



Nutritional management of Grass sickness in a horse: a Case Report

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Who is Nicky?



- ✓ Fell pony
- ✓ Mare
- ✓ 6 years old
- ✓ Weight : 408kg
- ✓ BCS : 3/9
- ✓ Sweating, Anorexia and decubitus



Equine clinic of Ghent



Service of internal medicine

- ✓ **Clinical examination :**
 - ✓ Depressed
 - ✓ Tachycardia → HR : 80p/min
 - ✓ CRT : >2s
 - ✓ T° 38,2° + sweating
 - ✓ Digital pulsation
- ✓ **Rectal examination :** /
- ✓ **Thoracal and Abdominal ultrasound :** /
- ✓ **Blood analysis :** /
- ✓ **Phenylephrine eye drops :** +
- ✓ **Hoofprobe :** -
- ✓ **ECG :** Sinustachycardia

→ **Grass sickness**

Grass Sickness

= Equine Dysautonomia

= Pasture-associated multi-system neuropathy in horses (ENS + ANS)



Acute/Subacute

ENS +++

Intestinal dysmotility



Chronic

ENS +

(Lyle and Pirie, 2003)



(Uzal and Robles, 1993; Pirie et al, 2014)

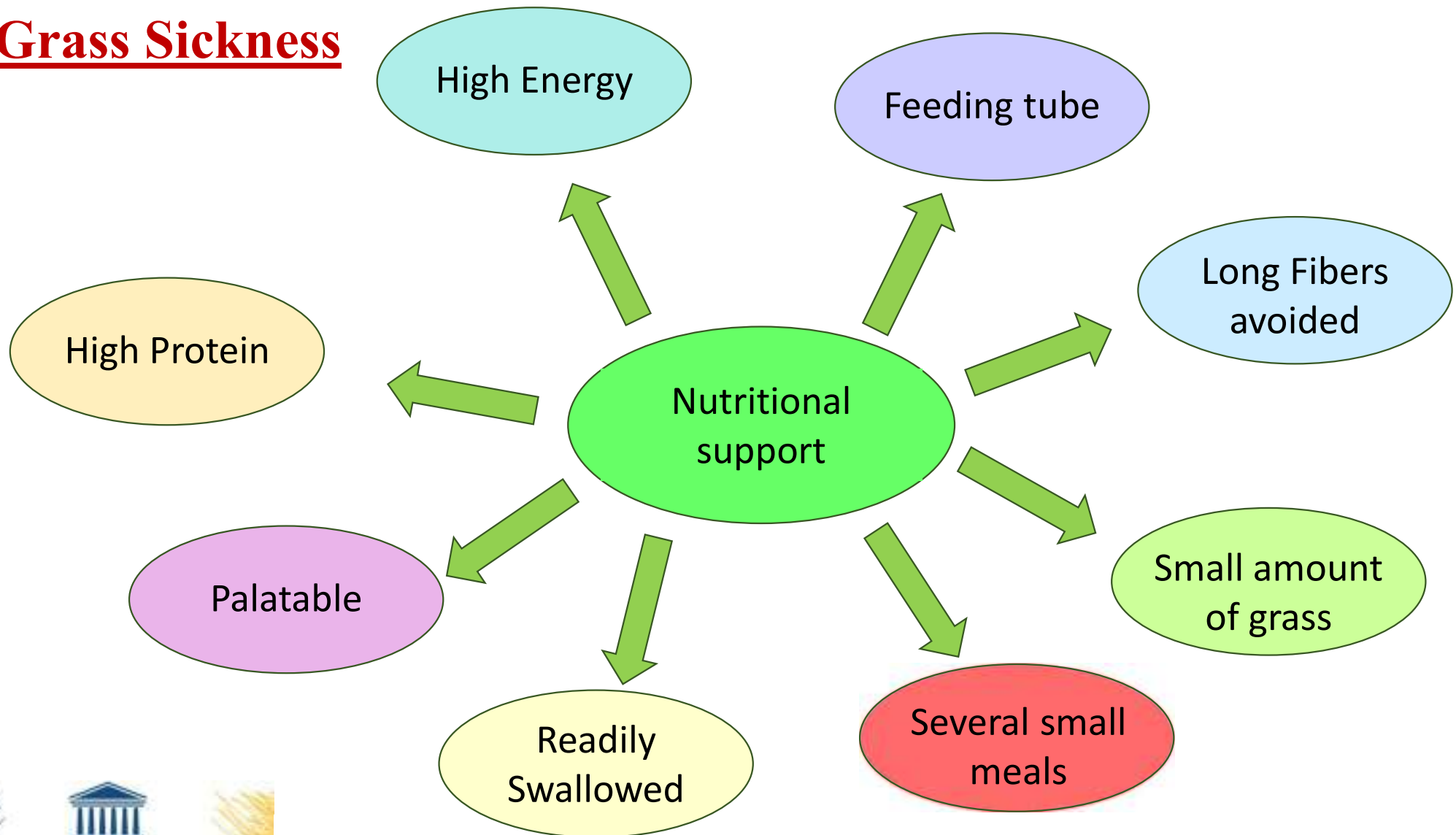
Grass Sickness

Symptoms :

- dullness,
- **anorexia,**
- **dysphagia,**
- tachycardia,
- ptosis,
- patchy sweating,
- muscle fasciculation,
- **abdominal pain/ colic (dysmotility)**
- **Lost of weight**
- Rhinitis sicca



Grass Sickness



(Equine Appl. Clin. Nutr. 2013)

What's the current diet of Nicky?

Per day:



→ 24/24H

Feed intake :

2-2,5% DM/kg BW/day

% DM in grass in Belgium : ^(NRC, 2007)

22,8% ^(Cvb, 2016)

Nicky :

