

# Exercise and the Menstrual Cycle

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## PICO Question

**Does adding physical activity, in comparison to inactivity, throughout the menstrual cycle result in a decrease in PMS symptoms in females that have reported experiencing PMS?**

## Key Methodology

- A cross-sectional quantitative study that determined how premenstrual syndrome (PMS) affected the quality of life along with how lifestyle and diet affected the presence of PMS.<sup>1</sup>
- A randomized clinical trial that determined the effects of eight weeks of exercise on the severity of PMS.<sup>2</sup>
- A randomized controlled trial that compared the effects of aerobic exercise and yoga on PMS.<sup>5</sup>
- A blind controlled study was performed to determine the effect of squatting exercises on menstruation in females with dysmenorrhea.<sup>6</sup>

## Key Findings

- The mean score of general health among participants without PMS was 71.7 and that of participants with PMS was 27.9. The scoring is on a scale of 0-100, with the lower the score indicating a poorer quality of life and vice versa.<sup>1</sup>
- The consumption of sweets and a lack of physical activity was associated with the presence of increased PMS symptoms.<sup>1</sup>
- Implementing aerobic exercise regularly can significantly reduce the presence of physical PMS symptoms such as headache, muscle cramps, bloating, nausea, and fatigue.<sup>5</sup>
- Yoga is slightly more effective than aerobic exercise in relieving general PMS symptoms; however, there was no difference in pain intensity.<sup>5</sup>
- Adding squatting to a yoga exercise regimen resulted in lower pain and menstrual distress in comparison to yoga alone.<sup>6</sup>

## Recommended Key Practices

- Encourage female patients to participate in yoga or aerobic exercise to assist with PMS symptom management.<sup>5</sup>
- Educate female athletes on the potential effects of oral contraceptives and their natural cycle on their muscle performance and form a plan to reduce such effects.<sup>3 4</sup>
- Provide a variety of resources to female patients to teach exercise techniques and offer advertisement material for local gyms for those who do not wish to exercise at home.<sup>6</sup>
- Educate the patient on the benefits of squats in relieving overall PMS symptoms.<sup>6</sup>

## References

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Figure 1.

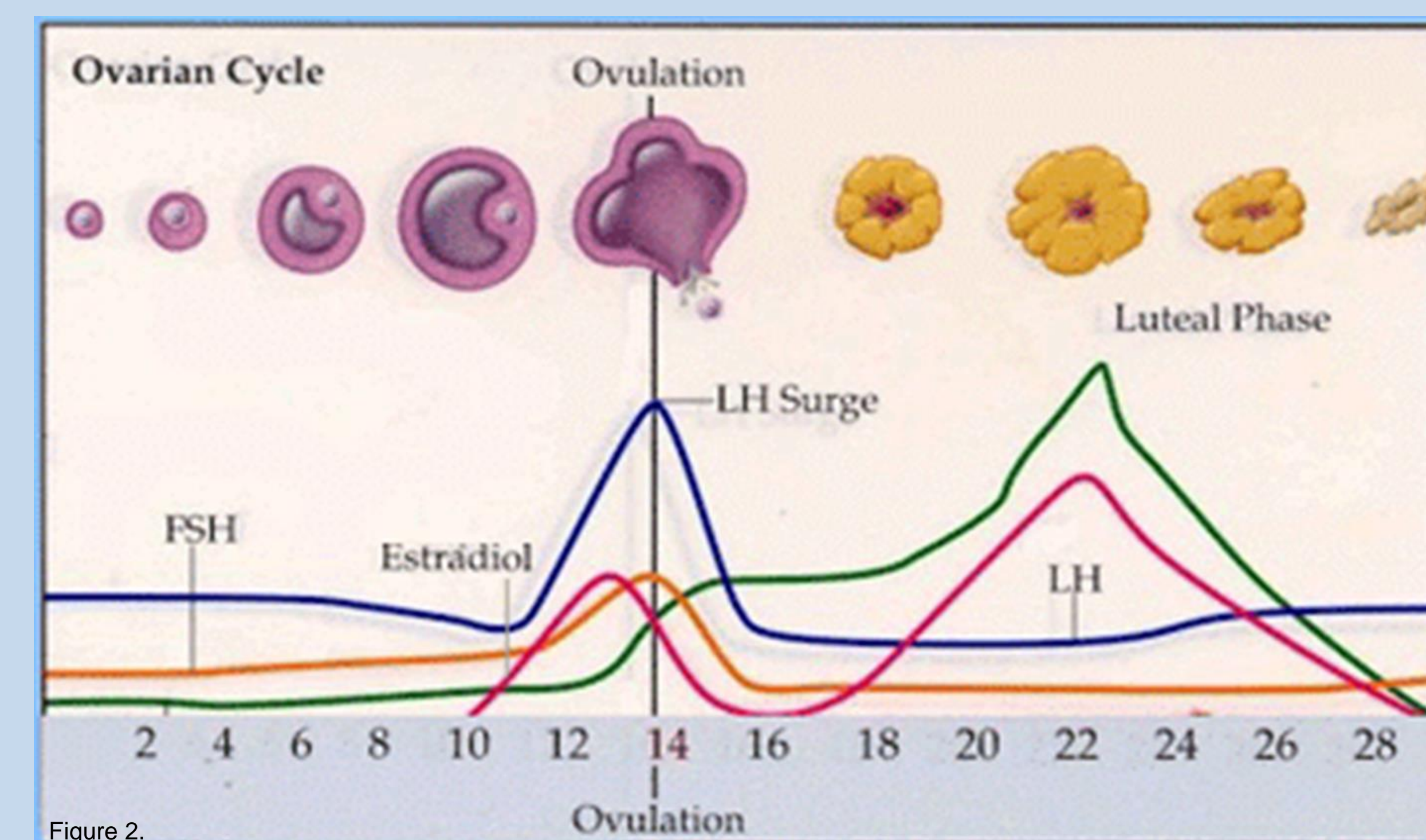


Figure 2.

### Figure List

Figure 1. Dumbbell. "Pngimg.com"  
<https://pngimg.com/image/16411>

Figure 2. Ovarian Cycle.  
<https://thealevelbiologist.co.uk/images/dub1.3.gif>