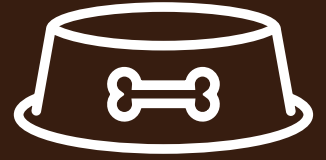


The K9 Nutritionist

ADVISORY SERVICES

PREPARED FOR JULES HARRISON AND TILLY

Background



Tilly is a Female adolescent Bernese Mountain Dog. Tilly has not yet been spayed.

Tilly eats a raw food diet comprising of Durham Animal Feeds complete meals. Tilly has 908g per day (454g per feed) of the following varieties: Oily Fish & Tripe, Pheasant, Beef & Heart, Beef, Pork, Beef & Tripe, Duck & Tripe. Tilly drinks a lot of water throughout the day.

Tilly also has nutritional supplements alongside her food, these are YuMove, YuCalm and Plaque Banish. Tilly also has natural and commercial treats.

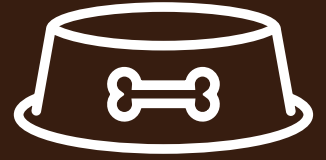
Tilly currently has joint issues presenting as hip dysplasia in her right hip. She has also previously had problems with her right elbow and underwent an arthroscopy in August 21. She is on prescribed medication to treat ongoing joint problems. Tilly is at her ideal weight.

In terms of exercise, Tilly has up to 1 hour a day off or on lead across several shorter walks, and spends most of her day indoors at home.

Tilly has no history of gastrointestinal issues, no skin/coat, eye or dental issues, but has presented with ear problems in the past. This was thought to be an issue with poultry and on removing poultry from her diet, her ears improved.

Tilly's stools are generally good, but occasionally can be crumbly in texture.

