

# **The Benefits of Dog Ownership for Mental, Physical, and Social Health**


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## **Abstract**

Dog ownership is common in Canada, with approximately 33% of Canadians living with a canine companion. A growing body of scientific evidence suggests that dogs may support human health and well-being across multiple domains. Research has associated dog companionship with improvements in mental, physical, and social health, highlighting a potential role in public health promotion. Mentally, interaction with dogs has been linked to reduced stress and cortisol levels and increased serotonin and dopamine, which may alleviate symptoms of depression, anxiety, and social isolation. Physically, walking and playing with dogs are associated with enhanced cardiovascular health, weight management, and mobility, while also enhancing sleep quality. Socially, dogs serve as social facilitators, fostering social interaction and community engagement. This commentary examines the health benefits of dog companionship through a lifestyle medicine lens. For individuals, it highlights how daily interaction with dogs, whether through ownership or alternative forms of engagement, may support mental, physical, and social well-being. For health care providers, it offers evidence-based insights to guide recommendations around dog-assisted interventions within holistic health strategies. Finally, for public health professionals and policy-makers, it advocates for broader recognition of these benefits in health promotion strategies and recommends inclusive, dog-centred community programs that extend these positive effects beyond ownership alone.

*Keywords:* dog, mental health, physical health, social health

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## **Introduction**

Did you know that 33% of Canadians own a dog? (NielsenIQ, 2016). Dogs and other pets hold a significant place in human life and well-being, serving as more than just companions. Numerous studies have highlighted the positive impact pets, particularly dogs, have on our mental (Purewal et al., 2017), physical (Westgarth et al., 2014), and social health (Carr et al., 2021; Gee et al., 2021). Dogs and other pets can significantly improve cardiovascular health, reduce stress levels, and enhance social interactions (Corliss, 2022). The companionship of a dog not only provides emotional support but also fosters community connections and friendships, enriching our social lives. Additionally, owning a dog encourages regular physical activity, which is a key determinant of health and quality of life, as well as being indicated for the prevention and treatment of various diseases (Cutt et al., 2007). This commentary offers a novel contribution by integrating these known benefits of dog ownership within the framework of lifestyle medicine, an evidence-based approach emphasizing healthy behaviour for preventing and managing chronic diseases (Lianov & Johnson, 2010). We highlight how dog ownership supports stress management, physical activity, and social connection, aligning with the six pillars of lifestyle medicine (Lippman et al., 2024). Importantly, we introduce the concept of a reciprocal, health-promoting relationship between dogs and humans, emphasizing that dogs benefit from healthy, engaged care while enhancing human well-being (Verbeek et al., 2024). Recognizing that dog ownership is not feasible for everyone, we suggest inclusive alternatives, such as community programs and animal-assisted intervention. This commentary aims to provide actionable, evidence-based insights for health care providers and public health leaders, supporting the integration of dog-assisted strategies into clinical practice and community health initiatives.

## **Mental Health Benefits**

Owning a dog can significantly enhance mental health by reducing stress levels, as the presence of a dog lowers cortisol and boosts serotonin and dopamine, promoting feelings of well-being (Brooks et al., 2018). This is crucial because high cortisol levels over time are linked to increased cancer risk (Kiecolt-Glaser et al., 2002). Dogs also provide companionship and emotional support, helping to alleviate loneliness and depression (Health benefits of pets, 2024). Therapy dogs are particularly effective in supporting individuals with anxiety, PTSD, and other mental health issues. For instance, a study by Beetz et al. (2012) investigated whether children with insecure-avoidant or disorganized attachment patterns benefit more from the presence of a therapy dog than from a friendly adult or toy during a stressful task. Among 47 boys aged seven to 11 undergoing the Trier Social Stress Test for Children, those in the dog-assisted group showed significantly lower salivary cortisol levels, especially during the recovery period. The findings suggest that therapy dogs provide uniquely effective emotional support for stress regulation, particularly in vulnerable children, reinforcing the value of animal-assisted interventions in educational and therapeutic settings. These benefits are further supported by research from McConnell et al. (2011), who conducted three studies showing that pet owners experienced higher self-esteem, more physical activity, and greater well-being. The researchers found that pets helped fulfill social needs in a way that complemented, rather than replaced, human relationships, and even buffered against the negative effects of social rejection. This suggests that pets, especially dogs, can serve as powerful sources of social support, offering important psychological benefits for individuals dealing with loneliness, social anxiety, or stress-related conditions (McConnell et al., 2011). A study by Matijczak et al. (2024) found that participants who spent time with their dogs after a stressful task experienced increased happiness and reduced anxiety compared to those who did not. The research suggests that

interacting with one's pet can serve as an effective strategy to alleviate stress and enhance emotional well-being during challenging situations (Palmer, 2024).

