

Effects of placentophagy on serum prolactin and progesterone concentrations in rats after parturition or superovulation.

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In rats that were allowed to eat the placentae after parturition concentrations of serum prolactin were elevated on Day 1 but concentrations of serum progesterone were depressed on Days 6 and 8 post partum when compared to those of rats prevented from eating the placentae. In rats treated with PMSG to induce superovulation serum prolactin and progesterone values were significantly ($P < 0.05$) elevated on Days 3 and 5 respectively, after being fed 2 g rat placenta/day for 2 days. However, feeding each rat 4 g placenta/day significantly ($P < 0.02$) lowered serum progesterone on Day 5. Oestrogen injections or bovine or human placenta in the diet had no effect. The organic phase of a petroleum ether extract of rat placenta (2 g-equivalents/day) lowered peripheral concentrations of progesterone on Day 5, but other extracts were ineffective. We conclude that the rat placenta contains orally-active substance(s) which modify blood levels of pituitary and ovarian hormones.

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