

Case Report of a multimorbid privately owned dog

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Medical History

- miniature poodle „Hessi“
 - 6 years old, neutered female
 - actual weight: 7 kg, ideal weight according to owner
- problems since 6 months:
 - hyperlipidaemia
 - increased blood values indicated liver, renal, pancreas diseases

Medical History

blood values 07.02.2013:

- normal: urea, creatinine, phosphate and canine Trypsin-like immunoreactivity

parameter	values of 07.02.2013 and 30.04.2013	reference values
protein-creatinine-ratio	4.5	< 0.5
alkaline phosphatase	354 U/l	< 147 U/l
glutamate dehydrogenase	39 U/l	< 18 U/l
cholesterol	490 mg/dl	< 398 mg/dl
triglyceride	220 mg/dl	28 – 150 mg/dl
specific pancreatic lipase	241 µg/l	critical range > 200 µg/l

Nutrition History

feeding:

- Royal Canin Gastrointestinal Low Fat and Royal Canin Renal I:I (400g/ day)
- additionally 60g cooked noodles and 60g cooked carrots

Dietary recommendations

for renal insufficiency:

- protein and phosphorus ↓ (according to blood values)
- protein quality ↑
- fat and cereals ↑
- B vitamins ↑
- additionally: pectin (fermentable fibre)

Dietary recommendations

- for liver disease:
 - protein quality ↑, perhaps more milk products
 - no eggs (methionine)
 - B vitamins and vitamin E ↑
- pancreatic disease:
 - fat ↓
 - polyunsaturated fatty acids ↑
 - easily digestible diet

Ration check

- ME intake above average
(average: 1.7 MJ/ day, Hessi: 2.6 MJ/ day)
- 1.4x protein intake of recommended protein requirement
- energy density: 1.7 MJ/ dry matter
- calcium-phosphorus-ratio = 2.0:1.0
- fat amount: 15.3 g fat/ 100g dry matter

ration check with dietcheck Munich™

[illegible]

Ration adaption:

- mixed diet of commercial and homemade diet
- protein quality ↑, amount of fat ↓
- polyunsaturated fatty acids ↑
- no reduction of protein amount because of normal renal blood parameters (urea, creatinine)
- vitamin E and B vitamins ↑
- balanced mineralisation
- additionally pectin feeding (fermentable fibre)

ration adaption

- 1.4x protein intake
- energy density: 1,8 MJ/dry matter
- calcium-phosphorus-ratio = 1.1:1.0
- fat amount: 10.8 g fat/ 100g dry matter

Nährstoffe	Menge	ME MJ	Rp	Ca	P	Mg	K	Na	Fe	Cu	Zn	Mn	J	Vit A	Vit D	Vit E	Vit B1	Vit B2	Vit B6	Vit B12	Biotin	Niacin	Pantothen
Einheiten	g/Tag	MJ	g	mg	mg	mg	mg	mg	mg	mg	mg	mg	µg	IE	IE	mg	mg	mg	mg	µg	µg	mg	mg
Bedarf		1,7	24	560	420	84	560	112	4,2	0,8	8,4	0,7	123	708	76	4	0,31	0,73	0,21	5	1	2	2,38
Versorgung		2,8	33	603	530	121	1264	226	12,0	1,4	9,7	14,2	141	6013	42	49	2,43	0,86	0,54	6	25	8	2,83
pasta (cooked)	150,0	0,5	3	11	53	15	90	8	0,8	0,1	0,5	0,0	0	0	0	0	0,21	0,09	0,01	0	0	3	0,00
carrots	200,0	0,4	2	100	70	40	680	60	1,4	0,2	0,8	0,6	8	0	0	4	0,14	0,10	0,10	0	2	2	0,44
salmon oil capsules	2,4	0,1	0													14							
RC Low Fat canned	200,0	0,8	15	480	260	46	280	120	8,0	1,0	7,0	13,6	50	6000	42	30	2,00	0,60	0,20	5	20	2	2,00
chicken breast (raw)	25,0	0,1	6	4	53	6	66	17	0,3	0,0	0,0	0,0	0	0	0	0	0,02	0,02	0,13	0	2		0,21
rice (cooked)	150,0	0,5	3	5	54	6	60	3	0,5	0,0	0,6	0,0	2				0,03	0,01				0	
beef goulash (raw)	25,0	0,3	4	3	40	8	88	18	0,9	0,1	0,8	0,0	1	13	0	0	0,03	0,04	0,10	1	1	1	0,18
canola oil	2,5	0,1	0	0	0	0	0	0	0,0	0,0	0,0	0,0	0	0	0	1	0,00	0,00	0,00	0	0	0	0,00
seaweed powder	0,1	0,0	0						0,1	0,0	0,0	0,0	80										

→ RC ~~Low Fat~~ canned

Follow up

- Hessi ate diet without problems
- blood values:

parameter	values of 28.08.2013	values of 07.02.2013 and 30.04.2013	reference values
protein- creatinine-ratio	2.5	4.5	< 0.5
alkaline phosphatase	318 U/l	354 U/l	< 147 U/l
glutamate dehydrogenase	19 U/l	39 U/l	< 18 U/l
cholesterol	287 mg/dl	490 mg/dl	< 398 mg/dl
triglyceride	73 mg/dl	220 mg/dl	28 – 150 mg/dl
specific pancreatic lipase	< 200 µg/l	241 µg/l	critical range > 200 µg/l

Thank you for your attention

