

# The heart-mouth CONNECTION

by ELLEN ASHTON-HAISTE

Flashing those pearly whites may indicate more than a dazzling smile and ebullient personality. It could also signal a healthy heart.

Dentists and dental hygienists have long expounded on the benefits of flossing and regular cleaning as a means to keeping a healthy set of teeth for a lifetime. But scientists are now discovering new benefits to this regimen for total health, including prevention of heart disease.

"The scientific literature in this area is exploding," says Evie Jesin, dental hygienist and professor at Toronto's George Brown College. "The recent literature states that an individual with gum disease has twice the risk for heart disease. That's really significant."

Jesin considers gum disease to be a definite risk factor for heart disease, joining traditional culprits like smoking, diabetes, high cholesterol and elevated blood pressure. And, the Heart and Stroke Foundation agrees, citing that opinion in one of its "Point of View" statements.

"Traditional risk factors...account for only about one-half of coronary artery disease. Scientists have long hunted for other culprits that contribute to (it)," the statement says. "Bacteria originating in the oral cavity may explain some of these other cases. Mounting evidence over the past few years points to a possible link between chronic inflammatory conditions including gum disease and cardiovascular disease. Although a clear cause and effect relationship has not been found to date, the link is gaining support through case control and epidemiological investigations."

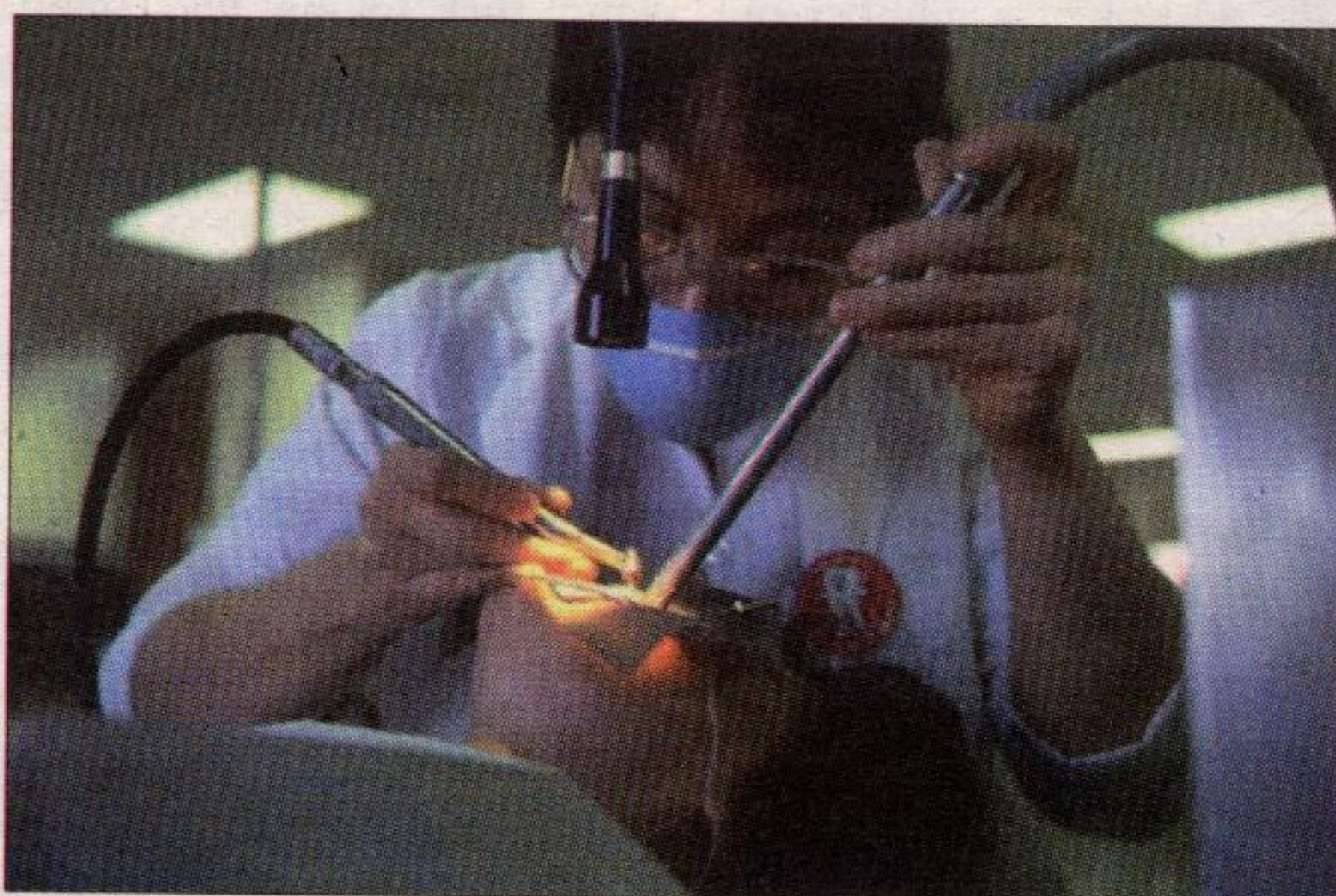
Deena Gardner (not her real name) of Vancouver doesn't need the scientific literature or research evidence to tell her the connection between heart and mouth is an important one. She underwent heart valve replacement surgery which she feels is the direct result of an infected tooth.

