reflects the comprehensiveness of the text. 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 sub-optimal 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
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