

## Case Study - Nutrition

### The Use of a Natural Diet to Treat Diabetes in a Cat

**Dr Mio Shinohara Royce, Australia, BVM, PhD, GDVCHM, GDVWHM**



***Dr Mio Royce is an integrative veterinarian from Sydney, Australia. She is also a highly valued member of the CIVT team, tutoring our Certification in Small Animal Nutrition and Advanced Certification Small Animal Naturopathy courses.***

#### **History**

'Wasabi' is a fifteen-year-old spayed female domestic shorthaired cat, who was newly diagnosed with diabetes mellitus and hospitalized for stabilization with insulin. She's an irritable angry cat, and her family was desperately needing alternative therapies, because home glucose monitoring and insulin injection would be impossible. Her previous medical history included otitis externa, obesity and osteoarthritis, and she had been on commercial science diet kibble and tins for weight management.

**Holistic diagnosis and findings:** Damp Heat consuming Yin (Empty Heat). Irritable, hissing, heat-intolerant and overweight (6.8 kg; BCS 6/9 with moderate muscle loss). PP/PU/PD. Greasy dirty ears and dry shedding hair. Mild hepatomegaly without liver enzyme elevation. Frothy pink tongue. Alternating between constipation and pasty stools.

#### **Herbal prescription**

The majority of diabetes in older overweight cat is Type 2 (insulin resistance). San Ren Tang seemed the best fit, as it is anti-inflammatory (drains Dampness and clears Heat) and known to improve insulin sensitivity and regulate bowel movement. Corn silk was added for possible hepatic lipodosis.

#### **Diet prescription**

Duck was selected as a novel protein to rule out food sensitivity. It was also ideal from TCM perspectives, as duck is a Qi and Yin tonic and energetically neutral to cooling. Home-prepared, gently warmed raw food was recommended for optimal digestion. Smaller meals four to six times a day were ideal to minimize postprandial glucose spikes.

- 70% Duck without skin, chopped
- 15% Duck liver and hearts, chopped
- 15% Duck egg, hard boiled
- Duck neck or wing, every 2-3 days
- Duck feet broth for chondroprotection
- Fish oil with vitamins E and D (100 mg DHA/EPA per day)
- Taurine (500 mg per day)

- Consider later: dental kelp (*Ascophyllum nodosum*); nutritional yeast or vitamin B complex; probiotic/prebiotic blend

Instructions: Combine meat, offal and eggs, divide into single serving portions and freeze. Defrost overnight in the fridge and pour a tablespoon of hot broth. Add supplements and mix thoroughly. Transition gradually from the current diet.

### Outcome

Diet transition was relatively easy, as Wasabi had a ravenous appetite. However, she refused to eat her food when herbs were added. We decided to manage her by dietary therapy alone. Her family continued to monitor her non-invasively for signs of hyperglycemia and hypoglycemia. She needed a few more doses of insulin before diet transition was complete. At her three-month follow-up, however, her blood glucose and fructosamine were normalized. She had lost weight without caloric restriction, just by switching to an unprocessed low-carbohydrate diet.

	At diagnosis	At presentation	Month 3	Month 6
Urinary glucose	+++	+/-	-	-
Blood glucose [70-150 mg/dL]	283	198	145	144
Fructosamine [191-349 µmol/L]	502	502	348	276
BW	6.8 kg	6.8 kg	6.0 kg	5.8 kg

Currently, glucose and fructosamine are monitored by her local vet twice yearly and still remain within the target ranges. Insulin is no longer necessary. After a recent outbreak of avian influenza in a local duck farm, her diet was changed to raw rabbit and lightly cooked fish (also cooling) with occasional venison (warming but Kidney tonifying). She enjoys occasional low-carb treats like sashimi scallops and freeze-dried mussels. She's also accepting a small dose of herbal tincture (jujube, reishi, rehmannia and dan shen), which has made her calmer and more relaxed.

After initial stabilization with insulin, newly diagnosed uncomplicated feline diabetes responds well to species-appropriate raw diet and insulin-sensitizing herbs. Typically, we start to see effects within a couple of days to weeks. Cats are not always a big fan of herbs, but the present case showed that even diet therapy alone was beneficial for glucose control, although the response was slower.

*These lecture notes, PowerPoint slides and other materials are protected under copyright in 2024 to the College of Integrative Veterinary Therapies PO BOX 352, Yeppoon, Queensland 4703 Australia. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means electronic, mechanical, photocopying, recording, emailing or otherwise without the prior written permission of the publisher CIVT.*



[civtedu.org](http://civtedu.org)