# THE OVULATION METHOD OF BIRTH REGULATION

The Latest Advances for Achieving or Postponing Pregnancy—Naturally

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MERCEDES ARZÚ WILSON

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MERCEDES ARZÚ WILSON

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To all the members of my family who gave me their untiring support and encouragement, and to all the scientists and teachers who have voluntarily given their time and effort to perfect this method and to spread this knowledge to every woman in the world.

## **Foreword**

Lyn and I are pleased to place on record the deep affection, respect and gratitude we feel towards Mercedes Wilson, and to acknowledge her special place in the history of the development of the Ovulation Method. When she was first introduced to it she felt that this knowledge should be in the possession of all adolescent and mature women, so that they need no longer regard their reproductive physiology as incomprehensible or frightening. She was able also to see that the Ovulation Method could be of inestimable help in the solution of problems of fertility regulation in the developing countries-she was thinking of her native Guatemala particularly-and she devised a recording method which we immediately adopted because it provides an international language by which even totally illiterate women can record their cervical mucus observations. Additional impetus was given to her work by the widespread recognition of the multiple harmful effects which have followed the implementation of programs of contraception and abortion, and of the fact that the programs were often implemented without proper concern for the dignity and freedom of the individuals concerned. Sooner or later it will be acknowledged that the only truly successful solution to these problems will be found in the use of a natural method, the knowledge being provided by a competent teacher who both accepts, and defends, the right of the husband and wife to use or not to use it, according to their own estimates of their needs.

It is a biological fact that a woman is incapable of conceiving most of the time. In a fertile cycle she has a fertile phase of one or perhaps several days. If there is no intimate sexual contact with a male during this fertile phase she will not conceive—that fact is self-evident. Some people have been reluctant to accept sexual discipline, but gradually it has come to be understood that self-control is necessary to the achievement of psychological maturity, and that at the heart of loving is generosity towards the beloved person. Natural family planning fosters communication and cooperation between the husband and wife, and thereby promotes the development of those virtues which are essential to the stability and happiness of marriage. If family life is secure and adult people have learned to be unselfish and thoughtful, the whole of society will benefit—there will gradually occur the relief of poverty, care of the oppressed and handicapped and old people, the correction of injustice, and perhaps peace will come at last.

The Ovulation Method is the most modern of the natural methods of family plan-

ning, and one which has been the subject of thorough scientific research. It remains for it to be taught correctly by teachers who are motivated to its success, so that they will teach with care, confidence and that encouragement which is engendered by deep concern for the true welfare of those who seek their assistance. The method is effective if the teachers meet these requirements and the husbands and wives are prepared to make an effort to succeed.

I hope that this book will be widely read. It is the story not only of the Ovulation Method itself, but of a very remarkable woman who has shown extraordinary fortitude and endurance in her efforts to assist the under-privileged. Her zeal is that of a person who stamps society with her own mark, who sees and answers a need; like all those people who have effected lasting good in human affairs she has remained constant in the face of jealousy and uninformed criticism. The book is also a tribute to those wonderful people who have responded to her inspiring leadership and who will help her continue her work far into the future.

#### J. J. BILLINGS. PRESIDENT. WOOMB INTERNATIONAL

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## **Preface**

From 1968 to 1970, because of my husband's involvement in oil exploration, my family and I lived in Melbourne, Australia. It was there, in 1969, that I first heard of the Ovulation Method of natural family planning—from a small news item in the back pages of the Melbourne paper, *The Age*. The item described a new natural method of birth control, developed by a Melbourne husband-and-wife team, Dr. John Billings and Dr. Evelyn Billings, and told of classes that were held on the subject. My husband and I attended one of the classes, and what we learned there revolutionized our thinking and our way of life.

At the 45-minute lecture, Dr. Evelyn Billings outlined the Ovulation Method, explaining that it is based on the fact that during the days a woman is capable of conceiving, she always has a particular mucous secretion from the glands of the neck of the uterus that she is able to recognize. Since the mucous secretion heralds the approach of ovulation, through their decision either to have intercourse or to abstain from it during the fertile period, a couple is able to achieve or to postpone pregnancy without having to use oral or mechanical contraceptive devices of any kind.

