## Effects of Diet, Body Weight, & Supplementation on Human Fertility

## Alexa Bryant\* & Pete Markowitz

Infertility, defined by the World Health Organization as "a disease of the reproductive system defined by the failure to achieve a clinic pregnancy after 12 months or more of regular unprotected sexual intercourse" is an increasingly common condition, affecting about 10% of the population of reproductive age. This condition can have many causes but is often affected by obesity, which can render a woman anovulatory making it very difficult for her to conceive. Weight loss has been shown to be an effective method of helping to restore menstrual cyclicity and increasing conception rates. This weight loss is best achieved through both dietary adjustments and structured exercise which help to bring the body to a weight that is safer for carrying a pregnancy. Unexplained infertility is also very common and for physicians the treatment option is often just referral to a trained specialist, but recommendations for dietary adjustments and supplements to help improve fertility and perhaps increase chances of conception while waiting for specialist referral could be very valuable. Both diet plans and supplementation have been found to be helpful in increasing conception rates through both the male and female factor and these are a quality first line of treatment for physicians to recommend before moving to more expensive and invasive treatment options. Herein the current information on the best recommendations for both overweight and non-overweight patients is analyzed and discussed in order to create a list of best practices for physicians and to uncover the information that is lacking in order to direct further research into the treatment of infertility using dietary changes.