

| DIETARY CHARACTERISTICS | SPECIFIC FEW-DM Endocrine Support Cat - Wet diet | SPECIFIC FED-DM Endocrine Support Cat - Dry diet | SPECIFIC CED-DM Endocrine Support Dog - Dry diet |
|--|--|--|--|
| Low level of carbohydrates | 8% Dry Matter 11% energy | 20.2% Dry Matter 21% energy | 30.1% Dry Matter 34% energy |
| Carbohydrate sources | No high-carbohydrate sources | Oats, lentils | Oats, peas, lentils |
| Reduced fat level to reduce risk pancreatitis | - | 14.2% DM | 12.6% DM |
| High level of omega-3 Omega-3 sources | 0.85 g/MJ Fish, fish oil | 0.88 g/MJ Fish, fish oil, krill, DHA algae | 1.12 g/MJ Fish, fish oil, krill, DHA algae |
| Nutrients/ingredients to support inflammatory and immune response | | | |
| High levels of omega-3 (EPA) | ✓ | ✓ | ✓ |
| Beta-glucans | ✓ | ✓ | ✓ |
| Immune-supportive nutrients Zinc, Selenium, Vitamin A | ✓ | ✓ | ✓ |
| Antioxidant substances Vitamin A, E, fruit extracts | ✓ | ✓ | ✓ |
| Increased crude fibre level | 3.9 g/MJ | 3.1 g/MJ | 5.4 g/MJ |
| Fermentable fibre | FOS, beet pulp | FOS | Beet pulp, FOS |

DECHRA – EXPERTISE IN ENDOCRINOLOGY

Through significant research and product development Dechra has clearly established itself as an expert in endocrinology. Today we are leading the way in this field, providing effective treatment for pets with endocrine diseases.

With Vetoryl, Forthyron, Felimazole and Zycortal we have established a comprehensive range of endocrine products. Combined with better understanding and support, we can help you to deliver effective control and management of hypoadrenocorticism, hyperadrenocorticism, hypothyroidism and hyperthyroidism.

We believe that even animals with marginal diseases should be given the opportunity to live life to their full potential. Successfully treating each of these challenging diseases gives you the control to restore quality of life to both the animal and the owner.

VETORYL: Vetoryl contains trilostane; ZYCORTAL: Zycortal contains desoxycortone pivalate
THYFORON: Thyforon contains levothyroxine sodium; FELIMAZOLE: Felimazole contains thiamazole



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New wet and dry diets for cats and dogs providing nutritional support of both diabetes mellitus and associated complications



New wet and dry diets for cats and dogs providing nutritional support of both diabetes mellitus and associated complications.

- Low carbohydrate level
- High level of omega-3 fatty acids
- High level of antioxidants
- Beta-glucans
- Moderate fat level (dry diet)
- Fermentable fibres



GOALS FOR NUTRITION FOR DIABETIC CATS AND DOGS

Optimising bodyweight and feeding an appropriate diet are both factors that can help support improved glycaemic control ^(1,2).

Weight management - If the cat or dog is overweight or obese it is essential to normalise their body weight as obesity can influence insulin resistance. For underweight diabetic cats or dogs it is important to provide sufficient energy and protein to support lean body mass and optimal body weight.

Lower dietary carbohydrate to improve glycaemic control in diabetic cats, ⁽³⁻⁶⁾ allowing beta-cells to recover and resulting in higher diabetic remission rates ⁽⁷⁾. In dogs lower dietary carbohydrate improves glycaemic control by reducing post-prandial hyperglycaemia and minimising blood glucose fluctuations.

Reduction of inflammatory cytokines and oxidative stress, which contribute to insulin resistance and diabetic complications ^(8,14).



MAIN GOALS OF MANAGEMENT OF DIABETES MELLITUS ⁽¹⁾

- **Reduction of hyperglycemia** to limit or eliminate the clinical signs with a treatment regime that is simple and convenient enough for the owners to comply
- **Avoiding insulin-induced hypoglycaemia** and preventing other complications

The **key elements of management of DM** are a combination of **optimising bodyweight; an appropriate dietary and exercise regime and an appropriate insulin regime.**

When well managed, the **prognosis for dogs and cats with DM is good.**

DIABETES MELLITUS: MORE THAN JUST INSULIN

Free online CPD courses, from The Dechra Academy providing a **comprehensive overview** of feline and canine **diabetes mellitus**, equipping you with the tools to **handle cases more confidently.**



SUPPORT OF INFLAMMATORY AND IMMUNE RESPONSE

Cats and dogs with diabetes mellitus have increased levels of inflammatory mediators and a reduced immune response increasing incidence of infections (e.g. urinary tract infections), which may contribute to poor glycaemic control or reduced remission rate.

Nutritional support of the natural inflammatory inhibitory reactions and immune response can be achieved through immune-supportive nutrients:

- High n-3 (EPA)
- Beta-glucans
- Immune-supportive nutrients Zinc, Selenium, Vitamin A

SUPPORTING INSULIN SENSITIVITY

Glucose toxicity and inflammatory cytokines reduce insulin sensitivity ⁽⁸⁾.

- Low carbohydrate level to support glycaemic control ⁽³⁻⁶⁾
- **Omega-3 fatty acids** provide precursors for production of mediators for support of the **natural anti-inflammatory process** and **insulin sensitivity** ⁽⁹⁾.
- **Beta-glucans** can affect **natural cytokine production**. In several studies supplementation with beta-glucans reduced blood glucose levels ⁽¹⁰⁻¹²⁾.

REGULATING BLOOD GLUCOSE

Very low level of carbohydrates (FEW-DM) and a reduced carbohydrate level, derived from sources with a low glycaemic index, (CED-DM and FED-DM) help maintain physiological glucose levels.

Increased crude fibre levels further help to retard the **digestion of complex carbohydrates**, reducing fluctuations in blood glucose.

NUTRITIONAL SUPPORT OF THE MICROBIOME

Diabetes is associated with changes in the composition of the microbiome ⁽¹⁵⁾. Fermentable fibre can support a healthy microbiome.



SUPPORT OF PANCREATITIS

There is a **close relationship between diabetes and pancreatitis in cats and dogs** ⁽¹³⁾, although it is not clear which disorder is cause or effect.

The **dry diets CED-DM and FED-DM** also supports cases of pancreatitis through a **moderate fat level**, and relatively high levels of **omega-3 fatty acids** - both helping to support normal blood levels of triglycerides.

SUPPORT OF OXIDATIVE STRESS

Oxidative stress, excessive production of reactive oxygen species (ROS) in the presence of diminished antioxidant substances, plays a pivotal role in the pathogenesis of diabetes and development of diabetes complications ⁽¹⁴⁾. **High dietary levels of antioxidant substances, such as vitamin A, E and fruit extracts** help to neutralise ROS.