

Your Right to Know: The Temperature Sign

The temperature sign is an extremely valuable component of the science and art of natural family planning.

- An elevated temperature pattern provides a positive sign of being past ovulation.
- It provides a highly accurate way to determine both the beginning of the fertile time and the end of the fertile time.
- Twenty-one days of elevated temperatures provide a 99% degree of certainty that you have achieved pregnancy.
- It provides the single best predictor of the date of childbirth, and it takes only a few minutes to take one's waking temperature.
- It can be used by itself, and it can also be used in a cross-checking way with the cervical mucus.

You have a God-given right to know all these God-given realities about the temperature sign.

Here's a brief summary of how this information developed, and in what follows, Phase 1 = pre-ovulation infertility; Phase 2 = the fertile time; Phase 3 = post-ovulation infertility.

In 1877 Mary Putnam Jacobi found that a menstruating woman's temperature rises about mid-cycle and remains elevated until the start of menstruation. She was a feminist of sorts, seeking to prove that menstruation was not a sickness that prevented women from working outside their homes.

A person of great interest to NFP history is Rev. Wilhelm Hillebrand, a German Catholic priest who had a scientific mind and simply wanted to help his parishioners. In the very early 1930s he was aware of the "rhythm" work of Dr. Kyusaku Ogino and Dr. Hermann Knaus and began advising couples according to the Knaus calendar-rhythm formula. Soon he had reports of three unplanned pregnancies. Then he remembered the temperature-based research of Dr. T. H. van de Velde reported in 1926.

In 1935 Fr. Hillebrand collected 76 temperature graphs from 21 women, and from this he invented the Calendar-Temperature method as it would be later called. In this system, a previous-cycle calculation such as "Shortest cycle minus 19" was used to determine the end of Phase 1, and Hillebrand's genius was to insist that elevated temperatures were required to establish the beginning of post-ovulation infertility. He thus eliminated the weakest side of calendar rhythm. (The 19 Day Rule has since been changed to the 21 Day Rule and the 20 Day Rule.)

Over the years, various doctors contributed to our understanding of how to interpret temperature graphs for the start of Phase 3, and they also contributed to increasing the effectiveness of previous-cycle rules for the end of Phase 1. But there was nothing by way of published effectiveness data.

In 1967 Dr. G. K. Doering of Germany made a significant contribution to the science of natural family planning with his temperature-only study published shortly before *Humanae Vitae*. See the translation of his report at <http://www.nfpandmore.org/Doering-1967-100315.pdf>. Of great significance is that his “end-of-Phase 1” rule is based on the temperature pattern. This was unique because previous researchers had used an end-of-Phase-1 rule based on the length of the entire cycle such as “Shortest cycle minus 19.” Doering based his calculation on the first day of thermal shift in previous cycles, thus eliminating variations based on the length of the luteal phase (the days between ovulation and the start of the next menstruation).

In his study, Doering gives us statistics for two different groups— (1) those who engaged in the marriage act both in Phase 1 and in Phase 3, and (2) those who limited their marriage acts to Phase 3. In the first group, he found a 96.9 percent effectiveness rate that included all the marriage acts in what was clearly Phase 2. In the Phase 3-only group, the effectiveness rate was 99.2 percent. This was a temperature-only system with no cross-check from the disappearance of cervical mucus.

Dr. Konald Prem decided in the early 1970s that we could modify the Doering Phase 3 rule into a cross-checking sympto-thermal rule by requiring that the three days of high-level temperatures must be cross-checked by a minimum of two days of mucus drying up to assure that the temperature rise is due to ovulation and not a cold or sickness. When this rule can be applied, it provides the earliest start of Phase 3 of any of the other STM or the mucus-only rules. In NFP International, we call this **Rule K**.

Konald Prem has also given us **an accurate temperature-based rule for estimating the date of childbirth** (EDC). The rule that doctors used almost universally previous to this time was the Naegele rule from the mid-19th century: start with the first day of the last menstrual period, add 1 year, subtract 3 months, and add 7 days—approximately 40 weeks. It works quite well when a woman ovulates about cycle day 14, but it is increasingly inaccurate when ovulation occurs a number of days after day 14, and it is worthless when a breastfeeding mother conceives before she has her first period.

The Prem rule uses the rise in post-ovulation temperatures. Take the first day of elevated post-ovulation temperatures, subtract 7 days and add 9 months. In a mid-Seventies article in a medical journal, he wrote that this is the most accurate way to predict the EDC, more accurate than much more elaborate and expensive procedures such as “estimation of uterine size by palpation or measurement, the dates of quickening and engagement of the fetal head and auscultation of the fetal heart tones with the head stethoscope...” or “biochemical and biophysical methods such as estriol, ultrasound and phospholipids...” (Konald A. Prem, “Assessment of Gestational Age,” *Minnesota Medicine*, September 1976, 623). For examples of how this knowledge has helped to avoid a premature induction of labor and to require an insurance company to cover the expenses of a premature baby, see page 70 of our manual, *Natural Family Planning: The Complete Approach*.

Breastfeeding mothers who conceived many months postpartum and before their first menstruation have expressed great gratitude for the Prem temperature-based rule.

Other benefits of recording temperatures are found when women experience **breakthrough bleeding** and **irregular shedding**. These are also described in our NFP manual. Among many married couples, a significant advantage of using the temperature sign is that **it gets the husband involved**, and this can be very helpful.

The weakness of the temperature sign is that when ovulation is significantly delayed, as happens during breastfeeding infertility and during premenopause, it does not signal the start of Phase 2. However, it does confirm continued non-pregnancy as long as the temperatures remain low. A second weakness, if it can be called that, is that it is so easy to take and record daily temperatures that some women ignore their mucus signs. I once heard Dr. John Billings cite this as a reason why he switched to a mucus-only system.

In NFP International we strongly recommend using both the mucus and the temperature in a cross-checking way.

We know that the elevated temperature reflects elevated levels of progesterone that is secreted by an ovarian follicle, the corpus luteum, after ovulation. I do not know *why* this hormone causes a woman's waking temperature to rise, but it is a God-given reality.

And you have a God-given right to know these realities.

John F. Kippley, August 11, 2013