

Dairy nutrition

Low forage strategy

Catalin Necula
Ruminant On-farm Coordinator
Alltech SDT



Euroopa Maaelu Arengu
Põllumajandusfond:
Euroopa investeeringud
maapiirkondadesse



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Cătălin Necula

Ruminant On-Farm Coordinator, Alltech SDT

Education

- BS – Veterinary medicine, Bucharest University 2003
- PhD – Animal science, Timisoara University 2023

Area of Expertise

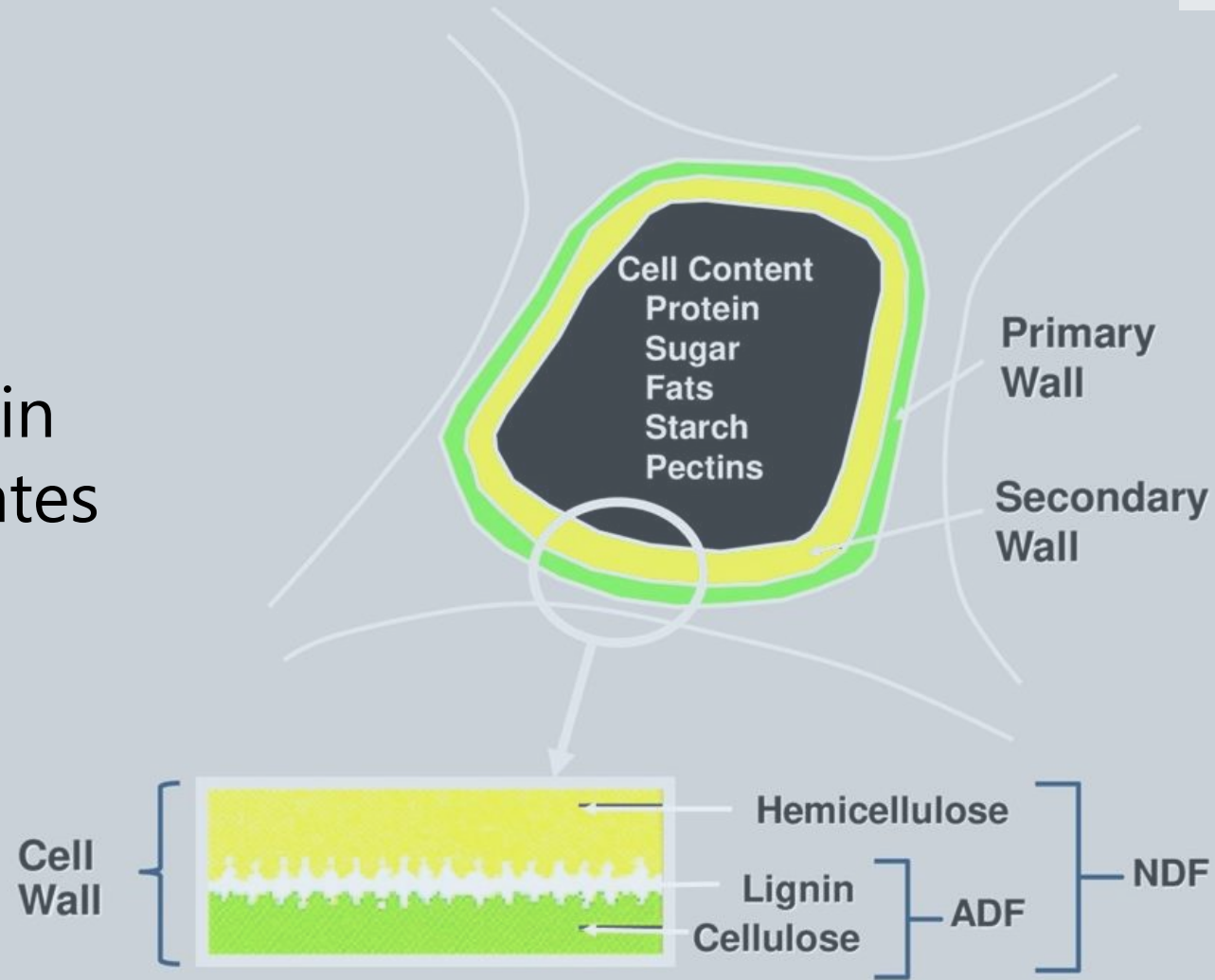
- Ruminant nutrition
- Animal health
- Farm management

Area of Interest

- Protein (N) metabolism
- Metabolic diseases and transition period
- Tools for real time data collection

What are Forages?