In the weeks following that meeting, my interest in the method grew, both for personal reasons and because I saw that the method would be of great value to people in my native country, Guatemala, and in other developing countries as well.

At the end of 1970, while awaiting our resident visa for the United States where my husband had been transferred, we spent a few months in Guatemala, where I started teaching the Ovulation Method to my friends and relatives. I also gave a formal presentation of the method at a meeting of the Christian Family Movement in Guatemala City. It was the largest meeting ever of the organization, a fact that made me aware of the great interest people had in natural methods of family planning.

Soon after, I was asked to teach in various parts of Guatemala. I agreed to do so, deciding to concentrate on the poorer parishes on the outskirts of Guatemala City. In the beginning, I was mainly interested in promulgating the Ovulation Method to the poor, but later, I became interested in disseminating information about the Ovulation Method to everyone I could reach.

The response to the lectures I gave was enthusiastic. One of my most vivid memories is that of a parish priest who stripped the altar to turn his church into a lecture room. He had gathered together about 100 people, mostly women, some children, a few men. We lectured to these people as a group and then divided them into small

groups to make it easier for them to ask questions more privately. We were happy to find out, from the questions and comments, that the people easily understood the method.

From experience gathered in that and other lectures, effective methods of teaching people of little education and sophistication were devised. I developed a simple method of charting data about the menstrual cycle (see page 37) that could be used by people unable to read or write, a group that makes up a large percentage of the world population.

In 1970 it was arranged that the Billingses would lecture in Guatemala to the general public, and also attempt to make doctors aware of this new method of family planning. The Billingses lectured extensively throughout Guatemala, in other Central American countries, and in Mexico. The interest in these lectures was remarkable. People came in hundreds—and sometimes in thousands—to hear them.

After their Central American tour, the Billingses came to Washington, at the invitation of Aid for International Development and the Human Life Foundation, to meet in person and by telephone conference with various members of the scientific community who were interested in promulgating various methods of birth control. Thus the Ovulation Method came to the attention of a wider scientific community. During this visit to the United States, the Billingses also lectured to a medical group in Los Angeles sponsored by the Archdiocese. In 1972, they again lectured in the United States, and in 1973 they returned to Washington to attend a conference sponsored by the Human Life Foundation.

In 1971 my family and I moved to Covington, Louisiana, a suburb of New Orleans, where we now live. Soon after settling in, I resumed my work with the Ovulation Method, giving bimonthly lectures and quarterly workshops to train teachers. In addition to people from Louisiana, the audiences included couples, individual women, and doctors from other states who returned to their towns and cities to teach and train others. Soon requests for me to lecture poured in from all parts of the United States, Canada, and Latin America. To make the most of my time, I finally was forced to confine my work to teacher-training courses rather than to lectures, which aroused interest but made no provision for follow-up.

On January 27, 1977, the World Organization of the Ovulation Method—Billings (WOOMB) was inaugurated at a meeting in Los Angeles by a group of teachers of the Ovulation Method from Australia, Canada, the United States, Latin America, and the Far East. The main objective of WOOMB was set forth as the dissemination of accurate information about the Ovulation Method to every woman of child-bearing age throughout the world.

In June, 1977, the United States branch of the organization was established. The United States branch was divided into regions, and it was planned that quarterly teacher-training workshops would be held in each region and that workshops would be well advertised in newspapers and other media.

At this writing, the Ovulation Method has spread to 100 countries around the world and there are several hundred trained teachers of the Ovulation Method in the United States. The number of women who have been taught the Ovulation Method is undetermined at the moment, but there are plans underway to gather and evaluate statistics from all over the United States. (L.A. study "Time Magazine.")

