Natural Cycles

Body of Evidence

Since its introduction in 2014, Natural Cycles has continuously conducted scientific research in collaboration with leading experts and institutions. The results from these studies demonstrate the effectiveness and value of Natural Cycles, all of which have been published in peer-reviewed journals or presented at leading conferences around the world.

Effectiveness

Research has shown Natural Cycles to be an effective natural method of birth control, demonstrating consistent effectiveness rates.

98%
Effective with perfect use

93%
Effective with typical use

1 Feasibility Study (2015): Examining the feasibility of Natural Cycles as a method of birth control.

Small study, comparing results from women using Natural Cycles alone and those using Natural Cycles and LH tests and comparing these results to published data on the correlation between LH tests and ultrasound to detect ovulation.

The study showed that the automated analysis of basal body temperature (BBT) can successfully detect a woman's ovulation and fertile window (i.e. comparable to established methods: LH tests and ultrasound).

The research was conducted in collaboration with Dr. Angelika Hirschberg/ Karolinska Institutet, Stockholm. Published in peer-reviewed journal: *The European Journal of Contraception & Reproductive Health Care.*

2 Pilot Effectiveness Study (2016): Contraceptive Effectiveness.

A study on data from 4,054 women, evaluating the effectiveness of Natural Cycles as a method of birth control.

The results showed a Pearl Index of 7.0 for typical use and a method failure rate of 0.5%, indicating an improvement in effectiveness vs. established/ manual FABMs.

This research was conducted in collaboration with one of the most recognized medical experts in Contraception (Prof. Kristina Gemzell-Danielsson/ Karolinska Institutet, Stockholm). Published in peer-reviewed journal: *The European Journal of Contraception & Reproductive Health Care.*

3 Effectiveness Study (2017): Real World Contraceptive Effectiveness.

The study included data from 22,785 women, making this one of the largest studies ever performed in natural contraception. Despite the much larger cohort investigated, the results of the pilot study were confirmed, showing...

> **...a pearl Index of 7.0 for typical, and a Pearl Index of 1 for perfect use. These results indicate a superior effectiveness relative to other (short-acting) non-hormonal and barrier methods of contraception.**

This study was conducted under guidance from Prof. James Trussell of Princeton University, as well as Prof. Kristina Gemzell-Danielsson of Karolinska Institutet. Published in peer-reviewed journal: *Contraception.*

User Characteristics and Behavior

The effectiveness of Natural Cycles is influenced by user behavior, particularly the ability of the user to measure BBT on a regular basis, and to either abstain from sex or use condoms on fertile days. Other factors, such as different sleep habits, as well as cycle length and regularity, have been shown not to have a significant impact on effectiveness. We therefore dove deeper into subcohorts to better understand which women are likely to be most successful on Natural Cycles—both for preventing and planning a pregnancy.

4 (2019) Real World Evidence Study investigating the association between previous contraceptive choice and the effectiveness of Natural Cycles.

The study showed that the typical use Pearl Index of Natural Cycles was the lowest (at 4) for those women who had been using condoms prior to switching to Natural Cycles, making these users the most successful users of the product.

The vast majority of Natural Cycles users were previously on similarly or less effective methods of contraception, suggesting that...

> **...use of Natural Cycles for contraception may reduce the population-level rate of unintended pregnancy in these cohorts of women.**

Again we collaborated with Prof. James Trussell of Princeton University and as Prof. Kristina Gemzell-Danielsson of Karolinska Institutet. Published in peer-reviewed journal: *BMJ Open.*

PREVIOUS METHODS

41%
of users switched to Natural Cycles from hormonal contraception, primarily from the pill.

59%
switched to Natural Cycles from non-hormonal methods, primarily the condom.

5 (2019) Prospective observational study investigating short- and long-term effect of hormonal methods vs. Natural Cycles on fecundity.

The study investigated the effect of previous use of hormonal contraception compared to the use of Natural Cycles on women's short and long-term conception rates, and time to pregnancy.

