Abstract

Menopause occurs when menstruation ends. It is a natural process that develops between the ages of 45-55 years. It results in symptoms including hot flashes, sweats, insomnia and vaginal dryness(3). Long-term conditions are osteoporosis and coronary heart disease. Medical treatment through Hormone Replacement Therapy (HRT) replaces key hormones estrogen and progesterone(1). But if taken for at least 5 years, side effects of HRT include major diseases such as breast cancer, heart attacks, and blood clots (5). It was hypothesized that an alternative to HRT is a lifestyle change including exercise and a sensible balanced diet. Components of the diet includes phtoestrogen, calcium products, folate and omega-3 fats with a maximum of 30% fat overall(5). A good substitute for HRT can be planned with a physician and this dietary information.

Introduction

Menopause is a naturally occurring biological process that brings a drastic transition in the development of women of 45 years and above. The ovaries stop producing the hormone estrogen, and fertility ends(1). Menopause is not a medical illness, and numerous treatments are available to reduce menopausal symptoms. The long term symptoms are osteoporosis and heart disease due to age-related increases in weight, blood pressure, and cholesterol (3). To prevent these symptoms, some women use hormone replacement therapy (HRT). HRT is a way to reduce menopausal symptoms, especially hot flashes, insomnia, headaches and joint pains(3). However recent studies of Women's Health Initiative (WHI) have shown that HRT should be used carefully with doctors prescription because it can increase the risk of blood clots, heart attacks, strokes, breast cancer, and gall bladder disease (Fig 1). Using estrogen alone increases the risk of endometrial cancer. Taking a progestin along with estrogen will reduce the risk of uterine problems(5), but may start bleeding again. Also the National Institute of Cancer (NCI) has stated that women who have used HRT for at least five years continuously have nearly twice the risk of certain cancers compared to women who never used HRT(5).

A safe alternative to HRT would be a carefully planned natural diet. This diet should consist primarily of soy because it is low in cholesterol and triglycerides and will likely reduce the risk of heart disease and weight gain(6). Spy is rich in phytoestrogen and therefore mimics estrogen in the body and reduces risk for breast cancer(6). Calcium supplements are also recommended to slow the onset of osteoporosis(3). A nutritional diet and regular exercise may improve health and reduce side effects that HRT might cause.

