

## How you can tell when things are not going according to plan

About 30% of women fertility problems are due to ovulation disorders, in which the ovaries can be prevented producing and releasing mature eggs, and it accounts for one of the most common conditions for infertility. Causes for failed ovulation can be categorized into hormonal imbalances, physical damage in the ovaries and premature menopause.

Harvard researchers have studied results from 18,000 women taking part in the Nurses' Health Study, a long-term research project looking at the effect of diet and other factors on health.

**Top 4 reasons for ovulatory infertility** – we will cover more on causes of delayed conception in module 2 and the role of stress in infertility in module 6

**Carbs** - Research from the Nurses' Health Study showed that carbohydrate choices influence fertility. Eating a lot of easily digested carbohydrates such as white bread and potatoes, increases the odds that you'll find yourself struggling with ovulatory infertility. More than any other nutrient, carbohydrates determine your blood sugar and insulin levels. When these rise too high, they disrupt the finely tuned balance of hormones required for reproduction and this can result in ovulatory dysfunction. Women in the highest glycemic load category were 92% more likely to have ovulatory infertility than women in the lowest category.

**Transfats -** Findings from the Nurses' Health Study indicate that the artificial fat, transfat, is a powerful deterrent to ovulation and conception. The more transfat in the diet the greater the likelihood of developing ovulatory infertility. This effect is evident from an intake of 4 grams per day (one doughnut) – less than the average American consumes each day!

**Protein** - The Nurses' Health Study revealed that getting more protein from plant sources (beans, legumes, grains, nuts & seeds) and less from animal sources has a large impact on improving ovulatory infertility. Ovulatory infertility was 39% more prevalent in women with the highest intake of animal protein than in women in the lowest. Simply by replacing 25 grams of animal protein with 25 grams of plant protein correlated to a 50% lower risk of ovulatory infertility.

**Weight** - Women with the lowest and highest body mass indexes (BMI) were more likely to have trouble with ovulatory infertility than women in the middle. Infertility was least common among women with a BMI of 20-24, with an ideal of 21. Weighing too much or too little can interrupt normal menstrual cycles, throw off ovulation, cause insulin resistance and an excess of male sex hormones.



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In regard to male fertility, studies have concluded that excess weight can lower testosterone levels which disrupts the ratio of testosterone to oestrogen (yes, men produce oestrogen too) resulting in a lower production of sperm cells that are good swimmers.