THE HUMAN BODY

YOUR INNER ENGINE

AN INTRODUCTORY COURSE ON HUMAN METABOLISM

Jane M. Vanderkooi Ph. D.

Your Inner Engine: An Introductory Course on Human Metabolism

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Forward

I began writing this book when I was starting chemotherapy. I had just retired as Professor of Biochemistry and Biophysics from the University of Pennsylvania, and my vision of a beautiful retirement in Colorado was suddenly altered with the diagnosis of cancer. As the chemo treatment advanced, I was curious about how the drugs were exactly working. I wondered whether it would be possible for someone without a science background to get an understanding of human metabolism. I am attempting here to give an explanation of metabolism.

In this book, the few chemical formulae that are given are explained. I do not assume that you already have a background in organic chemistry, but if you do, the chemical formulae given can be a review for you. This book will be useful for someone to study before starting a more detailed Biochemistry course, since here an overview is given. It is written for the general public, but especially for people who are in health care. Each chapter begins with an overview. If you have never studied biochemistry, you can consider reading these overviews (1.1, 2.1, 3.1...) first, and then go back to examine the whole book.

There is a bit to learn. You can know what "bon jour" and "merci bien" mean in French, but you need a bigger vocabulary and understanding of grammar before you can understand written and spoken French. The same is true in metabolism. Some one may give advice (say, "Eat blueberries; they are high in anti-oxidants"), but to evaluate whether the advice is good, you must have a general over-all knowledge of metabolism.

I would like to thank my colleagues at the University of Pennsylvania for many years of friendship and intellectual stimulation. I also thank my family members for their help and many friends who made constructive comments on the book.

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