$(2 \times 408)/100 = 8,16 \text{ kg DM/day}$

$(8,16 \times 100)/22,8 = 35,8 \text{ kg grass/day}$

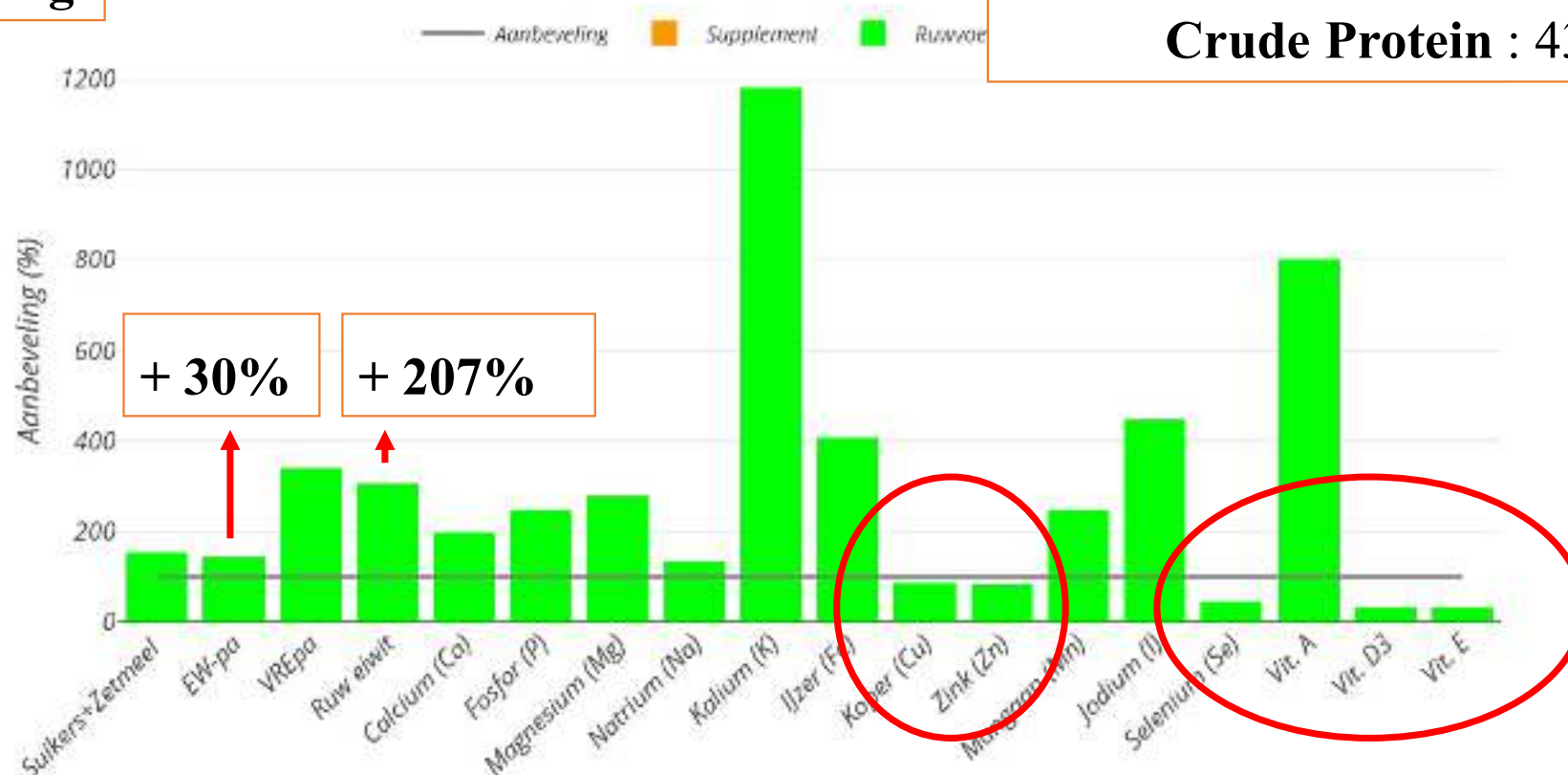
Analysis of the current diet

IBW : 430kg

Requirements :

EWP_a : 3,87 EWP_a

Crude Protein : 432gr/day



New diet:

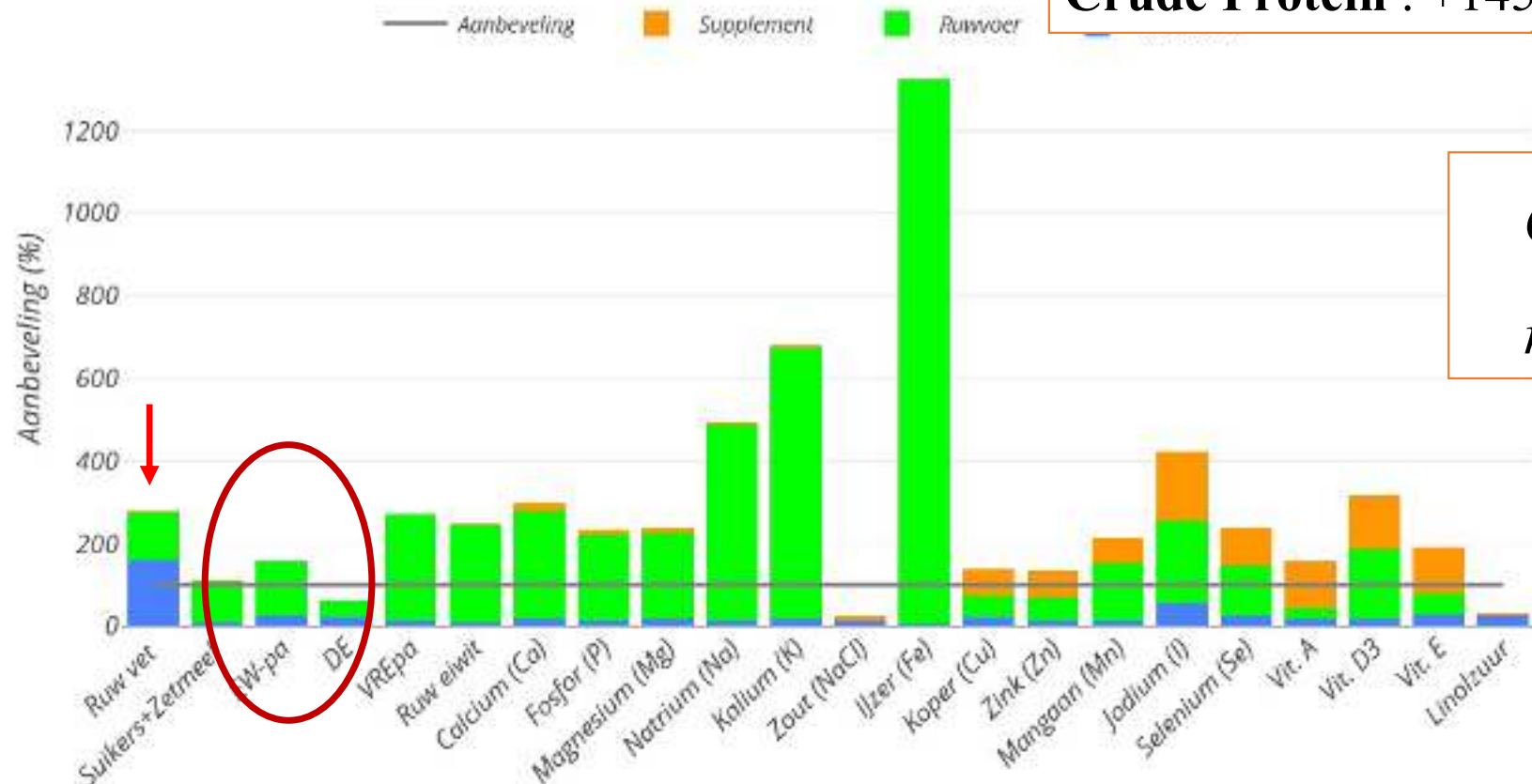
	Brand	Per day	Unit	Number of meals	Amount per meal (gr)
<i>Forrages</i>	High quality hay	3,5	kg	5	700
	Alfalfa pellets	1,5	kg	5	300
	Hartog Gras brok	3,5	kg	5	700
<i>Concentrates</i>	Cavalor Probreed mix	0,35	kg	5	70
<i>Supplements</i>	Cavalor Nutri plus	50	gr	1	50
	Cornoil	250	ml	5	50ml
	Licksteen	Available			

