

## Editorial: On Psycho-Oncology, Lycopene and the Noni Fruit

One of the critiques of integrative cancer therapy, and particularly nutritional therapy, has been that although there is substantial evidence to support the use of diets low in fat and meat, and high in fruits and vegetables for cancer prevention, this evidence has no relationship to the potential use of similar diets in cancer treatment. It is becoming clear that this view misconstrues some of our basic understandings about cancer, and sets up an artificial chasm between cancer prevention and treatment.

In the past, I have argued that many cancers have a long latency between initiation and clinical diagnosis. The line between risk and disease is thus blurred. I find it quite troubling to suggest that before discovery of, for example, a locally advanced prostate cancer, it would be appropriate for a man to eat a cancer-preventive diet—but as soon as it is discovered, he should switch to a high-fat, high-calorie diet to forestall possible, but undiagnosed cachexia. The result of such a diet change might be the exacerbation of an otherwise controllable cancer. Larry Kushi, a widely recognized nutritional epidemiologist and member of this journal's editorial board, points out that "If we believe that dietary factors act as *promoters* of carcinogenesis, then the influence of diet on tumor growth and spread should not necessarily be much different before or after clinical expression of the tumor. . . . Specifically, one can make a strong case that the time of clinical presentation of cancer is fairly arbitrary" (emphasis the author's).<sup>1</sup> Even bearing in mind that it is sometimes necessary to attend to caloric and protein intake in patients with advanced disease, we feel that it is quite problematic to differentiate nutritional advice supporting prevention from that supporting treatment.

We thus intend to publish selected articles on cancer prevention in *Integrative Cancer Therapies*. One of these appears in this issue. Eun-Sun Hwang and Phyllis Bowen have contributed a paper on the relevance of lycopene and tomato products in cancer prevention. They review systematically both the mechanistic studies and the human epidemiological and clinical studies on this phytochemical and its dietary source. Interestingly, Dr Bowen is in the forefront of researchers documenting the relevance of cancer-preventive dietary elements to cancer treatment. A recent paper

by Bowen's laboratory reported that early stage prostate cancer patients who were fed tomato products for only 3 weeks were found to have lower levels of oxidative DNA damage in biopsied prostate tissue, and lower serum PSA levels than controls, a remarkable finding that highlights the overlap of prevention and treatment.<sup>2</sup>

A significant trend in contemporary herbal medicine has been the movement of traditional medicines of indigenous peoples directly into international commerce—often with little scientific exploration before widespread marketing. In the first of our Patient Perspectives articles, Will McClatchey, an ethnobotanist with long field experience among the indigenous people of Hawaii—and impeccable credentials in the field of natural products drug discovery as well—gives us a detailed description of the evolution of *noni* from its native setting as a traditional Hawaiian medicine to an enthusiastically marketed alternative cancer remedy. For most clinicians, McClatchey's descriptions of the native Hawaiian medicinal pharmacopoeia from which noni emerged will be unfamiliar territory. But if we are to establish a truly scientific approach to the study of alternative medicine, we need to become aware of such scholarly approaches to the true histories and cultural backgrounds of the remedies popular among our patients.

We are featuring in this issue a section called "Psycho-oncology 2001," a set of papers on psycho-oncology growing out of the Comprehensive Cancer Care conference held in Washington DC in October, 2001. Some of the most challenging and controversial sessions at the conference were in the area of psycho-oncology. The conference speakers in the area of psycho-oncology were invited to submit papers to this special issue, and 4 of them agreed to contribute papers based on their lectures or other work. Dr James Gordon, the conference organizer, has provided a preface to this paper collection.

