

# Womb Mates: A Modern Guide to Fertility and Twinning

Gary Steinman and Christina Verni. New York: Baffin Books Publishing, 124pp., US\$19.95, ISBN 978 0 9665 1051 5

Reviewed by Nils Lambalk

**W***omb Mates* is dedicated to the ever-intriguing phenomenon of twinning. The book is intended for a general audience, in particular for those who are parents-to-be, pregnant couples and families with multiples.

Many aspects with regard to twinning are enthusiastically put together, varying from a historical, mythological, biblical and prosaic nature to complex genetic issues, such as the unravelling of the individual contribution of genes and environment to health and disease.

Several sections of the book were previously published as columns in *Twins Magazine* and much of this popular writing is based on previously published scientific work by Steinman. Unfortunately, many of the statements lack references and although it is understandable to limit keys in the text to improve readability, lay readers sometimes need links to further details. Certainly some critical notes can be made. For example, it is clear that Dr Steinman favours a key role for IGF in natural dizygotic twinning, although much of the evidence is circumstantial and not causative and based on animal data. In particular, hard endocrine data relating natural multiple follicle growth and IGF tone in humans are not available. Furthermore, with regard to inheritance of dizygotic twinning it is repeatedly stated that it follows solely from the female line, whereas logically this presumably autosomal and dominant trait should also be passed over by fathers to their daughters.

Despite these shortcomings, many aspects of twinning are nicely explained in a simple and versatile way such that even difficult issues become clear. For example, Chapter 2 explains the differences between monozygotic and dizygotic twins, how they start, develop and how they can be distinguished.

Chapters 3, 4 and 5 expound the roles of body composition, family history, race, diet, medication/assisted reproduction, age, parity and lactation and sufficiently explain for the general population each of their contributions to occurrence of twinning.

An important aspect of the book is its emphasis throughout of maternal ageing as one aspect of increasing change to conceive fraternal twins and the intriguing potential relation between lactation and subsequent twinning.

Monozygotic twinning is generally believed to occur as a random event. Nevertheless, in Chapter 6 a number of factors are discussed that may speculatively contribute to increasing chance of MZ twinning in humans, such as assisted reproduction techniques, the exposure of the embryo to low calcium conditions and the prolongation of time between conception and implantation of the embryo.

In general, the book radiates a positive attitude towards having twins and

being one. This is, however, adequately counterbalanced by the Chapters 7 to 9 that from a medical/clinical point of view rightfully aim to make the general public more aware of the several potential health risks both for the mom and the babies that come along with multiple pregnancies. Among these is increased occurrence of hypertensive and diabetic pregnancy disorders and the further complications, of which the delivery of severe premature children is the most relevant and worrisome for future health of the children. In particular, the attempts in these chapters to increase the understanding about the number of preconception possibilities that are at a couple's disposition to pursue a healthy (twin or singleton) pregnancy should be praised.

The book ends with a chapter that briefly addresses a number twin-specific issues, such as two-father twin pregnancy, boy-girl monozygotic twin pairs, foetus within a foetus, mirror twins, polar body twins, chimerical and vanishing twins.

Overall this book could indeed, with its Discovery Channel-like repeat style mention of important issues, contribute to more public awareness and understanding of the many interesting aspects of multiple pregnancy, as intended by the authors.