Breed Research

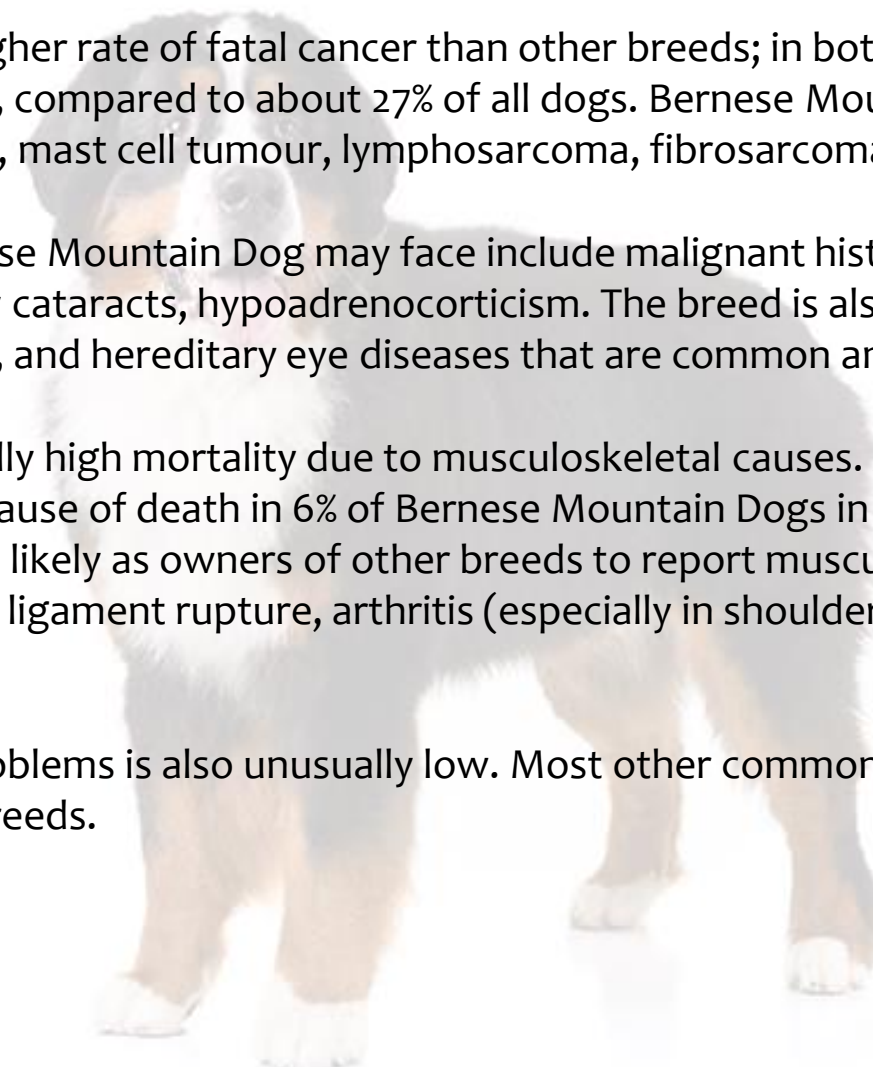


Bernese Mountain Dogs have a much higher rate of fatal cancer than other breeds; in both U.S./Canada and UK surveys, nearly half of Bernese Mountain Dogs die of cancer, compared to about 27% of all dogs. Bernese Mountain Dogs are killed by many types of cancer, including malignant histiocytosis, mast cell tumour, lymphosarcoma, fibrosarcoma, and osteosarcoma.

Inherited medical problems that a Bernese Mountain Dog may face include malignant histiocytosis, hypomyelinogenesis, progressive retinal atrophy, and possibly cataracts, hypoadrenocorticism. The breed is also prone to histiocytic sarcoma, a cancer of the muscle tissue that is very aggressive, and hereditary eye diseases that are common among larger dogs.

Bernese Mountain Dogs have an unusually high mortality due to musculoskeletal causes. Arthritis, hip dysplasia, and cruciate ligament rupture were reported as the cause of death in 6% of Bernese Mountain Dogs in the UK study. Owners of Bernese Mountain Dogs are nearly three times as likely as owners of other breeds to report musculoskeletal problems in their dogs; the most commonly reported being cruciate ligament rupture, arthritis (especially in shoulders and elbows), hip dysplasia, and osteochondritis.

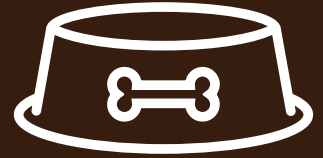
The age at onset for musculoskeletal problems is also unusually low. Most other common, non-musculoskeletal morbidity issues strike Berners at rates similar to other breeds.



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Allergy Test Analysis

Analysis of Food Allergens

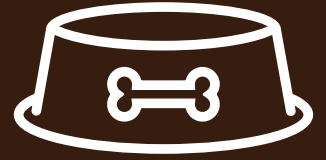


The allergy and intolerance test flags up food items that have a sensitivity level of 85% or over. This is the threshold at which we would start to see a reaction. Where possible, these items should be removed from the diet as soon as possible.

For Tilly, the items of most concern (95% or above) are:

Proteins	Grains	Fruit & Vegetables	Dairy
Lobster (98%) Ox Liver (95%)	Barley (100%) Yeast (96%) Buckwheat (95%)	Apple Juice (98%) Poppy Seed (98%) Jackfruit (97%) Oranges (97%) Raspberries (96%) Pineapple Juice (95%) Raisins (95%)	Egg Yolk (100%) Kefir (97%)

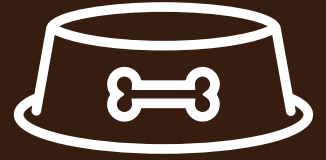
Analysis of Food Allergens



Tilly also has a number of items registering between 85% and 95%:

Proteins	Grains	Fruit & Vegetables	Dairy
Crayfish (93%) Sardines (93%) White Fish (cod, haddock, hake, pollock) (89%) Crab (86%) Sea Trout (86%)	Brown Sugar (91%) Maize/Corn (87%) White Sugar (85%)	Black Pepper (93%) Beetroot (92%) Grapefruit (92%) Orange Juice (91%) Banana (87%) Button Mushroom (87%) Mushrooms (86%) Peanuts (86%)	Milk lactose (90%)

Grain Intolerances in Dogs



Symptoms of grain allergies can vary from dog to dog. Symptoms may include

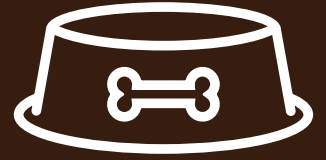
- Itchy skin
- Dry, flaky skin
- Hair loss
- Bumps/rash
- Chronic ear infections
- Obsessive licking/chewing of feet
- Inflamed, red paw pads
- Gastrointestinal upset

Grain allergies in dogs may develop immediately or may develop after years of being fed the same diet.

