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## Obesity and the risk of Infertility

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**Introduction:** Many people don't understand that obesity has the link factor for getting infertility. So, these abstract wants to discuss how obesity can increase a person's risk of suffering infertility.

**Method:** Review study

**Results:** Obesity and overweight people have high risk for reproductive disorder. Obesity is excessive fat accumulation condition. Human adipose tissue produces a variety of secretory factors. The secretory factors of adipose tissue release are free fatty acid, high leptin levels in serum and follicular fluid, hormone, cytokine or chemokines such as TNF alpha, IL-6, IL-8, leptin and adiponectin etc. So, adipose tissue in obese men and women is in pro inflammatory condition. Leptin is a stimulatory effect on the HPG axis to initiate the reproductive maturation of the hypothalamus. Leptin levels are higher in people who are obese.

**Discussion:** Obesity is linked to infertility in both genders. Infertility in obese people has relationship with pro inflammatory condition. Obesity in men affect fertility by impaired spermatogenesis, erectile dysfunction, reduced the hormone testosterone levels, poor libido which has relationship with the HPG and hypothalamic pituitary adrenal axes. Leptin is a hormone that plays a role in many metabolic functions, including reproduction. High concentration of leptin has relationship to azospermia, oligozoospermia and oligo astheno teratozoospermia in obese men.

**Conclusion:** Obesity has relationship to infertility cause of obesity has adipose tissue accumulation which produces many secretory factors. So, obesity in the pro-inflammatory condition will disturb normal reproductive function.