New diet:

EWPa : +54%

Crude Protein : +145%

Compared to requirements



Follow up

Lack of palatibility → adapted the diet



(Hammer, 2010)



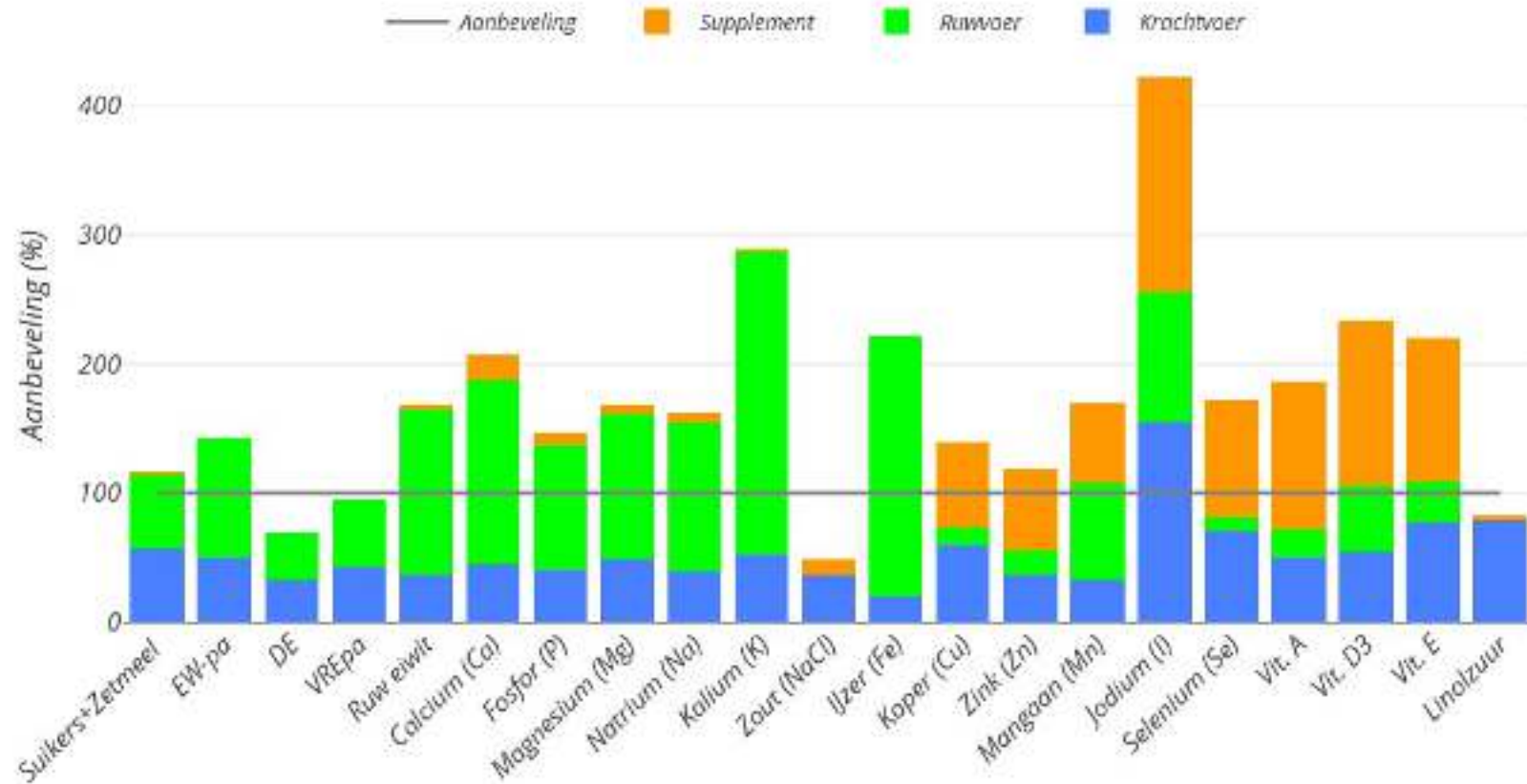
(Goodwin et al, 2005)



