



## Q&A Elina Berglund

# Physics to fertility

*Swedish particle physicist Elina Berglund developed a contraception algorithm, based on tracking ovulation rates, while working on the Higgs boson at CERN, Europe's particle-physics laboratory near Geneva, Switzerland. Today she lives in Stockholm, where she runs a company that markets and sells her Natural Cycles app.*

### What led you to develop Natural Cycles?

I wanted to give my body a break from hormonal contraception, because my now-husband Raoul and I wanted to have kids in a few years. I couldn't find any effective natural alternatives; however, I learnt that analysis of body-temperature variations can pinpoint fertility. From this, I developed my own algorithm. Both the Higgs discovery and our marriage took place in 2012. While on our honeymoon, Raoul suggested others might pay to use an app based on the algorithm. We launched Natural Cycles in 2013 and moved to Stockholm in 2014.

### How does Natural Cycles work and how effective is it?

Women have long used fertility-awareness-based contraception methods, but they aren't very effective because ovulation can be difficult to predict. Natural Cycles users input daily temperature measurements. They can also add menstruation dates and hormone-test results. The algorithm returns green or red days, telling users whether they need to use protection. Our recently published large study found that, taking human error into account, 7 out of 100 women per year will get pregnant while using Natural Cycles, compared with 9 in 100 for the pill and 18 in 100 for condoms.

### Is Natural Cycles just for contraception?

It can also help to reduce time to pregnancy

for women trying for a baby. When we started trying, I got pregnant first time, partly because I knew exactly when I was ovulating. Our daughter Alba is now three-and-half.

### Is Sweden a good place for scientists and start-ups?

Scientists in Sweden enjoy good salaries and funding, and have a lot of research freedom. It's a modern and tech-savvy society, which is especially good for start-ups. We started off in Switzerland, and when we had investment rounds we would have to get documents printed and go to a notary's office, whereas in Sweden things are quicker and less bureaucratic, and more can be done online. Things like transportation work well and it's a good climate for innovation. It's very family-friendly because you get 16 months of parental leave and the price of day care is minimal.

### What's the biggest downside?

In December it gets dark around 2.30 p.m.. It can make you feel as though you want to hide until the sun comes back out. People go out and interact with others less. On the plus side, it's lovely on the first warm day of spring when everyone is out in the sun with an ice cream. ■

BY NIC FLEMING

This interview has been edited for clarity and style.