



## **Survey of the Effects of Changes in Female Sex Hormones on Irritable Bowel Symptoms**

*Principal Author: O.S. Palsson, PsyD*

Menstruation is reported to worsen bowel symptoms and increase pain sensitivity in IBS, and two surveys also suggest that IBS prevalence declines after menopause. This study aimed to examine changes in IBS symptoms associated with events that alter female sex hormones. 276 women (mean age 37.6, range 16-66) diagnosed with IBS by their doctor completed a nationwide internet survey which included questions on diagnostic criteria and severity of IBS, and questions about observed changes in IBS associated with hormone-changing events. Results showed that 70.0% of pre-menopausal participants reported worsened IBS during menses (vs. 14.7% unchanged and 15.3 % improved). IBS symptoms improved during pregnancy twice as often (49%) as worsening (23%). IBS worsened after menopause in 57% of the women (vs. 34% unchanged and 9% improved). However, postmenopausal women were not different from pre-menopausal women in overall IBS severity or abdominal pain. Pain and IBS severity were not significantly affected by hormone replacement therapy in postmenopausal women or by oral contraceptives in premenopausal women. Irregular menses were associated with greater abdominal pain severity but not overall IBS severity. In summary, we found that menstruation is associated with exacerbation of IBS symptoms in the majority of women, as also reported by other investigators. Pregnancy appears to improve IBS temporarily for many women, and oral estrogen and progesterone supplements do not influence IBS symptom levels. We failed to confirm a previous report of improvement in IBS symptoms after menopause.