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Canine Gastric Dilatation-Volvulus (Bloat)

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Five-year prospective study of gastric dilatation-volvulus in 11 large and giant dog breeds:
non-dietary risk factors

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Based on the findings of the five-year prospective study of gastric dilatation-volvulus at Purdue University, graphs were drawn to help owners of large (50-99 lbs) and giant (>99 lbs) breed dogs estimate their dog's lifetime risk of developing GDV. The risks were calculated assuming an average life span of 10 and 8 years for large and giant breed dogs, respectively.

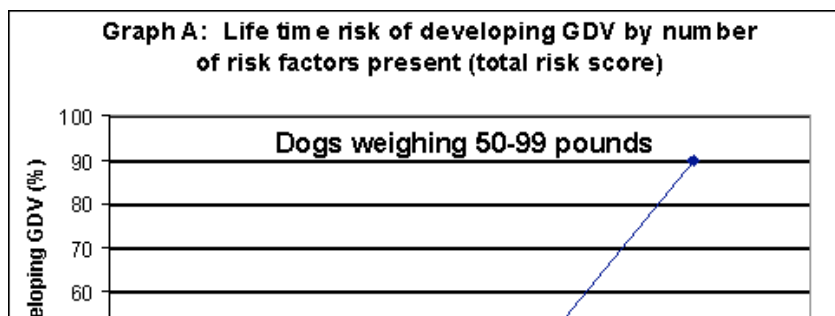
To calculate your dog's lifetime risk of GDV (bloat) follow the steps below:

1) Determine how many risk factors for GDV (bloat) your dog has according to its weight category. Score 1 point for each.

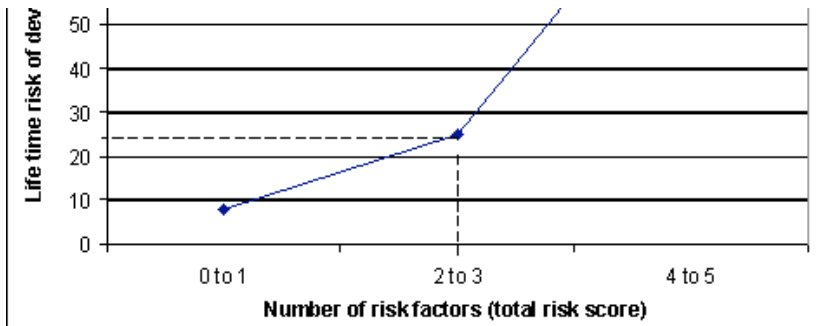
Risk Factors	Large Dogs [50-99 lbs]	Giant Dogs [>99 lbs]
High risk age group [if large & >5 years or if giant & >3 years]	1	1
Deep and narrow chest compared with other dogs in the same breed	1	1
Having any first degree relative with history of GDV	1	1
Using a raised food bowl	1	1
Being a faster eater compared with other dogs	1	–
Maximum possible risk score	5	4

2) Add up your dog's total risk score.

3) Use the appropriate graph below to determine your dog's lifetime risk of GDV.

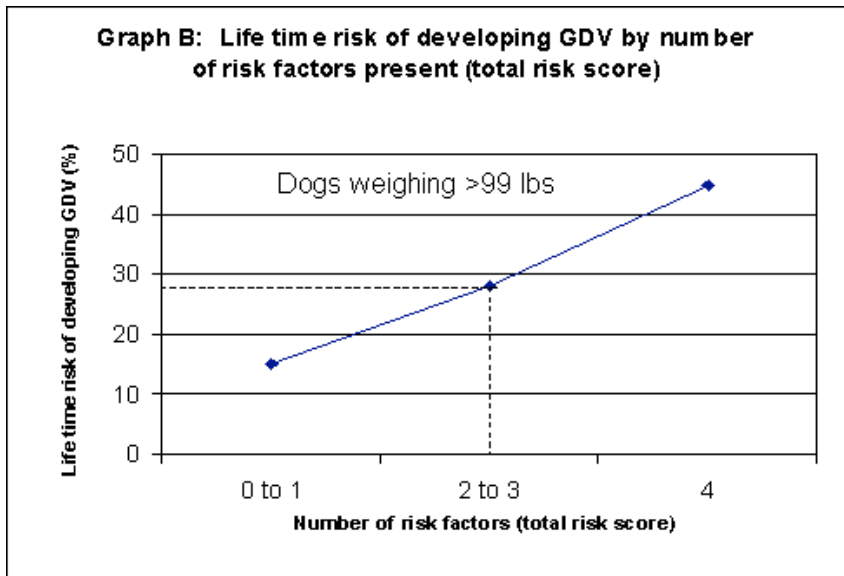


Example 1: If your dog weighs 70 lbs, and has 3 of the known risk factors (7 years of age, a first degree relative with history of GDV, and is a fast eater compared with other dogs of the same breed) the total risk score would be 3. Using graph A, draw a vertical line from the horizontal axis at the point indicating 2 to 3 risk factors up to the



point where it meets the line of the graph. From this point of intersection draw a line horizontally to the left until it intersects the vertical axis. The estimated lifetime risk of developing GDV for your dog is 24%.

Example 2: If your dog weighs 110 lbs, and has 2 of the known risk factors (4 years old, a deep and narrow thorax compared with other dogs of the same breed) the total risk score would be 2. Using graph B, draw a vertical line from the horizontal axis at the point indicating a risk score of 2 to 3. At the point of intersection with the graph draw a line horizontally to the left until it intersects the vertical axis. The estimated lifetime risk of developing GDV for your dog is 28%.



Using this method, you can determine how much your dog's risk of GDV would be reduced if you alter any of the risk factor present.

Note: The lifetime risk estimated by this method was based on studies of the following breeds: Akita, Bloodhound, Collie, Great Dane, Irish setter, Irish wolfhound, Newfoundland, Rottweiler, Saint Bernard, Standard poodle, Weimaraner. These lifetime risk estimates may not be accurate in other large and giant breed dogs.

References:

1. Lawrence T. Glickman, VMD, DrPH; Nita W. Glickman, MS, MPH; Diana B. Schellenberg, MS; Malathi Raghavan, DVM, MS; Tana Lee, BA. Incidence of and breed-related risk factors for gastric dilatation-volvulus in dogs. *Journal of the American Veterinary Medical Association*, 2000;216(1):40-45.
2. Lawrence T. Glickman, VMD, DrPH; Nita W. Glickman, MS, MPH; Diana B. Schellenberg, MS; Malathi Raghavan, DVM, MS; Tana Lee, BA. Non-dietary risk factors for gastric dilatation-volvulus in large and giant breed dogs. *Journal of the American Veterinary Medical Association*, 2000;217(10):1492-1499.

