

## Abstrakt

**Background:** Energy expenditure of physical activities of Czech women in gravidity is a lowly explorer part of energy metabolism.

**Objective:** The purpose of this study was the estimation of the energy expenditure by physical activities and basal metabolic rate against total energy expenditure in gravidity and to compare our values with values presented in foreign literature.

**Design:** The energy expenditure of physical activities was established in 137 Czech women in gravidity. Women have filled daily activities in the questionnaire. Seven days activities were estimated in a specially designed program GraphPad prism 4. As the values of energy expenditure of physical activities were considered program values calculated multiplication factors (1,035; 1,062; 1,177 for the first, second and third trimester of pregnancy.

**Result:** Sixty-six pregnant women have done the special exercise made for women in gravidity. Women have spent on the average by this exercise 7,50 min/day, 14,88 min/day and 11,01 min/day at first, in second and in third trimester. One hundred twenty-two pregnant women have introduced walking. At first trimester women have burned up on the average 109,87 kcal/day, in second trimester 378,92 kcal/day and in third trimester 661,07 kcal/day.

Twenty-six pregnant women have introduced yoga. At first trimester women have not exercised, in second trimester on the average pregnant women have burned up 54,45 kcal/day and in third trimester 57,20 kcal/day. One hundred thirty-seven women have introduced sleep. At first trimester women from our study have spent by sleeping  $536,36 \pm 50,40$  min/day,  $548,1 \pm 66,6$  min/day in second trimester and  $569,8 \pm 79,10$  min/day in third trimester.

**Conclusion:** Pregnant women have increased the special exercise in pregnancy (min/day) in second trimester of gravidity about 50,40% and in third trimester about 68,12% as compared to first trimester. Pregnant women have increased of walking (kcal/day) in gravidity in second trimester about 244% and in third trimester about 501% as compared to first trimester. Pregnant women have increased of yoga (kcal/day) in gravidity in third trimester about 5% as compared to second trimester. Pregnant women have increased sleep (min/day) in gravidity in second trimester about 15,20% and in third trimester about 43,50% as compared to first trimester.

**Komentář [h1]:** U všech číslic místo , zaměnit za . tedy 109.87, prověřt v dalších částech anglického abstraktu

**Komentář [h2]:** Doporučuji si nechat angličtinu zkontrolovat