

One Health and the Human-Animal Bond



One Health, or One Medicine, is a collaboration of related health science disciplines working together locally, nationally and globally to advocate for optimal health for people, animals, and the environment. The term is relatively new, but the initiative began in the 1800s; however, the concept dates to ancient times from Hippocrates' "On Airs, Waters, and Places" (estimated 400 BC). One facet of the initiative that is gaining recognition is the significant way companion animals — and the Human-Animal Bond — benefit human, community and possibly world health.

The Human-Animal Bond (HAB) likely dates back to the domestication of the dog some 35,000 years ago with both human and dog recognizing the mutual benefit of the relationship. History shows the importance of companion animals in society as people domesticated animals, integrated them into religion, culture, and science, and accepted them as cherished parts of the family. Paralleling the social importance of companion animals is the recognition of the health benefits of keeping pets, with formal recognition in the 18th century. The 19th century saw a strong push towards using animals as part of healthcare. The last 25 years have seen renewed interest and advancements in scientific documentation of the health benefits of companion animals across the human life span from infancy to the final stages of life.

The human-animal bond is a strong, innate attachment between people and animals, wild or domestic. The American Veterinary Medical Association defines HAB as "a mutually beneficial and dynamic relationship between people and animals that is influenced by behaviors that are essential to the health and well-being of both. This includes, but is not limited to, emotional, psychological, and physical interactions of people, animals, and the environment."

Pets in the Home

Evidence of health benefits of pets in the family is strong, plentiful and consistent, based on many studies. Dogs and cats are the most popular pets but hamsters, fish, birds, rabbits, horses, and ferrets, among other critters, are kept as pets, and the bond is equally strong. People acquire pets for several reasons, including companionship, protection, and recreation, and most pets are considered part of the family. All family members — children, adults, and seniors — bond with their animal companions and reap health benefits as a result.

Studies show that children raised with pets in the home tend to show not only greater empathy, self-esteem, and cognitive development but also display higher levels of trust, self-confidence, and participation in social and athletic activities. Health studies show that exposure to cats and dogs in infancy and early childhood strengthens the developing immune system, greatly reducing a child's risk of developing allergies and asthma later in life.

Adults with pets in the home also experience benefits of enhanced physical health, social

By Ramona D. Marek, MS ED

and emotional well-being. Pet ownership has had a positive impact on some of the costliest and most fatal diseases in humans, including cardiovascular disease, cancer, and diabetes.

Heart-related disease is the leading cause of death for humans worldwide. Early studies from the 1980s showed a decrease in mortality for pet owners one year after a coronary event. Subsequent studies of the therapeutic value of pets are ongoing. So far, research shows that pet ownership or interaction with an animal reduces the risk factors related to cardiovascular disease, including physical inactivity, obesity, high blood pressure, stress, and depression.

In 2013, the American Heart Association issued this statement regarding positive interactions with animals and cardiovascular disease: "Pet ownership, particularly dog ownership, may be reasonable for a reduction in cardiovascular disease risk." Some of the particulars they referenced included decreased blood pressure, cholesterol levels, triglyceride levels, and feelings of loneliness along with increased opportunities for outdoor activities and socialization.

While many of the activities center around walking a dog, that doesn't mean a cat owner cannot walk a willing cat on a leash/harness or in a stroller. Believe me, walking a cat definitely increases one's socialization!

Cardiovascular studies show specific benefits that owning a cat significantly reduces the risk of cardiovascular diseases and associated disease. This holds true regardless of the patients' age, gender, race, systolic blood pressure, cigarette smoking, diabetic condi-



tion, serum cholesterol concentration, and body mass index.

People with pets have fewer doctor visits and some pet owners, with some medical conditions, have been able to reduce or phase out the need for some medications, adding up to substantial healthcare savings. Senior citizen pet owners enrolled in Medicare reduced their demand for medical services, lessening the costs to the healthcare system.

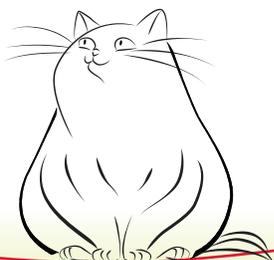
We pet owners have long known pets make us feel good, and now science is corroborating the anecdotal knowledge. It is far more than just a placebo effect of feeling loved, it is brain chemistry — specifically oxytocin, endorphins, prolactin, phenylethylamine and dopamine. These hormones have been associated with the bonding behavior, blood pressure regulation, pain control, stress relief, joy, and pleasure.

Pets in Clinical Settings

As the result of ongoing research, pets are becoming active participants in patient treatment plans. Some people have such a strong bond with their pets that they forego medical treatment, refuse hospitalization or shorten a hospital stay. Elderly individuals who can no longer properly care for themselves refuse to move to senior living centers because they don't want to leave their pets.

