

The Real Reason Your Dog Is a Sloppy Drinker

Even wonder why a dog makes a big mess when he drinks, while a cat barely spills a drop? This team of researchers from MIT took on the challenge to find out. You'll have a whole new appreciation as you wipe up around your pet's water bowl — again.

Reviewed by Dr. Becker

STORY AT-A-GLANCE

- A team led by researchers from MIT — the same team that studied feline drinking a few years ago — has delved deeper into the mysteries of doggy drinking physiology
- The researchers learned that unlike a cat who uses a plunge-and-pull technique to get water from a bowl into its mouth, dogs use a less sophisticated punch-and-pull maneuver that results in, well, a big sloppy mess
- The team also discovered, to virtually no one's surprise, that the bigger the dog, the bigger the sloppy mess
- They noted that, “the volume of water a dog's tongue can move increases exponentially relative to the dog's body size”
- Since the tip of your dog's tongue functions like a gravy ladle or serving spoon, when it's full to the brim, he has to open his mouth wider to pull in all the water

Editor's Note: This article is a reprint. It was originally published March 7, 2015.

In their continuing quest to discover why canines are such doggone sloppy drinkers, a team led by researchers from the esteemed Massachusetts Institute of Technology (MIT) described in some detail why dogs are such a hot mess when imbibing from their water bowls. The team was also able to shed some light on why large dogs create more mopping opportunities than their tinier counterparts.

Get Your Drink On — Cats vs. Dogs vs. Humans

The researchers presented their findings during the American Physical Society's Division of Fluid Dynamics Meeting held in San Francisco in November of last year, following up on a study published in 2010 on how cats drink.¹ The prior study found that:

“Felines drink via a two-part process consisting of an elegant plunge and pull, in which a cat gently places its tongue on the water's surface and then rapidly withdraws it, creating a column of water underneath the cat's retracting tongue.”²

Punching vs. Plunging

Unlike the elegant feline plunge-and-pull, dogs punch the water’s surface with their tongues, which creates a lot of splashing. Then they pull their tongues back in a greatly accelerated motion — about five times that of gravity — which creates columns of water that travel upwards into their mouths.

Big Dogs Make a Big Splash

Since bigger dogs drink with a larger moist area of the tongue, the researchers believe “... a proportional relationship exists between water contact area of the dog’s tongue and body weight, thus the volume of water a dog’s tongue can move increases exponentially relative to the dog’s body size.”³ Translation: The bigger the dog, the bigger the mess.

And one last tidbit you may want to contemplate as you wipe down the floor around your dog’s water bowl for the umpteenth time. Since the tip of your dog’s tongue functions like a gravy ladle or serving spoon, when it’s full to the brim, he has to open his mouth wider to pull in all the water. This also contributes to the splishy-splashy-sloppy factor.

Sources and References

[NBC News, November 26, 2014](#)
¹ [Science. 2010 Nov 26;330\(6008\):1231-4.](#)
^{2,3} [Discovery News, November 24, 2014 \(Archived\)](#).
