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Dysbiosis of the Evolved Intestinal Microbiome: Lessons for Health in Future Generations



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While it is clearly recognised that many non-communicable disorders are related to a disturbed microbiome (commonly called dysbiosis, a shortened term for microbiome failure: dysmicrobiosis), there is an absence of widely accepted underlying theories. The aim of this book is to show that all such disorders, be they weight gain, immune system disturbance, or poor mental health, stem from a single underlying problem: the failure to transfer key intestinal microbes from the mother to the new-born during birth. Furthermore, in contrast to the normal, exclusively bacterial approach, the book describes what might be called a "second generation" approach to the microbiome, that emphasises beneficial microeukaryotes acting to coordinate diverse bacterial functionality. Most importantly, lessons have been drawn to guide future research, the aim being to reintroduce these key microbes at the time of birth, alongside breast milk (bank milk if necessary) and before the immune system of the infant is fully established. If all goes as expected, not only can the present "triple plagues" of non-communicable disease be ameliorated more efficiently, but it should also be possible to banish such disease from future populations. Unfortunately, however, beneficial microeukaryotes will be hard to detect, while resistance-inducing oral antibiotics must be limited.

