PET POWER

A few weeks ago, I saw a TV interview with Bernie Siegel, MD, founder of Exceptional Cancer Patients (ECaP), an advocacy group for people facing cancer and other chronic illnesses, in which he discussed the effects of pets on heart attack victims in Australia. After one year, 6% of the patients who owned a dog had died, compared with a 25% mortality rate in those who did not own a dog. I thought that was a pretty remarkable statistic, especially after he said that someone in Australia calculated that if everyone in Australia were given a dog, it would save $145 million per year in health-care costs. I don't know how that cost compares with the cost of dog food, but it sure sounded impressive.

For years, we've all heard about the therapeutic effects of pets in healing, depression and stress reduction. I decided to look at some of the scientific data on how pets affect us. I called Karen Allen, PhD, a research scientist at the School of Public Health at the State University of New York at Buffalo. Dr. Allen's work focuses on the effects of pets on human stress reactions.

PEOPLE OR PETS -- WHICH ARE BETTER FOR STRESS?

Dr. Allen has conducted several studies that address such intriguing questions as...

* Which is better -- to have your best friend or your pet present in stressful situations?

* Which is better -- to have your spouse or your pet present in stressful situations?

* How do pets affect blood pressure (a common measure of stress response) in people who already are taking blood pressure lowering medication?

* Can newly acquired pets affect stress?

In one study, Dr. Allen looked at women performing mental arithmetic problems alone... then with their best female friends present... and finally, with their dogs present. Interestingly, with the friends present, the subjects experienced large increases in blood pressure (compared with when they worked alone). However, when the dogs were present, insignificant increases -- or none at all -- occurred in blood pressure.

"One study participant suggested that we compare the effect of her dog's presence with the effect of her husband's presence," recalled Dr. Allen. She and her colleagues laughed at the idea at first but then decided to test it out. In this study, in addition to performing mental arithmetic, participants were asked to hold their hands under cold water and endure it to test both "active coping" and "passive coping" responses.

Once again, and in both active and passive coping trials, participants experienced dramatic stress responses in the presence of another person versus only slight increases in blood pressure in the presence of a pet. The consistent results led Dr. Allen to conclude that pets clearly are a preferred source of social support. An interesting result of the study was that when the pets and the spouses were both present, the effect of the dogs cancelled out the stress that the presence of spouses generated.

PET/PEOPLE PREFERENCE?

One valid criticism Dr. Allen encountered was the notion that the pets really had produced no effect at all. Pet owners generally are healthier, happier and better adjusted than those who do not own pets, therefore, their blood pressure is less likely to rise under stress.

To test whether a pet would affect people who did not previously own one, Dr. Allen designed a study in which half of the participants were randomly selected to adopt a cat or dog from an animal shelter. The study participants, all stockbrokers who lived alone, described their work as extremely stressful. In addition, they all had high blood pressure (greater than 160/100)... and they were all

scheduled to begin drug therapy with lisinopril, a medication that successfully reduces resting blood pressure.

Once again, participants performed mental arithmetic as the stress provoker, but in addition they were asked to give speeches to imaginary clients whose money they had lost. As predicted, lisinopril lowered the resting blood pressure of all participants. However, while doing the mental arithmetic or giving the speeches, the pet-owning participants' blood pressure increased by less than half of their petless counterparts.

HOW DOES THIS HAPPEN?

Dr. Siegel has seen firsthand the extraordinary effects animals can have. "People's physiology, their body chemistry, literally changes when pets are around," he says. Levels of the stress hormone cortisol go down, immune function improves and, perhaps more significantly, serotonin and oxytocin levels increase. These are the same hormones that are elevated in a woman after giving birth, which promote bonding with the new baby.

But why do these chemical changes occur?

Dr. Siegel thinks that the bottom line is the unconditional acceptance and connection that animals consistently provide. In addition, he notes, the responsibility of pet ownership can give one's life meaning, especially in the absence of other close relationships. "I've worked with cancer patients who literally could not die because they had dogs and cats who had to be taken care of," Siegel says. "These people hung on to life until they were sure that their pets would be provided for."

Dr. Siegel explains that an important reason why we feel a close Connection to our pets is that they can be incredibly intuitive. Often, if a person were sick in bed, a dog would come and sit beside him/her, whereas if he were just taking a nap, the dog would not show the same level of concern and interest. Animals respond to feelings, to what is really going on with their owners.

"Animals have an incredible ability to be completely there and completely devoted," Dr. Siegel says. "How many of us can say that we are totally devoted to someone else's well-being? Animals are, and we respond positively to that."