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## Pure Breeding at Its Finest

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# Pure Breeding at its Finest

Justin Hunter

## Modern Breeding

Within the last few hundred years, people have been breeding dogs for specific traits and qualities (Nesathurai, 2019). Dog breeds, including pugs, golden retrievers, and border collies, have developed from this breeding. Even though some of the origins date back further in history, many of these breeds have had many selective pressures on specific traits for show or just simple appeal (Eschner, 2018). This inbreeding has been the cause of many health issues: such as trouble breathing, hip and back problems (Nesathurai, 2019).



Figure 1: Puppy Face Dog (Eschner, 2018)

## How has Breeding Affected the Health of Dogs?

### Brief History

The origin of dogs is still widely debated. There are older remains of dogs being found all the time, but it is suggested that dogs became tame at least 15,000 years ago. Anciently, societies have used dogs for their utility, such as herding cattle and pulling sleds in the arctic tundra ("Earliest Evidence", 2017).

### Neoteny

As seen in figure 1, people have come to love dogs but more specifically puppies. Neoteny also known as baby face is something people cannot get enough of.

The desire for this face shape and features has created further health issues as acknowledged by the American Kennel Association AKC (Eschner, 2018).

These problems can include:

- Trouble Breathing
- Yeast and Bacterial Infections
- Trouble Yielding Offspring
  - Syringmyelia

## Discussion

Dogs are amazing animals that can help bring joy to people. However, our love for specific traits have created many health issues for dogs. Consider adopting from shelters, buying "mutts", or being thorough on the health history of your pets. Also, pay attention to attributes of a dog. Agility in show animals can increase their popularity but these breeds need space to run. Think before you buy.

## References

- *Earliest evidence for dog breeding found on remote Siberian island.* (2017, December 8). Science | AAAS. [https://www.sciencemag.org/news/2017/05/e\\_earliest-evidence-dog-breeding-found-remote-siberian-island](https://www.sciencemag.org/news/2017/05/e_earliest-evidence-dog-breeding-found-remote-siberian-island)
- Eschner, K. (2018, January 31). *The Evolution of Petface.* Smithsonian Magazine. <https://www.smithsonianmag.com/science-nature/evolution-petface-180967987/>
- Nesathurai, A. (2019, April 29). *Purebred? How humans invented the modern concept of 'dog breeds.'* Genetic Literacy Project. <https://geneticliteracyproject.org/2019/04/26/purebred-how-humans-invented-the-modern-concept-of-dog-breeds/>