



Plasma estradiol was unchanged when exercise was performed at moderate work load either in follicular or luteal phase. Plasma progesterone rose in response to acute exercise during luteal phase but not during follicular phase. Testosterone and prolactin concentrations in blood were not changed from submaximal exercise. However, during luteal phase, mean testosterone level at 30 minute after exercise was significantly lower than mean level at immediately after ending of exercise and lowest mean prolactin concentration among three recordings was detected at 30 minute after cessation of exercise. Increased plasma cortisol concentration in response to exercise was shown only in follicular phase. Significant changes of hormonal levels and other parameters recorded in control subjects at corresponding times as in exercised subjects were not detected.

Hormonal responses to acute exercise in Thai women are consistent with several reports published before. However, inconsistency of the results with some other reports were shown. Dissociation in exercise intensity, training experiences, menstrual phases and some other factors among studied subjects may introduce controversial results in different studies.