Gardner's problems began a few years ago when her dentist capped a tooth that subsequently developed an abscess. In an effort to save the tooth, the dentist sent her to a dental surgeon who went in through the gum to remove the infected tissue. Initially following the procedure he did not give her antibiotics, confident he had gotten all the toxins, but when the tooth con-

tinued to bother her, she was put on antibiotic treatment.

"I should have had them from the beginning," says Gardner, adding that all the dental forms she had filled out clearly stated that there was a history of heart problems in the family.

Months later, Gardner suffered severe chest pain at work and was rushed to hospital where she was diagnosed with an enlarged heart, caused by the faulty valve which was eventually replaced with an artificial one.



She says her cardiologist is convinced that, while the valve may have been weak to begin with, the dental infection contributed significantly to the development of the problem.

The studies in this area suggest that bacteria from diseased gums or infected teeth travels through the blood stream, causing a variety of problems. It may contribute to the formation of artery-clogging plaques, which can lead to stroke. Or, as in Gardner's case, the bacteria may contribute to infective endocarditis, a condition in which the interior lining of the heart and valves becomes inflamed.

Jesin says the recognition of the link between gum disease and heart disease came out of a U.S. study of 1,200 veterans, moni-

tored over a 35-year period, undergoing extensive medical tests including dental check-ups. Those with moderate to severe gum disease were found to be much more likely to suffer a stroke or heart disease.

As well the Heart and Stroke Foundation reports that a Finnish study found that men who had suffered an acute myocardial infarction (heart attack) had a significantly higher presence of recent bacterial infection. And, another seven-year study of 214 people showed dental disease to be a predictor of coronary events leading to death.

In fact, says Jesin, gum disease can affect more than just the heart. It's also been shown to be a factor in respiratory diseases such as pneumonia, diabetes and in premature, low-birth-weight infants.

"That's why we talk about oral health being linked to total health. If your mouth is healthy, then you're treating your whole body," she says.

Preventive measures include the obvious cleaning, flossing and regular check-ups and professional cleanings. The latter is one of the most important, Jesin says, since a dental hygienist can develop a specific care plan for an individual. This is important for people who have difficulty cleaning or flossing their teeth because of physical conditions such as arthritis. There are various special aids they can use, she says.

"I've done a lot of speaking engagements to and work with seniors, modifying tooth brush handles so that they can grasp them properly. One of the modifications is to insert (the brush handle) into a soft hair roller. I do lots of modifications but the bottom line is to make their mouths healthier. Then their whole body will be healthier."