Lydia Temoshok and Rebecca Wald provide a critical analysis of the recent content history of psycho-oncology in a paper that may be a turning point in that field. They trace the progress of various studies on the relationship between psychological interventions and cancer survival. With the recent publication of the study by Goodwin et al,<sup>3</sup> (a well-designed replica-

tion of the seminal work of Spiegel et al<sup>4</sup>) which presents a finding of no survival benefit from a well-conducted support group, it is time for the field of psycho-oncology to consider where it has been and where it is to go next. With as many as 90% of chemotherapy patients experiencing some level of anxiety, and 60% depression,<sup>5</sup> it is clear that psychosocial interventions are important and relevant regardless of their survival impact. But the question of survival is what truly animates psycho-oncology. Temoshok and Wald argue one of the most important debates in the survival question—the debate about research design and methodology. What relevant psychological variables can we measure accurately? Are our randomized trials premature when there is so little known about the actual impact of long-term emotional patterns on cancer progression, or on patients' adherence to cancer treatment? Is it naïve even to suggest that an intervention as limited as a support group could impact survival from metastatic cancer? Is it time for psycho-oncology to go “back to basics”?

In a paper that exemplifies a creative way of exploring the questions raised by Temoshok and Wald, Alastair Cunningham and colleagues report on a qualitative analysis of psychological data on cancer patients who participated in a structured support group intervention. Again, as in his article in the first issue of *Integrative Cancer Therapies*, Cunningham raises questions that touch the very basis of current research in psycho-oncology and survival. Are the contradictory results of recent studies a proof of lack of connection between psychology and survival? Or are they simply a reflection of a field that has determined interventions and assessed their endpoints based on theories of psycho-oncology that are inadequately grounded in actual observations of the natural history of the psychology of cancer patients and their survival? Such observations—in spite of the fact that they are necessarily qualitative in nature and do not rank high on the scales of evidence-based medicine—are the beginning of all science, and are the true evidence base that any field must establish before moving to more sophisticated research designs.

Martin Rossman shows us some interesting case histories from his work in guided imagery, one of the first of the psychologically-oriented complementary cancer interventions. Rossman has been a major contributor to this field for many years, and his work has been one of the mainstays of research and instruction in guided imagery. The case histories in this issue show how this method can touch the patient's experience at multiple levels of meaning.

Ellen Levine and Elisabeth Targ explore issues of meaning even more deeply with their analysis of data

relating spiritual practice and belief to functional and even physical well-being. After reviewing the significant literature on spirituality and health, and the importance of spirituality to patients, they show a strong correlation of physical well-being and spirituality in cancer patients. Importantly for clinicians, they provide a single short question that they suggest can be used to assess the spiritual well-being of patients. We feel that spirituality is a most important, if usually neglected, component of the overall health of the cancer patient and would welcome future contributions in this area.

We are also presenting another paper on herbal medicine. This paper was contributed by Roger Wicke and C.S. Cheung, who are practitioners of traditional Chinese medicine (TCM) in the United States, emphasizing herbal medicine. They have provided us with a brief introduction to the theory and method of disease assessment in TCM. This unusually lucid and concise summary helps the reader to relate conventional medicine terms and concepts to TCM concepts and techniques as they apply to herbal medicine.

The paper of Wicke and Cheung is an essential background to the contribution of these 2 practitioners to the Integrative Tumor Board in this issue. The medical history of the case we focus on, a woman with advanced breast cancer, includes traditional Chinese diagnostic parameters as well as typical conventional medical data. The traditional diagnostics enabled Wicke and Cheung to contribute a full set of TCM recommendations for the patient. In a truly integrative fashion, our radiation oncology consultant, Stephen Sagar, makes TCM-based recommendations in addition to presenting radiation oncology considerations. In addition, the Tumor Board in this issue includes several other practitioners addressing areas ranging from naturopathic medicine to a discussion of massage therapy in cancer—a topic that has been worrisome to many in the complementary and alternative medicine community over the years. In line with our commitment to address spirituality, we have also provided a pastoral counseling perspective in this Tumor Board.

*Integrative Cancer Therapies* does not intend to shy away from controversies—and there are many in the field of integrative cancer medicine. We expect that many of our readers will find articles in this issue—and issues to come—to be quite challenging. With all sincerity, we invite those who may feel challenged, or even offended, by positions espoused by authors of articles we publish to reply to us in Letters to the Editor, and in submissions of substantive papers in response to data and conclusions of these authors, and our own editorial positions.

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