The organization of WOOMB into an international body with a U.S. branch has enabled promoters of the Ovulation Method to present their philosophy and goals accurately, and it has encouraged uniformity of teaching. With national and international representation, WOOMB hopes to qualify for funds from the U.S. government and international organizations that would help provide the volunteer teachers with the literature, and audiovisual equipment needed to teach the method efficiently.

Such is the present state of the Ovulation Method. It is my fervent hope that this book will spread the good news of a natural, simple, safe and effective method of family planning that can be used by all women.

Mercedes Arzú Wilson, President, WOOMB Covington, Louisiana

### Introduction

The Ovulation Method was developed because of a pressing need to improve on the Rhythm (Calendar) and Temperature methods of Natural Family Planning. Dr. John Billings and Father Maurice Catarinich, working in Melbourne during the 1950s, had extensively appraised these two earlier methods with particular emphasis on the thorough investigation of unplanned pregnancies. This appraisal included the testing of all possible modifications and combinations of the two methods and the formulation of optimum rules for their application. These workers concluded that the Rhythm Method, although applicable for long periods of time by those women who had regular menstrual cycles, was bound eventually to fail, particularly during periods of stress or at the onset of irregularity before the menopause. The Temperature Method had the merit of identifying the time of ovulation in each cycle and was therefore independent of chance variations in cycle lengths. However, this information was supplied in retrospect so that only the late safe days of the luteal phase were identified and no information was provided on the many days of infertility which preceded ovulation. This deficiency was particularly serious in women with long irregular cycles, in lactating women and in women approaching the menopause. When I first met Dr. Billings and Father Catarinich in 1963 and saw their data, I was most impressed by its extent and the thoroughness with which it had been appraised. They had hundreds of temperature charts showing every type of normal and abnormal menstrual cycle which had only recently been documented by laborious hormone assays on a few women. They had records extending for years on individual women as they approached the menopause, in an attempt to identify subtle changes which might indicate recommencement of ovarian activity after months of amenorrhea. They had tested every possible method of defining the temperature shift and had tried every possible rule for determining when intercourse could be safely resumed in an effort to decrease the failure rates. By 1963 they had concluded that neither the Rhythm Method nor the Temperature Method, nor a combination of the two could provide an accepted degree of safety in return for the restrictions imposed. The methods were inelegant because they did not identify the majority of the days of infertility which the couple could be using for intercourse. Therefore, they began to investigate the possible use of cervical mucus as an indicator of the days of fertility and infertility. This symptom was already well recognized by gynecologists and endocrinologists, but the question was whether it could be identified with reliability by the

women themselves. It was at this stage that Dr. Lyn Billings became an essential member of the team. She, together with her female colleagues, found that they could describe in minute detail the cyclical changes in mucus secretions and in the sensations they felt in the vaginal area, and showed that these changes were closely related to the underlying ovarian activity. From then on the Ovulation Method became exclusively a woman's preserve, and men were relegated to the position of observers, a very important and often resented change in roles compared with most other forms of contraception.

At first, the women correlated their mucous symptoms with their previous experience gained from the Rhythm calculations and the Temperature records. However, it was soon realized that the new method was probably considerably superior to the others and that more accurate markers were required for comparison. Therefore, Dr. Henry Burger and I were asked to test the accuracy of the mucous symptoms against the available hormone markers of ovulation, namely the midcycle peaks of serum and urinary LH, FSH and estrogen and the rise in progesterone production. These hormone markers were then correlated with the exact time of ovulation as determined by direct visualization of the ovaries at laparoscopy or laparotomy. With this secure basis, the women were then able to refine still further their descriptions of the mucous symptoms which were associated with the fertile and infertile phases of the cycle and with ovulation. These mucous symptoms were not identical for every woman and at first it was thought that only about 70 percent of women would be able to recognize them. However, with experience and the assurance provided by the hormone assays, it was shown that all fertile women have recognizable symptoms. A stated absence of symptoms is due either to inexperience of the observer or to a state of infertility. These studies produced an enormous amount of data on hormone values, mucous symptoms and temperature records under all possible conditions of normal and abnormal ovarian activity. This is by far the largest hormonal study of reproduction in the human female yet performed. The data have been so extensive that they have saturated the publication facilities of the two laboratories and consequently only a fraction has reached the scientific journals. Some is presented by Mercedes Wilson in this book.