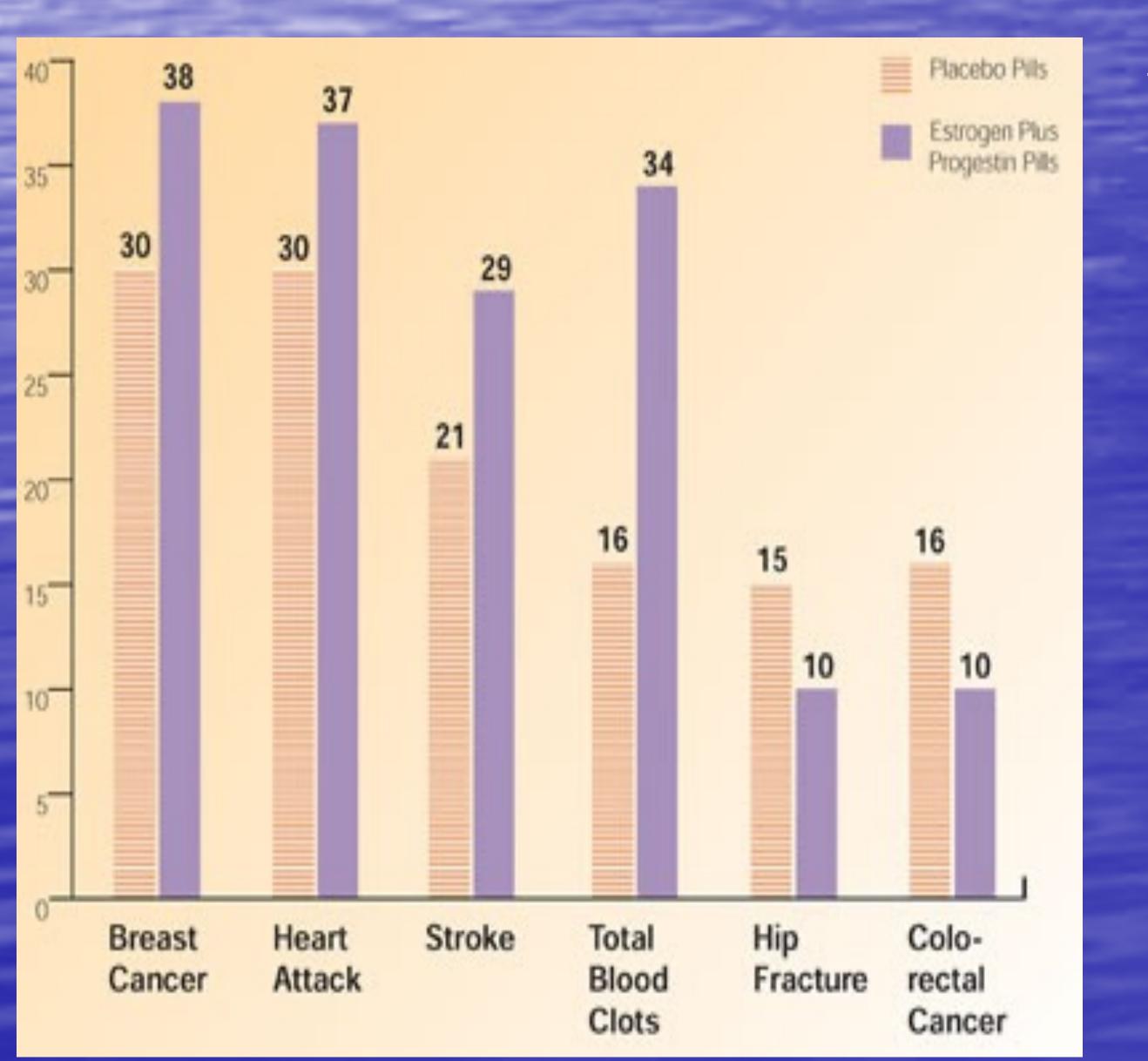


Fig.1. Estrogen Plus Progestin pills vs. Placebo http//www.nhlbi.nih.gov/health/women/pht_facts.htm

Optimum diet for menapouse is an alternative to HRT

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The rate of medical conditions per 10,000 women per year

WHI Findings on Estrogen plus Progestin Therapy compared with placebo, after about 5 years of use, resulted in (5) :

Increased risks

26% increase in breast cancer 41% increase in strokes 29% increase in heart attacks Doubled rates of blood clots in legs and lungs

Increased benefits

37% less colorectal cancer 34% fewer hip fractures

Method

I developed an optimum nutritional diet using internet sources and Medline Journals. In addition to this I interviewed a woman of 45 years of age who has had hysterectomy. My interview with her helped me to understand which major menopausal symptoms occur to help me develop the dietary table.

Results

The dietary list presented below highlights the essential food products required for menopausal women. The alternative food pyramid specifies the importance of these nutrients. The guidelines by the pyramid specify steps to a healty balanced diet.

Food product	How much?	Immediate Benefits	Long-term Benefits	
Phytoestrogens (6) like Soy (Tofu, soy milk, parsley beet root and yams)	90 mg daily of isoflavones (6)	Reduces hot flashes and night sweats (3)	Lowers blood cholesterol and protects against osteoporosis (2 and 7)	Alternative Food Pyramid Developed by Dr. Walter C. Willett and his colleagues. Dairy foo Source: "Eat, Drink, and Be Healthy" (New York: Simon & Schuster, 2001)
Calcium Products like dairy (3)	1200 mg daily (8)	Reduces bone fracture	less risk of hip fracture (3)	
Low Fat Products (3)	Less the 30% fat (8)	reduces heart thrombosis (7)	Low risk of heart diseases (7)	
Fiber rich fruits (2)	20-30 g of fiber per day(8)	Increases flavanones which prevents cancer (2)	Reduces the risk of cancer (2)	
Vitamins and Other Supplements				Whole grain food (at most meals)
Vitamin D (2)	400-600 IU (3)	stronger bones (2)	reduces risk of osteoporosis (3)	Daily ex
Vitamin B (2)	400µg of folate a day (2)	low level of homocysteines (7)	low risk of heart attacks (7)	http://galenslog.typepad.com/g