There are a variety of grains that can be found in your dog's food. Some of these grains include wheat, rye, **barley**, oats, rice, amaranth, buckwheat, **corn**, millet, quinoa, and certain beans.

"Gluten" is a term to describe the protein in some of these grains, but not all of them. A "gluten-free" diet and "grain-free" diet are two different things. "Gluten" covers only a few of the grains listed above, 'grain' includes them all. If you believe your dog has a grain allergy, you will have to stick with the "grain-free" diet.

Analysis of Environmental Allergens



The allergy and intolerance test flags up food items that have a sensitivity level of 85% or over. This is the threshold at which we would start to see a reaction. Where possible, these items should be removed from the diet as soon as possible.

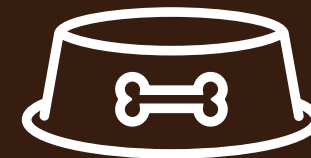
For Tilly, the environmental items above 85% are:

Trees	Grasses	Other	Plants
Willow (100%) Larch (93%) Walnut Tree (93%) Horse Chestnut (91%) Cherry Tree (85%)	Velvet Grass (87%) Sweet Vernal Grass (89%)	Chicken Feathers (98%) Mink epithelium (skin or cells) (93%) Dust (90%)	Chamomile (100%) Pigweed (97%) Narcissus (93%) Plantain (89%) Rose 88%

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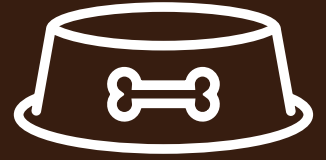
Recommendations

Dietary Recommendations - Food



Dietary Recommendations

Durham Animal Feeds Raw Diet



Tilly is currently fed a raw diet of Durham Animal Feeds food. The good news here is that there are **no changes needed to her food**. However, now we know what Tilly can eat, it would be great to introduce some new proteins in to her diet.

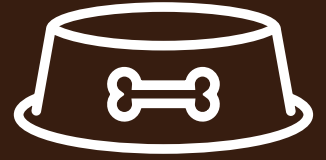
DAF do a **mackerel mince**, and I think this would be beneficial for Tilly as it's an oily fish that will aid her joints and mobility. Her main meals can also be supplemented with tinned **mackerel, herring, pilchards or salmon**. But Tilly cannot have **Sardines, Whitefish (Pollock, Cod, Hake, Haddock) or Shellfish**. If this isn't possible, then it may be helpful to use a **salmon oil** on Tilly's food.

Tilly can also have any of the following DAF flavours:
Game and Tripe, Rabbit, Venison, Lamb and Veal.

The Beef food from DAF that Tilly currently eats is also safe as it **does not contain Ox Liver**. This was confirmed by DAF customer services.

Dietary Recommendations

Additional Food Sources



Although Tilly does not show an intolerance to Chicken as suspected, it may still be beneficial to minimise the amount of chicken she eats, though I suspect that the reaction seen in her ears came from the grains the chicken was fed, rather than the protein itself.

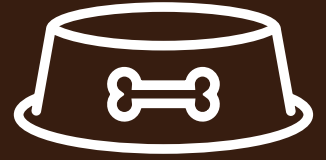
It is important for Tilly to also avoid **Eggs, Milk and Kefir**. Tilly should also avoid any **Peanut** based treats, including doggy peanut butter.

I would also recommend that Tilly follows a completely **Grain Free** diet, this would include **Maize/Corn**. It is important to also ensure any meat proteins that Tilly is fed are also considered grain free, this is where the animal was not fed grain as part of it's diet.

In terms of treats, you would need to check that any commercial treats are **grain, sugar and dairy free**. It may be beneficial where possible to give Tilly natural dehydrated treats like hooves or ostrich bones.

Dietary Recommendations

Treats



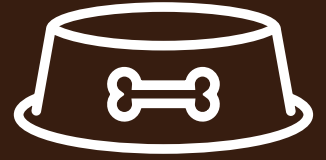
In terms of treats, you would need to check that any commercial treats are **grain, sugar and dairy free**. It may be beneficial where possible to give Tilly natural dehydrated treats like hooves or ostrich bones.

