



# Caring for Your Pregnant Bitch

All of your planning has come together, you have anxiously waited for your bitch to come into season and she has been mated to the stud dog that you carefully selected for her. Hopefully, she will be pregnant ('in whelp') and it won't be long until you are welcoming your litter into the world.

Although you will have done everything to make sure that she was healthy and in tip top condition prior to the mating, now is the time to make sure that she receives extra care and attention so that her pregnancy is uneventful, and you are both ready for the birth.

## How will I know if she is pregnant?

One of the first things you will want to know is whether the mating has been successful. The canine reproductive cycle is unusual in that the hormonal changes seen in the two months after a season/oestrus are basically the same whether the bitch is pregnant or not – meaning that she may act and look like she is pregnant even if she has not been mated.

Pseudo (or 'phantom') pregnancy is quite common and can be quite deceiving, even to experienced breeders. Females with a pseudopregnancy can put on weight, show teat development and even produce milk. They may show all of the behaviour changes associated with pregnancy, may dig a nest, and even snuggle up with objects such as toys. For this reason, it is impossible to confirm a pregnancy simply by observing behavioural or physical changes (such as swollen nipples or weight gain).

## Her season will end

Due to the timing of the most fertile period being right at the end of the oestrus period, you will probably notice that your female 'goes off season' in the days after the mating. She will become less attractive to male dogs, her vulva will begin to return to normal size, and any discharge (which is usually straw coloured by the end of her season) will begin to dry up. She is entering the part of her reproductive cycle called 'dioestrus'.

It is important that you wait until she is completely off season before allowing her to run with any other male dogs. If she has access to other males, there is always the chance that a second mating could occur (even if she has not shown any interest in the other dog(s) previously).

After taking the time to carefully plan a breeding, you do not want to leave anything to chance. If you are not sure, your veterinarian can run a progesterone test to check that her fertile period has passed.

During this time, the fertilised egg (now called an embryo) will divide a number of times and migrate through the reproductive tract before implanting itself in the lining of the uterus. This implantation occurs approximately 17 days after fertilisation.

## **Important!**

*If your bitch continues to have a discharge or continues to look like she is 'in season' for more than a few days after her last mating, she should be examined by a veterinarian.*

*It may simply be that the timing of the mating was not right (allowing you to arrange another mating), or there may be issues that may impact her likelihood of falling pregnant and carrying a litter to term.*

*Your veterinarian will be able to advise you of the best course of action or may refer you to a veterinarian that specialises in reproduction to ensure the best possible outcome.*

## Palpation

At around three weeks, it is possible for an experienced person to palpate ('feel') for a pregnancy. The implanted embryos at this stage are small and round and they are separated from each other within the uterus. They can be felt through the stomach wall using the right technique, and an experienced operator can usually give a rough idea of the number of embryos present.



# Caring for Your Pregnant Bitch

Depending on the size and shape of your bitch, there will be areas of the abdomen that are difficult to access with this technique, and your bitch will need to be relaxed to allow the palpation to occur.

Palpation is only useful for pregnancy diagnosis during a short window of time. Usually, by about four weeks, the individual embryos have grown to a size where they begin to converge, and it is no longer possible to feel individual 'puppies'.

## Ultrasound

Most veterinary practices these days have access to an ultrasound machine, and this can be used to both detect and monitor a pregnancy. Ultrasound examination is best performed from four weeks and can be used right up to the time of whelping.

Ultrasound has the advantage of not only being able to see the embryos but also to measure their size accurately and visualise the puppy heartbeats. As the ultrasound provides a two dimensional 'slice' of a three dimensional object, the operator needs some experience to ensure that all areas of the uterus are examined. Where there are quite a few pups, the litter count determined by ultrasound is likely to be lower than the actual number.

## Blood test

Where your veterinarian does not have access to an ultrasound machine, it is possible to take a blood test to determine the level of a hormone called 'Relaxin'. This hormone is secreted by the pregnant bitch from about day 20 of gestation, and the test is usually performed from day 25. This is great for early pregnancy diagnosis, but only gives a 'yes-no' answer and does not indicate the size of any potential litter.

## X-Ray

An X-Ray cannot be used for early pregnancy diagnosis, but it comes into its own closer to the whelping date. Once the skeletons of the puppies start to calcify (moving from cartilage to bone), X-ray can be used to accurately count and see the position of the puppies.

