# Polish Gynecological Society



Recommendations of the Polish Gynecological Society Expert Panel on Natural Family Planning methods used as contraception.

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# Recommendations of the Polish Gynecological Society Expert Panel on Natural Family Planning methods used as contraception.

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The Panel of Experts held a meeting on 14 November, 2010 and after analyzing literature and on the basis of their experience, the experts herby announce their recommendations.

### Introduction

The primary function of contraception is prevention of pregnancy that is unwanted due to numerous reasons, chief among them:

- age (too young or too old)
- economical (absence of means to maintain the desired financial status of the family)
- health (possible deterioration of the woman's health)
- genetic (possibility of giving birth to a child with an incurable genetic disease)
- worldview (no desire to ever start a family)
- rape

The fundamental, though not exclusive, criterion in the evaluation of contraceptive methods is their effectiveness due to the fact that the direct result of non-effective methods is involuntary pregnancy, which will either be accepted with time or terminated. Tertium non datur. Natural contraceptive methods mean sexual abstinence in the fertile phase of a woman's cycle. The Pearl index is a universally acknowledged value which rates the effectiveness of birth control methods (a number of pregnancies per 100 couples using a particular contraceptive method in the course of one year). The lower the Pearl Index will be, the higher the effectiveness.

In natural contraception methods the Pearl index varies from 0,6 to 25. WHO does not include natural family planning methods into the group of contraceptive methods. Natural contraception methods ought to be recommended to:

- women who, due to their worldview, do not accept any other methods of contraception
- when there exist medical contraindications or unwillingness to use other, particularly hormonal, contraceptive methods
- women who would accept the pregnancy if it happened

Sexual abstinence, lasting from 9 to 18 days, is an obvious disadvantage of natural family planning methods as it limits the satisfaction and spontaneity in a relationship during the phase when the woman's libido increases.

Coitus interrupts, which has a Pearl index of 8-17, is often wrongly classified as natural family planning method.

There are numerous methods which identify the fertile days in a woman's menstrual cycle.

# Natural family planning methods

### Calendar – based (Ogino – Knaus) method

In order to evaluate the fertile phase, a woman must know how long her longest and shortest cycle lasted. The first day of the fertile phase is identified by subtracting 20 from the shortest cycle and the last fertile day by subtracting 11 from the longest cycle. This method is classified as highly unreliable, with a Pearl index of 20-24.

## **Thermal method**

Daily accurate temperature measurements, oral or vaginal but always taken at the same place, is checked immediately upon waking. In the second phase of the cycle, after the ovulation, the temperature increases on average by 0,4 C. The forth day of the temperature increase marks the beginning of the infertile days. Charts help to interpret the temperature measurements results. The sexual abstinence period ought to last for about 8 days. The Pearl index for this method is 1-2.

#### **Billings mucus observation method**

This method is based on mucus observation. Each day the mucus is checked for its quantity, stickiness, glitter, clearness and viscosity. Ovulation occurs on the day when the mucus is most abundant, slippery and stretchy. The abstinence period is 4 days before and after the ovulation. The method is characterized by significant divergence in the Pearl index (1-12).

### Thermal and mucus observation method

This method is a combination of temperature measurements and mucus observation.

#### **Tests methods**

In order to identify the fertile and infertile days, tests are available in drug stores, for example:

- PC 2000 optical tester for mucus and saliva observation
- Clear Blue luteinizing hormone test in urine
- Persona luteinizing hormone and progesterone test in urine. In the first cycle the test needs to be taken 16 times, in the following cycles: 8 times.

Numerous factors influence the results, chief among them: inflammation of the vagina, illness and medications. The Pearl index for all these methods varies from 4 to 6.

#### Computer evaluation of temperature measurement

Computer analysis of female cycles, combined with basal body temperature measurements, provided a simple means to monitor the changes in the cycle, what in turn led to effective application of natural family planning methods for contraceptive purposes. In Poland the following devices are available on the market:

- BIOSELF analyzes everyday basal body temperature and, combined with the Calendar method, provides effective pregnancy prevention, 95-98% accurate (Pearl index 2-5)
- LADY-COMP, BABY-COMP and PEARLY medical devices for highly accurate tracking fertile and infertile days based on everyday temperature measurements (Pearl index 0,6-0,7). Each device uses sophisticated statistical gathering methods, as well as a comprehensive database generated by observations in changes of BBT. Based on over 1 million cycles during 25 years of production. During the first 2-3 cycles the devices are "learning" to identify fertile days using an algorithm created on the basis of a validation group. Basal body temperature is measured every day in the mouth, directly upon waking, with a special sensor which is an integral part of the device. The main task of

these cycle computers is to accurately predict the fertile phase and its prediction for 6 days before the ovulation, taking into account 5 days of spermatozoon vitality. Due to a mathematical model which can learn and adapt to the user, the results are not influenced by changes caused by irregular lifestyle, infections, stress or lack of certain measurements. Medical survey conducted in Poland in 2010 on a group of 510 women who had been using the devices for over 13 months, confirmed the effectiveness of this contraception method with a Pearl index of 0,64. The same highly accurate and low Pearl index (0,6-0,7) results were obtained in medical research conducted in Germany.

Polish Gynecological Society Expert Panel concludes that women who chose sexual abstinence during the fertile phase of the cycle to prevent unplanned pregnancy, will be able to identify the fertile phase of the cycle with the highest precision and accuracy using cycle computers analyzing BBT and cycle lengths.

The recommendation of the Expert Panel presents the current state of knowledge on the subject matter. Polish Gynecological Society Expert Panel retains the right to update and/or re-evaluate the recommendation upon access to new and crucial scientific reports and findings regarding the matter in question.

The Expert Panel declares no conflict of interests in creating the present recommendation.

Signed by:

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