

## **Body weight and fat distribution in women using a low-dose oral contraceptive**

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**Objective:** Weight gain is frequently assumed to be a possible side effect of oral contraceptive (OC) use and women who experience an increase in body weight will often stop using this OC. Therefore, a study was conducted to assess the effect of a low dose OC containing 20 µg ethinylestradiol and 150 µg desogestrel (20EE/150DSG) on body weight and body fat distribution.

**Design & methods:** Thirty-one female volunteers with ages ranging from 17 to 42 years were included in this observational, open-labeled, non-randomized study conducted in Russia. All women received 20EE/150DSG (Mercilon®) for at least 6 cycles. A treatment-cycle consisted of 21 days of pill-use followed by 7 pill-free days. Body weight, body mass index (BMI), humeral and femoral fat mass, and abdominal circumference were assessed at baseline and after treatment.

**Results:** No significant effect of the low-dose OC on body weight and BMI was revealed. Average body weight before treatment with the low-dose OC was 59.62 kg (SD 4.38) and after treatment it was 59.02 kg (SD 3.69). Average BMI at baseline was 21.9 kg/m<sup>2</sup> (SD 3.2) and ranged from 19.7 to 32.6, and after treatment with 20EE/150DSG the average BMI was 22.4 kg/m<sup>2</sup> (SD 3.5) and it ranged from 19.3 to 32.8. There was no statistically significant change in fat distribution in 20EE/150DSG users. There were very few side effects during OC use. The side effects that did occur, consisted mainly of breast tenderness, headache, and vaginal spotting. These side effects usually disappeared without additional treatment after 2 to 3 cycles of 20EE/150DSG use. Four out of the 31 women included, discontinued treatment prematurely due to a variety of reasons. No pregnancies occurred throughout the study.

**Conclusions:** The low-dose OC containing 20 µg ethinylestradiol and 150 µg desogestrel has a negligible effect on body weight and BMI. It also does not have any influence on body-fat distribution.