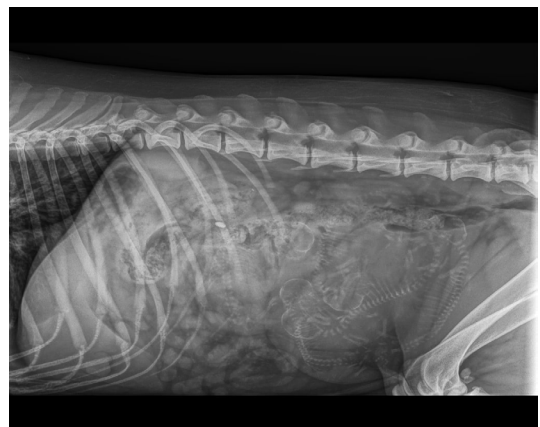
Generally, X-ray is only used in the last week or so of the pregnancy to give an accurate count of pups. It can also be used during or after the birth to ensure all puppies have been whelped, especially if the bitch experiences difficulties during the whelping process.

## Important!

*If early pregnancy detection suggests that your bitch may only have one or two puppies she may be at increased risk of having difficulties during the birth – your vet will be able to explain the risks to you.*

*Your veterinarian may suggest a pre whelping health check for your bitch or an X-ray during the final week of pregnancy, just to confirm numbers.*

*Regardless of the anticipated litter size, make sure that you have discussed with your veterinarian the procedure you should follow if things are not going to plan. You should also determine their availability around the time of the expected birth. If they do not offer an out of hours service, ask them to recommend one nearby.*





# Caring for Your Pregnant Bitch

## Caring for your bitch during pregnancy

### Nutrition

You will have worked on making sure your bitch was in perfect body condition before her mating, so for the first few weeks of her pregnancy, nothing should need to change. At this early stage, the nutritional demands of pregnancy are very low.

For the first few weeks, you should continue to feed her a complete and balanced diet at the same amount and frequency as before she was mated. You want to avoid over feeding her at this stage as putting on too much weight may predispose her to problems when it comes time to whelp her puppies.



As her pregnancy progresses past the first few weeks, you may find that her appetite suddenly increases – some girls become absolutely ravenous and obsessed with food! If your bitch is housed with others, it is advisable to keep a close eye on interactions where food is involved as some girls can become increasingly possessive of food at this time.

As she moves into the latter stages of pregnancy, your bitch's nutritional needs will increase as the puppies hit their period of maximum development. Because she needs to eat more, but space in her abdomen is at a premium due to the growing pups, feeding should move to two or three smaller meals each day. Of course, she should have access to clean, fresh water at all times.

If you feed a dry kibble based diet, you may want to begin to transition her to a 'puppy formula' dry food in the latter stages of the pregnancy. Puppy dry formulas have slightly higher levels of calcium and protein and are generally more energy 'dense' which may help her meet her calorie requirement with a lower volume of food, both at the end of her pregnancy and during the high demands of lactation.

#### **Remember:**

*If you have any questions about the correct amount or type of food to feed your pregnant bitch, please consult your veterinarian for advice.*

*You should also consult your veterinarian immediately if your pregnant bitch seems off her food, refuses to eat, or has signs of a tummy upset (such as vomiting or diarrhoea) during her pregnancy.*

### Supplementing the diet

It is important that you feed your pregnant bitch a diet that is 'nutritionally complete' (all vital nutrients, vitamins and minerals present) and 'balanced' (all nutrients in the correct ratio to each other).

If her diet is lacking in vital nutrients, she will be forced to deplete her own body stores to grow her puppies. This can lead to serious deficiencies developing over time. Deficiencies of vital nutrients can lead to problems during pregnancy, birth and beyond.



# Caring for Your Pregnant Bitch

Overdoing it with supplements can be just as dangerous to the mother and her growing pups. In particular, over supplementation with calcium during the pregnancy can lead to serious problems once the litter has whelped and the mother begins to produce milk.

If you are feeding a commercial pet food diet, the manufacturer will have calculated the nutrient breakdown of the food for you - check that the label states 'nutritionally complete and balanced'. In most cases, there should be no need to supplement these types of diet.

If you are feeding a home cooked or raw diet, then you need to make sure that you formulate it to ensure it is complete and balanced.

## **Remember:**

*You should speak to your veterinarian if you are considering supplementing your bitch's diet or if your bitch eats a home cooked or raw diet regularly. They will be able to tell you if supplements are necessary, and when it would be appropriate and safe to give them.*

## **Exercise, socialisation and enrichment**

Just because your bitch is pregnant, does not mean she should miss out on any of her daily routine. Exercise is important to keep her fit and strong and mental stimulation and social interaction are just as important as before she was mated.

Your pregnant bitch should have exercise, social interaction and enrichment activities every day. You may need to modify the amount and type of exercise as her pregnancy progresses, but exercise helps keep her fit, and ensures all of the muscles that assist with the pregnancy and birth remain strong.