A mixed-methods study of 1,693 adult dog-owners from the United Kingdom (Merkouri et al., 2022) highlights how deep bonds with dogs are associated with enhanced mental well-being and happiness, offering both hedonic and eudaimonic benefits like emotional support during tough times and a renewed sense of purpose. However, the delightful companionship of a dog also brings challenges, as owners may face burdens of responsibility and would benefit from guidance in caring for their dogs and managing problematic behaviors (Merkouri et al., 2022).

### **Physical Health Benefits**

Dogs also promote physical health by encouraging daily exercise through walks, hikes, and playtime, which benefits cardiovascular health, aids in weight management, and improves mobility (Mubanga et al., 2017). For those with cardiovascular diseases, diabetes, or hypertension, low-impact activities such as walking are especially beneficial (Lee et al., 2021; Moghetti et al., 2020). The Canadian Society for Exercise Physiology (CSEP) recommends that adults aged 18–64 years engage in at least 150 minutes of moderate-intensity aerobic physical activity per week (CSEP, n.d.). This activity can be accumulated in bouts of at least 10 minutes and can include brisk walking, cycling, or recreational sports. Achieving this level of activity is associated with reduced risk of heart disease, stroke, type 2 diabetes, and certain cancers, as well as improved mental health and physical function (Warburton et al., 2006). Conversely, insufficient physical activity is linked to increased risk of chronic disease, reduced mobility, and earlier mortality (Lee et al., 2012). Notably, dog ownership provides a sustainable and enjoyable way for adults and potentially children and older adults to integrate activity into daily life (Christian et al., 2013). A scientific statement by Levine et al. (2013) for the American Heart Association found that dog owners were more likely to meet recommended physical activity levels compared to non-owners, which is associated with lower blood pressure and reduced risk of heart disease.

Early exposure to dogs during infancy can strengthen the human immune system and significantly lower the risk of developing allergies and asthma later in life (Ownby et al., 2002). While exposure to dogs can exacerbate asthma symptoms in sensitized individuals, especially those already diagnosed with asthma or severe allergies (Gergen et al., 2018), there is evidence suggesting that controlled and gradual exposure combined with appropriate management strategies, such as improved hygiene practices (e.g., regular dog washing; Hodson et al., 1999), use of air filters and air cleaners (Sublett, 2011), limiting exposure to allergens like dander and in some cases allergen immunotherapy, can help mitigate these risks and may even promote desensitization over time (Chan & Leung, 2018). This is particularly relevant, as it can be emotionally challenging for pet owners to consider separating from their dogs when new or worsening respiratory symptoms emerge. Ultimately, while risks exist, they can often be managed effectively, and the physical, mental, and social health benefits of dog ownership may outweigh these potential drawbacks, especially when tailored intervention and shared decision-making are applied.

As a further benefit, dogs can improve sleep quality by providing a sense of security, leading to more restful and uninterrupted sleep (Patel et al., 2017). This observational study found that people who slept with their dogs in the same room, but not on the bed, often experienced higher sleep efficiency and better overall sleep quality due to the calming presence of their pets. However, allowing the dog to sleep on the bed was associated with reduced sleep efficiency (Patel et al., 2017).