New diet : more palatable

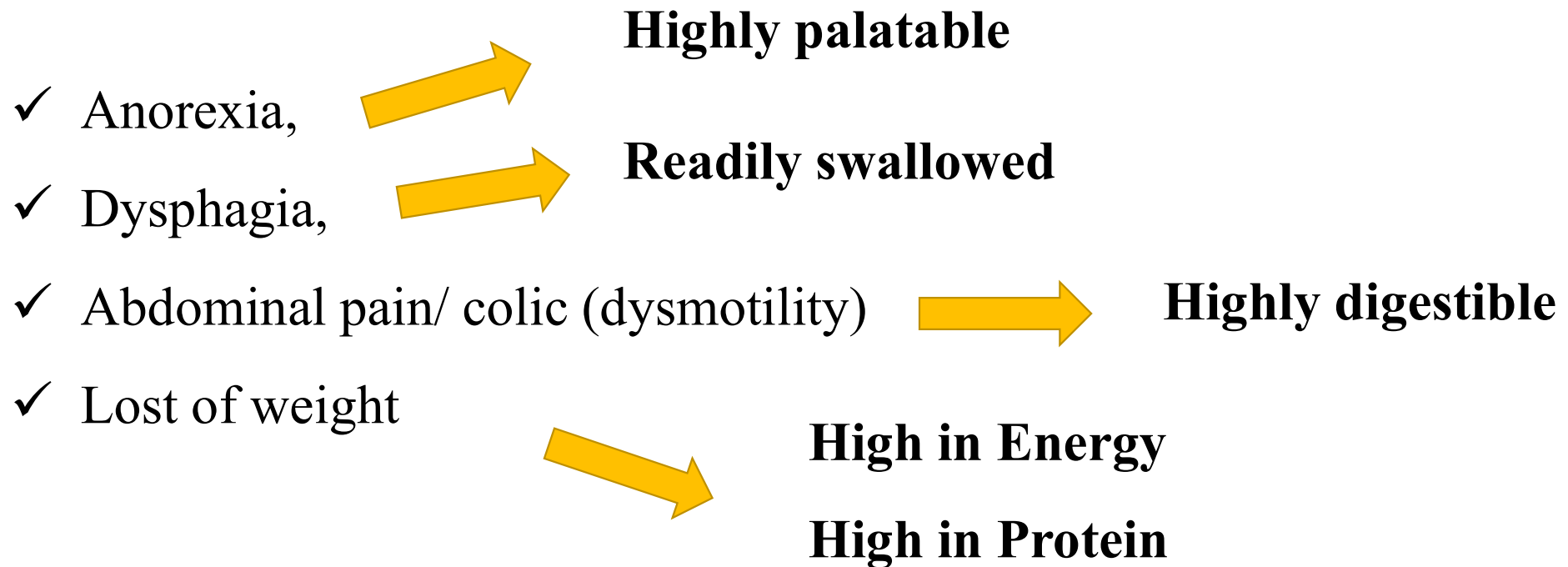
	Brand	Per day	Unit	Number of meals	Amount per meal(gr)
<i>Forrages</i>	High quality hay	3	kg	5	600
	Carob	0,5	kg	5	100
	Aveve Fiber wafer	3	kg	5	600
<i>Concentrate</i>	Cavalor Probreed mix	1	kg	5	200
<i>Supplements</i>	Cavalor Nutri plus	50	gr	1	50
	Cornoil	250	ml	5	50ml
	Lickstone	Available			

New diet : more palatable



Conclusion

Nutritional management → Difficult



**Thanks
for
Your
Attention!**

