

What does aging look like in your dog?

Learn to identify signs of aging.

Dog owners and veterinarians sometimes think of aging-associated changes as natural and inevitable. We at Loyal are focused on the fact that aging is just another manifestation of biology. This means we can understand how it happens. Aging impacts dogs in multiple ways, and this reduces both lifespan and quality of life. The better we understand aging, the better able we will be to target the underlying mechanisms and reduce the harmful impacts of aging on healthspan and lifespan in dogs.

Older dogs may experience:

- Diminished physical health and function
- Increased susceptibility to disability and disease
- Undesirable changes in behavior and social functioning

Looking old

The most familiar signs of aging in dogs are:

- Graying
- Thinning of hair
- Loss of muscle
- Clouding in eyes

Dog owners also frequently notice changes in physical function, such as

- Less activity
- Difficulty going up and down stairs or walking on slippery floors
- Limping or other signs of pain
- A general decline in enthusiasm and energy

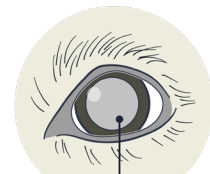
Most of us can easily tell a dog is older by their appearance, movement, and demeanor without being able to list all the specific features that signal age. One interesting challenge for canine aging science is to be able to break this assessment down into components and identify specific markers of physical aging. This would be especially useful since not all dogs age in the same way or at the same pace.

We can tell when a dog is "old," but what we are really seeing is their biological age, not how many years they have lived. A six-year-old Great Dane, for example, may look a lot older,

Looking old



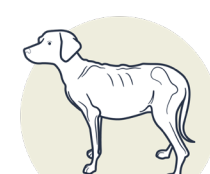
Greying/thinning of hair



Clouding in eyes



Limping



Loss of muscle



Difficulty going up and down stairs

and truly be older physically, than a ten-year-old chihuahua. Giant-breed dogs age physically earlier and faster than small-breed dogs.

Feeling and acting old

Not all physical changes that occur with aging are visible, of course. Changes in the structure and function of internal organs have significant health effects even though they are invisible from the outside.

Old dogs may have:

- Less energy
- Less strength
- Less tolerance for exercise
- Less tolerance for stress, such as heat or cold or intense activity
- Less resistance to disease

Chronic health problems, such as arthritis and other inflammatory diseases, kidney disease, heart disease, and many others become more common with aging, and these can seriously degrade well-being and quality of life.

One of the exciting aspects of longevity medicine is that by targeting general aging changes, it may be possible to prevent many different kinds of health problems at once, rather than targeting the specific mechanisms behind each disease separately.

Key takeaway

Although we often think of aging as inevitable, it is just a collection of biological processes that we can understand and influence. Loyal and other researchers are focused on combating age-associated diseases. We can't eliminate all the adverse effects of aging (like pain, disease, and decreased physical function), but we hope that scientific investigation can help us understand the mechanisms of aging so that we can intervene to preserve health and quality of life for our canine companions.



For more education around senior dogs and what we're accomplishing at Loyal, go to: <https://loyal.com/for-dog-owners>

Acting old



Increasing in barking



Loss of housetraining



Reduction of appetite



Increasing in fear and confusion



Decline in activity, enthusiasm or energy



Reduction of social interactions