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# Foods That Make You Fertile: Nutritional Advice for Women and Men

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Healthy pregnancies can be difficult to achieve. It is estimated that infertility impacts 1 out of 10 women. While some medical interventions drugs and high-tech medical procedures can improve infertility, a safer, more natural approach of optimum nutrition and lifestyle changes can increase pregnancy success rates.

Preconception nutrition research shows that healthy diets are tied to fertility health for men and women, yet diet is an often-overlooked component of fertility. Changes in lifestyle, diet and exercise habits remain important influences in pregnancy success rates and fetal health outcomes.<sup>1</sup> It is estimated that 1 in 4 women in reproductive age is obese and 75% of infertility is related to weight and polycystic ovary syndrome (PCOS).<sup>2,3</sup>

## Importance of Achieving a Healthy Weight

Overweight and obese women have a reduced probability of getting pregnant.<sup>2</sup> The best weight range for pregnancy is between 20 and 24 on the body mass index scale.

Being overweight or underweight with too little or too much body fat may interfere with a woman's fertility.<sup>1</sup> For overweight women, weight loss can help regularize menstrual cycles and increase the chance of spontaneous ovulation and conception.<sup>4</sup> Furthermore, women who are obese before conception tend to gain and retain more weight during pregnancy than recommended.

But how much pre-conception weight loss is necessary? Some data suggest that as little as 5–10% weight

loss can improve fertility outcomes.<sup>5</sup> Zain and Norman found improved pregnancy rates and positive results were obtained with female subjects who lost 5 percent of their body weight.<sup>6</sup>

A recent Stanford study of 39 patients found that women who achieved meaningful weight loss, defined as lost 10% of their maximal weight (initial BMI: 29.7) along with decreased calorie intake and an increase in exercise, had an 88% pregnancy rate compared to women who lost less than five percent (initial BMI 33.6) who only had a 33% pregnancy rate.

## Trying to Conceive Diet Strategies

Pre-conception nutrition is a vital part of preparing for pregnancy. A healthy diet rich in nutrients is the best bet to improve ovulation, fertility and offer an excellent start to a pregnancy.<sup>7</sup> Nutrition intervention to promote fertility focuses on weight, dietary quality, insulin resistance, and hormonal imbalance.

The Academy states that the link between fertility and healthy eating is unclear, and fertility diets in general have limited, if any, scientific evidence to support their claims. The following is a general fertility diet pattern thought by some to promote increased fertility in otherwise healthy individuals.<sup>8</sup>

- Emphasis on meeting calorie and nutrient needs in 3 plus meals per day.
- Eating foods from all food groups, including at least 5 servings of antioxidant rich fruit or vegetables, low glycemic whole grain carbohydrates, healthy fats, low fat dairy and plant and lean animal protein.

- More natural foods, closer to the earth and organic if affordable.
- Adequate intake of omega 3 rich fats - consume at least 12 ounces of low mercury fish and no more than 6 ounces of canned albacore tuna weekly. Fish is the best source of omega 3 fatty acids, which are critical to a baby's brain development.
- A multi and pre-natal vitamin (max 200% of DRI)

While the overall evidence is weak, there are multiple versions of fertility diets designed to help women conceive. One of the most popular recommendations stem from the Harvard Nurses' Health Study of more than 18,000 women and are aimed at preventing and reversing ovulatory infertility.<sup>7</sup> These strategies won't guarantee a pregnancy but are without side effects and are the foundation of a healthy eating strategy for motherhood and beyond.

These dietary recommendations include:

- Avoid trans fats
- Use more unsaturated fats that can improve insulin sensitivity and cool inflammation; cut back on saturated fats
- Eat more plant protein and less animal protein. Replace one serving of meat daily with a plant protein source
- Enjoy whole milk or full fat ice cream or yogurt daily
- Choose carbohydrates that are high in fiber and slowly digested to help control blood sugar and insulin levels
- Take a multi-vitamin and get an extra 400 micrograms per day of folic acid. All women capable of getting pregnant should consume

400 mcg of folic acid daily from fortified foods or supplements in addition to food forms of folate from a varied diet<sup>9</sup>

