



## The effect of Pilates exercises at home with vitamin D intake during corona quarantine on inactive young girls

### Poster Presentation

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### Abstract

**Introduction:** Vitamin D has a significant role in health and strengthening the human immune system. Sedentary lifestyle during corona quarantine and vitamin D deficiency have been close. The aim of this study was to determine the effect of 8 weeks of Pilates protocol online class on plasma vitamin D levels and weight loss in inactive young girls. In addition to its function in bone preservation, this vitamin also has various non-skeletal effects. Studies have shown that vitamin D levels in obese people are lower than in lean people due to having more subcutaneous fat, and weight loss is associated with the development of vitamin D levels and the improvement of metabolic diseases.

**Methods:** Thirty young girls participating in online Pilates classes participated in this study voluntarily with informed consent. Subjects were randomly divided into two groups of 15: Pilates and Vitamin D training group and control group and vitamin D. The training group performed the Pilates training protocol for 8 weeks in an online class under the supervision of an instructor and took 50,000 units of vitamin once a week. They received D with food on the weekend.

**Results:** The measurement of vitamin D in the body is the serum level of 25OH vitD3. Correlation test and independent t were used for data analysis at the significant level of  $P < 0.05$ . Vitamin D levels in the selected individuals were such that 11.5% had severe vitamin D deficiency, and 18.4% had a mild deficiency.

**Conclusion:** Eight weeks of Pilates training and vitamin D intake with significant weight loss in sedentary overweight young girls has been associated with corona quarantine, but BMI has not changed significantly. Vitamin D consumption helps maintain the normal state of this vitamin in the body and the development of health in overweight people.

### Keywords

Pilates; Vitamin D; Corona Pandemic; Inactive young girls

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