To aid Tilly's joint and mobility issues, I would recommend feeding natural treats that contain high levels of chondroitin and glucosamine. When dogs suffer from arthritis or bone and joint pain, these compounds can help to cushion and repair the area between joints where cartilage is missing, thin, or damaged. Glucosamine and chondroitin sulphate are the primary triggers for glycosaminoglycan, a molecule used in the formation and repair of cartilage and other body tissues.

- Chicken and duck feet
- Beef trachea and Oxtails
- Pigs ears and tails
- Green lipped mussels
- Salmon Skins

Dietary Recommendations

Bone Broth

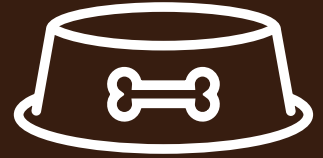


Another great way to give your dog natural glucosamine is to make a thick, gelatinous **bone broth**. It's simple to make, despite the fact that it takes about 24 hours to boil on the burner (or in a slow cooker). Bone broth is high in glucosamine and other joint-supporting nutrients, and it has many health benefits.

You can also buy ready made frozen bone broth, as well as concentrated bone broth in powdered format that you rehydrate.

There are many recipes online for making your own bone broth, and you can freeze this in ice cube trays or bags and add one to Tilly's food each day.

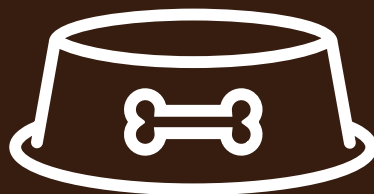
Summary



- ✓ Beef
- ✓ Pork
- ✓ Venison
- ✓ Lamb
- ✓ Lambs liver
- ✓ Veal
- ✓ Rabbit
- ✓ Duck
- ✓ Pheasant
- ✓ Chicken
- ✓ Tripe
- ✓ Salmon
- ✓ Mackerel
- ✓ Pilchards
- ✓ Herring
- ✓ Halibut
- ✓ Perch
- ✓ Brown Trout
- ✓ Tuna
- ✓ Anchovy

Recommend to add Bone Broth daily
Also keep Tilly's diet Grain Free

- ✗ Shellfish (Lobster, Crayfish, Crab)
- ✗ Sea Trout
- ✗ Sardines
- ✗ Whitefish (Cod, Hake, Pollock, Haddock)
- ✗ Ox liver
- ✗ Eggs
- ✗ Milk (apart from Goats Milk)
- ✗ Kefir grains
- ✗ Sugar (Brown and White)
- ✗ Peanuts
- ✗ Grains (Barley, Yeast, Buckwheat, Maize)
- ✗ Raspberries, Banana, Grapefruit
- ✗ Mushrooms



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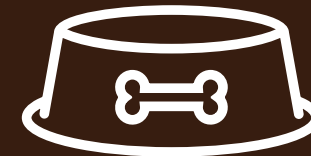
07585 332226

gemsross@me.com

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Additional Resources

Interpreting Food Labels (EU)



Ingredients (raw materials) are listed under "composition"

- In descending order of weight (fresh matter)
- The names can be specific or can also be named by their legal category (see example)

[Product name] 400 g

Complete pet food for adult cats

Composition: Meat and animal derivatives (4% chicken), vegetable protein extract, derivatives of vegetable origin, cereals, minerals, various sugars

Additives (per kg):

	weight (kg)	serving / day (g)
Nutritional additives:	2	35
Vitamin D3 xx UI, E1 (iron) xx mg [...].	3	50
Preservatives:	4	62
antioxidants	5	74

Analytical constituents: Crude protein XX %, Crude oils and fats XX %, Crude ash XX %, Crude fibres XX %, Moisture XX%

ABC [company responsible of labelling/packaging], address/phone #

BATCH 1234567890
plant ABCD
Best before date MM/YYYY

Net weight must be reported

The pet food label must:

- Specify target species and lifestage
- Specify if the food is "complete" (provides all necessary nutrients and energy for the species and lifestage, and can be used as sole source of nutrition) or "complementary" (does not provide all nutrients and many refers to treats)

Feeding instructions can be more or less detailed. Many labels state that these are only recommendations and might vary depending on age, breed, activity and health

Label should include storage instructions (canned food might also include storage instructions after opening)

Dry pet food must recommend that the pet must have fresh water available at all times