Years ago fur, fins, and feathers never crossed the antiseptic threshold of clinical settings such as hospitals and nursing homes, but that is changing. The use of animal-assisted therapies, with therapy pet visits, pets on staff and personal pets being accepted as part of the treatment plan, is increasing. Doctors see benefits in areas of improved mood, reduced anxiety and a desire to get well faster.

Some hospitals have special programs where a patient's companion pet is allowed to visit during the hospital stay. One example is Zachary's Paws for Healing at the Juravinski Hospital in Hamilton, Ontario, Canada.



In addition to pet visits, Zachary's Paws for Healing also offers foster care to pet owners entering the hospital so they don't need to worry about their pets and can focus on getting well. This not only reduces stress and worry for the individual but also for the pet: win-win. (Read more about Zachary's Paws for Healing: www.zacharyspawsforhealing.com/about.html)

Not all hospitals have such in-depth organized programs, but an increasing number do have patient pet policies although the requirements vary. The key is to inquire.

The Role of Squirrels

By Ramona D. Marek, MS ED

Did you ever wonder how feeding squirrels became a pastime? It isn't by accident but a well-planned introduction for people's mental health and well-being dating back to the 19th century. According to an article in the *Journal of American History* by Etienne Benson, a professor at University of Pennsylvania, a pet squirrel escaped in New York City in 1856 and throngs of people watched the "unusual visitor."

In 1847, the city of Philadelphia released three squirrels, provided food, and built nesting boxes for them in Franklin Square. It was such a huge success with people that Boston (Boston Common 1855) and New Haven (1860s) followed the trend. Not only was the concept a huge success, but it's reported that the squirrels grew so fat that they missed their holds and fell out of trees. Adding to the plan, cities began planting nut-bearing trees for the squirrels' food source.

American landscape architect Frederick Law Olmsted's prolific park designs and developments in the 1870's brought more squirrels. Central Park saw the second wave of park squirrels and interest grew to Harvard Yard and Washington DC's National Mall. According to

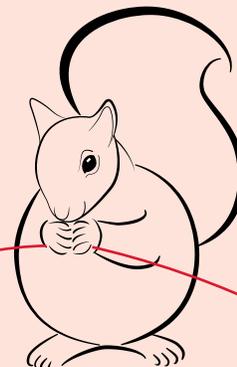
Karla Bachl, director of volunteer services at Lehigh Valley Hospital in Allentown, PA, says, "If a physician thinks a patient will improve with their dog present, doctor's orders will be written for their dog to visit. The dog is exclusive to the patient's room; a handler must be present at all times, and other set guidelines must be followed."

Kelley Boothby, manager of volunteer services at Hartford Hospital in Hartford, CT, says, "The hospital allows pet dogs, cats, and rabbits to visit patients. The unit supervisor

Benson, the concept of squirrels in parks was "related to the idea that you want to have things of beauty in the city, but it was also part of a much broader ideology that says nature in the city is essential to maintaining people's health and sanity, and to providing leisure activities for workers who cannot travel outside the city."

Over the years, the concept spread to the suburbs and feeding squirrels became a pastime. Naturalists and conservationists saw it as a way to teach humans about how to better treat animals. Naturalist Ernest Thompson Seton, who had helped found the Boy Scouts, and other urban-squirrel advocates saw feeding squirrels as opportunities for boys to establish trusting, sympathetic, and paternalistic relationships with animal others.

The next time you see a friendly squirrel, remember they are here for our health, well-being and as a reminder of how man and nature are entwined. Excuse me; my resident squirrel is knocking on the door for her allotment of nuts.



or nursing coordinator must give permission, documentation that the pet is current on vaccinations should be provided, the pet stays leashed in the patient's room and a handler must be available to provide care for the pet. Other conditions also apply. The facility recognizes the importance of the human-animal bond and that having their pet with them is an important component of a patient's healing."

For senior citizens and their families, moving to a care facility is often emotionally difficult because of the strong bond with a pet and the worry over who will take care of it. Sometimes a necessary move is delayed due to having a pet. That emotional strain is being lifted by an increasing number of

senior living centers. According to A Place for Mom, the nation's largest senior living referral service, approximately 40% of people calling ask about pets.

Residential care facilities understand the importance of pets and 39% of them have residential pets that include dogs, cats, and birds on staff for the residents, according to the 2010 CDC National Survey of Residential Care Facilities. The survey also cites 54% of residential facilities as allowing residents to bring their personal pets. The most common pets are dogs, cats, birds and fish. There are requirements: limit two pets, the person must be able to care for the pet and have a backup plan for care in the event they are no longer able to provide proper

care, usually a pet deposit is required, the owner must be financially able to provide food and veterinary care, the pet must be current on vaccinations, and meet guidelines of weight, behavior, and possibly other restrictions.

The positive interaction with pets and animals goes far beyond the happiness we experience. Scientific study of the benefit of the Human-Animal Bond is ongoing, and evidence is positive that the interaction is good for us. Recognizing and nurturing the connection between humans and animals has immense implications for individual health, community health, and improved healthcare costs.

