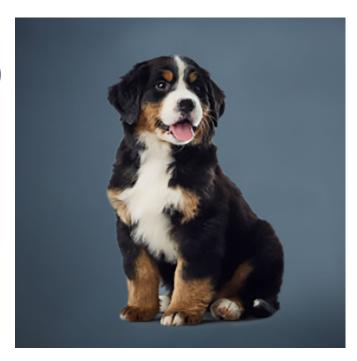


## Puppy

## LARGE BREED PUPPIES: RAPID GROWTH IS NOT OPTIMAL GROWTH

Large and giant breed dogs have a higher growth rate than smaller dogs. Controlling their growth rate is critical as rapid growth rates can lead to reduced bone density and place stress on their developing bones and joints, resulting in irreversible skeletal malformations.



## **Key Messages**

- Overfeeding large and giant breed puppies encourages undesirable rapid bone growth. Excess calories can also lead to excessive body weight which can further stress their immature, developing skeletons.
- Growth diets (puppy food) should be fed until puppies have stopped growing, which can take up to 18-24 months in large and giant breed dogs. Growth diets formulated specifically for large and giant breed dogs are less energy dense, and therefore help reduce the likelihood of overfeeding.
- Feeding puppies to maintain a lean, healthy weight can increase life span and delay the onset of signs of chronic disease, including hip dysplasia and osteoarthritis.



Genetics determine the size of the adult dog. Encouraging a slower, more controlled growth rate will not affect the final adult body size.

## **Additional Resources**

Larsen, J. (2010). Feeding large-breed puppies. Compendium: Continuing Education for Veterinarians, 32(5), E1–E4.

Kealy, R. D., Lawler, D. F., Ballam, J. M., Mantz, S. L., Biery, D. N., Greeley, E. H., Lust, G., Segre, M., Smith, G. K., & Stowe, H. D. (2002). Effects of diet restriction on life span and age-related changes in dogs. *Journal of the American Veterinary Medical Association*, 220(9), 1315–1320. doi:10.2460/javma.2002.220.1315

The Purina Institute aims to help put nutrition at the forefront of pet health discussions by providing user-friendly, science-based information that helps pets live longer, healthier lives.

