

The Fertility Tracker Method (FTM)

The Fertility Tracker Method (FTM) is a method of Natural Family Planning (Fertility Awareness). Using this method, women can distinguish their infertile from fertile days within their menstrual cycle with an accuracy of over 99%¹. In the Fertility Tracker Method, a fertility tracker is used such as the Lady-Comp. Via an integrated highly sensitive temperature sensor, the user measures her basal body temperature daily and documents her menstruation as needed. The fertility tracker automatically stores the data and independently evaluates it using an integrated algorithm to narrow down the fertile window².

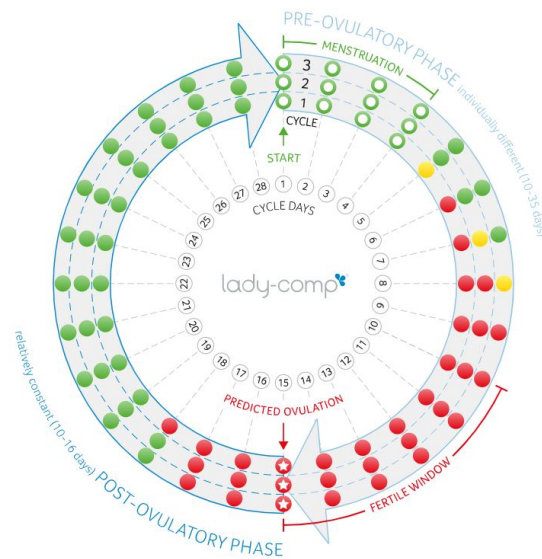
The first fertility tracker was developed by Dr. Hubertus Rechberg back in 1986. The company, Valley Electronics, still produces and sells fertility trackers worldwide. Currently, the 6th generation of cycle computers is available with the current Lady-Comp.

Fertility Tracker Algorithm

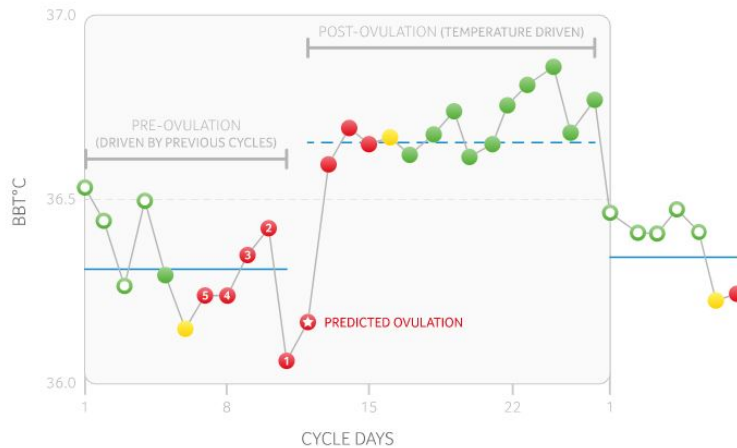
The Fertility Tracker Method is based on the logic of existing manual methods of natural family planning such as the Calculothermal Method* or the Symptothermal Method and complements them with an integrated self-learning algorithm that is designed to detect significant differences in basal body temperature (BBT) as well as variables in cycle length.

While the calculothermal method uses a rigid calculation concept (the beginning of the fertile period is calculated on the basis of the shortest cycle minus 18 days, while the beginning of the infertile period is determined on the basis of temperature, see also Knaus-Ogino method³), FTM enables individual calculation of the fertile days after menstruation on the basis of previously measured personal cycles.

Thus, the Fertility Tracker Method does not use a blanket calculation formula, but learns to evaluate the individual cycle more precisely through the integrated algorithm and continuous data collection. At the beginning of the application, the method assumes (due to the lack of sufficient data) that all days after menstruation could be fertile in the first cycles (see figure). These fertile days are continuously adjusted individually with each further cycle and are increasingly narrowed down by the learning algorithm.