The figures and statistics required by the scientific community seem irrelevant and unimportant. The following story illustrates the problem. In 1976, the analysis of the hormone values and mucous symptoms in 104 normal menstrual cycles had been completed and we were discussing progress over dinner. Drs. John and Lyn Billings, Father Catarinich, Dr. Pat Harrisson and I were present. Dr. Lyn Billings then introduced her latest concept concerning the basic infertile mucous pattern, which persists day after day and signifies continuing infertility. It was a brilliant concept because it changed the emphasis from the recognition of the fertile days to that of the much more numerous infertile days. Furthermore, once stated it was an obvious truth because fertility and ovulation depend on cyclical events and a steady state must necessarily be infertile. The concept required verification by hormone analyses. Thus it was agreed that 25 trained volunteers would contribute daily specimens for a complete cycle during which they recorded their mucous symptoms. The aim was to correlate the first change from the postmenstrual mucous pattern with the first rise in estrogen output. At the same time the study would provide the best possible figures

relating the last day of fertile type mucus (Peak day) with the day of ovulation, using the latest refinements in the Ovulation Method. The women went to work with enthusiasm to recruit volunteers. No more than a week later, Dr. Meg Smith, who runs the laboratory, came into my office to check on details. Twenty-five women had been agreed upon, more than 30 were already collecting with more to come! Two weeks later she reported that two of the volunteers had just returned from Europe and were having the most complicated mucous patterns they had ever recorded, another had volunteered because of difficult mucous patterns and was having an anovulatory cycle, and at least five others had volunteered because they were having difficulty in becoming pregnant and were hoping that the hormone values would help them. So much for our plans for a perfect study!

During the early days of the Ovulation Method, the women were taught to use the mucous symptoms in conjunction with the temperature records and the rhythm calculations. The problem inevitably arose as to which to believe when discrepancies occurred between the different observations. Dr. Lyn Billings took the bold step of stating that the mucous symptoms were the most correct, and as the temperature record and calendar calculations were confusing the picture, they should be abandoned altogether except in special cases. Thus the Ovulation Method in its present form came into existence. The laboratory investigations had by then demonstrated that the Peak symptom (last day of fertile type mucus) was as accurate in dating ovulation as any of the hormone markers, and that the temperature shift was the least reliable of the indices used in this study. Furthermore, the hormone studies had confirmed that the fertile type mucus was caused by the high preovulatory estrogen values, and had also shown that the sudden change to infertile type mucus which followed the Peak day was caused by the rise in progesterone secretion at this time rather than by the fall in estrogen production. Thus the Peak day phenomenon was caused by the same rise in progesterone which caused the temperature shift and was a more sensitive indicator of this event. The decision to dispense with the thermometer and rhythm calculations caused a bitter division amongst natural family planners, so that today two main methods are employed, the Symptothermal Method and the Ovulation Method (Billings) which forms the subject of this book.

With a world-wide demand for improved natural methods of family planning, the Ovulation Method introduced in Australia in the 1950s, spread and was quickly accepted in other countries. It attracted some brilliant supporters, including Mercedes Wilson, who introduced the system of charts and stamps which have become almost the symbols of the Ovulation Method itself. Others in developing countries have introduced new teaching aids for nonliterate people. Nevertheless, attempts to improve the Method continue, and it is necessary that the process which led to the development of the Ovulation Method, namely the detailed appraisal of all unplanned pregnancies, must go on. This process of continual modification of the rules, both by the originators and by others throughout the world in an attempt to entirely eliminate unplanned pregnancies, has led to much confusion. Thus the continual updating of the Atlas of the Ovulation Method published from Melbourne has been necessary. The chief purpose of the present book is to present the Ovulation Method as the author sees it in the late seventies and in the eighties; and in this she provides a most valued service. The book is profusely illustrated and contains the most comprehensive collection of stamp charts compiled by women of many different countries illustrating the universal application of the Ovulation Method. Chapters are included on the underlying processes involved in reproduction and on the scientific findings which relate these processes to the mucous symptoms. An evaluation of the user-effectiveness of the Ovulation Method and of methods of family planning in general are also covered.

