity treatment as this supplement may interfere with hormonal assays.

**FOLIC ACID**

- 800 mcg/day

- Should take for at least one month prior to conception to help prevent neural tube defects

- Higher doses may be required if you or your partner had a neural tube defect, you have diabetes, or you are taking antiepiletics

**DIET**

- Increase intake of foods high in antioxidants: pomegranate, chocolate, berries, espresso coffee, fruits and vegetables, turmeric, cumin, ginger, oregano, vitamin C rich foods

- A “Mediterranean diet” is high in antioxidants – seafood, fruits & vegetables

- Limit intake of red meat, saturated fats

- Avoid foods that have advanced glycation end products: overcooked, charred, grilled, BBQ foods. These foods can induce oxidative stress. Avoid over boiling or over microwaved foods.

**LIMIT CAFFEINE**

- Limit to 2 caffeinated drinks/day

**EXERCISE**

- Moderate exercise may improve oocyte quality and fertility treatment outcome

- Avoid exercise in the latter half of your stimulation or when your physician tells you

- Avoid extreme/vigorous exercise as this can actually worsen treatment outcome

**NORMALIZATION OF WEIGHT**

- Know your BMI - ask your physician if you need help calculating this

- Normal BMI is 18.5-24.9, overweight is 25-30, obese is >30

- Obesity is associated with a state of systemic inflammation and high oxidative stress which affects oocyte quality and uterine receptivity

- Obesity is linked to a higher rate of many obstetrical complications including miscarriage,

preeclampsia, gestational diabetes, and preterm delivery

- Obese women who exercise have a 3 x higher pregnancy rate with fertility treatment than obese women who do not exercise

**STRESS REDUCTION**

- Sustained stress levels increase cortisol hormone production interfering with the normal balance of the hormones that play a role in fertility function

- Mental health professionals can assist in exploring ways to cope with stress

- Other activities that may reduce stress: exercise, acupuncture, massage, yoga, and meditation

**AVOIDANCE OF BPA**

- Avoid exposure to BPA (bisphenol A)

- BPA is found in plastic containers and canned food linings

- Avoid microwaving or heating food or beverages in plastic or styrofoam containers

- The Think Dirty app is a helpful tool to check your personal care products and make sure they do not contain ingredients toxic to your reproductive health

**AVOID MOSQUITO BITES**

- Follow strict precautions to avoid mosquito-borne diseases.

- Prior to becoming pregnant or starting fertility treatment, please read the information on the CDC website about Zika and West Nile Virus.

- https://www.cdc.gov/zika/

- https://www.cdc.gov/westnile/

**NO ALCOHOL**

- Alcohol intake is associated with decreased fertility success rates (female and male)

- Alcohol is contraindicated in pregnancy and should be avoided before, during, and after a treatment cycle

**NO SMOKING**

- Smoking causes a state of severe oxidative stress (male and female)

- Smoking reduces pregnancy rates by half

- Smoking is associated with a 16 % higher miscarriage rate

- Quitting 3-6 months prior to fertility treatment recommended

**MALE FACTORS**

- Alcohol and tobacco have been known to affect both quality and quantity of sperm

- Reduce exposure to extreme heat 2-3 months prior to and during treatment. Extreme and vigorous exercise can also affect the quality and quantity of sperm

- Severe illness / high fever can decrease sperm count (inform the doctor if this has occurred within 3 months prior to or during treatment)