



## Myth:

*'Dogs are too far removed from Wolves/Have been changed too much, and therefore cannot handle a Natural/Raw Diet'*

This is MOSTLY false. The only truth found in this statement is that humans have changed dogs. BUT, we have only changed their external appearance and temperament, NOT their internal anatomy and physiology. The claim that dogs cannot handle a raw diet because they are so domesticated is only true in that we have been feeding them commercial diets for so long that a dog's system is not running up to par. The result of feeding dogs a highly processed, grain-based food is a suppressed immune system and the underproduction of the enzymes necessary to thoroughly digest raw meaty bones (Lonsdale, T. 2001. Raw Meaty Bones). This does NOT mean, however, that the dog does not "have" those enzymes. Those enzymes are present, and once the dog is taken off the grain-based, plant matter-filled food those enzymes quickly return to the proper working level that allows for optimal digestion of raw meaty bones.

Dogs are so much like wolves physiologically that they are frequently used in wolf studies as a physiological model for wolf body processes (Mech, L.D. 2003. Wolves: Behavior, Ecology, and Conservation). Additionally, dogs and wolves share 99.8% of their mitochondrial DNA (Wayne, R.K. Molecular Evolution of the Dog Family). This next quote is from Robert K. Wayne, Ph.D., and his discussion on canine genetics (taken from [www.fiu.edu/~milesk/Genetics.html](http://www.fiu.edu/~milesk/Genetics.html)).

*"The domestic dog is an extremely close relative of the gray wolf, differing from it by at most 0.2% of mDNA sequence..."*

Dogs and wolves can freely interbreed and produce fertile offspring—even little dogs like Westies and Chihuahuas are capable of this! This is a dramatic indication that dogs and wolves are very closely related and are compatible in terms of genetics (incompatible animals do not produce viable, fertile offspring, such as donkeys and horses. Their offspring—the mule—is a sterile animal.). The genes for different coat colors, lengths, conformations, and structural differences are present in the wolf population to a certain degree (otherwise wolves would not have been able to give rise to the different dogs we have today. In order for a phenotypic change to occur, there has to be a genetic basis off which to work. If the genes are not there, then the phenotypic change is not going to "magically" occur), but are selected against by nature because they are not advantageous to wolf survival. Humans are the ones that manipulated the breeding's to "create" smaller dogs and dogs of varying colors, shapes, and sizes.



Additionally, dogs that are left to their own devices in the wild will form packs and hunt other animals, exhibiting a similar range of behaviors like those seen in wolves. Phenotypic differences like size, ears, etc. will often return to a more "wolf-like" state as the animals outcross and breed freely (for example, Chihuahuas will increase in size if left to breed without specific human selection for size); breed characteristics have been specifically selected according to human whim, and in order to retain those characteristics like dogs must be continually bred to like dogs until the genes for those characteristics are sufficiently 'fixed' within that population of dogs (which is how we came upon the different dog breeds today). One can rightfully question what dogs would end up looking like if they just bred for generations without human interference. Would they gradually look more and more like their ancestral predecessors?

Lastly, dogs have recently been reclassified as *Canis lupus familiaris* by the Smithsonian Institute (Wayne, R.K. "What is a Wolfdog?" [www.fiu.edu/~milesk/Genetics.htm](http://www.fiu.edu/~milesk/Genetics.htm)), placing it in the same species as the gray wolf, *Canis lupus*. The dog is, by all scientific standards and by evolutionary history, a domesticated wolf (Feldhamer, G.A. 1999. Mammology: Adaptation, Diversity, and Ecology. McGraw-Hill. pg 472.). Those who insist dogs did not descend from wolves must disprove the litany of scientific evidence that concludes wolves are the ancestors of dogs. And, as we have already established, the wolf is a carnivore. Since a dog's internal physiology does not differ from a wolf, dogs have the same physiological and nutritional needs as those carnivorous predators, which, remember, "need to ingest all the major parts of their herbivorous prey, except the plants in the digestive system" to "grow and maintain their own bodies" (Mech, L.D. 2003. Wolves: Behavior, Ecology, and Conservation.). The [next myth](#) will discuss a dog's "changed needs" to cooked food more fully.

What about the argument that dogs may have weaker digestive enzymes than wolves? Some argue that dogs may not be as efficient as wolves in digesting raw meat and bones. This argument has been recognized by wolf researchers (Mech, L.D. 2003. Wolves: Behavior, Ecology, and Conservation.) but is generally not considered in their dog model studies. Why? From mouth to anus, dog and wolf physiology and basic anatomy are almost precisely the same. What is the significance of this? This means dogs should still be fed a carnivorous diet to meet their needs. What does it matter if they don't have the same digestive capabilities as a wolf? How does that justify feeding them an even harder-to-digest meal of commercial pet food or cooked food? How does that justify feeding them any differently from a prey model diet that has been proven by nature to be completely sufficient?



Let us forget the wolf-dog relations for a moment. Let us just look at the dog itself and listen to what its body can tell us about its diet. The dog has the anatomy and physiology of a predatory carnivore, of a hunter designed to subsist on other animals. It has the skull and jaw design of a carnivore: a deep and C-shaped mandibular fossa that prevents lateral movement of the jaw (lateral movement is necessary for eating plant matter). The jaw muscles are designed for crushing grips and powerful bites, with a jaw that hinges open widely to help gulp chunks of meat and bone. The teeth of the dog are pointed and specialized for ripping, tearing, shearing, and crushing meat and bone. Their saliva lacks amylase, the enzyme responsible for beginning carbohydrate breakdown; instead, they have lysozyme in their saliva, an enzyme that destroys pathogenic bacteria. They have highly elastic stomachs designed to stretch to capacity with ingested meat and bone, complete with incredibly powerful and acidic stomach acid (pH of 1). Their intestines are short and smooth, designed to push meat through quickly so that it does not sit and putrefy in the gut. Their external anatomy also shows development as a hunter. They have eyes situated in the front of their skulls rather than to the side like an herbivore. The body (prior to man-made manipulation of things like size and angulation) is built for chasing down prey, and its senses are acutely developed to help locate prey. By all accounts, this is an animal designed to eat other animals.

Dogs still are carnivores. They still need meat, bones, and organs. They still cannot utilize vegetables as efficiently as meat. Their nutritional needs have not changed much over their years of domestication. Do they need supplemental enzymes, then? The small amount of stool coming out the other end of a raw fed dog clearly indicates that there is no need for extra enzymes (medical conditions requiring extra enzymes not included here). The best, most highly digestible diet for our domesticated carnivores is a prey model diet based on a variety of raw meaty bones and whole carcasses.