With the purchase of a Great Dane puppy comes one of the most rewarding journeys in teamwork you can ever imagine. This article will dispel the many questions and fears you may have when purchasing and owning one of these gentle giants. It should be used as your template to gather further information on how to properly choose and care for your puppy. The goal of all of us that love and work with this breed should be to promote well-mannered Great Danes that achieve long life expectancies and that are in excellent health.

Just like in all breeds, the Great Dane has a tendency towards a few major hereditary health issues. Prior to purchase take time to understand the high profile health issues that confront this breed. The truly great healthy dogs are out there, so why settle for less.

From a clinical standpoint the major health issues in the breed involve:

- 1. Gastric- volvulus torsion: Dilation and twisting of stomach (42% average among breed; Tuff's breeding genetics conference,2007)
- 2. Osteosarcoma: bone tumor (hereditary)
- 3. Hypertrophic Cardiomyopathy: severe heart disease (hereditary)
- 4. Wobblers Syndrome: incoordination often seen by 2 years of age due to cervical spinal canal narrowing (hereditary)
- 5. Hip Dysplasia: arthritic hips (hereditary)
- 6. Hypothyroid: thyroid gland deficiency, (hereditary)
- 7. Mega esophagus: dilated esophagus (hereditary)

There are other health issues of concern just as in any breed, but these noted above are the big ones that can cause pain and a shorter life expectancy. Do your research and ask your veterinarian about these conditions. Consult your breeder and ask if any of these health issues have been seen in their breeding program. Many of the progressive breeders will participate in the Orthopedic Foundation of America's CHIC or Canine Health Information Center, (www.caninehealthinfo.org). Ask that breeder too what is the average life expectancy of their lineage. Some genetic lines of the breed live well into the 10 year plus range, while others have an average lifespan from their breeding program of only 5-7 years.

So you have now done your research and found you are still in love with the breed. Is there a difference due to colors in the breed? The only recognizable Great Dane colors that may be shown include fawn, black, brindle, blue, mantle, and harlequin. There are other colors out there which can be registered with the AKC, but currently if you wish to show in the ring these are the acceptable colors.

Great Dane's for the most part are a very accommodating breed. They truly want to please their owner. They are extremely intelligent, and for those of us that work with the breed we are continually unlocking new opportunities to excel which include agility, scent tracking, obedience work, and others. Great Danes can be raised in an apartment or any household situation. The key to remember is these dogs must have daily exercise to keep their muscle mass in tone and their minds engaged. This is a very social dog that thrives on human contact and will not do well when neglected.

Great Dane puppy nutrition unlocks a myriad of discussions. However, when one researches the facts that are actually documented by true nutritional research studies there

comes out a couple of notable points. Orthopedic problems are most often seen in puppies that are overfed and grow too fast. Keep your pet in a lean body score condition without bulking them up (approximate mean body score of 4/9). There was a theory on diets high in protein could result in overgrowth and developmental problems. This theory was disproved years ago (RC Nap 1991) and protein intake is not considered a risk factor but it is still best to be under 24%. Fat percentage in the diet seems to be the key in a large breed dog's proper bone development. Fat levels at approximately 15% allow minimizing the risk of over nutrition as does utilizing diets that provide about 350 kcal/cup of food. Note also for large breed dogs calcium levels should only be around 1% in the diet. Thus a quality Large Breed puppy diet fed probably 3 times daily for the first six months and twice a day thereafter is the food of choice supported by research. Keep your puppy on this food until he/she is full grown at approximately 12-18 months of age. Also do not give any vitamin or mineral supplements such as calcium or others. There is no supportive research evidence that raw diets should be fed to Danes, and there is further no evidence of raw diets preventing bloat or gastric dilatation volvulus. I think the point to take home is always ask a person supportive of a particular diet to give you true research statistical data supporting that particular diet. I think you will find one can cut through the mist of voodoos out there and make your own decision. People can survive on junk food for a long time but that does not make it right.

