If you have never taught junior high school, you don’t know what you are missing. Well, maybe you do. Many years ago, before lofting into the rarified air of college teaching, my first education job often amounted to an impromptu study of hormonal influences on human pre-adolescent behavior. “I know puberty is a powerful thing,” I would tell my students, “but try to pay attention anyway.” It very much is; and they pretty much didn’t.

Then, just when you’d like to think matters might improve with age, there is menopause, the sometimes symptom-crazy winding down of what adolescence started. Yet long before puberty, and long after the change, as well as at all points in between, practically everything about us is in some way endocrine-driven. It is all one great, gland plan, and the topic of naturopathic doctor Michael Friedman’s new book, *Fundamentals of Naturopathic Endocrinology*.

Dr. Friedman has taught the subject at university level and he clearly is an endocrine enthusiast. Previously, with Alexander McLennan, he wrote *Healing Diabetes: Complementary Naturopathic and Allopathic Treatments*. Friedman is also the author, along with Miranda-Massari and Gonzalez, of “Supraphysiological cyclic dosing of sustained release T3 in order to reset low basal body temperature.” (PR Health Sci J. 2006 Mar;25(1):23-9).”

Considering the enormity of the topic, *Fundamentals of Naturopathic Endocrinology* is a relatively concise 374 pages. There are no wasted words to be found, and the text is free of pontification. Rather, it presents evidence and invites intelligent application. The reader expects, and the book delivers, the necessary detail. What one might not expect, and what distinguishes this volume, is the inclusion of so many natural treatment alternatives. The book’s abundant clinical studies and literature reviews mean that there is new knowledge with every page turn. Thanks to all the diagnostic and therapeutic protocols, the practitioner can apply the information immediately. The author provides an especially well-referenced focus on herbal, Chinese, and ayurvedic remedies.

Why range so far? “My decision to choose naturopathic medical school instead of allopathic medical school was primarily based on this past experience with my health,” writes Dr. Friedman. He subsequently conducted clinical research on herbs in the treatment of diabetes. “To my surprise,” writes Friedman, “the same herbs effective in treating diabetes were also helpful in treating hypoglycemia. In clinical practice I prescribed herbs for benign prostatic hypertrophy that are normally used to treat menopause, and prescribed herbs for ovarian enlargement that are normally used for prostate enlargements. To my surprise, the herbs worked interchangeably well in both groups.”

*Fundamentals of Naturopathic Endocrinology* explains how, and offers plentiful and interesting case studies. Illustrations are clear and plentiful, with numerous quick reference tables. There also are boxes providing summary material and symptom run-downs. Conventional medical treatments are duly considered, juxtaposed with naturopathic treatments. The book is well supported with chapter by chapter literature citations. Yes, this is a textbook all right. Diabetes, hypothyroidism, adrenal exhaustion, impotence, menopause, and a panoply of other endocrine disorders and imbalances are discussed. The 3-page index needs considerable expansion until it more adequately
An author index would be a worthwhile addition, since the book contains over 120 pages of clinical studies and reviews.

*Fundamentals of Naturopathic Endocrinology* is also a clinical handbook, conveniently summarizing much of what a practitioner might specifically seek: physical examination, signs and symptoms; excesses and deficiencies; laboratory tests; diet plans and herbal material medica; checklists and questionnaires; supplement lists and dosage recommendations; prognosis and side effects; lifestyle changes; and a question-and-answer section.

Dr. Friedman’s presentation is both readable and reliable, and highly recommended.

–Review by Andrew W. Saul, JOM Assistant Editor

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**Could It Be B12?**

*An Epidemic of Misdiagnoses*

S. Pacholok, RN & J. Stuart, DO

Word Dancer Press, Sanger, CA, 2005

Paperback, 217 pages

Sally Pacholok, RN, learned about B12 deficiency the hard way, by personal experience. While training to become a nurse, she experienced symptoms which her doctors dismissed as “insignificant”. One specialist charted her as a “hysterical female” before doing any diagnostic testing. Soon after Pacholok asked for tests, that expert, a hematologist, called her in to discuss her medical reality – she had a deficiency of vitamin B12, a condition called pernicious anemia. For over 20 years, Pacholok has researched B12 deficiencies and studied cases of B12 patients who trusted their doctors to diagnose them accurately and treat them effectively, but too often found themselves misdiagnosed and mistreated or undiagnosed and untreated. Untreated B12 patients risk permanent neurological complications.

Pacholok learned that deficiencies of vitamin B12 were identified in the early 1900s. If patients had apathy, memory loss, restlessness, irritability, confusion, dementia, delirium, depression, delusions, hallucinations, paranoia and even mania, they were considered “mad.” If those patients also had enlarged red blood cells (macrocytosis), their diagnosis was “megaloblastic madness”. It turned out that the blood problem was caused by a deficiency of B12. In the 1920s, doctors administered raw liver to “mad” patients, thereby supplementing B12. For decades, medical journals have reported patients who recovered after getting B12.

Even after a hundred years of medical research has consistently connected B12 deficiency with psychiatric problems in some patients, the problem of misdiagnosis and mistreatment continues – with few patients getting tested for urine MMA (methylmalonic acid/creatinine ratio) that would uncover B12 deficiencies, which can exist even if serum B12 tests look normal. Few mental patients get supplements of vitamins; most psychiatrists can quickly and easily prescribe one or more pills, often without diagnostic testing. The authors point out that pills for depression and bipolar disorder usually cost more than $1,000 per year; two and three drug combinations and other medications prescribed for multiple sclerosis or dementia can cost thousands of dollars compared to B12 shots which cost $20 for the year.