The results show that women who were previously using Natural Cycles as a method of birth control and who then switch to planning a pregnancy, conceive faster than women previously using hormonal contraception (85 days vs. 146 days to pregnancy).

These results highlight the value of Natural Cycles in providing couples with personalized information on ovulation and the fertile window, allowing them to time intercourse and achieve a faster time to pregnancy (vs. women coming off hormonal methods).

The long-term cumulative pregnancy probability (after 12 cycles) was the same for the two groups of women.

The study was conducted in collaboration with fertility expert Dr. Jan Holte, Uppsala University Hospital University, as well as Prof. Kristina Gemzell-Danielsson of Karolinska Institutet.

Published in peer-reviewed journal: *The European Journal of Contraception & Reproductive Health Care.*

6 (2019) Study showing that different sleep habits have no significant impact on contraceptive effectiveness.

The findings suggest that difference in effectiveness outcomes between sleep habit cohorts can be better explained by population differences in age and behavioral factors.

The study results were presented as a poster at the ACOG Annual Clinical Meeting.

7 (2018) Study showing that different cycle lengths and cycle regularity have no significant difference in contraceptive effectiveness.

The study results were presented as an abstract at The 15th Congress of the European Society of Contraception and Reproductive Health.

Importance of Individualization

Natural Cycles has one of the largest databases of women's menstrual cycles and BBT. By leveraging this dataset for physiological research, we were able to show a wide variation in cycle lengths, thereby busting the myth of the 28-day cycle and ovulation occurring consistently on day 14. These variations in an individual woman's cycle highlight the importance of Natural Cycles' personalized fertile window identification, as well as the need to track BBT, as cycle dates alone are not sufficiently informative to prevent pregnancy.

Out of **600.000** cycles, only **13%** are 28 days long

8 (2019) Real-world menstrual cycle characteristics of more than 600,000 menstrual cycles show that only 13% of women have the text-book 28-day cycle.

The findings show an average cycle length of 29.3 days, with only around 13% of cycles being 28 days in length.

The study also demonstrated that ovulation does not occur consistently on day 14, highlighting the importance of tracking other cycle measures such as BBT, as cycle dates alone are not informative.

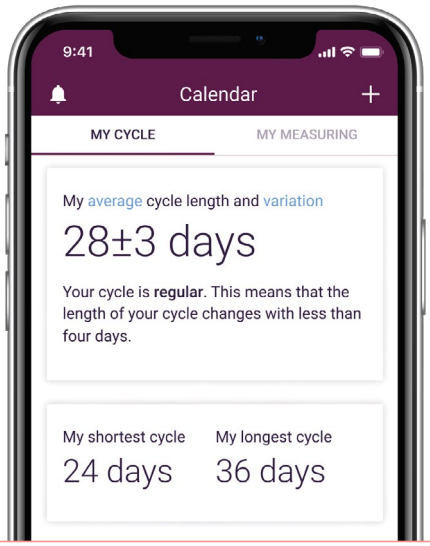
The study was conducted in collaboration with Prof Joyce Harper, UCL Institute for Women's Health. Published in peer-reviewed journal: *Nature Digital Medicine*.

9 (2019) Advantages of determining the fertile window with the individualised Natural Cycles algorithm over calendar-based methods.

Fertility awareness-based methods of contraception rely on correct fertile window identification. This study compared Natural Cycles' accuracy of fertile window identification against the Calendar Method.

> **The results showed that the individualized Natural Cycles algorithm has a higher accuracy of determining the fertile window than static, calendar-based methods.**

This research was conducted in collaboration with Prof. Kristina Gemzell-Daniel-sson/Karolinska Institutet, Stockholm. Published in peer-reviewed journal: *The European Journal of Contraception & Reproductive Health Care.*



Find out more at www.naturalcycles.com
Or reach out at info@naturalcycles.com

Natural Cycles