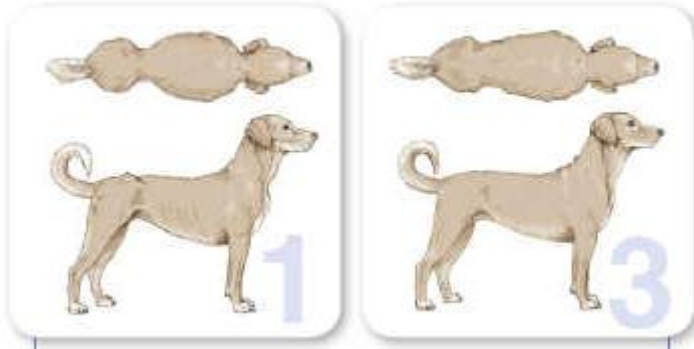
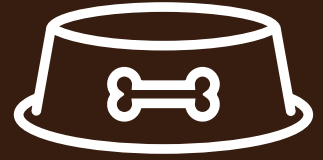
Label must include those nutritional additives (vitamins and minerals) with legal inclusion maximums. The amounts are those added (therefore, the overall amount of nutrient might be different depending on raw material provision and effect of processing. Other additives (like preservatives, dyes, or flavouring agents) do not have to be reported by their specific name, but the company responsible for labelling should provide this information if contacted.

Name, address and contact information of the company responsible for labelling must be included. Label does not have to include country of production. If it applies, companies can use "made in the EU"

Label should include traceability information such as batch number and plant approval number. Best before date must be included in month and year (plus day if short shelf life)

Analytical constituents are declared as percentages (grams per 100 g of pet food) in fresh matter. The ones that are mandatory are crude protein, crude oils and fats, crude ash, and crude fibres. Moisture is only mandatory if >14%. The energy density (kilocalories per kg, cup or can) is not mandatory and is often absent from labels.

Body Condition Score



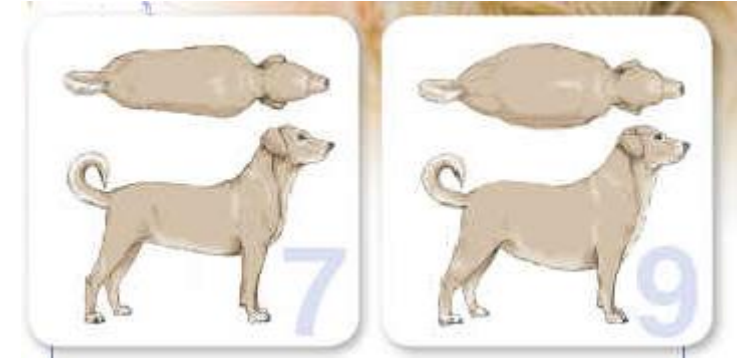
Under Ideal / Underweight

1. Ribs, lumbar vertebrae, pelvic bones and all bony prominences are visible from a distance. No discernible body fat. Obvious loss of muscle mass.
2. Ribs, lumbar vertebrae, pelvic bones are easily visible. Some evidence of other prominent bony areas. Minimal loss of muscle mass.
3. Ribs easily felt under the skin and may be visible with no layer of fat covering. Tops of lumbar vertebrae visible. Pelvic bones becoming prominent. Obvious waist and abdominal tuck.



Ideal

4. Ribs can be felt easily with minimal fat covering. Waist easily seen when viewing from above. Abdominal tuck is evident.
5. Ribs easily felt without excess fat covering. Waist observed from behind ribs when viewed from above. Abdominal tuck can be seen when viewing from the side.



Over Ideal / Overweight

6. Ribs can be felt under a slightly excessive fat covering. Waist can be seen from above, but it is not prominent. Abdominal tuck is apparent from the side.
7. Ribs can be felt with difficulty under a heavy fat cover. Noticeable fat deposits over lumbar and base of tail. Waist absent or barely visible. Abdominal tuck may be present.
8. Ribs cannot be felt under a heavy layer of fat, or can be felt only with significant pressure applied. Heavy fat deposits over lumbar and base of tail. Waist absent. No abdominal tuck, obvious abdominal distention may be present.
9. Massive fat deposits over thorax, spine and base of tail. No waist or abdominal tuck. Fat deposits on neck and limbs. Obvious abdominal distention.