

AKC Guidelines for Dog Owners – Responsible Dog Ownership

Among companion animals, dogs are unmatched in their devotion, loyalty and friendship to humankind. Anyone who has ever loved a dog can attest to its hundred-fold return. The excitement your dog shows when you come home, the wagging tail at the sound of the leash being taken from its hook, the delight in the tossing of a tennis ball, and the head nestled in your lap-those are only some of the rewards of being a dog owner.

Owning a dog is not just a privilege-it's a responsibility. These animals depend on us for, at minimum, food and shelter, and deserve much more. If you are considering taking a dog into your life, you need to think seriously about the commitment that dog ownership entails. If you already have a dog, you need to consider if you are fulfilling all your obligations as its owner.

The AKC is committed to helping dog owners raise happy, healthy dogs. The list below is certainly not exhaustive, but it contains some of the essential ways you can be the best dog owner you can be.

Please go the following Source link for more information:

Source: <http://www.akc.org/dog-owners/responsible-dog-ownership/>

AKC Basic Genetics – Responsible Breeding

To be an effective breeder, you should have a basic understanding of the science of genetics. Everything about your prospective puppies' health, soundness, looks, and temperament will be determined by the genes passed on by their parents, and by their parents before them. Therefore, the selection of a mating pair should not be made solely based on the dog's or bitch's looks (or temperament or soundness, etc.), but should be based on an understanding of how the animal's genes contributed to its looks and of how those genes are passed on and expressed. That is why it is essential to study the pedigrees of your mating pair. The more knowledge you have as you make your selection, the more likely you are to produce a litter with the qualities you desire.

You should also be well-versed in the genetic problems that affect your breed. Genetic defects can occur in any breed and can affect any system in the body. Some genetic diseases may occur in many breeds; others occur in only one or a few breeds. The following is a brief explanation of how genetic defects may be inherited and expressed.

Diseases that follow a dominant pattern of inheritance need only one abnormal gene. That is, if only one parent is affected, the condition will show up in each successive generation. Some individuals may be only mildly affected with the condition, making it difficult to detect. In such cases, the condition can mistakenly be thought to skip generations.

Diseases that follow a recessive pattern of inheritance occur in homozygous individuals, meaning dogs with two abnormal genes. Dogs with one mutant and one normal gene are heterozygous, and they are carriers of the condition. They appear normal but can pass the abnormal gene to their offspring.

Recessive mutant genes can be passed through many generations before emerging in the offspring of two dogs that carry the same genetic mutation.

Polygenic disorders result from the cumulative action of several different genes. The exact number of genes involved and their individual functions are difficult to determine, and the pattern of inheritance tends to vary from family to family. Polygenic inheritance can sometimes mimic either dominant or recessive inheritance, and this feature may lead to erroneous conclusions regarding the type of underlying genetic abnormality.

Chromosomal anomalies -- defects in chromosome number and structure -- can also cause genetic diseases. Dogs normally have 39 pairs of chromosomes on which genes are located. Major abnormalities in chromosome number and structure can produce serious defects.

Please go the following Source link for more information:

Source: <http://www.akc.org/dog-breeders/responsible-breeding/#5>