

DIABETES NDOGS OWNER MANUAL



DIABETES IN DOGS

Learning your dog has diabetes can be a shock. Don't worry, with insulin therapy, the correct diet and exercise, your pet's diabetes can be controlled. Your veterinary team will support you along the way so you aren't alone.

WHAT IS DIABETES?

When the food your dog eats is digested, carbohydrates are converted into sugars, including glucose, which then goes into the blood. Glucose is needed as energy by the body's cells to work properly. To enter most of the body's cells, glucose needs help from a hormone called insulin. Insulin is produced in the pancreas. In diabetic pets the pancreas is unable to produce enough insulin or the body's cells become less responsive to insulin.

CAN DIABETES BE CURED?

There is no cure for diabetes. Your veterinary surgeon has prescribed Caninsulin[®] from MSD Animal Health to help control the signs of diabetes such as excessive thirst, urinating, eating more and weight loss. The majority of dogs will lead a normal happy life on Caninsulin.

WHAT ARE THE SIGNS OF DIABETES?

Diabetic dogs may show a range of clinical signs due to their illness. In particular, diabetic dogs will often drink and urinate excessively. They will also tend to lose weight despite having an increased appetite. Other signs such as lethargy, cataracts and poor coat condition can also be seen.



TREATMENT

The main aim of treatment is to restore a good quality of life, not just for your dog but for you as well.

We can do this by stopping the signs of diabetes. Treatment also helps reduce the risk of diabetic complications. Whilst dogs tend to escape some of the more serious complications seen in diabetic people, they will have a higher incidence of problems such as cataracts.

Just as in people, diabetes can be effectively controlled by the injection of insulin, such as Caninsulin. In dogs, insulin is generally given in the morning and evening. In bitches, control may be easier after she has been spayed.

Routine is the key to successfully treating diabetes and revolves around insulin injections, exercise, weight control and diet. Veterinary nurses are often a great source of advice on these matters.

MAKING SMALL CHANGES

Talk to your veterinary team about making some small changes which can really help manage your dog's diabetes:

- Change your dog's diet
- If your dog is overweight, discuss a weight management plan
- Discuss home monitoring

STARTING TREATMENT

As every dog's diabetes management plan is different, your veterinary surgeon will tailor the dose of insulin to your pet's needs. It is normal for the stabilisation of diabetes to take several months, although you should see improvements in your dog within a few weeks of commencing treatment.



Your veterinary team will show you everything you need to know about correctly giving Caninsulin. It is important that only Caninsulin 40iu syringes, Caninsulin VetPen cartridges and VetPen needles are used with Caninsulin insulin.

You can carry out some home monitoring, such as urine tests for glucose and ketones, or monitoring your dog's blood glucose level. Your vet can show you how to do this. These give an extra indication of how your pet is getting on in between visits to your vet. Always consult your vet straight away if you are unsure what to do or worried about the result you get.

Initially you will be in close contact with your veterinary team, as you and your dog adjust. However, this should reduce as your dog stabilises.

You should never change your pet's dose of insulin without first consulting with your vet.

VERY IMPORTANT

LOW BLOOD GLUCOSE ('HYPOGLYCAEMIA')

One complication you need to be prepared for is low blood sugar, known as hypoglycaemia. This can be fatal if left untreated.

By knowing the most common causes, you can help to avoid hypoglycaemia:

- Giving too much insulin
- Missing a meal
- A change in food, or amount of food, fed
- Infection or illness, such as diarrhoea or vomiting
- · A change in the body's need for insulin
- Interaction with other drugs

SIGNS OF HYPOGLYCAEMIA CAN INCLUDE:

• Weakness

- Shivering/muscle twitching
 Fits
- Lack of energy
- Unconsciousnes

It is important to keep a source of glucose at home in case, such as glucose powder, honey or jam (check not sugar free).

When treating hypoglycaemia aim to give 1 gram of glucose per kilogram bodyweight. For example, a 4 kilogram dog would require approximately 1 level teaspoon of glucose/sugar.

WHAT TO DO IF YOU SEE SIGNS OF HYPOGLYCAEMIA

If your dog is conscious:

- Offer food immediately.
- If your dog does not eat straight away, syringe a small amount of glucose solution into the mouth and/or rub a glucose solution, honey or jam onto the gums. Take care not to get bitten.
- Call your vet for advice.

If your dog is unconscious or having a fit:

THIS IS A MEDICAL EMERGENCY – CALL YOUR VET IMMEDIATELY

In the meantime:

- Treat your dog rub glucose powder, honey or jam onto your dog's gums.
- Your dog should respond quickly, within a couple of minutes.
- Once your dog has responded and is sitting up offer a small amount of food.
- Never pour glucose solution into your dog's mouth in these circumstances; there is a risk it could go into the lungs.