### **Social Health Benefits**

Owning a dog not only enhances mental and physical health but also profoundly impacts social well-being. Dogs act as social catalysts, facilitating interactions between people and fostering a sense of community and belonging (McNicholas & Collis, 2000). Dog owners often find themselves engaging with other pet owners during walks, at dog parks, or in pet-friendly establishments, leading to the formation of new friendships and social networks. A study conducted across four cities in the U.S. and Australia found that pet ownership, especially dog ownership, was significantly associated with higher levels of social capital (Wood et al., 2015, 2017). Dog owners were more likely to meet and connect with people in their neighborhood compared to non-owners and were more likely to trust others and participate in community activities, indicating that dogs can strengthen community bonds (Wood et al., 2017). Beyond community engagement, companion animals can help improve social connection by providing a common topic of conversation and a sense of companionship in social settings, and the presence of a dog can make individuals feel more comfortable and less self-conscious, facilitating smoother social interactions (Wood et al., 2015). Dogs can act as social buffers, reducing feelings of anxiety and stress in social situations (Janssens et al., 2021). Additionally, owning a dog encourages people to be more active in their communities, participating in local events, pet-related activities, and community groups. This increased engagement can foster a sense of belonging and community spirit, as highlighted by Friedmann et al., (2010) who conducted a study examining the role of pet ownership in community engagement. Their research revealed that dog owners reported higher levels of community involvement and satisfaction, attributing this to increased social interactions and feelings of connectedness fostered by regular interactions with other dog owners during walks and neighbourhood activities. The social connections formed through dog ownership can extend into supportive networks that provide emotional and practical assistance, whether through dog walking groups, pet-sitting exchanges, or online communities. Additionally, interacting with other dog owners and the broader community can help strengthen social connection skills and enhance social well-being (Potter et al., 2019). The routine nature of dog walks and park visits provides regular opportunities for positive social interaction, which may be particularly beneficial for older adults or individuals experiencing social isolation. A study by McConnell et al. (2011) investigated the psychological and physical benefits of pet ownership among everyday individuals. Through three studies, the researchers found that pet owners exhibited higher self-esteem, greater physical fitness, and more conscientiousness compared to non-owners. Pets were also shown to fulfill important social needs, complementing human relationships. Notably, thinking about one's pet helped alleviate negative emotions during experiences of social rejection, similar to the comfort provided by thinking about a close friend. These findings suggest that pets can serve as valuable sources of social support, enhancing overall well-being. Pet owners also often exhibit greater empathy and social skills, attributed to their interactions facilitated by their pets (McConnell et al., 2011).

As a further social benefit, dogs can strengthen family bonds by encouraging shared activities such as walking, playing, and caring for the pet, which promotes co-operation, communication, and a sense of responsibility among family members (Rodrigues, 2023; Wanser et al., 2020). This helps families connect and spend quality time together, thereby strengthening their relationships. Lastly, dogs can bridge social gaps by bringing together people of diverse backgrounds and demographics who might not otherwise interact. This inclusivity fosters a more diverse and accepting community environment. A review of human-animal interaction research found that pet ownership can facilitate engagement with new people and strengthen community bonds, supporting more inclusive connections across different social groups (McCune et al., 2014). In summary, owning a dog can significantly enhance social health by increasing social interactions, reducing social anxiety, enhancing community engagement, and improving social skills. These benefits extend beyond the individual owner, positively impacting families and communities. Dog ownership fosters social bonds

that can lead to a more connected, supportive, and inclusive society. This highlights the integral role dogs play in promoting social well-being.

### **Mutual Reinforcement and Lifestyle Medicine**

Dog ownership not only nurtures mental, physical, and social well-being but also exemplifies the principles of lifestyle medicine. The stress reduction, regular physical activity, and social activities associated with caring for a dog align with the principles of lifestyle medicine's emphasis on healthy behaviours for disease prevention and optimal well-being.

This relationship is reciprocal: both dog and owner encourage each other to maintain a healthier, more active lifestyle, creating a powerful mutual reinforcement that promotes vitality and longevity for both. Recent evidence supports this perspective: a pilot study by Smedberg et al. (2024) demonstrated that eight-week joint outdoor exercise programs for dog owners and their dogs significantly improved the owners' self-reported quality of life and body image acceptance, while also reducing dogs' body condition scores. This highlights the potential of shared physical activity to foster positive health outcomes for both humans and animals, reinforcing the principles of lifestyle medicine and emphasizing the importance of the human-animal bond.