- Get plenty of iron. The 2010 Dietary Guidelines suggests improving iron status by choosing foods that supply heme iron which is more readily absorbed by the body and enhancing absorption with vitamin C rich foods<sup>9</sup>
- Drink more water, limit alcohol and skip sugary sodas that appear to promote infertility. Note, the Center for Disease Control states that at no time during pregnancy is it safe to drink alcohol,<sup>10</sup>
- Daily physical activity within your comfort zone

These recommendations generally echo those of the Dietary Guidelines for Americans and other Federal healthcare agencies. A healthy whole food diet like The Mediterranean diet can also be effective. In a recent study of women trying to conceive naturally, the Mediterranean style diet was associated with a 40% reduction in risk of infertility.<sup>11</sup>

### Foods and Behaviors to Avoid

There are several foods that are generally not recommended for mother or baby during conception or pregnancy due to their poor nutrient quality, and greater risk of microbial or other contaminants. High fat foods, trans fats, refined sugars, overly processed foods, too much salt, caffeine and sugary drinks tend to be nutrient poor and not recommended.<sup>10,12,13</sup> Further, foods with many additives, preservatives, chemicals, and artificial sweeteners should be approached with caution. Soft cheeses and pates, foods that may contain high levels of listeria,

should be avoided. The American College of Obstetricians and Gynecologists, American Academy of Pediatrics and CDC recommend cessation of smoking and reduction of ethanol intake before and during pregnancy as a part of primary preconception care as well as preventive care.<sup>1</sup>

### Beyond Diet: Exercise

Most experts recommend regular physical activity of about 30 minutes to 1 hour/day of mild to moderate exercise. Some good exercise options include walking, swimming, bicycling, and aerobics as long as they are within the comfort zone of the woman. Yoga is an excellent choice because it incorporates posture, breathing, and concentration which will be beneficial during labor.

A 2012 study of 3,000 pre-conceptive Danish women not undergoing fertility treatments found that the women who reported moderate exercise (walking) were more likely to get pregnant than the women who reported engaging in five or more hours of intense exercise (running) per week.<sup>14</sup>

### Fertility Guidelines for Men

A growing body of evidence suggests that men's diet and lifestyle can affect fertility, sperm quality and motility. Just like women, the CDC recommends men need to eat a healthy diet, take multi vitamins, quit smoking and reduce intake of alcohol.<sup>15</sup> Chronic drinking and smoking is associated with reduced sperm concentration, volume and motility.<sup>16</sup>

Following a similar dietary pattern

as outlined above is highly recommended for men. In addition, an emphasis on walnut consumption will improve diet quality and may promote sperm quality. A recent study showed that healthy young men aged 21-35 years who ate 2.5 ounces of walnuts a day (~1/2 cup) for 12 weeks improved sperm quality.<sup>17</sup>

Men also need to pay close attention to their weight as being under or over weight can affect sperm quality.<sup>18-19</sup> Exercise can help achieve a healthy weight and may also play a role in sperm counts. One study showed men who engaged in exercise for seven hours or more per week, had a 48 percent higher sperm concentration than men who exercise less than one hour per week.<sup>20</sup>

### Role of the RDN: Nutritional Assessment and Counseling

As part of a comprehensive medical team, RDNs should conduct a thorough evaluation and nutritional assessment of both potential parents addressing the following:

- Height, weight
- Medications, dietary and herbal supplements
- Typical meals and snacks per day (week day and weekend)
- Fish intake
- Beverage intake (caffeine, alcohol, water, dairy, sweetened beverages)
- Frequency of eating out and types of restaurants 3 day intake
- Nutrient adequacy of meals
- Types of preferred foods
- Intake of sugar/fat/sodium
- Cigarettes
- Activity level
- Average amount of sleep
- Stress level

Couples are usually highly motivated to make lifestyle changes for the sake of their unborn children. Eliminating risky behaviors, may be difficult at other times, becomes easier with the goal of a much-desired pregnancy.

While some may need hand holding, supportive texts, newsletter or social media outreach, one role of the RDN is to inspire, motivate and support fertility clients to make healthy changes that carryover into pregnancy and parenthood.

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