## 9<sup>th</sup> Yazd International Congress and Student Award on Reproductive Medicine with 4<sup>th</sup> Congress of Reproductive Genetics

## **Poster Presentations**

## P-92

The effects of soy milk enriched with *lactobacillus casei* on the sexual hormone in ovariectomized rats

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**Background:** Loss of ovarian function causes estrogen deficiency, followed by menopause and uterine atrophy.

**Objective:** The aim of the present study was to investigate the effects of soy milk Enriched with *Lactobacillus casei* on the sexual hormone, as hormonal replacement therapy in ovariectomized (OVX) rats.

**Materials and Methods:** Fifty female Sprague Dawley rats were randomly assigned into 5 sets: control, sham-operated, OVX, OVX + soy milk, and OVX + soy milk + *Lactobacillus casei* groups. The soy milk and *Lactobacillus casei* were fed to OVX groups at the concentration of  $(1 \times 10^9 \text{ CFU/ml/day})$  for 4 wk. Finally, the rate of serum estradiol and progesterone was measured using Elisa reader and the data were analyzed using the SPSS statistical software (V. 23) and Tukey test.

**Results:** The results showed a significant decrease in serum estradiol, progesterone, in the OVX group compared to the control and sham groups (p < 0.05). On the other hand, all the treated groups significantly increased the serum estradiol, progesterone, compared to the OVX group (p < 0.001).

**Conclusion:** The results indicated that soy milk Enriched with *Lactobacillus casei* ameliorate the changes arising from ovariectomy on the sexual hormone as hormonal replacement therapy when ovarian hormones are absent.

Key words: Soy milk, Lactobacillus casei, Ovariectomy, Rat.