

What causes the temperature to rise?

What causes the thermal shift on the temperature graph?

The rise in Basal Body Temperature (BBT) is due to the **hormone progesterone** which is secreted by the corpus luteum in the ovary after ovulation (release of the ovum). Progesterone maintains the integrity of the endometrium, and if conception occurs it also maintains the pregnancy.

If pregnancy does NOT occur in the cycle:

If fertilization of the ovum has not occurred in the cycle the corpus luteum has a life-span of about fourteen days and starts to regress after 7 days, and will have atrophied completely 14 days after ovulation, at which stage the production of progesterone ceases. Once the progesterone level in the blood falls below a certain point, the temperature (BBT) falls, the lining of the uterus (endometrium) is no longer maintained and is shed as the menstrual period.

If pregnancy DOES occur in the cycle:

However if pregnancy occurs the **corpus luteum persists** and continues to secrete progesterone until the placenta takes over the production of progesterone at 8 to 12 weeks gestation. The raised progesterone keeps the temperature at a higher level. A temperature that stays at the higher level for 21 days or more after the thermal shift is an indication of pregnancy. ([Planning pregnancy – does temperature help?](#))