Avoid overly strenuous exercise sessions or exercise in extremes of weather. You do not want your bitch's internal body temperature forced outside of the normal range as this can impact the growing pups.

Although most girls are fine to run, play or exercise with other dogs during their pregnancy (and many love the social interaction), you may need to modify this as she gets to the more advanced stages of her pregnancy. Keep a close eye on all interactions, and step in or change the routine if required.

In the last few weeks of pregnancy, it may be that social interactions with other dogs are restricted to calm, compatible house or kennel mates and that exercise sessions are separate from other dogs.

If you have a multi dog household, remember that the group dynamic may change, both when your girl is on season and throughout her pregnancy. Make sure that you keep a close eye on everyone's behaviour, and modify your management as required. This is especially important if your regular enrichment activities include food and/or toys as these resources may have increased value at this time.

## **Routine health care during pregnancy**

Pregnancy puts additional stresses on the body, and it is important that you do everything you can to minimise the risks of disease and illness at this time as pregnant animals are at an increased risk if exposed to disease.

## **Preventative treatments**

Before she was mated, you will have ensured that your bitch was up to date with all of her preventative health care treatments – vaccination, worming and other parasite protection. This is particularly important as it reduces transmission of parasites to the pups, and will ensure that they receive an adequate level of immunity through the important first milk (called 'colostrum').

Worming and parasite protection needs to continue throughout the pregnancy, and whilst she raises her litter, but you must make sure that any products that you use are safe to be given during pregnancy and lactation. Talk to your veterinarian if you are not sure.



# Caring for Your Pregnant Bitch

## Daily health checks

All dogs in your care will already be undergoing a daily health check – making sure that they are eating and drinking normally, that there are no signs of injury or illness. Now that your bitch is pregnant, you want to be super observant as you do not want her to be unwell at any time during the pregnancy.

Every day you need to be checking her vulva closely for any signs of discharge, and both looking at and feeling each of her teats. If you have any concerns, you should immediately consult with your veterinarian. Early intervention, diagnosis and treatment is vital during pregnancy.

If your bitch does become unwell, make sure that you tell your vet that she is pregnant. There are some otherwise very safe medications that are not suitable for pregnant animals, and treatments that may cause the bitch to abort her pups, so it is important that medications are chosen carefully.

## **Important!**

*Never give your pregnant bitch any medications, supplements or other treatments without checking carefully that they are safe to give to pregnant or lactating animals. Read the labels carefully, and if you are not sure, consult your veterinarian for advice.*

## Grooming

During the pregnancy, it is important that you continue your bitch's regular grooming and coat care. She can be bathed, but make sure that you dry her completely, and don't let her get cold/chilled. Towards the end of the pregnancy, you may find she is less comfortable sitting or standing for long periods, so grooming may need to be broken down into shorter sessions.

If you have a breed with a lot of coat or long hair, you may want to trim her hair short as it draws closer to the birth to make it more manageable. Some breeders will clipper or shave around the teats or around the vulva/under the tail to make it easier to monitor the area and make it easier to keep her clean.

## Cleanliness and hygiene

Because pregnancy places added stresses on the body, now is the time to take your cleanliness and hygiene to the next level. You will already be picking up droppings daily, and cleaning and disinfecting bedding, toys and food items regularly. Now is the time to consider increasing the frequency of this so that everything is squeaky clean throughout the pregnancy.

Make sure any disinfectants you use are safe, and make sure items such as food and water dishes are well rinsed before use.

## Minimising stress

Throughout the pregnancy, you want to minimise stress as this can impact the developing puppies – so making sure that your pregnant bitch is relaxed and comfortable should be a priority. Although her routine will be basically the same, you may need to pay a little more attention to ensure she is happy and calm.





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If there are extremes of weather during her pregnancy, pay particular attention to keeping her warm or cooling her down. Try to keep your routine as normal as possible, and monitor multi pet household dynamics to make sure that her pregnancy is as uneventful as possible.

During pregnancy, you may notice some behaviour changes in your bitch – some become clingier and suddenly do not want to be left alone, others may become more assertive with their housemates. Some want to retreat and spend more time alone, others spend more time resting but remain very social.

No two bitches are the same. Some will be fussy with their food, others will appear always hungry – pregnancy affects different animals in different ways.

If your bitch is an 'only dog' managing her should be fairly easy. If you have a multi pet household, you will need to monitor interactions between animals throughout the pregnancy to minimise stress and potential scuffles.

It may be that certain individuals who were fine together normally, now need to be separated or supervised. The way food, treats, toys and enrichment items are delivered or used may need to be tweaked. The aim is to prevent problems occurring, and to manage your animals in a way that keeps everyone safe.

