

The Color Code: A Revolutionary Eating Plan for Optimum Health

By James A. Joseph, Daniel A. Nadeau, and Anne Underwood. Hyperion, New York, 2002. pp. 308. \$22.95. ISBN:0-7868-6721-3

The authors of *The Color Code*, J.A. Joseph, D. Nadeau, and A. Underwood, acknowledge that their message is not new. The idea that a healthy diet is one rich in fruits, vegetables, and whole grains is not a revelation. It is their approach that is unique; it emphasizes color.

The authors review the latest scientific research involving the abundant phytochemicals found in fruits and vegetables. These substances, found exclusively in natural produce, are critical to human health. Since there are so many types of phytochemicals (many have not even been identified yet) and they seem to work synergistically, they cannot simply be consumed from supplements.

Take, for example, the apple. The reader may be surprised to learn that the apple's skin contains flavonoids, including quercetin, that seem to disable the free radical singlet oxygen, kill viruses such as herpes simplex, relieve inflammation, as in pancreatitis and prostatitis, treat allergic reactions like hives and asthma, and fight malignancies. Not to be outdone, the avocado, for example, contains high levels of folate, potassium, magnesium, vitamin E, beta-sitosterol that lowers blood cholesterol levels and inhibits excessive cell divisions, and glutathione, an essential antioxidant. Or look at spinach, with its vitamin K, its lutein and zeaxanthin which appear to fight macular degeneration and cataracts, and its glutathione, which detoxifies pollutants and carcinogens, helps maintain liver health, boosts the immune system, repairs damaged DNA, and reduces chronic inflammation. Indeed, the authors assert with serious conviction that if greengrocers had the marketing muscle of drug companies, we would all be racing to try this miracle regimen (of fruits and vegetables). Patients would demand that their doctors prescribe it. Consumers would flock to the produce aisles to snap up these lifesaving foods.

While this probably sounds very encouraging, knowing how and when to eat the fruits and vegetables high in the phytochemicals that you need most, may seem confusing to all but the most experienced biochemists. That is where *The Color Code* comes in. The authors note that some of the most important phytochemicals found in fresh produce are the pigments. As such, they have divided all fruits and vegetable into four color groups. Their thesis is that the novice can assure he is eating an adequate mix of produce, with all their critical nutrients, by eating a variety that covers these four groups.

The first group is red fruits and vegetables, pigmented by the anthocyanins, betacyanins, and lycopene. These include, for example, tomatoes, red peppers, beets, strawberries, and cherries. Next are the orange and yellow fruits and vegetables, colored especially by alpha- and beta- carotene, lutein, and zeaxanthin, such as carrots, sweet potatoes, mangoes, and corn. The third group consists of the likes of broccoli, asparagus, brussel sprouts, and kiwifruit, which owe their green color primarily to chlorophyll. Finally, anthocyanins are what give a blue-purple color to the group including blueberries, blackberries, plums, and eggplant.

To further help the professional and layman alike, *The Color Code* provides numerous recipes which incorporate a diversity of colorful fruits and vegetables. It even provides a week-long sample menu for eating an exciting and healthy diet that embodies the color principles. The authors provide other practical advice as well, such as how to cut a mango, and the best way to wash pesticides from food. They also take every opportunity to present a variety of helpful nutrition information, such as the difference between soluble and insoluble fiber, complete and incomplete proteins, different oils and fats, and the relative benefits of fresh, frozen, and canned produce. Moreover, they present many fascinating historical anecdotes such as the role of bilberry jam in the World War II Royal Air Force and the 1893 United States Supreme Court Case concerning whether tomatoes should be categorized as fruits or vegetables.

Additionally, *The Color Code* is written in a clear and engaging style, and even the novice will not become confused or overwhelmed. Perhaps to this end, the authors have avoided the use of traditional references, simply compiling a bibliography of journal articles and books corresponding to each chapter. Unfortunately, this makes it harder to connect a given fact with its source. Furthermore, the bibliography does not appear to be as comprehensive as it could be.

But more disturbing is that the authors' "Color Code Eating Program," does not place great importance on the incorporation of produce from all four color groups, supposedly the primary contribution of this book. The authors recommend eating 100 "points" per day, ideally consisting of 10 servings of fruits and vegetables, at 10 points each. Of several ways to earn a mere "5 bonus points," along with such things as drinking tea, one may eat from all four color groups in a given day. In fact, much of the book is devoted to describing the benefits

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of fruit and vegetable phytochemicals that are unrelated to their pigments. Consequently, it would seem that, to a certain extent, "the color code" is just an excuse to write another book about the importance of eating your veggies, and your mother already told you that one.

Even if its title, and perhaps even its principle message, is therefore somewhat misleading, *The Color Code* is still a valuable book. For the scientist or researcher, it quickly reviews the surprising multitude of studies linking fresh fruits and vegetables to almost every imaginable aspect of good health. For the nutritionist

or dietician, its sample menus and recipes are a demonstration of how healthy meals may be presented to clients in an attractive and appetizing way. And it will, in simple terms, educate the novice about proper nutrition and motivate him to that end. Indeed, our pill-popping society needs to be roused to the fact that "food is the magic bullet."

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