

Lifestyle and Environmental Factors

Holistic reproductive medicine always considers – in diagnosis and therapy – the body as well as the mind.

The following living condition factors of patients are considered and recorded:

- Possible psychosomatic disorders
- Body weight (underweight, overweight, obese)
- Nutrition
- Consumption of semi-luxury foods (alcohol, tobacco or caffeine)
- Physical activity levels
- Possible prescription medicine, or drug abuse
- Environmental pollution – intoxication.

Psychosomatic Disorders

Psychosomatic disorders - such as anorexia or bulimia – can negatively influence natural fertility. These conditions have an influence on the production of the Gonadotropin-Releasing-Hormone (GnRH), which is essential for the liberation of luteinising hormone (LH) and follicle stimulating hormone (FSH). Both hormones are key for the development of oocytes as well as ovulation.

Body Weight (underweight, overweight, obese)

The body weight classifications above all have an impact on natural fertility. When a male is overweight, the android distribution of fat (around the stomach) leads to a significant decrease in biologically active testosterone (male sex hormone).

Scientific studies reveal that approximately 12% of female infertility can be traced back to stark cases of being overweight or underweight. These also have a negative influence on the production of GnRH, necessary for the development of both LH and FSH. Both, as explained further above, are of significant importance for the development of mature oocytes and ovulation.

Nutrition (balanced, wholesome diet)

A nutritious and wholesome diet is of great importance for both male and female fecundity. Scientific studies confirm that the regular intake of nutritious substances increases the chances of natural conception.

Consumption of Semi-luxury Foods

Consumption of Caffeine

The consumption of more than four cups of coffee a day is able to impair female fertility.

Alcohol Consumption

Sex hormones (for example oestrogen) can no longer be as efficiently and effectively produced when excess alcohol is frequently consumed, and possible issues such as alcohol-related liver damage occur. This leads to hormonal disturbances and imbalances.

Excess alcohol consumption also impairs the quality of sperm. The concentration of sperm cells shrinks and the proportion of dysmorphic sperm cells rise. Furthermore, substantial alcohol consumption also has an adverse effect on a person's sex drive and virility.

In females, excess alcohol consumption can impair both folliculation (follicle maturation), and the

menstrual cycle itself. This reduces female fertility.

Tobacco Consumption

Smoking predictably reduces sperm motility and subsequently impairs the chances of fertilisation. Consumption of more than 10 cigarettes a day decreases the chance of the embryo's nidation (implantation) in the uterus.

Additionally, smoking leads to an increased amount of multiple pregnancies. A reduced pregnancy rate was observed after a uterine transfer of morphologic attributed top-quality embryos in female smokers, compared to non-smoking counterparts.

Physical Activity Levels

Moderate physical activity (exercises such as brisk walking, swimming, jogging or mowing the lawn) improve the overall health status and fecundity of a person. On the other hand, extremely vigorous levels of physical activity can be detrimental to natural fertility. Hence, a fine balance is necessary.

Prescription Medicine/Drug Abuse

Antibiotics (Cotrimoxazol or Gentamycin), or blood pressure medication (Reserpin or Methyldopa), can damage spermatogenesis. Drugs (such as cannabis) lead to decreased testosterone production and lower sperm concentrations if regularly taken.

The following (prescription) drugs can lead to impairment of folliculation in females, and the loss of sex drive in males:

- Androgen blockers
- Antidepressants
- Antiemetics
- Blood pressure medication
- Antisymphotonics
- Endogen opiates (endorphins)
- H2 receptor inhibitors
- Melatonin
- Opioids
- Neuroleptics of the following groups Benzisoxazolpiperidin, Butyrophenone, Dibenzodiazepine, Phenothiazine or Thioxanthene.

Cytostatic agents (substances which inhibit cellular growth or cell division) can damage the testicles and ovaries. For example: Cyclophosphamide.

Environmental Factors (pollution or intoxication)

Testicular hyperthermia (which can arise from working at a furnace or in a bakery, frequent sauna visits or having a seat heater) can impair male fertility. Sperm cells diminish in number, and are slower and often dysmorphic.

Environmental pollution, for example polychlorinated biphenyls (PCB) - toxic and cancerous chemical chlorine compounds ('softeners') - impair male fertility.

Occupation-related contact to gaseous anesthetics can reduce female fertility.

Optimizing Lifestyle and Environmental Factors

The physical and mental wellbeing of both partners, as well as a healthy, well-balanced lifestyle, are vital prerequisites for a successful fertility treatment.