

The Effects of Menstrual Phases on the Levels of Wellness and Performance in Elite Female Athletes

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This research was carried out to determine the effects of menstrual phases in various stages on female athletes performance capacity (aerobik-anaerobik) and nutrition, life quality and wellness, taking into account their premenstrual and menstrual phases.

22 female athletes in soccer and table tennis voluntarily participated in this study. The demographic data of the athletes, the identification of their well-being and quality of life were taken by the way of scales, before the research. In order to determine the menstrual phase, the progesteron level was determined by blood tests. The scales, applied to determine the complaints during the premenstrual and menstrual phases, were used periodically. Yuhasz formula was used to determine the body composition. During the premenstrual and menstrual periods, the nutrition level was determined by BEBİS software. The shuttle run test was used in determining the aerobic capacity of the participants and the RAST test was used in determining the anaerobic capacity of the participants. For the statistical calculations, the SPSS 14 packet program was used. The averages, t statistics tests, correlation and regression analysis were used for statistical analysis.

Except BMI during menstrual and premenstrual phase ($p < .05$), a significant difference between the measurements of body compositions couldn't be found. When the nutrition in menstrual and in premenstrual phases are compared a difference is not identified. It is identified a significant difference between nutrients which should be taken and nutrients which have been taken ($p < .01$). The caloric value of fat in premenstrual phase shows a difference ($p < .01$), but it is not identified a difference in menstrual phase. A significant difference between the aerobic and anaerobic performance tests during menstrual and premenstrual phases was not identified but significant correlations were found periodically ($p < .01$). As the pain value is decreasing during the premenstrual phase, the total wellness value is increasing ($p < .01$).

Key words: Menstruation, nutrition, performance, quality of life, wellness