People should also be aware of the signs of gum disease, Jesin says, such as sore and bleeding gums, bad breath or a bad taste in the mouth. "Some people disregard these symptoms... they think it's all normal. They don't realize that it may be stemming from plaque in the mouth and gum disease."

More information about the connection between heart and mouth is available on the College of Dental Hygienists of Ontario website at [www.chho.org](http://www.chho.org).

## HORMONES FOR MEN

— easing the pain of male menopause

by CECIL SCAGLIONE

The concept of "male menopause" and the need for hormone replacement therapy as a treatment are highly controversial topics, but one Toronto doctor is working on changing that.

When Dr. Jerald Bain set out to find 100 subjects to participate in a recent study, 900 volunteered for the chance to get a male hormone pill for what ailed them.

In the end, Bain, who is an endocrinologist at Mount Sinai Hospital and the director of the Health Institute for Men at the King's Health Centre, was only able to use 30 subjects.

After analyzing the data, he maintains "there is no basis for the assumption that the male hormone, testosterone, is dangerous."

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He's currently analyzing further data comparing men with "menopausal" symptoms on hormone replacement with men receiving placebos to determine the effectiveness of the treatment.

Drs. Andrew Dott and Anthony Karpas of the Institute of Endocrinology and Reproductive Medicine in Atlanta, contend that about 40 per cent of men, who are 40 and older, experience some degree of symptoms, including lethargy or fatigue, depression, increased irritability, mood swings, loss of bone density, decrease in lean muscle, increase in fat, anemia

or low blood levels of iron, decreased libido, and difficulty in attaining and sustaining erections.

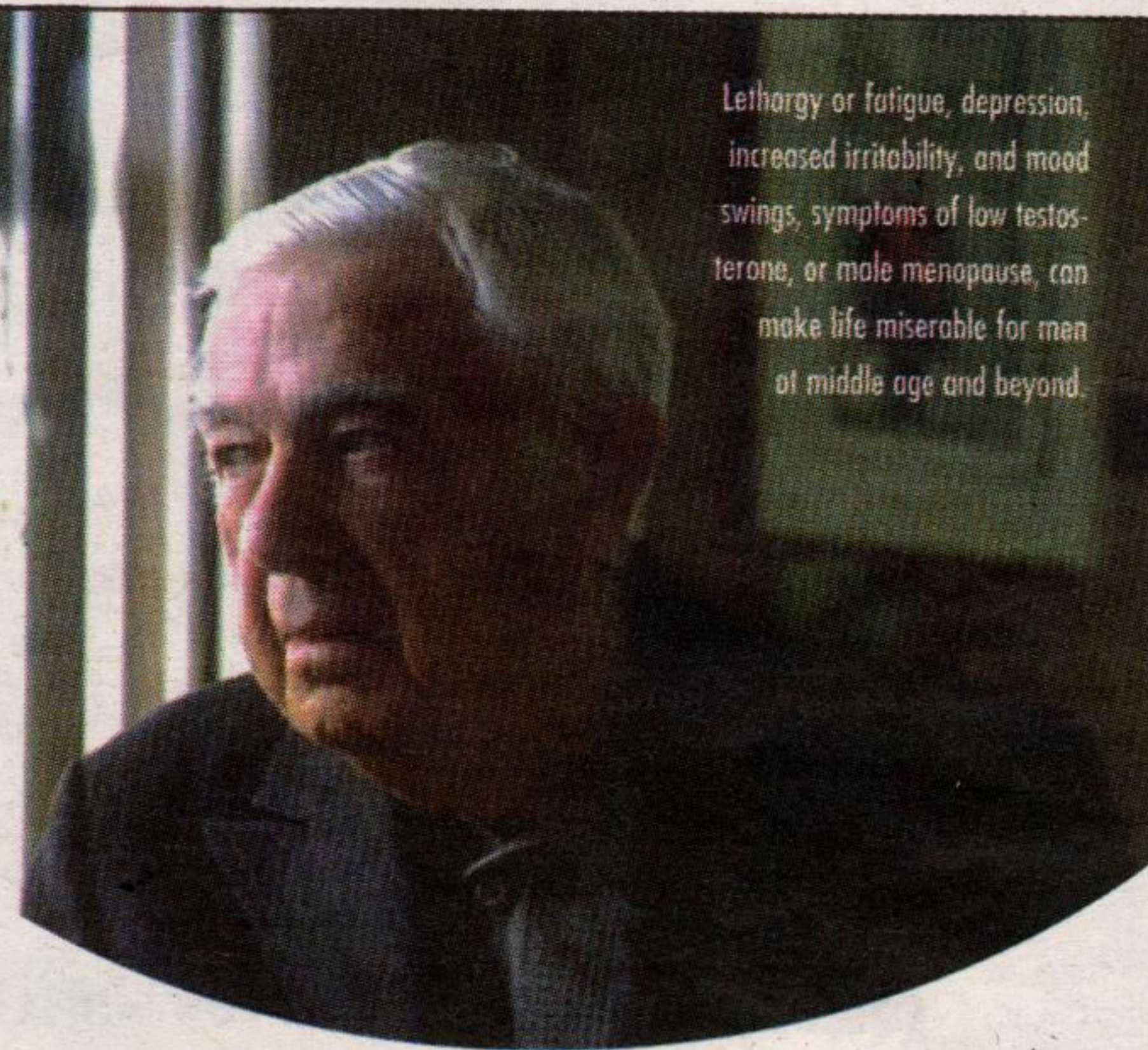
They say that these symptoms of "male menopause," also called andropause or viropause, can be caused by a decreased level of the male hormone testosterone and/or risk factors such as excessive alcohol consumption; smoking; high blood pressure; prescription-drug use; nonprescription drug use; poor diet; lack of exercise; poor circulation; or psychological problems.

