# Intermittent fasting may disrupt women’s hormonal balance despite popular claims



Intermittent fasting (IF) has surged in popularity, often celebrated in wellness circles for purported benefits ranging from improved gut health to radiant skin. However, as this trend gains traction, questions are surfacing about its effects, particularly on women's health. Raksha Lulla, a nutrition and lifestyle expert, highlights significant concerns regarding the appropriateness of fasting for women, suggesting that much of the existing research on IF operates from a male perspective, overlooking the unique needs of the female hormonal system.

Lulla points out that the hormonal cycle in women typically spans 28 days, reflecting a rhythm attuned to natural cycles rather than a straightforward linear model. This cyclical nature means that fasting practices typical of male physiologically-based studies may not translate effectively for women. When women participate in prolonged periods of fasting, the body may enter a state of survival, potentially disrupting ovulation, fertility, and broader hormonal balance. Such shifts can manifest in noticeable changes to menstrual cycles and overall health, indicating that fasting may not always align with female biological needs.

Current scientific discussions shed light on the mixed effects of intermittent fasting on women. Research into the relationship between IF and women's reproductive health is growing, particularly regarding conditions such as polycystic ovary syndrome (PCOS). Some studies suggest that time-restricted feeding can lead to improved menstrual regularity and hormonal balance in women with PCOS. For instance, a systematic review indicated that these interventions significantly normalised cycles for 33-40% of participants, also reducing levels of total testosterone and increasing sex hormone-binding globulin (SHBG), which are crucial for reproductive health. Nonetheless, experts insist on the necessity for further research and larger studies to firmly establish these findings as effective therapeutic options.

While IF may present benefits for some regarding metabolic functions, its application is not universally positive across all female populations. Many women report experiencing adverse hormonal shifts including mood swings, altered menstrual patterns, and even reduced libido when engaging in intermittent fasting regimens. Lulla cautions that the experience of feeling “lighter” during fasting may not equate to genuine improvement but rather reflect a state of deprivation. To promote healthy fasting, she advocates for more mindful approaches, suggesting that women focus on lighter, nourishing foods rather than strict abstention.

Distinguishing healthy fasting from harmful disordered eating practices is crucial. Lulla emphasises the importance of intention behind fasting, noting that when it becomes a form of self-punishment or rigid discipline, it can turn damaging. Fasting characterized by care, flexibility, and self-awareness may foster a more supportive relationship with food. This distinction is vital, particularly for women who might feel societal pressures to conform to certain body standards.

Concerns about negative implications of fasting extend to broader societal narratives, wherein fasting might inadvertently reinforce harmful beauty standards. Lulla asserts that many women engage with fasting not as a means of nurturing their health but through a lens of insecurity or self-criticism. This raises critical questions about the motivations behind wellness trends and their effects on self-perception and body image.

At its core, while intermittent fasting may remain a viable option for certain individuals, it is clear that it is not a one-size-fits-all solution, especially for women. As the conversation around women's health evolves, the importance of understanding and respecting the unique physiological needs of women in dietary practices grows ever clearer. Before adopting fasting regimes, women are encouraged to reflect deeply on how these practices will affect their overall well-being, ensuring that choices align with personal health rather than external expectations.

### 📌 Reference Map:

* Paragraph 1 – [[1]](https://www.cosmopolitan.in/life/features/story/bodytalkwithcosmo-fasting-might-be-trendy-but-is-it-secretly-sabotaging-your-cycle-1222122-2025-06-03), [[4]](https://pubmed.ncbi.nlm.nih.gov/39320714/)
* Paragraph 2 – [[1]](https://www.cosmopolitan.in/life/features/story/bodytalkwithcosmo-fasting-might-be-trendy-but-is-it-secretly-sabotaging-your-cycle-1222122-2025-06-03), [[2]](https://pubmed.ncbi.nlm.nih.gov/39876903/), [[5]](https://www.frontiersin.org/articles/10.3389/fnut.2024.1362226/full)
* Paragraph 3 – [[3]](https://www.mdpi.com/2072-6643/14/11/2343), [[6]](https://health.economictimes.indiatimes.com/news/industry/intermittent-fasting-causes-hormonal-issues-in-women/105490862)
* Paragraph 4 – [[4]](https://pubmed.ncbi.nlm.nih.gov/39320714/), [[5]](https://www.frontiersin.org/articles/10.3389/fnut.2024.1362226/full), [[6]](https://health.economictimes.indiatimes.com/news/industry/intermittent-fasting-causes-hormonal-issues-in-women/105490862)
* Paragraph 5 – [[1]](https://www.cosmopolitan.in/life/features/story/bodytalkwithcosmo-fasting-might-be-trendy-but-is-it-secretly-sabotaging-your-cycle-1222122-2025-06-03), [[2]](https://pubmed.ncbi.nlm.nih.gov/39876903/), [[7]](https://onlinelibrary.wiley.com/doi/full/10.1155/2023/4038546)
* Paragraph 6 – [[1]](https://www.cosmopolitan.in/life/features/story/bodytalkwithcosmo-fasting-might-be-trendy-but-is-it-secretly-sabotaging-your-cycle-1222122-2025-06-03), [[2]](https://pubmed.ncbi.nlm.nih.gov/39876903/), [[3]](https://www.mdpi.com/2072-6643/14/11/2343)