Sally Pacholok and co-author Jeffrey Stuart, a physician who has practiced emergency medicine for more than 12 years, make this long-known medical problem fresh and new for readers. They present a selection of B12 patients who were misdiagnosed and mistreated but recovered after they received B12 supplements – sometimes orally, other times by injection. Each chapter has research
articles, both current and decades-old. This book teaches us how a range of symptoms and disorders can lead to mistaken diagnoses when the root cause involves a deficiency of vitamin B₁₂. Misdiagnoses include aging problems, neurological conditions (such as multiple sclerosis), stroke, heart disease and vascular problems (linked to high homocysteine), learning and developmental problems, infertility and even mental diagnoses (depression, bipolar disorder, schizophrenia and autism). The authors encourage patients and families to ask for MMA urine tests and take B₁₂ supplements to restore suboptimal levels.

The late Bernard Rimland, PhD, known for researching autism and developing restorative orthomolecular treatments, recommended this book because “the authors provide an invaluable service for medical consumers who want to protect their families and for medical care providers who care about their patients.”

–Review by Robert Sealey, BSc

Healing Cancer: Complementary Vitamin and Drug Treatments
by Abram Hoffer with Linus Pauling
CCNM Press, 2004
Paperback, 227 pages
(Previously published as Vitamin C and Cancer: Discovery, Recovery, Controversy)

Cancer may be humanity’s most feared disease, and with reason. Healing Cancer: Complementary Vitamin and Drug Treatments, by Abram Hoffer and Linus Pauling, removes much of that fear, replacing it with clinically-tested practical nutrition. The book provides dozens of documented case histories of vitamin-taking patients who achieved significantly longer life, and vastly improved quality of life.

It is unethical to deny therapy that might be of value to the patient. Yet some politically powerful medical authorities continue to openly discourage cancer patients from taking large doses of vitamins. The number of cancer patients who have ever had their doctor recommend a therapeutic trial of large quantities of nutrients remains small. Says Dr. Hoffer: “Fixed ideas about the supposed ‘evils’ of vitamin antioxidants must be one of oncology’s most pervasive delusions.”

The grounds for disparaging vitamins usually center on three inaccurate claims:
1) vitamins are ineffective against cancer;
2) vitamins interfere with conventional cancer therapies, especially chemotherapy; and
3) high doses of vitamins are directly harmful to the cancer patient.

It is time to set the record straight.
1) Controlled studies that demonstrate that vitamin C is indeed effective against cancer. Research done in Japan used over 30,000 mg of vitamin C a day. Research conducted by Dr. Hugh Riordan’s team in Wichita, Kansas, used as much as 100,000 mg/day. And although focusing on vitamin C, Hoffer and Pauling discuss the value of other nutrients including niacin, the carotenoids, selenium, zinc, and more.

2) Vitamins, especially vitamin C, reduce the side-effects of surgery, chemotherapy, and radiation therapy. The risk reduction aspects of enhanced nutrition, both pre- and post-op, are well established, and supplemented patients have faster, uncomplicated healing after surgery. Patients on a strong nutritional program have far less nausea, and often experience little or no hair loss during chemo. They experience reduced pain and swelling following radiation. Such vitamin-mediated benefits mean that oncologists can give vitamin-taking patients the full treatment, rather than having to cut the dose to keep the patient from giving up entirely. Full-strength chemo is
more likely to be effective against cancer than reduced-strength chemo. A similar benefit is at work with radiation therapy: the full intensity of treatment is far better tolerated by an optimally-nourished patient. Perhaps most importantly of all, the authors assert that “Vitamin C increases the killing effect of irradiation and chemotherapy.” Clearly vitamins, far from being detrimental, can make a most positive contribution to the conventional treatment of cancer.

3) Even at very high doses, vitamin C is an unusually safe substance. On the other hand, enormous doses of ascorbate selectively kill cancer cells without harming normal body cells. As antioxidant, collagen-builder, and immune system booster, vitamin C is vital to a cancer patient. Yet the blood work of cancer patients will invariably show that they have abnormally low levels of the vitamin. What is dangerous is vitamin deficiency.

In addition to a substantial reference section, *Healing Cancer* contains two appendices. The first is a statistical analysis of the data; the second a discussion of the adrenalin-adrenochrome system and cancer. An index is needed and should be added to the next edition.

Curiously, this book very nearly never saw the light of day. “Linus asked me if I intended to publish my data,” Abram Hoffer said. “I replied that I did not. Linus urged me to do a complete follow up study of every patient I had treated. We began to write a book but we could not find a publisher in the United States willing to publish it. The topic was still too controversial. It contains all the original material Dr. Pauling had written dealing with each type of cancer, and a presentation of my data based on nearly 800 patients.”

A patient’s therapeutic response is the highest of all guiding principles in medicine. If it works, do it. If it seems to work, do it. If it does no harm, do it. If there were a sure cure for cancer, you would have heard about it. There isn’t. But this bald truth just makes it all the more urgent that patients demand adjunctive vitamin therapy from their physicians. Support for high-dose vitamin C therapy is growing. Hoffer and Pauling were among the first to report its benefits. An oncologist you know could be next. Let him or her read your copy of *Healing Cancer*.

–Review by Andrew W. Saul, JOM Assistant Editor