Until recently, says Bain, most doctors have considered these symptoms just part of aging and have ignored them. But now, he says, "we're beginning to realize we don't have to accept them all. We can accept the loss of strength, but to have to lie in bed at age 60 because of weakness and fatigue is not something we should accept."

Although men can experience a decline in testosterone levels with increasing age, and despite decades of attempts to rejuvenate them, "male menopause" is still widely ignored.

Malcolm Carruthers, a London, England specialist in men's health, suspects that one reason is historical. The first successful use of hormone replacement occurred 150 years ago when a German professor named Berthold transplanted a rooster's testes into a castrated rooster. This procedure prevented the castrated rooster's comb from withering away. That study was followed by several other experiments using testicular transplants and extracts.

Testosterone was only isolated and synthesized 60 years ago. But the oral form can be toxic to the liver and heart, and that, Carruthers says, has "coloured the thinking of two generations of physicians."



Lethargy or fatigue, depression, increased irritability, and mood swings, symptoms of low testosterone, or male menopause, can make life miserable for men at middle age and beyond.

But Carruthers, who has been following men who have taken testosterone supplements for up to five years, has concluded that the supplements cause no negative effects on their hearts, livers, or prostate glands.

Another problem associated with the diagnosis of "male menopause" is that only 13 per cent of men with symptoms have a low level of total testosterone.

Carruthers and others say doctors need to evaluate the level of free active testosterone, or FAT, rather than total testosterone levels. FAT is obtained by dividing the total plasma testosterone level by that of the sex hormone binding globulin (SHBG). This turns out to be low in 74 per cent of men with menopausal symptoms. SHBG increases with age and "zaps" the free testosterone before it can get into the cells to do its job.

Dott and Karpas maintain that, when it comes to diagnosis, doctors should not just evaluate testosterone levels. "Good medical care dictates that a comprehensive medical and psychological assessment along with a thorough laboratory assessment are necessary."

For more information, check the Canadian Andropause Society's website at [andropause.ca](http://andropause.ca).

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