just to the loss of estrogen on its own. While HRT might relieve the severe times, some symptomatology will be present when HRT is discontinued. There are many contra-indications for HRT, and it must be used only after a detailed physical examination and careful consideration with an informed physician.

Just as society has prescribed fear and mystery for menopause, we can change that prescription. Women need to become responsible for understanding their own bodies and to know about exercise and proper nutrition. Keeping track of one's physiological and mental changes are the best way to refute "you are just in the menopause." We cannot pass off our many problems to menopause if we know what to expect at this time. We need to write more about women over the age of fifty. Who are we? What are our values and joys? We must become visible so that we can tell each other and our daughters who we are. We need to validate our wisdom and experience. And if ever there was a time for sharing responsibilities with families and extended families, it is now. Can we build on the supports that are there in our lives, or must we continue to hold on, not to let go of the small area of control that has been our domain? If menopausal women validated themselves and spoke out for themselves, we would become a powerful force. Let's show the physical and mental aliveness that Margaret Mead captured in the phrase "post-menopausal zest"!

Suggested Reading:

Jane Page, *The Other Awkward Age,* Ten Speed Press, 1977.

Rosetta Reitz, *Menopause: A Positive Approach,* Chilton Book Company, 1977.

Barbara and Gideon Seaman, *Women and the Crisis in Sex Hormones,* Bantam, 1977.

Penny Wise Budoff, *No More Hot Flashes and Other Good News,* G.P. Putnam's Sons, 1983.

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SEX AND THE SILENT

Diane Palmason

Tous les chercheurs s'entendent pour affirmer qu'il vaudrait mieux prévenir l'ostéoporose que la soigner, car c'est une maladie qui peut être en grande partie évitée. En fait, la forme la plus commune, l'ostéoporose de post-ménopause, peut être totalement évitée!

Les femmes commencent une perte osseuse à 35 ans (les hommes à 50 ans) et cette perte s'accélère rapidement après la ménopause. Vingt-cinq p. cent de la population féminine canadienne de plus de 50 ans souffre d'ostéoporose et la moitié d'entre elles subit des fractures. Toutes les femmes devraient suivre un régime qui contient des produits laitiers pour le calcium, et faire régulièrement de l'exercice. L'activité physique aide non seulement à prévenir l'ostéoporose, mais elle est également efficace pour la traiter. Une vie active physiquement est donc un des moyens pour les femmes d'éviter que le "voleur silencieux" — l'ostéoporose — ne les attaque quand elles vieillissent.

Photo: Diane Palmason

Although there is much controversy among researchers as to the causes and methods of treatment of osteoporosis, they all agree on one point: that it would be far better to prevent this condition from developing than to attempt to treat it, and that it is largely preventable — certainly that the most common form, postmenopausal osteoporosis, is completely preventable. Both men and women lost bone as they age, but loss of bone begins sooner in women (thirty-five years) than in men (fifty years), and proceeds far more rapidly, especially after the menopause (0.4 per cent of bone lost per year in men; 2 per cent to 3 per cent in women).[1] This, combined with the fact that far more women than men live to an age at which this process begins to become manifest as vertebral, wrist, and hip fractures, makes osteoporosis a disorder that affects women much more than men. In Canada,

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approximately 25 per cent of the female population over fifty years of age — more than 300,000 women — have radiologic evidence of osteoporosis, and half of this group experience hip, forearm, or vertebral compression fractures.[2]

It is interesting to speculate about the extent to which the incidence of osteoporosis would be reduced if all women were encouraged to eat a hearty diet that included lots of dairy products for calcium and then to burn up at least some of the attendant calories in physical activity, whether through sport or through work. Such a regimen has been shown to be therapeutic in those who are already osteoporotic,[3] so it would certainly be preventive as well. Further, although it would be preventive, it would not involve any "medicine." That is, it would not require any visits to a physician nor prescriptions or treatments. Nor need there be high costs involved beyond an income sufficiently adequate to allow the purchase of powdered skim milk and sturdy, supportive footwear.

The authors of a recent publication on the effects of exercise on bone density support the concept that it is both therapeutic and preventive. They cite studies by Dr. Everett Smith[4] in which women with a mean age of eighty-two years showed not only slowed bone loss but actual bone accretion over a thirty-six-month period of very mild activity (chair exercises). After commenting on the various studies of differences in the bones of the arms of tennis players and losses in bone density with the lack of gravity and decreases in physical activity during space travel, the authors conclude: "all people ultimately lose bone, but those who have developed a larger bone mass by the fourth decade are slower to show bone loss clinically later in life. Thus, vigorous physical activity for young people, especially girls and young women, might significantly deter the symptoms of osteoporosis with aging."[5]

This last comment is encouraging, given the findings of the Canada Fitness Survey that more women in their twenties and thirties are becoming physically active. Less reassuring is the finding that although women seem to be more active, they still are showing significantly lower levels of physical fitness, when tested, than men. Even less encouraging is the report that many women are physically active solely for the purpose of controlling their weight and that many teen-aged women are now taking up smoking for the same reasons — the desire to be thin.[6] Will the increased mechanical stress on their bones from exercise offset their negative calcium balance from dietary restriction and their loss of hormones as a result of an early menopause following years of smoking? It may be twenty or thirty years before such questions can be answered.

In the meantime, what about the older woman whose risk of osteoporosis is much closer? For women forty years of age and older, there is a growing body of literature that shows that physical activity will not only help to prevent osteoporosis but will also reduce body fat, increase cardiovascular endurance,[7, 8] and, as an added bonus, perhaps even improve quality of life. A group of researchers used the Pflaum Life Quality Inventory to compare women over forty years who were long-distance runners with non-running adults and college students, and found that the runners scored significantly higher on measures of satisfaction with their self-development and personal growth, their intimate social interaction (family/friends), and their secondary social contacts (at work and/or in the community). The authors relate these findings to the women's high level of physical activity, although they do point out that "the mechanism for the mind/body interaction is not known."[9] Even should such a mechanism remain unknown or, indeed, prove to be non-existent, the findings that exercise can prevent primary bone loss in otherwise healthy older adults should be sufficient to encourage policy makers, program planners, health professionals, and those most at risk of osteoporosis — older women — to recognize the importance of a physically active lifestyle.

Notes

1. E.L. Smith, "Exercise for Prevention of Osteoporosis: A Review," *The Physician and Sportsmedicine* 10, 1982, 72-83.

2. B.R. Ashpole, "Bone Disease Gains Higher Profile in the Minds of Health Care Professionals and the General Public," *Therapeutic Update* 2, 1984, 4.

3. Smith, 82.

4. E.L. Smith and K.G. Stoedefalke, *Aging and Exercise,* Hillside, N.J.: Enslow, 1983.

5. R.A. Yeater and R.B. Martin, "Senile Osteoporosis: The Effects of Exercise," *Postgraduate Medicine* 75, 1984, 156.

6. Canada Fitness Survey, *Women and Fitness,* Fitness Canada (in press).

7. P. Vaccaro, A.F. Morris, and D.H. Clarke, "Physiological Characteristics of Masters Female Distance Runners," *The Physician and Sportsmedicine* 9, 1981, 105-107.

8. P. Vaccaro, G.M. Dummer, and D.H. Clarke, "Physiological Characteristics of Female Masters Swimmers," *The Physician and Sportsmedicine* 8, 1980.

9. A.F. Morris et. al., "Life Quality Characteristics of National Class Women Masters Long Distance Runners," *Annals of Sports Medicine* 1, 1982, 23-25.

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