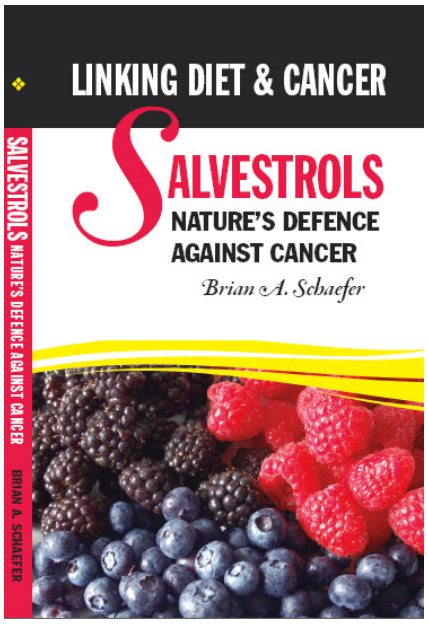
BOOK REVIEW

By Scott Tips



Salvestrols – Nature's Defence Against Cancer

By Brian A. Schaefer (ISBN 9781477554111; Clinical Intelligence Corp., www.salvestrolbook.com, 2012; softcover, 146 pages, $20.00)

I tend to be very leery of books that are written, or even seem to be written, to promote a particular company or its products. For one thing, they tend to read like advertisements, most of which are boring propaganda with a brainless, foregone conclusion. More importantly, they are also simply so self-promotional that the credibility of the content is as lacking as are politicians' promises on election day.

Brian Schaefer's book, Salvestrols – Nature's Defence Against Cancer, treads close to that line, mentioning as it does a particular natural compound sold by a particular company. In fact, even the subtitle for his book cleverly invokes the name of the company selling the product. Yet, his book is so full of interesting facts, discoveries, and new ideas that I have no choice but to recommend it to you.

For those of you who do not know (as I did not either), salvestrols are a new class of natural compounds that have a pharmacological definition rather than a chemical definition. Rather, they are defined by the action of the metabolites that are produced when the CYP1B1 (pronounced "Sip-One-B-One") enzyme in cancer cells break down the salvestrols into potent cancer-killing agents. These anticancer agents suppress tumor growth by killing cancer cells. As the author puts it, "Salvestrols provide an explanation of the link between diet and cancer and between fruit and vegetable consumption and lower cancer incidence."

Salvestrols, the author explains, are produced in plants as a defense against attack by various pathogens, particularly fungi. Fungi, like humans and other life forms, house a number of cytochrome P450 enzymes. The destruction of the invading pathogen occurs when the salvestrols are metabolized by the enzymes into an antifungal agent within the invading fungi. And here's where it gets interesting: The fungi's cytochrome P450 enzyme has similar metabolic activity to the CYP1B1 enzyme in cancer cells. Salvestrols are natural antifungal agents and they can help us fight and defeat cancer.

Consider that the CYP1B1 enzyme is intrinsic to cancer cells but completely absent from healthy, noncancerous tissue. The salvestrols that you consume circulate harmlessly in your body until they encounter CYP1B1 enzymes in cancer cells. That enzyme metabolizes the salvestrols into a cancer-killing agent within the cancer cell only. Cell death follows, and any surrounding healthy tissue is left intact. Salvestrols are, in that respect, highly selective, unlike the typical chemotherapeutic drugs that will kill healthy cells as well as cancerous ones.

The author makes an important point about the sources of salvestrols: It is far better to eat organic fruits and vegetables because they will be much higher in salvestrol content. Conventionally grown fruits and vegetables, exposed as they are to antifungal and other

pesticide spraying, have their salvestrol content markedly reduced because the antifungals and pesticides substitute their protection for that of the naturally occurring salvestrols. Hence, yet another reason to consume organic – it's not just about avoiding the toxins, it's about increasing the anti-cancer punch of the fruits and vegetables.

Just as important, in the author's view, is our need to avoid CYP1B1 ***inhibitors***. These are substances that will bind with the enzyme and render it incapable of activating salvestrols. Powerful inhibitors include carbon monoxide (e.g., in tobacco smoke), Vitamin B17 (curiously enough), and certain agrochemical fungicides. The fungicides are doubly bad, however, because they not only lower the production of salvestrols in plants when applied to them but when the fungicides are then also consumed, they prevent the CYP1B1 enzyme from doing its job.

The author also highlights the important anticancer role of proper nutrition. For example, the activity of CYP1B1 is reduced by fifty percent when adequate levels of magnesium are not present. So, magnesium is, at least indirectly, a necessary cancer-fighting nutrient.

This book is not just expository writing, for its short length it also contains useful references, glossaries, and even a few salvestrol-rich recipes. In particular, the author encourages readers to eat such salvestrol-rich foods as globe artichoke, thistle, dandelion, burdock, chamomile, the various berries, pumpkin, asparagus, broad beans, broccoli, Brussels sprouts, cabbages, chard, apples, dates, figs, and many others.

Another very interesting part of this book deals with the impotence of current cancer detection methods. According to the author, "[c]urrent technology can only detect cancer once the cancer has grown between 10^8 and 10^9 cells … (roughly the size of a pea) – once the cancer reaches 10^{12} cells (about a litre of cells) you're dead. By the time modern technology can tell you that you have this disease the disease has silently grown through about 75% of its life." The corollary to this observation is that when a doctor tells someone that their cancer is "in remission" or "all clear," it may only mean that the cancer cells have retreated below the detection level. They are still there; it is just that medicine cannot detect them still waiting around, ready to grow once again into the detectable range! The author suggests a solution to this problem by measuring the presence of the CYP1B1 enzyme directly, since the enzyme only occurs in cancer cells. The ability to detect the presence of cancer cells at a very early date would be greatly enhanced and appropriate treatment could begin at a more optimal time rather than at a crisis stage of the disease.

Brian Schaefer has done us all a great service by writing this book and making its important health information available. Although a salvestrol company is mentioned at times throughout the book, that in no way detracts from the information's importance. More useful facts appear in the book than could be covered in a short review such as this; so, if you want to learn more about this particular way of fighting cancer, then read the book.