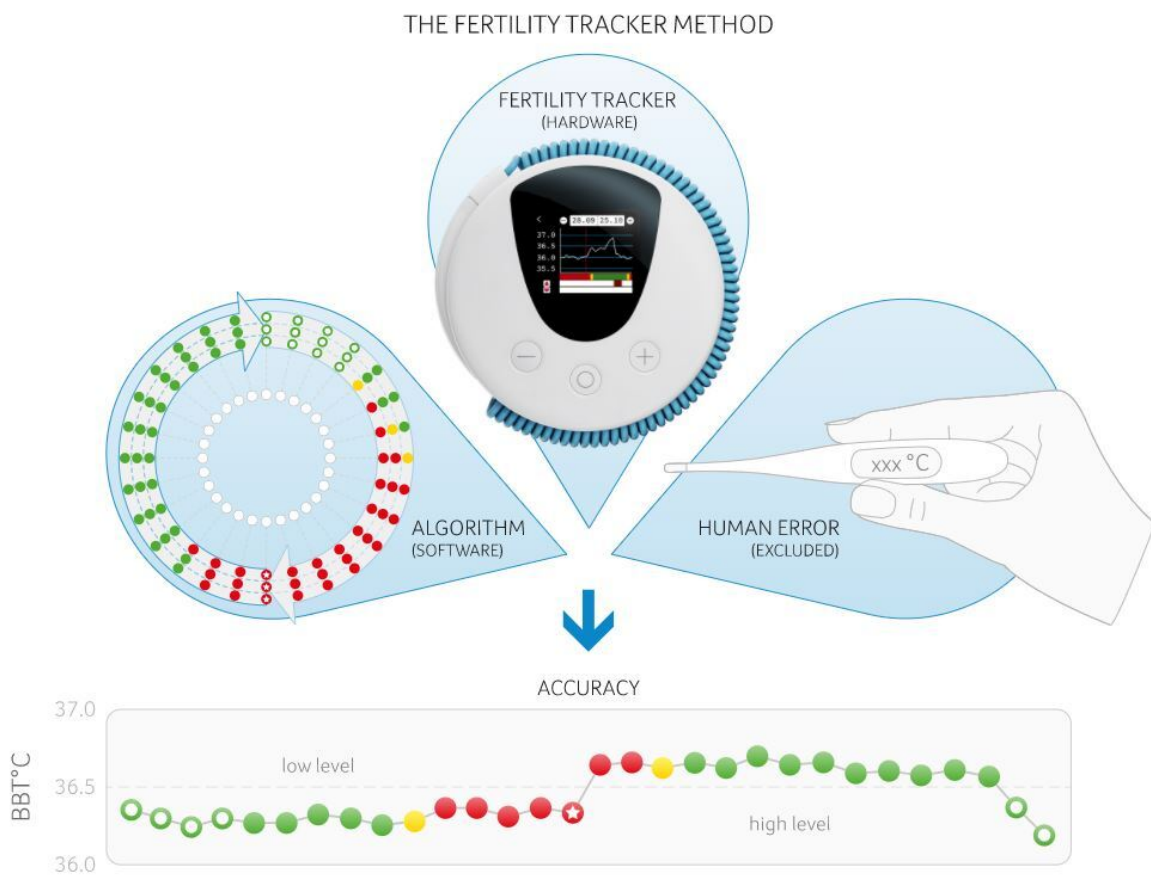


Necessary for the calculations of Lady-Comp are the basal temperature data from the daily measurement as well as the determined significant change of the basal temperature after ovulation. The hormone, progesterone, which is secreted by the corpus luteum, has a thermogenic effect that causes the basal body temperature to rise by approximately 0.2-0.3°C after ovulation⁴ (see figure). This temperature increase is a retrospective indication that ovulation has occurred with a very high probability^{5,6}. One day after the significant increase in BBT, the chance of successful fertilization is only 0.8%, two days after the increase it is 0.4%⁷. Based on this data, the algorithm can distinguish the infertile from the fertile days with an accuracy of over 99%. Information provided by the user on the beginning and end of the menstrual cycle is also included.



Advantages of the Fertility Tracker Method

A disadvantage of the established methods of natural family planning is the reading and interpretation of the measured data resulting in human rounding and interpretation errors^{8,9} as well as the use of non-uniformly configured measuring devices¹⁰. The Fertility Tracker Method combines the measurement of basal body temperature and the evaluation of individual fertility in one device, which largely eliminates human as well as technical inaccuracies.



In summary, the Fertility Tracker Method consists of four elements:

- The recording or documentation and learning of new data (the basal body temperature measured daily, the start and end of menstruation, and the historical cycle data collected) through a fertility tracker.
- The evaluation of the statistically significant temperature increase after ovulation.
- The statistical calculation of infertile days at the beginning of the cycle, based on the earliest significant temperature rise of previous cycles.
- The categorical avoidance of human input and interpretation errors by combining hardware (thermosensor) and software (algorithm) in one device (fertility tracker).

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You can also find more information at: lady-comp.com

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