Plant material high in
cell wall carbohydrates
35-60%DM



Forage's role

Nutritional

Fiber
Energy
Protein
Minerals

Physical
Rumen mat
Chewing



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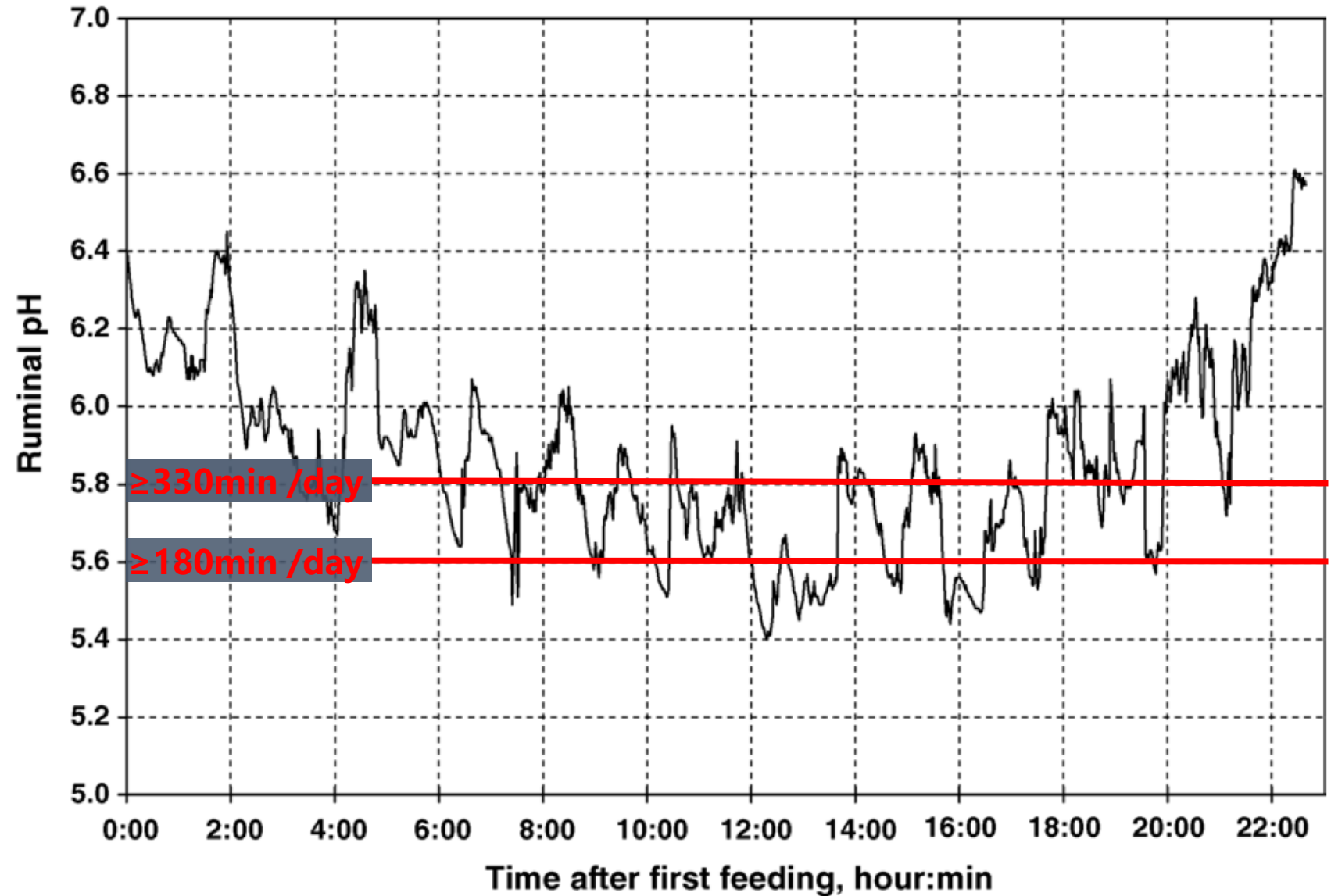
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Typical ration

- Forage (%DM) $\geq 45\%$
- fNDF_{om} (%DM) $\geq 21\%$
- NDF_{om} (%DM) $\geq 30\%$



Risks associated with low forages





Signs of SARA

Milk fat	↓
Milk fat : protein ratio	↓
Manure score	↓
Grains in feces	↑
Long particles in feces	↑
Rumination time	↔↑



HOW LOW?

