Finding the nutritional balance between different suspected diagnoses, the owners' expectations and the effective cause: a case report in a cat

Resident: med. vet. Han Opsomer
Supervisor: Prof. Dr. Annette Liesegang

Combination of conditions

Initially suspected diagnosis by vet: inflammatory bowel disease (IBD) – no biopsy – due to symptoms and blood work

collective term for disorders of the GI tract, characterized by persistent or recurrent GI signs and histologic evidence of intestinal inflammation

Development of the diagnosis during consultation: chronic pancreatitis – no biopsy – due to symptoms and blood work

characterized by continuing inflammation (lymphocytic/lympoplasmacytic) with irreversible changes such as fibrosis

Owner's diagnosis: chronic renal insufficiency (CRI) – due to blood work (creatinine)

structural and/or functional abnormalities of one or both kidneys that have been continuously present for 3 months or longer

Patient: Anamnesis

Name: Mausi

Breed: mix (European shorthair)

Weight: 3.8 kg

Estimated ideal weight: 4.0 kg

Age: 11 years

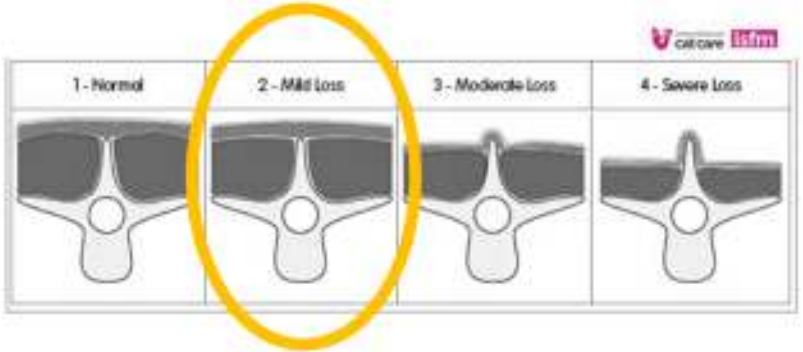
Gender: spayed female

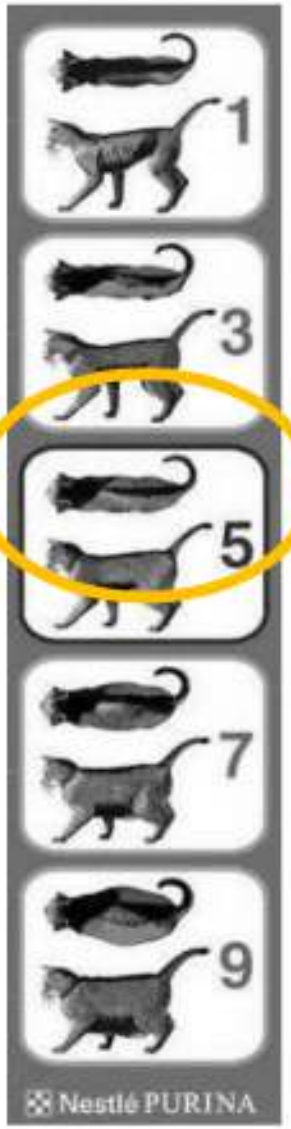
Outdoor access: restricted

BCS 4.5-5

MCS mild loss

Copyright owner





Patient: History

1. CREA: 218 µmol/L (71 – 212)
2. Cobalamin: 302 nmol/L (> 290)
3. Thickened intestinal wall

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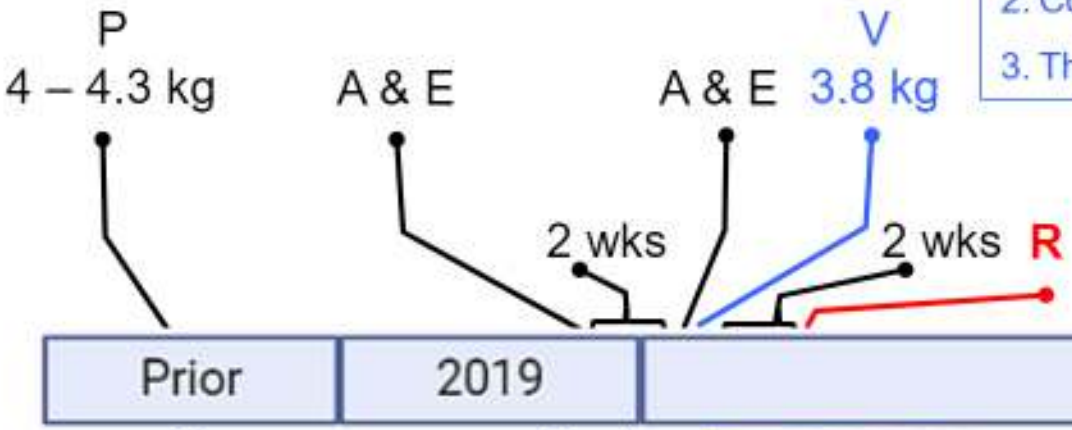

P: *Pruritus*
A: *Anorexia*
E: *Vomitus*
V: *Veterinary check-up*
R: *Referral*

Patient: History

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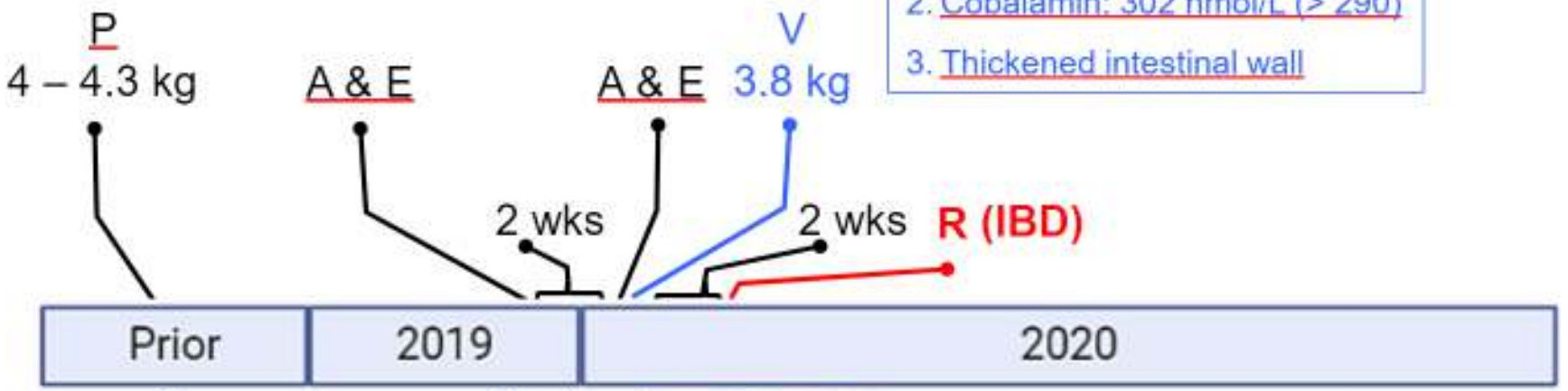

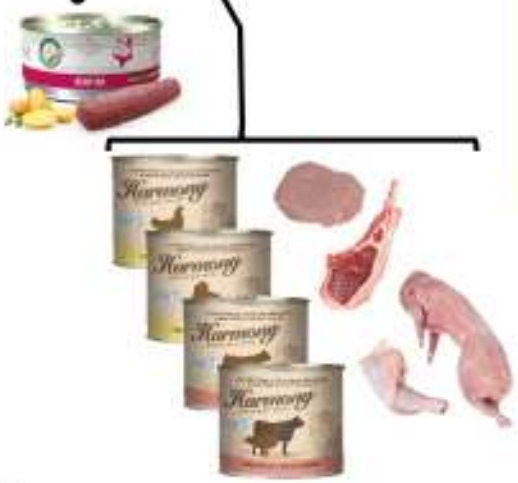

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P
4 – 4.3 kg

A & E

A & E

V
3.8 kg

2 wks

2 wks

(CRI)
R (IBD)
(Pancreatitis)

