

What Information Can Be Got From The Temperature Graph?

What information is got from the Temperature (BBT) Chart?

The basal body temperature (BBT) graph can give **three** pieces of information:

1. That ovulation has occurred.
2. That ovulation has not occurred.
3. It can confirm pregnancy

The Temperature Chart can confirm that ovulation has occurred:

Ovulation, (*the release of an ovum*), occurs just once during the menstrual cycle and the ovum lives for 24 hours. If a second ovum is released as in the case of twins, then both are released in the same 24 hour period. By taking her basal body temperature (BBT) each day and marking it on a chart the woman can tell when ovulation occurred. When the ovum is released, the temperature rises above its previous level. It stays at this higher level for about fourteen days, and if the woman does not become pregnant it falls to the original lower level when the next menstrual period begins. It is the change of temperature from the lower to the higher level which shows that the ovum has been released, (Fig. 12-1). The rise in temperature is due to progesterone secreted by the corpus luteum in the ovary after ovulation. The rise in temperature is known as the **thermal shift** and the rules regarding the definition of a thermal shift must be taught by a trained natural family planning teacher.

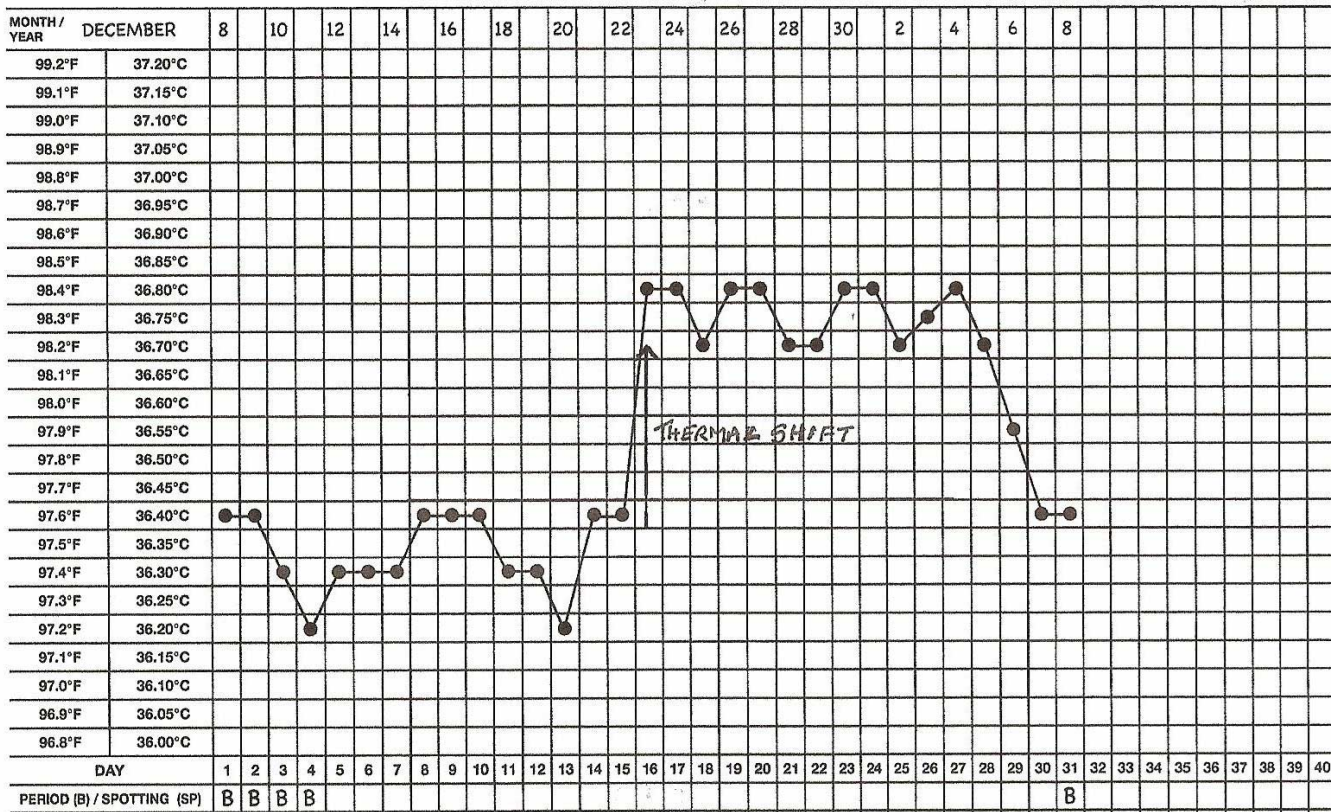


