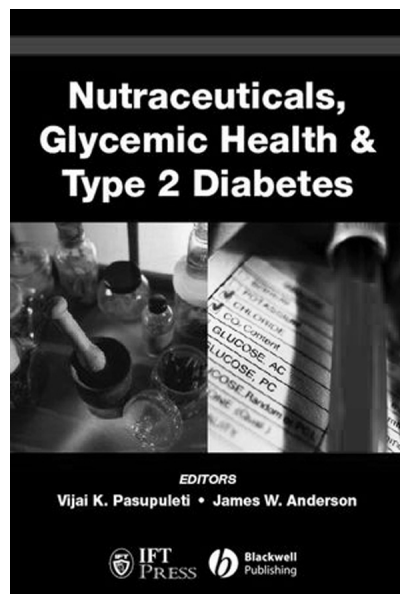


MNF Books



Nutraceuticals, Glycemic Health and Type 2 Diabetes

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James W. Anderson (Editors)
Wiley-Blackwell, 2008, 489 pages
ISBN-13: 9780813829333

Within a few decades toward the end of the past century we have seen an almost cynical shift among the problems that world nutrition is facing. While most nations in the Western part of the world have succeeded in steering away, seemingly forever, from the threads of starvation and hunger, they are now facing the perils of what most likely is the outcome of an oversupply of food paired with bad nutrition habits. Worse yet, some of the less well-off nations follow at close foot. The rapid emergence of the overweight and obese in some populations is disheartening. As a result we are merely dabbling trying to tame the rise of the looming diabetes

epidemic. Nevertheless, at the same time it is worth keeping in mind that there are still other parts of mankind, those for whom the apparent “too much of a good thing” is out of reach, seemingly forever, too.

Insulin resistance, hypertension, type 2 diabetes, and cardiovascular disease are among the complex of ailments that, when occurring together in the same patient, are referred to as metabolic syndrome. Abdominal obesity is the major cause of the metabolic syndrome and the ensuing progression from insulin resistance *via* prediabetic state to type 2 diabetes. Overweight and obesity result from a disequilibrium between energy uptake and energy expenditure. A simpleminded solution to curtail obesity is to reduce food intake and to increase physical activity. A different approach is to change the type of food being consumed, or, to exploit the potential of natural agents and micronutrients to act as functional foods in the prevention and treatment of the disease.

The latter possibilities are discussed in this volume. The book is split into two sections covering the topics “glycemic health and type 2 diabetes” and “nutraceuticals and type 2 diabetes”. The first part is setting the stage detailing the epidemiology of diabetes and introducing the concept of glycemic index, glycemic load, and glycemic health. The second part discusses individual nutraceuticals like ginseng, fenugreek, cinnamon, and minerals, in addition to structurally complex molecules like fiber, soy protein, and bioactive peptides. Most of the chapters are expertly written, and fulfill the promise of a concise and scholarly presentation of

the field. Still, when going through the chapters one by one the reader is reminded more than once of the devastating scale of the obesity and diabetes epidemic. Unfortunately, almost all of the figures that are supposed to illustrate a concept are rather unintelligible. There are some glitches in the Geography (Turkey, Kazakhstan, and Tajikistan, for example, are not part of the European Union, nor is Europe a country), and referring to “England” as “indigenous population” is mixing up the country and the people.

The literature references throughout are up to date, and the book contains a helpful appendix compiling almost one hundred herbal products and references, together with a short description of their mechanism of action, and whether clinical evidence supports therapeutic value.

Our history of about 5000 generations as *homo sapiens* (not to mention that of our predecessors and evolutionary companions) was marked by adaptation to paucity rather than to an abundance of food. It appears that man's genetic make up has evolved to better deal with starvation than with opulence. This is not to advocate presumed benefits of widespread famine. But much like smoking, obesity is one of the risk factors to human health that can easily be avoided, or at least be diminished, by a change in lifestyle. If so, the metabolic syndrome and type 2 diabetes are a sociological problem as much as they are a medical problem.

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