## **Book Review**

## The Amazing Science Behind Nature's 'Miracle From The Sea'

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Georges Halpern. The Amazing Science Behind Nature's 'Miracle From the Sea'.

Bioprospecting is a relatively new term that seems to prevail in early pages of eCAM and it may be considered now a definite component of eCAM, giving opportunities to discover new and effective compounds, especially those derived from marine and terrestrial animals. Bioprospecting sets out to discover new healing agents in a field dominated by molecules derived from plants. Now eCAM is taking the initiative by focusing on molecular products with applications to certain human diseases. Products run throughout the evolutionary scale including those from sponges (1), mollusks (2–4), and earthworms (5).

Now comes an enormously important book by Professor Georges M. Halpern, MD, PhD, which straddles the open question of inflammation and bioprospecting. He has gone a step further than the mere discovery of relevant molecules as outlined in his easily readable book. A paperback, just published by Square One Publishers.

The book contains 127 pages including a Conclusion that goes straight to the point comparing over the counter drugs with those of natural origin. There is also a Glossary, Appendix that focuses on Non-steroidal Anti-inflammatory Drugs (NSAIDs), Selected References, About the Author and a very comprehensive Index, better than most for a book so small. The biography is especially enlightening because of the vast and lasting influence of Professor Halpern's work and positions as a first rate professional and scientist. When you read this account, your confidence in the claims is strengthened enormously.

From the jacket review, 'The Amazing Science Behind Nature's "Miracle From the Sea"' treats nutrition but in a most novel manner. The book (*The Inflammation Revolution*) describes the science behind a remarkable breakthrough treatment that can reduce the pain and swelling of arthritis, control bronchial asthma, relieve allergy symptoms and more. Over two decades ago, researchers observed that the coastal-dwelling Maori—the native people of New Zealand—had a far lower incidence of arthritis-related disease than those Maori who lived inland. In fact, those living inland had the same incidence of arthritis as the New Zealanders of European origin. After years of studying this medical phenomenon, researchers discovered that the incredibly low incidence of arthritis was due to diet—in particular, to the Maori's consumption of raw green-lipped mussels. There was something in this New Zealand delicacy that reduced arthritis by decreasing inflammation. Here, in *The Inflammation Revolution*, is the story of this exciting discovery.

Since the early 1990s, clinical studies have shown that specific lipids found in green-lipped mussel oil are highly effective anti-inflammatories in the treatment of arthritis. Research has also revealed that this marine lipid oil offers protective benefits to blood vessels and bone joints. The lipid oil may even provide benefits to other organs, such as the skin, bronchi and gastrointestinal tract. Thus, recently, using green-lipped mussel lipids has increased throughout Australia and Asia. Now, this natural product has appeared in North America. Professor Halpern feels that this comes at apparently the right time.

Because of newly found risks of many anti-inflammatory drugs ever before the public eye, it has become essential for millions of arthritis sufferers, asthmatics and others with inflammation-related disorders to find safer and therefore alternative options. In *The Inflammation Revolution*, readers can learn how marine lipids work; what scientific studies have shown about their use; and, most important, how this 'miracle from the sea' can be used to safely and effectively relieve the pain of arthritis and restore better breathing to asthmatics.

Clearly, this book, *The Inflammation Revolution*, opens a very new avenue for going further in bioprospecting. Professor Halpern's efforts are multifaceted and of extreme importance.

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First, this book should point the way to others interested in bioprospecting. Second, guided by the wisdom of this book more investigators can see the ability of going the several steps further. This means to determine the target disease to which a particular molecule can be directed. Third, this book points out the need to isolate and purify relevant molecules by highpowered biochemical and biophysical methods. Claims should therefore go further than single case reports and should approach the ideal situation of the pyramid with case reports at the bottom and randomized double-blind clinical trials at the top (6).

I hope that all of us interested in bioprospecting especially the relevance of animal derived molecules will read Professor Halpern's delightful and informative book. It is indeed *The Inflammation Revolution* since the inflammatory response lies at the heart of several inflammatory disorders. Imagine that this book is recalling the magnificent discoveries of Metchnikoff, the zoologist (Nobel Prize in Physiology and Medicine 1908), who laid the foundation for understanding the phenomenon of inflammation although prescient but perhaps then not realizing the long-range implication, i.e. to human health. For more information contact Anthony Pomes [Tel: +1-516-535-2010 ext. 105; Fax +1-516-535-2014; E-mail (Sq 1 Marketing (aol.com)].

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