Fig. 12-1; Biphasic Temperature Chart: This temperature chart is annotated for both Centigrade and Fahrenheit thermometers. Each square on the Centigrade scale is equal to 0.05°C, and each square on the Fahrenheit scale is equal to 0.1°F. Day 1 of the cycle, marked on the bottom of the chart, is the first day of menstruation, (marked B). The last day of the cycle (Day 30) is the day before the next menstruation begins which is on Day 31 (marked B). The woman takes her temperature every morning at the same time and records it in the middle of the square. On Day 15 there is a rise in temperature and it remains elevated until Day 30 due to the action of progesterone. **Ovulation occurred** sometime between Day 15 and Day 16. Progesterone maintains the endometrium and as pregnancy did not occur in this cycle the **corpus luteum atrophies** causing a drop in progesterone. The endometrium is no longer maintained and is shed as the menstrual period. The **luteal phase** from Day 16 to Day 30 is usually constant in length (on average about 14 days), and reflects the level of progesterone in the blood and the life-span of the corpus luteum. Day 31 is the first day of menstruation of the next cycle and is Day 1 of the new cycle.

The Temperature Chart can confirm that ovulation has not occurred:

A temperature chart showing a lower phase followed by a higher phase is known as a **biphasic** temperature chart, and indicates that ovulation occurred. The point at which the temperature chart rises to a higher level (*i.e. becomes biphasic*) is called the **thermal shift**. (Fig. 12-1) A temperature chart that shows **no rise** in temperature is called a **monophasic temperature chart** and indicates that ovulation did not occur in that cycle. (Fig. 12-2)

