

Feeding Through Pregnancy

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Mountain Dog Food

As spring fast approaches (thinking positively here) ones mind naturally turns to growth, renewal and birth. A fundamental step in this process naturally involves pregnancy. Whether this is your dog's first pregnancy or the first one in a long time it is only natural for questions to emerge: Should I alter my dogs diet during this time and how? How much should I be feeding? Are there things I should add to her diet? Or avoid altogether?

Since diet plays a big part in the well being of all species it is good place to start when building a foundation for the health of your bitch and her future pups. Most importantly the diet needs to contain high quality protein, adequate levels of energy and essential nutrients such as calcium, folic acid and omega 3 fatty acids. If you are already feeding a well-balanced raw diet including a variety of muscle meat, bones and organs you are adequately supplying your dogs needs of protein, fat and calcium. The amounts will need to be increased as the pregnancy progresses to meet her growing energy demands – along with a few other changes to be discussed below. However, if you're feeding a commercial diet it would be a good idea to add in some fresh foods both before and throughout the pregnancy to help meet the increasing energy and nutrient needs she will experience. It will of course be a benefit to her to continue this through the whelping period to ensure that she has an adequate milk supply for the pups and can maintain her own weight/body condition.

Good quality protein is important for the growth and development of the fetus as well as maintaining the muscle tone of the mother. The protein is also providing her with a good supply of iron, which is important for the production of red blood cells. Examples of good sources include chicken, beef, turkey, rabbit, venison, and lamb – basically any affordable meats you can find available locally. Another option is to add raw eggs to her meals a couple times a week. Eggs are a great source of protein that also supply a healthy dose of vitamin D to her diet – important for the proper absorption of calcium. Other sources include canned mackerel and salmon or dairy products like plain yogurt or cottage cheese.

It is also a good idea to feed occasional meals of organ meats in the months leading up to breeding and throughout the pregnancy (around 5-10% of the overall diet). Liver is a great natural food source of folic acid (along with an abundance of other nutrients), which is important in the proper development of the brain and spinal cord of the pups. As with everything it is important not to over do it. While liver is very nutritious and a great food to feed it is also high in vitamin A – a vitamin that you do not want to feed in excess during pregnancy. For this reason most breeders will avoid the use of cod liver oil during a pregnancy.

A popular misconception is that calcium should be supplemented during this time. However if your dog has access to plenty of raw bones as a part of her diet extra supplementation is not necessary and could actually cause harm. Some breeders find that after the puppies are born increasing the amount of bones fed helps support the mother's calcium needs for milk production. To help raise the caloric content of the meal near the end of the pregnancy and while nursing some will also add grains to the meal. Although

their use is controversial as to whether dogs benefit from this addition – based mostly on their lack of digestive enzymes for breaking down the cellulose and complex carbohydrates.

Essential fatty acids, especially omega 3, also play an important role in the growth of the fetus. They are involved in the development of both the brain and nerves, along with having an effect upon eyesight and the immune system. Since a diet that provides meat will adequately supply the omega 6 fatty acids it is important to balance this with a source of omega 3's. While these can be found in plant oils like flaxseed oil animal sources, such as salmon or other fish body oils are best.

So now to deal with the amount fed – how and when to increase meal size. This of course will vary for each dog and is meant only as a rough guide. Every dog will have her own preferences during a pregnancy and may even avoid some of her “favorites” during this time. This is one of the reasons why variety is key. During the first 1/2 of the pregnancy your dog's energy requirement will not differ greatly from that of her normal needs. However around the 4th week you can slowly start adding to the amount fed (about a third more daily), increasing this slightly each week as the pregnancy develops. As she grows it is a good idea to feed smaller, more frequent meals. This will allow you to give enough food to meet her nutrient needs yet still accommodate for the space being occupied by the pups. As a rough guide most dogs will gain about 15-20% of her pre-pregnancy weight during this time and will retain about 5-10% after giving birth. This will of course fluctuate depending upon the size of the litter and the demands upon mom afterwards.

Some breeders also opt to give various forms of herbal and/or homeopathic remedies during this time, either to tone the muscles of the uterus or prepare for the birthing process. If this is an area that you are interesting in investigating further it is a good idea to discuss this with a homeopathic/naturopathic vet prior to their use – especially when giving supplements before or during a pregnancy.

Resources:

- Grow Your Pup With Bones – Ian Billingham, DVM
- Nutrition And Pregnancy – Lew Olsen. B-Naturals - February 2004 Newsletter. <http://64.177.71.150/Feb2004.php>
- Hand, MS., Thatcher, CG., Remillard, RL. and Roudebush, P. (2000) Small Animal Clinical Nutrition – 4th Edition. Pp. 234-260.
- Nutrient Requirements of Dogs: Revised 1985. National Academy Press - NRC.