Prior | 2019 | 2020

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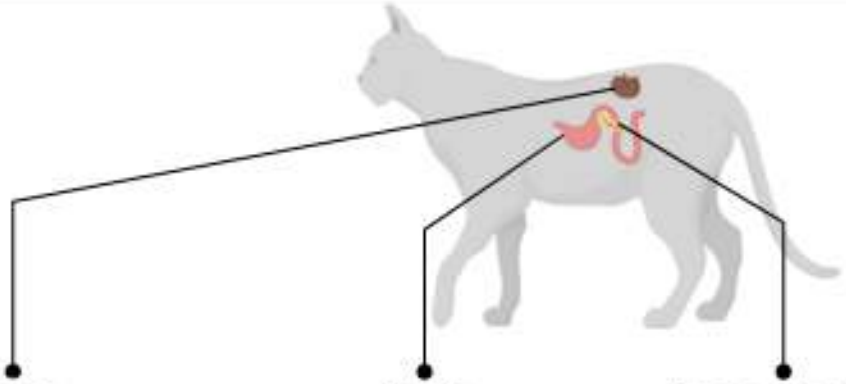
Key nutritional factors



	CRI	IBD	Pancreatitis
Avoid excess	Protein	Protein, Fat	Protein, Carbs
Reduce	Phosphorus (80%)		Fat
Highly digestible sources	Protein	✓	✓
Fibre	Nitrogen trap	Flora	Flora
Additional EPA & DHA	Blood flow	Anti-inflammatory	Anti-inflammatory
B-vitamins	Loss	B12	B12
Novel sources		✓	
Frequent small meals	✓	✓	✓

Ref: 11,13,14

Dietary check and recommendation (daily basis)

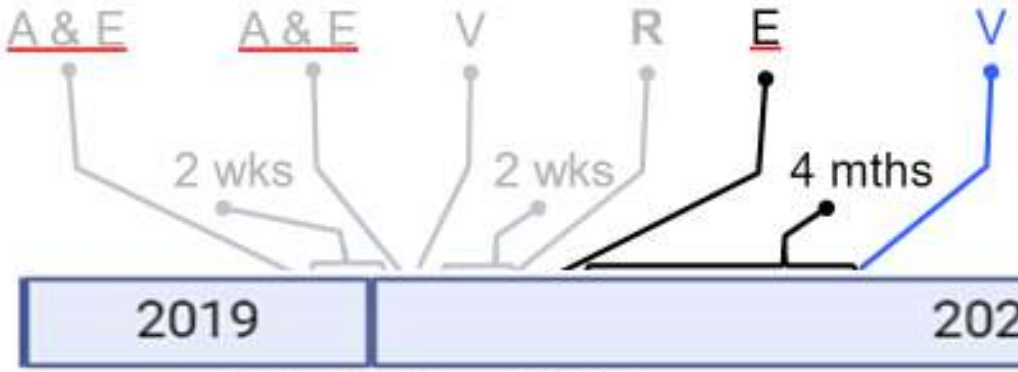
	Amount (g)	ME (MJ)	cP (g)	cFa (g)	Ca (mg)	P (mg)	Na (mg)	Vit A (IU)	Vit D (IU)	Vit B12 (µg)
Recommended		1.0	18		182	162	43	211	18	1
Previous diet (commercial)	200	0.8	22	12	540	500	480	3000	40	?
Prescribed diet (Homemade)	134.2	1.0	18	4	316	196	65	238	162	2
Chicken meat	70	0.4	16	1	11	105	42	18	0	2
Millet	25	0.4	2	1	5	78	1	0	0	0
Carrots	35	0.1	0	0	12	13	22	0	0	0
Rapeseed oil	2	0.1	0	2	0	0	0	0	0	0
Cod liver oil	0.2	0	0	0	0	0	0	220	30	0
Mineral & vitamin supplement	1.2	0	0	0	0	0	0	0	132	0
$CaCO_3$	0.8	0	0	0	288	0	0	0	0	0

Ref: 2,3,5,6

Patient: Follow-up

IRIS 1

	CREA (µmol/L)	SDMA (µg/dL	Cobalamin (nmol/L)
Reference	71 - 212	0 - 14	> 290
1st check	**218**	/	302
2nd check	**238**	**16**	**111**



