THE INFERTILITY TRAP

A potential crisis in human fertility is brewing. As societies become more affluent, they experience changes that have a dramatic impact on reproduction. As average family sizes fall, the selection pressure for high-fertility genes decreases; exacerbated by the IVF industry which allows infertility-linked genes to pass into the next generation. Male fertility rates are low, for many reasons, including genetics and exposure to environmental toxins. So, a perfect storm of factors is contriving to drive fertility rates down at unprecedented rates. If we do not recognize the reality of our situation and react accordingly, an uncontrollable decline in population numbers is likely, which we'll be unable to reverse.

This book will address in a unique and multifaceted way, how the consequences of modern life affect fertility, so that we can consider behavioural, social, medical and environmental changes which could reduce the severity of what is about to come.

John Aitken is the highest ranked expert on sperm biology and fertilization in the world (Expertscape). In 2019 *The Australian* magazine named him as Australia's leading reproductive biologist while a recent ranking of the world's leading scientists by Stanford University ranked him in the top 5 in Obstetrics and Reproductive Medicine. He has won several major awards in reproductive science including the Carl G Hartman Award from the Society for the Study of Reproduction (USA) and the Distinguished Andrologist Award from the American Society of Andrology. In 2012 he was named as NSW Scientist-of-the-Year.

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Why Life Choices Impact Your Fertility and Why We Must Act Now

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Dedicated to my family

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FOREWORD

This is a very important book. I do not say this casually. If Professor Aitken's hypothesis is correct, the information he presents has significance not only for people currently living, but for future generations. Shall we be sceptical? By all means! That is the foundation of science. Does Professor Aitken have the credentials to address his subject? Few would be better prepared. I should know, having followed his work for decades. And this judgement goes beyond mere academic titles, which may not reflect one's true intellect. It is no exaggeration to say that John Aitken is at the pinnacle of his career, a highly respected scientist who has been a world leader in the field of human reproductive physiology. He has identified certain environmental factors that have the ability to impair fertilization and has proceeded to clarify the mechanisms by which they act.

I came of age in the 1960s, when Paul Ehrlich's *Population Bomb* awakened everyone to the Malthusian concern regarding overpopulation, the proposition that the growth of the world's population would exceed its ability to produce food, raising the spectre of famine. Years later, I travelled to New Delhi, India, for the World Health Organization, to speak about immune-contraception at their National Immunology Institute. The thesis presented in *The Infertility Trap* that the world was at risk of a devastating fall in population seemed counterintuitive. Yet I have come to believe that Professor Aitken's concerns are valid, and this is a first step towards action!

What then is Professor Aitken's thesis, which he now champions in this book and hopes to convince the reader of its urgency? Nothing less than a significant worldwide loss of human fertility that will lead to a devastating reduction in population of sufficient magnitude to be a threat to our species!

Can we believe him or is this a script for a grade B sci-fi movie? Are credentials enough? No, he would not want us to act on faith in his expertise alone, but rather be convinced by his argument.

And how does he convince us of the validity of this hypothesis? By a series of discussions, backed by data and presented to the reader in a logical sequence of chapters. Though well supported with graphs and tables, this is neither a dry book nor an incomprehensible academic tome. It is written in a conversational style, and we learn something of the man, his early life, his strivings that would later blossom into a leadership career.

The 'cast of culprits' in his hypothesis include the diminishing desire of couples to bear children as their livelihood improves, an increasing delay of women to seek to conceive, as they take the opportunity to pursue careers, a general lack of awareness amongst many women that fecundity falls a good decade before menopause, our increased exposure to environmental toxicants which impair reproduction in both men and women, and false expectations regarding laboratory-based treatments such as in vitro fertilization (IVF) to correct the problem of delaying plans to conceive.

In a prologue and eight additional chapters, we take a journey into the demographic heart of darkness, discover the miracle of fertilization, learn that female fertility is the hostage of affluence. We are alerted to the current trend toward impaired fertility of the human male and the mechanisms of how men can become infertile. We are made aware of the Janus faces of IVF, and given an assessment of the gathering storm. In his final chapter, Professor Aitken offers us guidance, not so much as a road map, but a prescription in broad terms on how we might escape the Trap. Most importantly, he has alerted us to this impending crisis, raised our level of consciousness so that many individuals, not a few pioneers, will begin to focus on the problem and the combined efforts of *Homo sapiens*, the 'thinking

man', find a solution! Then, seeing how we are currently handling global warming, maybe not.

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