Discussion

An effective nutritional diet may be safer than HRT. NCI and WHI have done clinical trials proving that HRT is an effective short term treatment for menopausal symptoms, but not the best alternative(4). A doctor should be consulted at least monthly if HRT is taken, especially if a woman has a family history of breast or uterine cancer or heart disease(5). HRT causes water retention and hunger resulting in a high incidence of Weight gain(5). A balanced diet, however, can be easily modified, and is effective in raising consciousness about eating habits for good health and weight control. With a proper diet with below 30% mostly unsaturated fat(2) and regular exercise, women have less need to visit a doctor or take prescription medications. A good diet is a risk and stress free method for relieving menopausal symptoms and reducing health problems. The diet table was accumulated from website and text book information that are clinically tested for women. The dietary guidelines are presented because they include information from the pyramid and the diet table. A doctor should be consulted before modifying one's diet for health reasons.

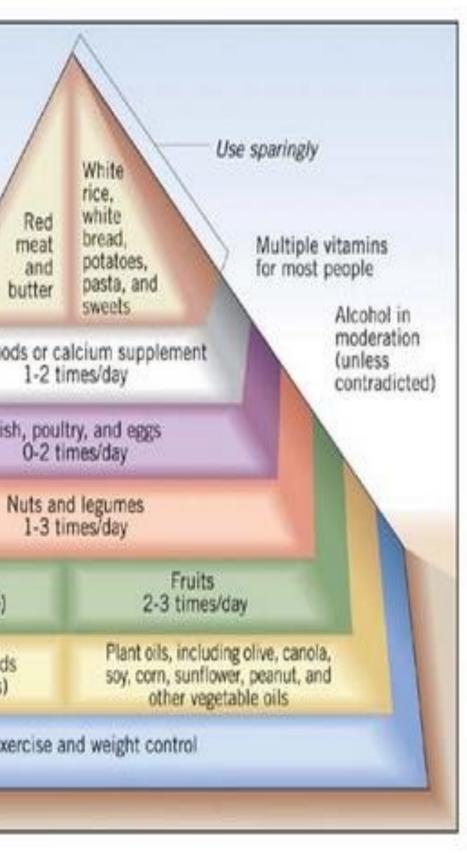
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Dietary Guidelines To Discuss with a Doctor

- 1. Exercise like long walk everyday is good for strengthening bone and reduces weight gain (8)
- 2. Soy products like Tofu, Soy milk , Soya oil 2 to 3 times a day increase estrogen levels
- 3. Whole grains are better than simple carbs during meals or as snacks because they decrease risk of diabetes which is common in women above 45. (8)
- 4. Fruits and Vegetables rich in phytœstrogens are essential eg: Beet root , parsley , other vegetables and fibers (3 to 4 times a day) (3)
- 5. Soy, seeds , nuts , legumes have proteins which are a better alternative to red meat (1-3 times a day) (8)
- 6. White meat is a better alternative to red meat and reduces cholesterol (2 times a day). Eat red meat sparingly (8)
- 7. Get calcium rich products which have very low levels of saturated fats eg. Broccoli, Tofu, Collards (2 times a day) (8)
- 8. Eat polyunsaturated and Monounsaturated fats eg. Cashews , almonds, avacadoes, Fish (1-2 times a day) (8)
- 9. Vitamin B and Vitamin D are needed in amounts specified in the table atleast once a day) (2, 8)