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://www.cosmopolitan.in/life/features/story/bodytalkwithcosmo-fasting-might-be-trendy-but-is-it-secretly-sabotaging-your-cycle-1222122-2025-06-03> - Please view link - unable to able to access data
2. <https://pubmed.ncbi.nlm.nih.gov/39876903/> - This systematic review examines the impact of intermittent fasting (IF) on fertility and reproductive hormones in women with polycystic ovary syndrome (PCOS). The study found that time-restricted feeding (TRF) interventions led to significant improvements in menstrual regularity, with 33-40% of participants reporting normalized cycles. Additionally, reductions in total testosterone, free androgen index, anti-Müllerian hormone (AMH), and luteinizing hormone (LH) levels were observed, alongside increased sex hormone-binding globulin (SHBG). TRF also improved insulin sensitivity, reduced body weight, and decreased inflammatory markers, all contributing to enhanced reproductive outcomes. The authors suggest that IF, particularly TRF, shows potential as a non-pharmacological intervention to improve reproductive health and fertility in women with PCOS. However, they call for larger randomized controlled trials with long-term follow-up to confirm these findings and establish IF as a standard therapeutic option for PCOS management.
3. <https://www.mdpi.com/2072-6643/14/11/2343> - This literature review investigates the effects of intermittent fasting (IF) on reproductive hormone levels in humans. The findings suggest that IF decreases androgen markers, such as testosterone and the free androgen index (FAI), while increasing sex hormone-binding globulin (SHBG) levels in premenopausal females with obesity. This effect was more pronounced when food consumption was confined to earlier in the day, with all food consumed before 4 pm. In contrast, fasting did not have any effect on estrogen, gonadotropins, or prolactin levels in women. The authors note that very few studies have been conducted on this topic, making it difficult to draw solid conclusions. They suggest that IF may decrease androgen markers in both genders, which could have varied health implications. For example, fasting may prove to be a valuable tool for treating hyperandrogenism in females with PCOS by improving menstruation and fertility. However, more research is warranted to confirm these preliminary findings.
4. <https://pubmed.ncbi.nlm.nih.gov/39320714/> - This review examines the impact of intermittent fasting (IF) on female reproductive function, focusing on various IF regimens and their effects. In healthy non-overweight/obese or pregnant animal models, alternate-day fasting (ADF) and an 8-hour time-restricted feeding (TRF) window may have adverse effects on reproductive function. However, these regimens show potential to mitigate negative consequences induced by a high-fat diet or environmental exposure. A 10-hour TRF demonstrates benefits in improving fertility in both normal-weight and high-fat diet-fed animal models. In women with overweight/obesity or PCOS, the 5:2 diet and TRF significantly reduce the free androgen index while elevating SHBG, promising improvements in menstrual regulation. For pregnant Muslim women, available data do not strongly indicate adverse effects of Ramadan fasting on preterm delivery, but potential downsides to maternal weight gain, neonatal birthweight, and long-term offspring health need consideration. The review underscores the potential utility of IF regimens as a therapeutic approach for addressing menstruation irregularities and infertility in women with obesity and PCOS. However, pregnant women should remain cognizant of potential risks associated with IF practices.
5. <https://www.frontiersin.org/articles/10.3389/fnut.2024.1362226/full> - This systematic review investigates the effects of calorie restriction and intermittent fasting (IF) on glucose homeostasis, lipid profile, inflammatory, and hormonal markers in patients with polycystic ovary syndrome (PCOS). The review found that IF led to significant reductions in total testosterone and free androgen index, alongside increases in SHBG levels. Additionally, IF improved insulin sensitivity, reduced body weight, and decreased inflammatory markers, all contributing to enhanced reproductive outcomes. The authors suggest that IF, particularly TRF, shows potential as a non-pharmacological intervention to improve reproductive health and fertility in women with PCOS. However, they call for larger randomized controlled trials with long-term follow-up to confirm these findings and establish IF as a standard therapeutic option for PCOS management.
6. <https://health.economictimes.indiatimes.com/news/industry/intermittent-fasting-causes-hormonal-issues-in-women/105490862> - This article discusses the hormonal issues that intermittent fasting (IF) can cause in women. It highlights that IF may lead to a decline in insulin levels, triggering hormonal surges in adrenaline and cortisol, which aids in metabolic benefits and stress tolerance. However, prolonged periods of fasting may reduce DHEA levels, impacting fertility. The article also notes that IF can decrease testosterone while increasing SHBG levels in premenopausal women with obesity, potentially leading to symptoms such as headaches, acne, insomnia, mood swings, and low sex drive. The author suggests that women engaging in fasting should monitor changes in their menstrual cycle and consider a personalized and cautious approach to IF, especially during periods of high stress or if hormonal dysfunction is suspected.
7. <https://onlinelibrary.wiley.com/doi/full/10.1155/2023/4038546> - This article discusses the health-promoting effects and mechanisms of intermittent fasting (IF). It highlights that IF can affect circadian rhythms depending on the timing of food availability and induces a metabolic state that affects the suprachiasmatic nucleus (SCN) clock. The article also notes that IF can improve inflammation levels, with long-term IF significantly improving the inflammatory state. Additionally, the study by Shafiee et al. found that the expressions of IGF-1, insulin-like growth factor-binding protein 1 (IGFBP1), and phosphatase and tensin homolog (PTEN) genes were significantly upregulated in the endometrium of women with PCOS and endometrial cancer compared to their study controls. The upregulation of these genes was independent of systemic estradiol and androgen levels as well as estradiol levels BMI, HOMA-IR, and waist-hip-ratio. The article suggests that different fasting regimens may reduce IGF-1, IGFBP1, glucose, and insulin levels, benefiting ovarian function, androgen excess, and infertility in women with PCOS.