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# **The Fertility Absolutes**

WOOMB International Ltd

# THE FERTILITY ABSOLUTES

## The Significance of 750,000 Hormone Assays

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The results of 750,000 hormone assays have been obtained in collaboration with colleagues and reported in more than 220 publications in refereed journals and chapters of books. This is equivalent to one publication every two months for nearly 40 years!

I have been involved in practically every advance in reproduction between 1950 and 1990, including the development of methods for monitoring ovarian and placental function; development and testing of the contraceptive pill; timing of ovulation; safe use of gonadotrophins; significance of hormones in cancers of the breast, ovary and uterus; timing of egg pick-up and the use of gonadotrophins for this in IVF; the use of ultrasound and the application of the knowledge gained to Natural Family Planning. This represents a life-time of discovery and I have much more to publish. These 750,000 assays do not include the many thousands applied as a placental function test in late pregnancy: I have supervised their performance and interpretation and my assistants have always referred any new and unusual results to me.

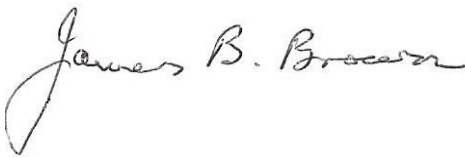
The 750,000 assays were mainly daily urinary oestrogen and pregnanediol measurements throughout at least 12,000 menstrual cycles. From the results we can state some absolute findings about fertility in that we have never seen deviations from these absolutes in this sample. This does not imply that they never occur: all acts of sexual contact carry the possibility of pregnancy and no avoidance system is absolute, but their incidence is so low that they would be ignored by all methods of family planning. Furthermore, by working in both pregnancy achievement and avoidance, it is possible to check the reality of an infertility factor, for example the deficient luteal phase, by showing that correcting it greatly increases the chances of achieving pregnancy.

### The Fertility Absolutes:

1. Fertility involves very definite cyclical activity. The changes occur with such rapidity, particularly at the crucial stage of ovulation, that at least daily observations are required to monitor them adequately. This is readily achieved by the mucus symptoms used by the Billings Ovulation Method (BOM) and by urinary hormone assays. It is a practical impossibility to use blood assays or ultrasonography routinely instead for large numbers. Observations that are the same day after day prove infertility throughout the time of no change. This defines the Basic Infertile Pattern (BIP). The woman will recognize any change in the BIP to alert her to a return to potential fertility.
2. Ovulation capable of producing a pregnancy occurs at one time only during a menstrual cycle. A very reliable mechanism operates to detect a faulty follicle and if

necessary replaces it by a better one, but once a follicle ovulates, ovulation of further follicles during that cycle is positively inhibited. This inhibitory process takes a short time to operate and during this time it is possible for several exactly synchronized follicles to ovulate and thus produce a multiple pregnancy.

3. A continuing pregnancy is the absolute proof that a fertile ovulation has occurred. Demonstrating that the post-ovulatory rise in progesterone production has occurred is the next best proof of ovulation. However, the current use of a day 21 blood progesterone measurement is totally inadequate for this purpose. Daily assays of progesterone production, for example by daily urinary pregnanediol measurements, are necessary to ensure that ovulation and the progesterone rise are properly timed. The levels reached provide information on the adequacy of the resulting corpus luteum. The inadequate corpus luteum is the most common infertile cycle variant, it affects the clarity of the Peak symptom and it needs serial progesterone assays for at least six days after ovulation for its diagnosis. The length of the luteal phase for fertility is 11-16 days. Inadequate and short luteal phases are encountered in approximately 10% of apparently normal menstrual cycles, they are usually sporadic and interspersed with normal cycles and are the main cause of unexplained infertility. When persistent they are readily corrected by giving clomiphene.
  
4. Bleeding always follows ovulation provided the woman is not pregnant and has a uterine endometrium responsive to hormone stimulation. Bleeding may or may not follow anovulatory ovarian activity or a luteinised unruptured follicle (LUF).



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