The world-wide dissemination of the Ovulation Method has raced ahead of the facilities for publishing the scientific basis of the Method. This has led to the criticism that the Method has been promoted more by religious zeal than by scientific merit. It is hoped that this criticism will be allayed when all the hormone studies are finally published in scientific journals. Nevertheless, reliable figures for the user-effectiveness of the Method as practised in 1978 have yet to be obtained. It is obvious that methods of natural family planning are, of all methods, most open to user failure because of the need for complete abstinence over the fertile period. This demands complete communication and cooperation between husband and wife. It is for this reason that the Natural Family Planning Associations are mainly religion-based and are very much involved in marriage guidance. It must be understood that the cooperation and understanding between partners which are essential for applying the natural methods are beneficial to the marriage as a whole. It should be emphasized that any attempt at sexual contact using withdrawal or mechanical contraception during the fertile phase distorts the mucous symptoms, causing errors in interpretation at this most crucial time. Furthermore, our hormone studies suggest that intercourse during the fertile period may advance ovulation and thus shorten the period of safety provided by the rules.

Accurate figures on the degree of method reliability if the rules are adhered to are of prime importance to the couple. Mercedes Wilson attempts to answer this, but agrees that more extensive studies are required. There is a tendency for witch hunts to be started by every unplanned pregnancy. Yet all methods of contraception have failure rates, and the real question is whether these are acceptable for the advantages gained. Mercedes Wilson in the chapter on user-effectiveness shows that, as for other methods of family planning, motivation of the couple is most important. The failure rate of the Ovulation Method is much higher for those who are spacing their families than for those whose families are completed. The WHO is conducting trials on the effectiveness of the Ovulation Method in several countries. The results are awaited with much interest. Preliminary results indicate that the majority of the failures have occurred during the first few months of the trials and that thereafter the performance of the Method is remarkably good with completely acceptable failure rates. Whether this trend is due to the early elimination of the most highly fertile couples or to increasing experience in the recognition of the mucous symptoms is not vet determined.

Our results are based on 70 complete cycles from 54 normally ovulating women studied daily with hormone assays (serum/urine LH, urine estrogen and urine pregnanediol), with mucous symptoms and temperature records. We have also studied 43 women post-partum and during breast feeding; these have been studied by urine assays on a weekly basis, together with mucous symptoms, for a total of 390 months (average of 9 months per subject). Eighty-three pre-menopausal women have

been studied daily or weekly with mucous symptoms for 1 month. Two pre-menopausal women have been studied weekly at intervals for 5–7 years; a total of 63 months have been studied in these two patients. Two girls have been studied as they passed through menarche and first ovulation from the ages of 11–16 years—these were mainly weekly assays, giving a total of 60 months studied.

In the normally ovulating women full data were available in 66 cycles, in which the last day of fertile mucus was able to be correlated with the LH peak, which is considered to occur approximately 17 hours before ovulation. In 56 cycles (85%) the last day of fertile mucus (Peak symptom) occurred within  $\pm$  1 day of the LH peak; however, when considering our assessment of the time of ovulation by the LH peak it should be remembered that this can be in error by 1 day in approximately 20% of cycles.

This book by Mercedes Wilson is a most valuable addition to the literature on the Ovulation Method. It will do much to educate potential users in the current application of the Method and will give them the necessary confidence in applying it. She is to be congratulated for a fine effort.

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University of Melbourne, Australia;
Professor, Department of OB-GYN,
Royal Women's Hospital, Melbourne, Australia.

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