VERY IMPORTANT

TIPS ON LOOKING AFTER YOUR INSULIN

Insulin is a very fragile substance. Incorrect storage and handling of insulin may mean that it doesn't have the proper effect when you give it to your dog. Follow these rules with Caninsulin:

- Always keep Caninsulin cartridges/vials in the fridge stored at +2 to +8°C in an upright position.
- Do not allow Caninsulin to freeze freezing destroys the insulin. Remember that items kept at the back of the fridge may freeze if they come into contact with the cooling plate.
- Always store unbroached Caninsulin in an upright position

 insulin can be affected by substances in the rubber cap
 at the top of the cartridge/vial.
- Before first use, agitate the cartridge/vial until a uniform milky suspension is obtained. Foam on the surface of the suspension formed during shaking should be allowed to disperse before the Caninsulin is used. Before each injection, the Caninsulin should be gently mixed to maintain a uniform milky suspension. Particles can group together to form small lumps in insulin suspensions: do not use the product if visible small lumps persist after shaking thoroughly.
- Do not use a cartridge/vial of Caninsulin for longer than 28 days.

ADDITIONAL OWNER SUPPORT MATERIALS

MSD Animal Health produces a variety of pet-owner support materials, available from your veterinary practice on request.

SUMMARY

When you find out that your dog is a diabetic it can be a daunting experience – there is a lot to learn in the first few weeks. However, in time, many owners establish a routine that becomes second nature to both them and their dogs. Looking after a diabetic dog is a challenging, yet rewarding undertaking. It must be accepted that regular injections, a fixed routine and frequent visits to the vet will become a way of life.

However, with the right care, dogs can enjoy a full and happy life after the diagnosis of diabetes.

METHOD OF INJECTION – VETPEN

Your vet or veterinary nurse will show you how to inject your dog with VetPen. Full instructions are provided in the package leaflet.



Ensure the arrow on the VetPen body points to the start line on the dose selector. Then dial up the number of units of insulin required as per your veterinary surgeon's direction. If you over-dial, never wind back the dose selector. Expel the insulin and draw up the correct dose.



Pull the skin of the scruff of the neck/back upwards and form a depression with your forefinger.



Insert the needle of VetPen at right angles gently through the skin in the depression you have formed. Then push the release button toward the pen needle and hold it in place until the start line on the dose selector returns to the arrow on the pen body. Count to a minimum of 5 seconds before removing the needle from the skin.

IMPORTANT: ONLY USE WITH CANINSULIN CARTRIDGES AND VETPEN NEEDLES

METHOD OF INJECTION – SYRINGES

Your vet or veterinary nurse will show you how to inject your dog with a syringe. Full instructions are provided in the package leaflet.



Draw up into the syringe slightly more insulin than needed. Expel any air bubbles by tapping the upright syringe with your finger and then gently press the plunger until the correct dose remains.



Pull the skin of the scruff of the neck/back upwards and form a depression with your forefinger.



Insert the injection needle at right angles gently through the skin in the depression you have formed. Gently draw back the syringe plunger and if blood appears remove the needle from the skin and start again with a fresh syringe (this will very rarely happen). Release your hold on the skin. Slowly depress the plunger.

IMPORTANT: ONLY USE 40IU SYRINGES DESIGNED FOR USE WITH CANINSULIN

caninsulin[®]

USING VETPEN

HOW LONG WILL MY CANINSULIN VETPEN 2.7ml CARTRIDGE LAST?

IU per injection	IU per day based on twice daily dosing	No. of days cartridge will last	IU per injection	IU per day based on twice daily dosing	No. of days cartridge will last
0.5	1	28 *	6.5	13	8
1	2	28 *	7	14	7
1.5	3	28 *	7.5	15	7
2	4	27	8	16	6
2.5	5	21	9	18	6
3	6	18	10	20	5
3.5	7	15	11	22	4
4	8	13	12	24	4
4.5	9	12	13	26	4
5	10	10	14	28	3
5.5	11	9	15	30	3
6	12	9	16	32	3

*Cartridge should be discarded after 28 days and replaced with a new one.

Use medicines responsibly.

This information is provided by MSD Animal Health, th<u>e manu</u>facturer of Caninsulin[®]. Caninsulin[®] contains an aqueous suspension of insulin containing 40 i.u. highly purified porcine insulin, which is structurally identical to canine insulin. Legal category [<u>POM-V</u>] Further information is provided in the package leaflet.

Caninsulin[®] is for animal treatment only and must be prescribed by your veterinary surgeon whose advice should be sought. Caninsulin[®] is indicated for the treatment of diabetes mellitus in cats and dogs. @ Registered trademark. Caninsulin[®] is the property of Intervet International B.V. or affiliated companies or licensors and is protected by copyrights, trademark and other intellectual property laws. Copyright © 2018 Intervet International B.V. All rights reserved.

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STORAGE ADVICE

VetPen should always be stored or carried with the needle removed and the pen cap on. Once loaded with a cartridge, VetPen should be stored in the fridge at +2 to +8°C. The loaded VetPen can be stored on its side. Always keep Caninsulin cartridges and vials in the fridge stored at +2 to +8°C in an upright position. Do not freeze. Protect from light.

