It's been called the fountain of youth hormone, and despite all the hype about dehydroepiandrosterone (DHEA), research shows healthy DHEA levels may be an indicator for a long and healthy life.

We know that the human body's natural production of DHEA deteriorates as we age. In his book *Natural Cures* (Common Sense Publishing, 2006), Allen Josephs, MD, states that DHEA levels may fall by as much as 90 percent between the ages of 20 and 90.

Think of it as a wind-up toy running down. As DHEA levels fall, energy levels decrease and we begin to experience the fatigue, aches and pains, and general lack of energy many of us associate with getting older.

Where does it come from?
DHEA is manufactured by the adrenal glands, walnut-sized glands located above the kidneys that regulate our responses to stress, among other functions. The skin, brain, and prostate glands also produce DHEA, though in smaller amounts.

The primary sex glands—ovaries and testes—do not produce DHEA, but when DHEA is secreted into the bloodstream in its sulphate form (DHEAS), it helps the body produce estrogen and/or testosterone as needed.

Of course, none of us will live forever, but there is compelling evidence that people with the highest DHEA levels in their blood experience a better quality of life. Also, they often live longer because high DHEA levels help lessen the risk of heart disease, cancer, and obesity.

"Allen Josephs, MD, states that DHEA levels may fall by as much as 90 percent between the ages of 20 and 90."

Proven benefits
Low blood levels of DHEA have been associated with heart disease in older men and women.

Italian research published in the *Journal of Clinical Endocrinology* (2006) showed that a small group of men who took 50 mg of DHEA supplements daily for two months were able to lower their total cholesterol and their LDL (bad) cholesterol.

Research—then and now
Temple University's earliest animal research showed DHEA could almost completely wipe out cancerous tumors in middle-aged mice and eliminate as many as 75 percent of the
skin, lung, bowel, breast, and liver cancers to which the animals were exposed.

Recent research suggests that those protective effects can cross over into humans, at least in some cases. A 2006 study from Quebec's Universitè Laval shows that DHEA-based treatments for prostate cancer can prolong life and even offer a 90-percent chance of a cure for men with the disease. A new Japanese study shows that DHEA effectively helps shrink cancerous tumours.

A French study conducted over a 10-year period ending in 2001 states that elderly male smokers with low DHEA levels have a higher death rate than elderly male smokers with higher levels of DHEA.

Weight control
A 1998 study in Endocrinology indicated that DHEA treatment reduced body weight in rats. Sadly for those of us who struggle with our weight, the early promise of DHEA in animal studies appears not to apply to humans.

"High DHEA levels help lessen the risk of heart disease, cancer, and obesity."

Scientists at the University of Rochester in New York gave a small group of healthy men high doses (1,600 mg) of DHEA daily for four weeks, but found it had no effect on their weight.

However, Japanese research published in Clinical Chemistry (2000) shows approximately half of the women with low thyroid function also had low DHEA levels, and because weight gain is one of the most common symptoms of low thyroid function, it would seem we have more to learn.

To supplement or not to supplement?
While there is a great deal of research on DHEA, leaving little doubt that low DHEA levels in humans can predict numerous health problems, there are still widely varying opinions about the effectiveness of supplementing DHEA to lengthen life span.

One problem is that in many of the studies very high dosages of DHEA were used (as in the above-mentioned weight loss study). These amounts are not recommended for most people. Many doctors recommend a blood test to determine your DHEA levels before you start taking a supplement.

Dr. Josephs recommends 5 mg to 15 mg of DHEA daily for women and 25 mg to 50 mg for men. 3

Kathleen Barnes is author of several natural health books, including User's Guide to Thyroid Disorders [Basic Health Publications, 2005].