**ABSTRACT**

**Background:** Premenstrual syndrome (PMS) is characterized by a collection of physical, emotional, and psychological symptoms happened on women, which occur in the luteal phase every menstrual cycle (7-14d prior to the onset of menstruation). Phito-oestrogen has oestrogen like effect, and work as balancer for woman with imbalance oestrogen hormones, such as Premenstrual syndrome (PMS). Isoflavones is cluster that mostly used as Phito-oestrogen and mostly found in soy beans. The aim of this research is to analyze soy milk containing isoflavon consumption related to premenstrual syndrome.

**Method:** The effect of soy isoflavones product: 300 mL soy milk containing approximately 40 mg/day soy isoflavones on premenstrual syndrome severity was studied in one-menstrual cycle, randomized, intervention-controlled, experimental pretest and posttest control group study in thirty-two women (16 women each group) with prospectively confirmed PMS with Shortened Premenstrual Assessment Form (SPAP). Soy isoflavones product: soy milk intervention was consumed in front of the researcher for complete 14 days before the next menstruation (luteal phase) predicted by researcher.

**Result:** After one lutheal phase of soy product containing isoflavones intervention, analyzed with paired sample test ($\alpha= 0.05$, $p=0.916$) resulted no effect to reduce physical and psychological symptoms of premenstrual syndrome. Furthermore, Independent Two-Group Sample Test also showed that there were no effects of soy product: soy milk contained isoflavones to reduce symptoms of premenstrual syndrome ($\alpha= 0.05$, $p=0.189$).

**Conclusion:** Soy product: soy milk contained isoflavones doesn’t reduced physical and psychological symptoms of premenstrual syndrome

**Keyword:** Premenstrual syndrome, soy milk, isoflavones