Prescribed diet

Increase carrots and nightly portion

P: *Pruritus*
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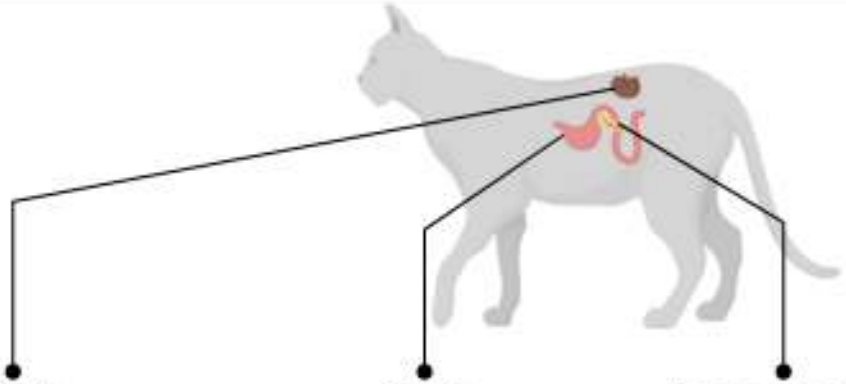
Ref: 5-7,11,12

Key nutritional factors



	CRI	IBD	Pancreatitis
Avoid excess	*Protein*	*Protein, Fat*	*Protein, Fat*
Reduce	*Phosphorus (80%)*		*Fat*
Highly digestible sources	*Protein*	✓	✓
Fibre	*Nitrogen trap*	*Flora*	*Flora*
Additional EPA & DHA	*Blood flow*	*Anti-inflammatory*	*Anti-inflammatory*
B-vitamins	*Loss*	*B12*	*B12*
Novel sources		✓	
Frequent small meals	✓	✓	✓