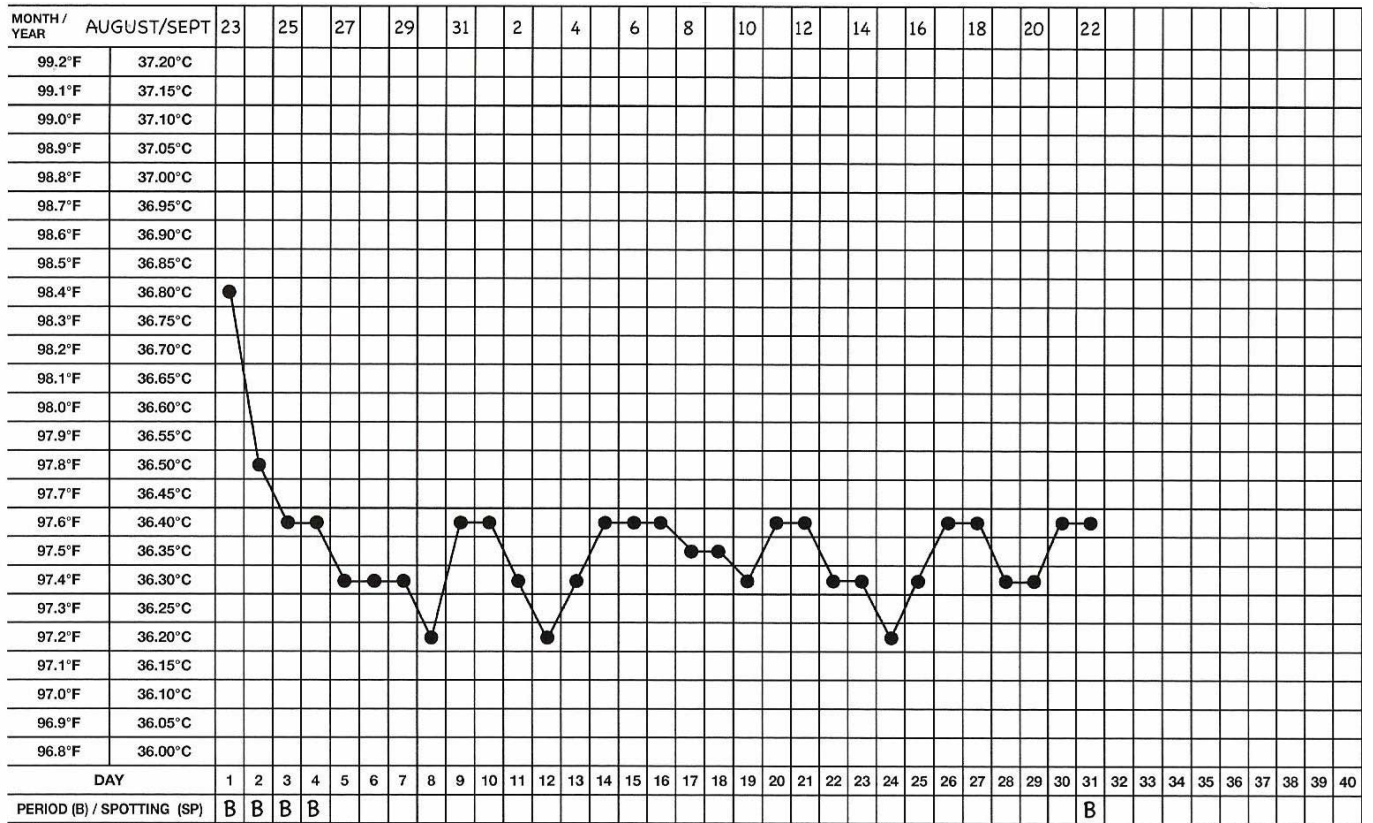


Fig. 12-2; Monophasic Temperature Chart: Day 1 of the cycle marked at the bottom of the chart is the first day of menstruation (marked B). The last day of the cycle (Day 30), is the day before the next menstruation on Day 31 (marked B). After Day 3 the temperature varies between 36.40°C and 36.20°C. However there is no sustained rise in temperature on this chart, and such a chart is called a **monophasic** chart.

What does the monophasic chart indicate?

The **monophasic chart** indicates that this is an **anovulatory cycle**. No corpus luteum was formed because **ovulation did not occur**. Because no corpus luteum was formed, no progesterone was secreted and therefore **no rise** in temperature occurred. (*progesterone causes the temperature rise*). The bleeding that occurs on Day 31 which would be Day 1 of the new cycle is not a true menstruation but a withdrawal bleed due to the drop in hormone levels.

Temperature chart can help confirm pregnancy:

If the woman does conceive in the cycle the higher phase temperature will remain elevated. A higher-phase temperature that **persists for 21 days** or more indicates pregnancy. [The woman may also note a further rise in temperature at the time of implantation, due to the increase in progesterone.](#)

How is the Temperature Chart used to define the beginning of the Infertile Phase after ovulation?

(i.e. the ‘second infertile phase’/ ‘definitely infertile phase’ of the cycle):

The sustained rise in basal body temperature after the thermal shift is due to progesterone from the corpus luteum after ovulation, and confirms that ovulation has occurred. After ovulation the ovum lives for **24 hours** and when the **ovum dies** the **woman is infertile**. The second infertile phase of the cycle after ovulation is called the definitely infertile phase as the woman cannot get pregnant in this phase as the **ovum is dead** and **no further ovulation will occur** in that cycle. According to the **RULES** of the *symptothermal double-check method* of Natural Family Planning (NFP), two fertility indicators, 'BBT' and 'cervical mucus' whichever comes last, are used to define the onset of the 'definitely infertile phase'. The woman must be taught these Rules by a qualified NFP teacher. The definitely infertile phase ends on the day before the next menstrual period, as the first day of the period is 'Day 1' of a new cycle.