

Anti-Aging Medicine Figuring out what might work isn't easy

By Jamie Talan.
STAFF WRITER

Well into Jean Martin's 50s, yoga and tennis are as integral a part of her life as the cream hormone she rubs on her thighs to keep the hot flashes of menopause at bay.

Martin is part of the Baby Boom generation, which is not taking this aging thing lying down. The collective body appears unwilling to settle for the slumped posture, sagging body and debilitating illnesses they have seen in previous generations.

"I feel great," said Martin, who recently moved from Wainscott to Connecticut. Twice a year she travels into Manhattan to see her doctor in the new field of anti-aging

medicine - a new medical breed that relies on a mix of nutrients, vitamins and replacement hormones in an effort to keep the body healthy and youthful. Their medicine cabinet contains injectable human growth hormone, testosterone, melatonin, estrogen and a host of nutritional products touted to help build bone mass, decrease body fat, improve sleep and lower the risk of the physical and mental diseases associated with aging.

But do they really work?

The practice of pushing back the hands of time is taking its licks from traditional doctors who aren't willing to pretend that science has anything to offer in the way of a youth elixir.

"It's alarming to endanger the

public with stuff that we don't have randomized clinical trials for," said Dr. Robert Butler, founder of the International Longevity Center in Manhattan and one of the first geriatricians in the country. In 1974,



Newsday Photo / Viorel Florescu
Dr. Joseph M. Raffaele, who specializes in anti-aging medicine, with patient Jean Martin, who is in her 50s.

he became the first director of the National Institute on Aging. "We are concerned with the term 'anti-aging' that suggests that aging is a disease and not just another stage of life."

Nevertheless, the sagging skin, thinning bones and slowed gait are part of a process that scientists are trying to alter. And already doctors are using some of the lab findings in their practices - ready or not.

Practitioners of anti-aging medicine believe in replacing key hormones the body loses over time. One, human growth hormone, is critical to the developing body but in the teens begins to decline by 50 percent every seven years. The body continues to use it to mineralize the

bone, keep skin healthy, strengthen muscle and reduce body fat. There also is evidence that it plays a role in the brain, enhancing the ability to process information.

"Baby boomers want to remain healthy," said Dr. Merrill N. Werblun, a 68-year-old physician at Cenegenics Medical Institute in Las Vegas, an age management medical practice. He exercises daily and takes a handful of vitamins and nutrients. He eats a low glycemic diet, a classification for foods that is based on a carbohydrate's blood glucose-raising potential. (Older people are prone to insulin resistance, or type 2 diabetes, because the

aging body has a harder time processing carbohydrates and other foods that convert to sugar.)

But his health strategy takes a controversial turn in his daily injection of human growth hormone and a substance that stimulates testosterone production.

The FDA has never been asked to weigh the evidence of HGH as an anti-aging therapy, so it's not approved for use in fighting aging. But once a medicine is federally approved for use, doctors can prescribe it for other conditions. And injectable HGH has been approved for some conditions.

A study published in 1990 established benefits of injectable

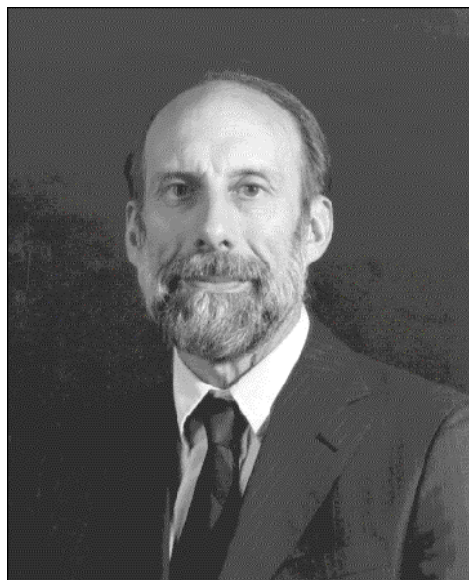
human growth hormone given to men over 60. Three injections a week were found to increase lean body mass by 8.8 percent and skin thickness by 7 percent. Fat-tissue mass was decreased by 14.4 percent. The men receiving it also reported that they felt better

The hormone is thought to work by stimulating the insulin-signaling pathway that regulates the rate of metabolism.