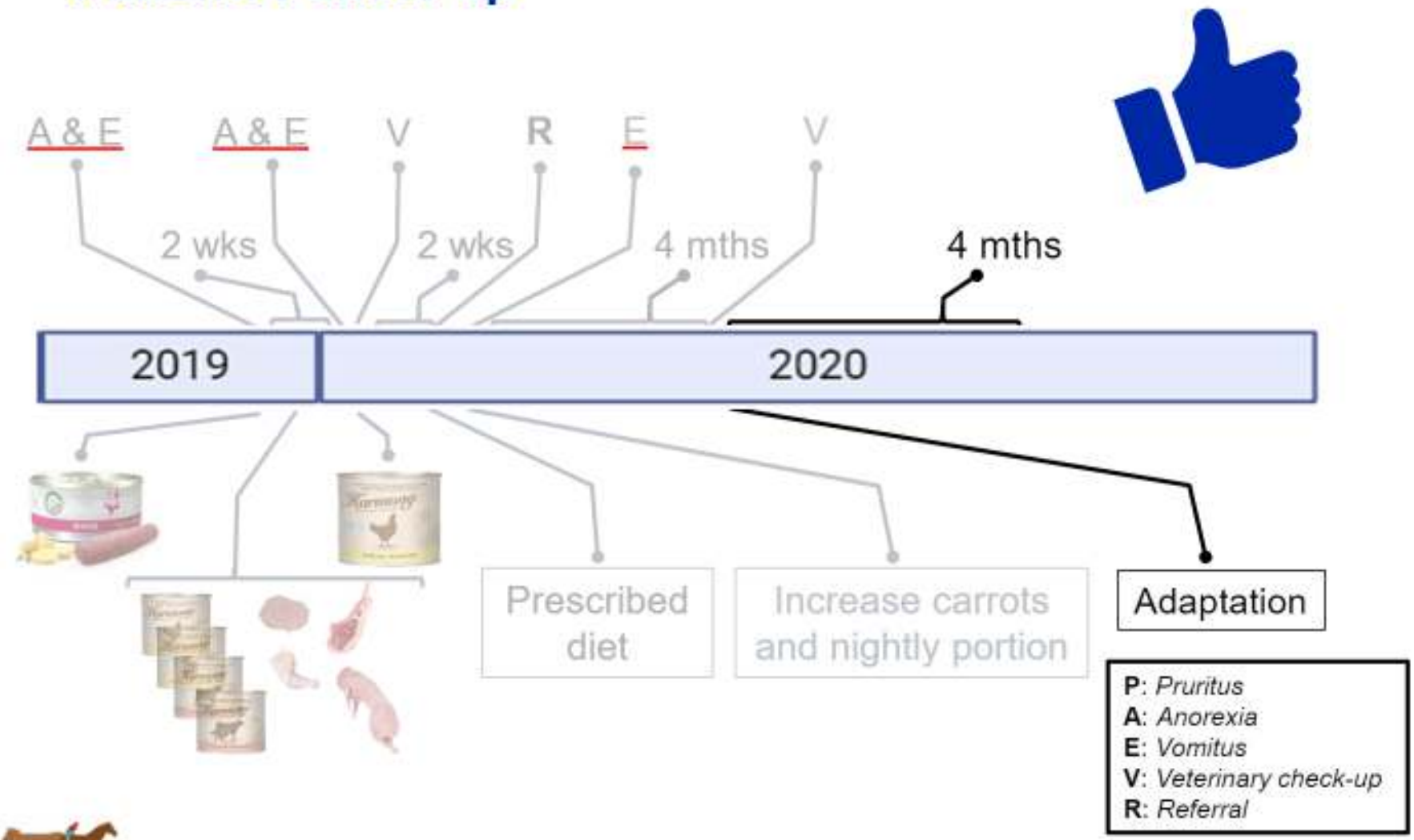
Ref: 11,13,14

Dietary recommendation and adaptation (daily basis)

	Amount (g)	ME (MJ)	cP (g)	cFa (g)	Ca (mg)	P (mg)	Na (mg)	Vit A (IU)	Vit D (IU)	Vit B12 (µg)
Recommended		1.0	13		182	130	43	211	18	1
Prescribed diet (Homemade)	134.2	1.0	18	4	316	196	65	238	162	2
Adapted diet (Homemade)	134.2	1.1	16	5	211	**145**	69	233	195	16
Chicken meat	50	0.3	12	1	8	75	30	13	0	2
White rice	35	0.5	3	0	2	42	2	0	0	0
Carrots	60	0.1	1	0	21	22	37	0	0	0
Rapeseed oil	2	0.1	0	2	0	0	0	0	0	0
Cod liver oil	0.2	0	0	0	0	0	0	220	30	0
EPA & DHA supplement	2.2	0.1	0	2	0	0	0	0	0	0
Mineral & vitamin supplement	1.5	0	0	0	0	0	0	0	165	0
$CaCO_3$	0.5	0	0	0	180	0	0	0	0	0
Vitamin B supplement	2.0	0	0	0	0	6	0	0	0	14

Ref: 2,3,5,6

Patient: Follow-up



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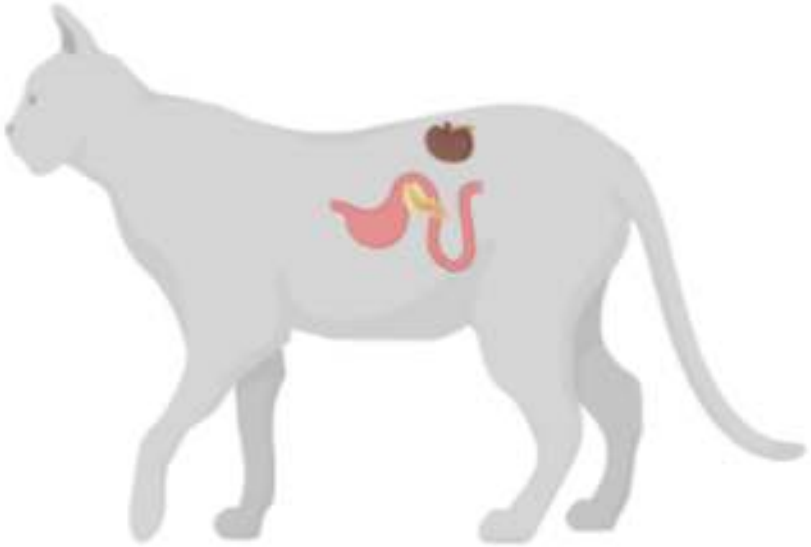

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