Many people often ask what their puppy's size or weight should be at a certain age. Below is a very nice weight management guide (Yousha 1992) that was the result of a very large study involving thousands of Great Dane puppies.

```
Birth Weight: 1-2 lbs.
Week 1:
              2-3 lbs.
Week 2:
              3-5 lbs.
Week 3:
              4-7 lbs.
Week 4:
              5-8 lbs.
Week 6:
              10-20 lbs.
Month 2:
              15-30 lbs. (13-17")
              30-45 lbs. (17-22")
Month 3:
Month 4:
              50-65 lbs. (21-25")
              65-85 lbs. (25-30")
Month 5:
              70-100 lbs. (27-32")
Month 6:
              75-110 lbs. (27-33")
Month 7:
              80-115 lbs. (27-34")
Month 8:
              85-120 lbs. (28-34")
Month 9:
One year:
              90-135 lbs. (28-36")
              100-190 lbs. (28-38")
Full grown:
```

For males 135-170 lbs. and 33-36" is typical For females 110-140 lbs. and 30-33" is typical

Puppies should get their Distemper/Parvovirus combo vaccines beginning about 6-8 weeks of age. The reason to start the vaccines then is that the protective antibodies from the dam's milk start to wean at about this time. You do not need to vaccinate earlier as

the vaccines are ineffective due to these antibodies in the puppy. Puppies should have booster vaccines every 3-4 weeks until they are approximately 16 weeks of age. Rabies vaccination is usually given at approximately 3 months of age. Bordatella vaccine when utilized (for upper respiratory) is usually given at 12 weeks and then repeated at 16 weeks of age.

To crop or not to ear crop is a personal choice. If you decide to crop your puppy's ears have them done at approximately eight weeks of age for the best results. Talk with your breeder, or look for a veterinarian that performs many ear crops on Great Danes and ask to see the results of his/her work. Not every veterinarian performs ear crops and even less of them know how to do nice Great Dane ear crops. Be prepared for weeks or in some cases months of diligent ear taping to enable the ears to stand properly. If you are not prepared to do the after care for an ear crop do not have the procedure performed.

When choosing your veterinarian for your Great Dane ask your breeder and do some research on which veterinarians in your area see a good number of the breed. In simplicity the Great Dane needs a veterinarian who knows their nuances to include personality, specialty diets, health condition maladies, etc. Veterinarians love all animals but find that person who knows the breed inside and out and keeps updated on new happenings in the breed.

I like to think of the Great Dane puppy as a Golden Egg. They are durable but fragile. Do not let them rough house with your children or a robust neighborhood Labrador Retriever while they are young. There is a lot of cartilage and bone growth going on and the puppy can be prone to a long term injury with a hard bump. Try to minimize stairs to lessen pounding on the limbs too. No jogging, agility, or hard hikes until the dog is full grown for the same reason. Remember a little preventative care goes a long ways in helping these young puppies grow properly.

One of the most important things to help your puppy along is proper training and socialization. Puppy classes are great for Danes and interesting enough the breed is somewhat shy initially. Get in those classes around 8 weeks of age and watch your puppy have fun and learn social skills. Also get your dogs out there with people and various situations to help them achieve confidence. This is where your teamwork and encouragement are crucial to bring out the inner strength in your dog. Positive training methods are the only way to go with Great Danes. You want your dog to be a willing partner and not fearful. Long gone are the alpha-rolls, dominance training and other punitive training techniques. Today's modern trainer is achieving stellar success by consistently utilizing positive training methods. Some wonderful resources are published out there but a couple notable ones include world class trainer and veterinarian Ian Dunbar (dogstardaily.com) and renowned trainer Karen Pryor (karenpryoracademy.com).

As a new prospective owner of a Great Dane puppy you are about enter an experience of working with an animal that for good reason has been labeled the "Apollo of Dog's". Listen to mentors out there who have tremendous wisdom and history in the breed. Utilize modern training, nutrition, genetic research, and veterinary care to make a truly incredible breed even better in the future.