### **Addressing Barriers and Challenges: Inclusive Alternatives and Support for Dog Owners**

While dog ownership can be highly beneficial, it may not be accessible to everyone. Barriers such as housing restrictions, long work hours, financial limitations, allergies, physical or cognitive impairments, or lack of caregiver support can make pet ownership impractical or impossible for some individuals (Applebaum et al., 2020). These challenges can disproportionately affect marginalized groups, including older adults, low-income individuals, and people with disabilities, thereby limiting their access to the benefits of pet companionship (Obradović et al., 2021).

To address these barriers, innovative public health initiatives and community programs focus on promoting interaction with dogs without requiring ownership. Programs like animal-assisted therapy and volunteer-based initiatives provide emotional support, social engagement, and opportunities for physical activity (Wood et al, 2017). For example, community-based programs such as animal-assisted therapy visits in long-term care facilities and community centres demonstrate benefits for mental health and social connection without requiring ownership (Cherniack & Cherniack, 2014).

One notable example in Canada is ElderDog Canada, a national, volunteer-based organization dedicated to supporting older adults in caring for their dogs. Through a network of volunteers, ElderDog assists with dog walking, transportation to veterinary appointments, and temporary dog care during hospitalizations (ElderDog Canada, n.d.). This model not only helps seniors maintain their bond with their pets but also reduces social isolation and prevents pet rehoming. By addressing barriers like limited mobility and financial constraints, ElderDog represents an innovative, equitable approach to fostering well-being through human-animal interaction.

It is important to recognize that not all owners may experience the same benefits equally. Some individuals may face challenges such as the stress of caregiving responsibilities, financial costs, potential health risks like allergies or zoonotic diseases, and even emotional distress if the pet becomes ill or passes away. These challenges can disproportionately affect owners with limited resources or support networks, potentially diminishing the overall benefits of dog ownership.

However, these potential drawbacks can be mitigated through supportive community initiatives, educational resources on responsible pet care, and improved access to veterinary and behavioural services. For instance, community-based programs such as the St. John Ambulance



Therapy Dog Program (St. John Ambulance, n.d.) and Therapeutic Paws of Canada (Therapeutic Paws of Canada, n.d.) offer not only animal-assisted therapy for the broader community but also support and resources for dog owners themselves, helping them manage caregiving challenges.

### **Conclusion**

This commentary highlights the significant impact of dog ownership on mental, physical, and social well-being. Importantly, these benefits align with the core pillars of lifestyle medicine, which emphasize healthy behaviours such as stress management, regular physical activity, and positive social connection to prevent and manage chronic diseases and enhance quality of life.

From a mental health perspective, dogs provide invaluable support by reducing stress, alleviating feelings of loneliness, and promoting emotional resilience. Their presence has been linked to increased levels of serotonin and dopamine, contributing to a more positive outlook on life. Physically, dogs encourage an active lifestyle through regular walks and playtime, improving cardiovascular health and aiding in weight management. Moreover, dogs act as social catalysts for connections, bringing people together in parks, in neighbourhoods, and through online platforms, as well as fostering supportive networks that enrich lives and combat feelings of isolation. The presence of dogs in our communities promotes inclusivity and strengthens social bonds, highlighting their unique role in enhancing social well-being.

We also introduce the concept of a reciprocal, health-promoting relationship between dogs and humans, underscoring the mutual benefits of this bond. However, we recognize that not everyone may experience benefits equally. Barriers such as housing restrictions, financial constraints, or physical and cognitive limitations can limit access to dog companionship. To address these challenges, we propose that inclusive alternatives, such as community-based programs and animal-assisted interventions, can provide opportunities for interaction with dogs without requiring ownership, ensuring that more people can access these benefits.

By integrating the known benefits of dog ownership within the framework of lifestyle medicine and highlighting both individual and public health perspectives, this commentary offers a more comprehensive view of how the human-animal bond can promote overall health and well-being. Recognizing and embracing these benefits can lead to a deeper appreciation of our canine companions and their meaningful influence on our daily lives and community health.

### **Conflict of Interest**

The authors declare no potential conflicts of interest for the research, authorship or publication of this article.

### **Declaration of Ethics**

Not applicable. This is a commentary article and does not involve any new studies with human participants or animals.

### **Author Contributions**

ARG wrote the first draft of the manuscript. CR reviewed and revised the manuscript. Both authors approve the final version.

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