

# Pets: Positive Companions for Life

By now, most of us have heard that pets are more than just great companions, they're actually good for our health. It's common to read articles affirming a pet's ability to help reduce our blood pressure, or better cope with stress, but research into the health benefits of human-animal interaction (HAI) is continuing to discover that relationships with pets do more than just help us to relax, they can actually help us to live longer, healthier, happier lives.

The Pet Positives website (www.petpositives.com.au) aims to raise awareness of the positive experience of pet ownership supported by peer-reviewed academic research. Research into human-animal interaction has found that pets offer a range of benefits to their owners, families and wider society.

A childhood spent in the company of animals may actually provide lifelong health benefits. Exposure to pets has been linked to improvements in immune function in children, including fewer respiratory infections, ear infections<sup>5</sup>, and gastroenteritis<sup>6</sup>. Although findings in this area have been mixed, some studies looking at the effects of pet exposure in early childhood have found that it protects against the later development of both allergies and asthma<sup>7,8</sup>. A potentially related finding is that pet ownership has been associated with a decreased risk of non-Hodgkin Lymphoma (NHL), and the longer the duration of pet ownership, the less chance one has of developing this type of cancer<sup>9</sup>. The authors of the study theorized that because animal exposure during infancy may reduce the prevalence of allergies later in life, it is possible that the reduced risk of NHL is due to altered immune function and desensitization to allergens.



### **Benefits for Children**

Many of us have great memories of our childhood pets and may even credit these early relationships for inspiring in us a lifelong love of animals. Research has demonstrated that these early interactions are more than just play. Children seek out pets when they are upset, and view them as confidantes and providers of support and comfort.<sup>1</sup> When asked, children often rank pets higher than certain human relationships in their social networks.<sup>3</sup> Youngest children, and children without brothers and sisters, show greater attachment to pets, suggesting that pets may be particularly important for these children.<sup>1</sup> Childhood obesity has been described as a public health crisis,<sup>10</sup> and pets may have a role to play here as well. Although research into the effects of pet ownership on childhood physical activity and weight status is in its infancy, and the results have been somewhat mixed, there is some evidence to suggest that children from dog owning households are more physically active.<sup>11</sup> An Australian study found that younger children (in particular 5-6 year olds) from families with dogs, were less likely to be overweight or obese.<sup>12</sup>

### **Benefits** for Adults

In 1980, the results of groundbreaking research on the health benefits of pets were published. In this landmark study, Dr Erika Friedmann found that pet ownership made a significant difference in the survival rate for heart attacks: 94% of the heart patients

with pets survived serious heart attacks, compared to 72% without pets<sup>13</sup>. The significance of these findings, that pets could actually enhance survival, attracted substantial attention from the medical and scientific communities, and, in a very real sense, this study paved the way for HAI as a legitimate field of research.

Dr. Friedmann's early and subsequent works continue to inform the field of HAI research, and many intriguing studies of the cardiovascular benefits of pet ownership have resulted. These include a study from Melbourne, which found that pet owners had reduced risk factors for cardiovascular disease, including lower systolic blood



pressure, plasma triglycerides and cholesterol<sup>14</sup>, and research from the United States demonstrating that pet owners have healthier physiologic responses to stress<sup>15</sup>. In fact, there has been so much convincing evidence of the cardiovascular benefits of pet ownership, that the American Heart Association, the United States' oldest and largest voluntary organisation dedicated to fighting heart disease and stroke, recently issued the following statements:

Pet ownership, particularly dog ownership, is probably associated with decreased cardiovascular disease (CVD) risk.
Pet ownership, particularly dog ownership, may have some causal role in reducing CVD risk<sup>16</sup>.

Repeated positive findings have given the scientific and medical communities increased confidence in the cardiovascular benefits that pet ownership can provide, but the question remains: Why is pet ownership producing these beneficial effects? Is it due to increased physical activity (for example, walking the dog)? Is it the social support that pets provide? Is it a combination of different elements? Based on the research that's currently available, the answer to all of those questions is: Probably.

It is well-known that regular physical activity reduces the risk of cardiovascular disease, hypertension and a variety of other diseases.<sup>17</sup> A number of studies have found that dog owners engage in more walking and physical activity than non-owners and are more likely to achieve recommended levels of physical activity. For example, researchers in Australia found that dog owners were 55% to 77% more likely to achieve sufficient physical activity<sup>18</sup>, and researchers in the UK found that pregnant mothers, who own dogs, are 50% more likely to achieve the recommended three hours of physical activity per week<sup>19</sup>. If dogs can motivate us to move more, it's not difficult to imagine that this increased activity could improve our health.

Increased physical activity would be a simple explanation for the cardiovascular benefits of pet-keeping, if we were only considering dog owners (and if everyone who had a dog walked it), but studies have found that cardiovascular and other health benefits accrue to cat owners as well. While there are a few people who walk their cats, it's probably safe to assume that having a cat doesn't generally motivate owners to substantially increase their levels of physical activity. This has led researchers to conclude that the social support provided by companion animals may play a role in keeping pet owners healthy.



