Overall an excellent book that has brought needed attention to bioidentical hormones. While the method described in the book is far superior to commonly used synthetic HRT, it is not the most optimal regimen currently available. Following are some important points that need to be taken into account when deciding on treatment after reading the book:

**The recommendation that oral estradiol be used.**
- Oral estradiol is superior to Premarin and other synthetic oral estrogens, but when given orally it also increases the risk of stroke, heart attack and DVT when compared to transdermal (gel) estrogen.
- When any estrogen is given orally, it goes through the liver and stimulates binding proteins for thyroid, testosterone, adrenal hormones and growth hormone, lowering these hormones with potentially detrimental effects. This does not occur with transdermal preparations.
- Oral estradiol will increase inflammation, including CRP, which increases the risk of heart disease. This does not occur with transdermal preparations.
- When oral estrogen is given, it is first metabolized by the liver (called 1st pass metabolism) which breakdowns the estrogen to unwanted metabolites (you don't get what you give).
- Oral estrogen increases insulin resistance while transdermal does not.

**Dr. Schwarzbein does not mention or use estriol.**
- She makes the point that women just have to live with the increased risk of breast cancer without apparently knowing of the anti-breast cancer effects of estriol.
- Estriol should be combined with estradiol for breast cancer prevention. As discussed, the higher level of estriol, the lower the cancer. It is unconscionable not to make women aware of this. “Enough presumptive and scientific evidence has been accumulated that we may say that orally administered estriol is safer...let us have the estrogen that causes the least risk.”  
  *JAMA 1978*

**Women should be on cyclic progesterone (only 10-14 days per month)**

- The decreased amount of progesterone in cyclic administration of progesterone to have periods increases the risk of endometrial cancer (1,2,3) and breast cancer. (4,5).

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**Dr. Schwarzbein states that doing the combined continuous method is like pregnancy and thus increases the risk of breast cancer.**
- Combined continuous is certainly not like pregnancy and has opposite effects on the endometrium. In addition, pregnancy is strongly associated with breast cancer protection.
- Women with multiple pregnancies have a lifetime exposure to the estrogen and progesterone that is 1.5-3 times that of women who have never been pregnant. This increased exposure (especially in estriol and progesterone) confers a significant reduction in cancer risk. If natural hormones caused cancer, opposite findings would be expected.
- Some factors associated with pregnancy (high estriol and progesterone) are known to reduce a woman's chance of developing breast cancer later in life.
- The younger a woman has her first child, the lower her risk of developing breast cancer during her lifetime.
- A woman who has her first child after the age of 35 has approximately twice the risk of developing breast cancer as a woman who has a child before age 20.
- Having more than one child decreases a woman's chances of developing breast cancer. In particular, having more than one child at a younger age decreases a woman's chances of developing breast cancer during her lifetime.

**Dr. Schwarzbein states that doing the combined continuous method (not having periods) with natural progesterone increases insulin resistance.**
- While this is certainly true with progestins, it has been demonstrated not to be the case with natural progesterone.

*University of Massachusetts, Energy Metabolism Lab, 2003 Diabetes Care January 2002*
- I have followed the insulin levels on thousands of women on combined transdermal bi-estrogen and continuous progesterone. I have found that there are no adverse effects on insulin resistance, but rather an improvement in insulin sensitivity.
- In fact, it has been shown that it is not the continuous progesterone that results in an increased insulin resistance, but rather the effect of oral estrogen (natural estradiol included).
- A 1993 study found that oral estrogen increased insulin resistance while transdermal did not.
  "Oral estrogen therapy caused a deterioration of glucose tolerance"
and an increased overall plasma insulin response…while the transdermal regimen had relatively few effects on insulin metabolism.”

*Metabolism 1993*

- A study published in 2002 in the journal Diabetes Care looked at the effect that oral estradiol and continuous progesterone had on insulin resistance. Twenty-eight postmenopausal women were given oral estradiol with or without continuous progesterone and matched with women not taking any hormones.

- The authors conclude that postmenopausal women taking oral estrogen, with or without progesterone, show a greater degree of insulin resistance than those not taking hormone replacement therapy, even allowing for total and abdominal adiposity.

- The culprit was the oral estradiol and not the progesterone.