Nutritional

- Forage (%DM) $\geq 39-40\%$
- fNDF_{om} (%DM) $\geq 18-19\%$
- NDF_{om} (%DM) $\geq 27-28\%$
- NFC (%DM) $\leq 41\%$
- DCAD (kgDM) $\geq 300\text{meq}$

Management

- Good structural fiber
- Particle size (PSPS)
- TMR moisture (41-44%DM)
- Avoid overstocking
- Good ventilation

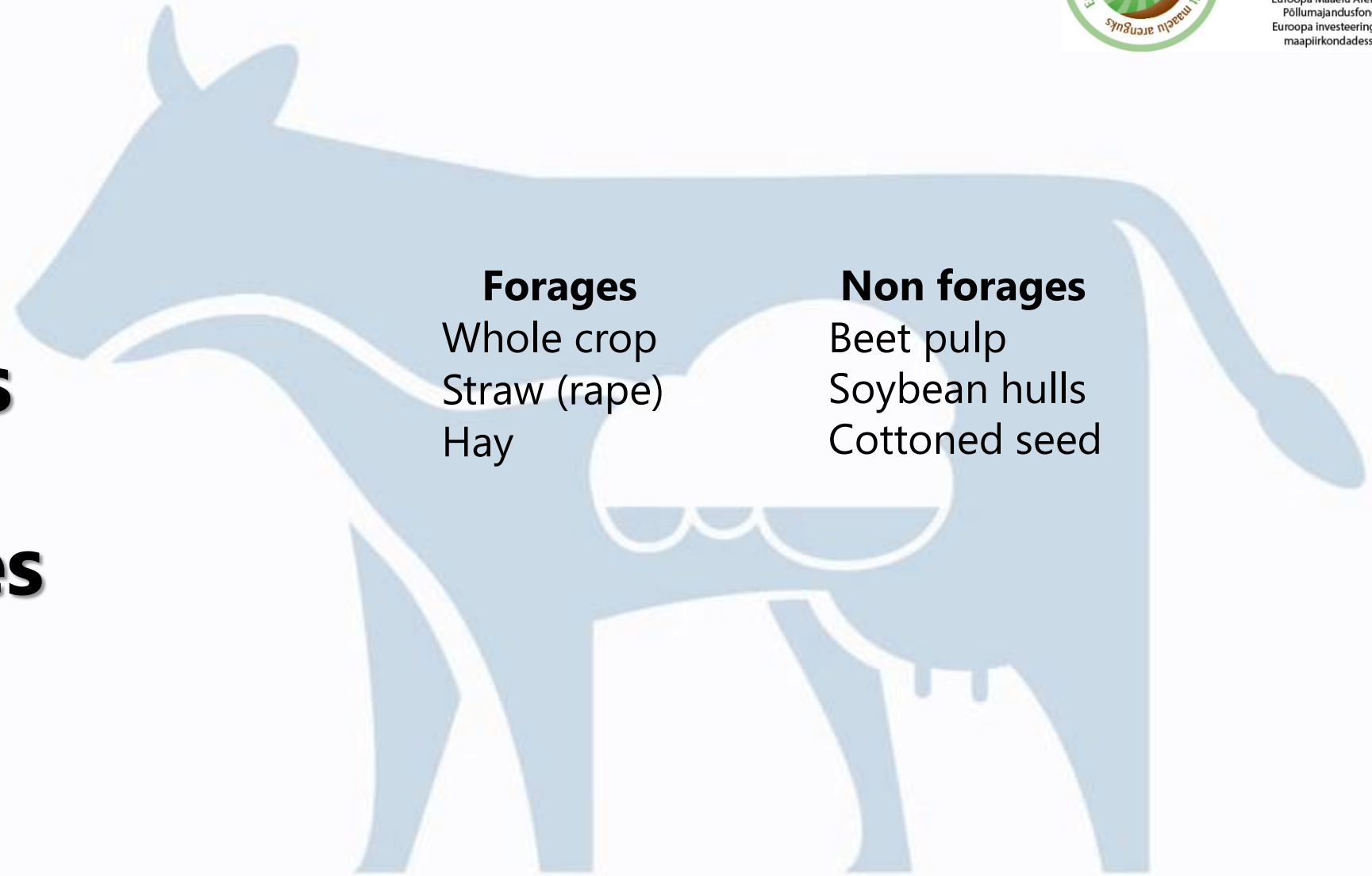


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Alternatives to Estonian fiber sources



Forages

Whole crop
Straw (rape)
Hay

Non forages

Beet pulp
Soybean hulls
Cottoned seed



Thank you for your attention!