Chronic stress increases the body's release of the stress hormone, cortisol, which in turn suppresses immune function. Social support has been shown to act as a buffer against the stresses of everyday life,<sup>20</sup> and research has demonstrated that people who share their homes with pets have healthier physiologic responses to stress, including lower baseline heart rate and blood pressure, and demonstrating less cardiovascular reactivity to, and faster recovery from, mild stressors.<sup>15,21</sup>

If the two prevailing theories to explain the cardiovascular benefits of pet ownership involve increased physical activity, and the stress buffering effects of social support, wouldn't everyone benefit from having a pet? With regard to this general topic, the American Heart Association provided the following statement:

"Although pet adoption, rescue, or purchase may be associated with some future reduction in CVD, the primary purpose of adopting, rescuing, or purchasing a pet should not be to achieve a reduction in CVD risk. Furthermore, the mere adoption, rescue, or purchase of a pet, without a plan of regular aerobic activity (such as walking a dog) and implementation of other primary and secondary cardiovascular preventive measures, is not a sound or advisable strategy for reduction in CVD risk."<sup>16</sup>

Although there are no definitive criteria to determine who will benefit most from pet ownership, studies suggest that people who have strong attachments to their pets accrue greater benefits.<sup>22</sup> It makes logical sense that someone who enjoys an activity or relationship will benefit more than someone who is ambivalent or engages only out of a sense of obligation.





#### **Benefits for Older Adults**

As we age, we may experience increasing challenges to our health, our social networks may become smaller, and we may be faced with the loss of loved ones. This means that the motivation for increased physical activity and the social support provided by pets may be even more important for older adults.

Maintaining health and physical mobility is an important component of preserving independence, and studies have found that elderly dog owners are more than twice as likely to maintain their mobility over time as non-dog owners, they are more likely to walk faster, and meet the recommended guidelines for physical activity.<sup>23</sup> Pet owners, over the age of 65, are also more able to maintain their activities of daily living, such as climbing stairs, preparing meals, and bathing independently.<sup>24</sup> Dogs in particular appear to help in keeping people active and provide a reason to get up in the morning.<sup>24</sup>

Stressful life events, including bereavement, can sometimes lead to depression and a deterioration in physical health, but pet ownership appears to buffer the impact of these stressors on the health of older adults. In a study of physician visits among Medicare recipients in California, experiencing multiple negative life events, resulted in a higher number of doctor visits for non-pet owners, but this same increase was not seen in people who had pets, particularly dogs.<sup>25</sup> A strong attachment to a pet has also been associated with significantly less depression in recently bereaved older adults.<sup>22</sup> These close relationships with pets appear to be especially important for those with relatively few confidants available.<sup>22</sup>

#### **Benefits for Society**

A lot of attention has been paid to the benefits that pets can bring to individuals, but recent research has demonstrated that the positive influence of pets can be felt on a societal level. If you've ever walked your dog in a public place, you already know that pets are powerful catalysts for positive social interaction. People who would never consider engaging a stranger walking alone, will enthusiastically approach a dog out for a walk with his or her owner.

Dr Lisa Wood, a researcher at The University of Western Australia, has been studying the social impact of pets in both Western Australia and the United States, and has found that pets increase what is known as 'social capital.' Social capital is made up of the social networks and interactions that inspire trust and reciprocity among citizens;<sup>26</sup> it is the glue that holds a community together. Dr Wood's research has shown that pet owners are significantly more likely to get to know their neighbours, and about 40% of pet owners reported receiving social support from people they met through their pet.<sup>27</sup> The formation of these social bonds and benefits extends beyond pet owners and includes nonpet owners, who are encountered during walks. Pets also provide opportunities for helpfulness and reciprocity among neighbours, with people trading pet-sitting favours, or looking out for the safety of neighbourhood pets.<sup>26</sup> It appears that pets contribute to an overall sense of community in neighbourhoods by increasing the "out and about" presence, which not only encourages social connection, but also increases residents' feelings of safety.26

The benefits that companion animals bring to society aren't just social, they're also financial. National health surveys

from both Germany and Australia have found that pet owners may use less medication<sup>28</sup> and make about 15% fewer visits to doctors per year than non-owners, and that those who own pets the longest, are the healthiest.29 Estimates suggest that for the period 1999-2000, the health benefits conferred by pet ownership potentially saved Australia \$3.86 billion in national health expenditure.30





## "...the social support provided by companion animals may play a role in keeping pet owners healthy."

#### **Conclusions**

For those who love and share their lives with animals, it will come as no surprise that pets are good medicine, but what may be unexpected is just *how* good they are for us, and in how many ways. Pets motivate us to stay active, calm us during the stresses of everyday life, soothe us through our toughest times, keep us healthy and independent in our later years, and introduce us to new friends. Though many among us have known it all along, the body of scientific evidence is now growing to support pets as being our companions for life.

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For more information on the WALTHAM<sup>™</sup> Human-Animal Interaction Research Programme, please visit: http://www.waltham.com/waltham-research/hai-research/

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