Tens of thousands of adults have taken human growth hormone in the past decade, according to Huber Warner, associate director of NIA's biology of aging program.

"It's very seductive to think it will reduce aging," Warner said. "But it may not be such a good idea."

He cited studies that suggest animals that don't make human growth hormone actually live longer. Doctors who support its use counter that the hormone was absent during a critical period in development - and that studies on rodents don't always have applications for humans.



NIA's Huber Warner

Still, Warner says that there may be an important reason that these hormones decline with age - and messing around with human nature could be dangerous. "We just don't know," he said.

At 43, Dr. Joseph Raffaele uses it himself. He offers it at a cost of \$7,000 a year - not reimbursable through insurance - to patients,

including Martin.

But detractors are wary.

"There is nothing on the market that can slow aging," said Dr. S. Jay Olshansky, a professor in the school of public health at the University of Illinois in Chicago. He's been searching for genes that offer protection from certain diseases, and he doesn't believe he'll find genes specific to longevity.

And he worries about the growing number of clinics promising youth in a syringe. "All of this needs to be studied," Olshansky said.

But Raffaele counters that "a clinician doesn't have the luxury of saying, 'Let's wait and see.' We don't accept that for cancer or heart disease." Raffaele and Olshansky debated at a recent national medical meeting.

At the turn of the 20th century, the average human lifespan was about 50 years. Now the average has extended into the 80s for women and late 70s for men, and scientists are trying to stall death even longer.

Anti-aging doctors don't limit themselves to the use of HGH and other hormones, including estrogen, testosterone and melatonin. They search a patient's blood for depleted vitamins and minerals and for markers of cancer and heart disease. Many order a CAT scan of the cardiovascular system to identify problems before symptoms develop. There are also tests of mental function.

"It's a different perspective but not different medicine," said Dr. Richard Firshein, who has a holistic practice in Manhattan and is author of "The Neutraceutical Revolution" (Riverhead Books).

Estrogen, even in light of studies pointing to the risks of its use when combined with progestin, is often on the anti-aging menu due to the perceived benefits on mind and body that some doctors say outweigh the risk for breast cancer and heart disease. Testosterone has been shown to enhance memory and mood and increase lean body mass. And melatonin promotes sleep.

Yet even anti-aging doctors concede it is not easy to tell them apart

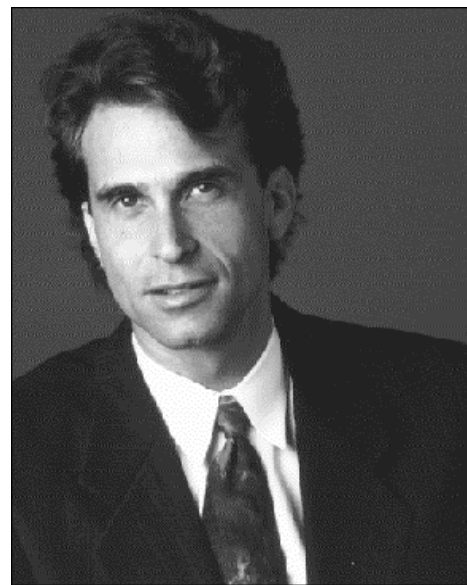
from snake-oil salesmen.

"There is a lot of crap out there," added Raffaele, who cringes at Internet advertisements promising life-altering miracles through human growth hormone given in oral doses - which, he said, has not been studied.

He cautions people to seek the advice of a physician before venturing into uncharted territory. Ultimately, he says, "Something is going to get you.

Whatever it is will depend on what organ goes first." That's why the goal of anti-aging doctors is to keep the entire body as healthy as possible.

"Buyer beware" is the advice Butler gives. At 76, he continues to work a 12-hour day, eats an almost all-vegetarian diet and does the equivalent of five miles a day on his home stepping machine. A personal trainer comes once a week. And what he's found after decades of practicing geriatric medicine is this: "It's important to have a purpose. People with goals live longer."



Dr. Richard Firshein

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