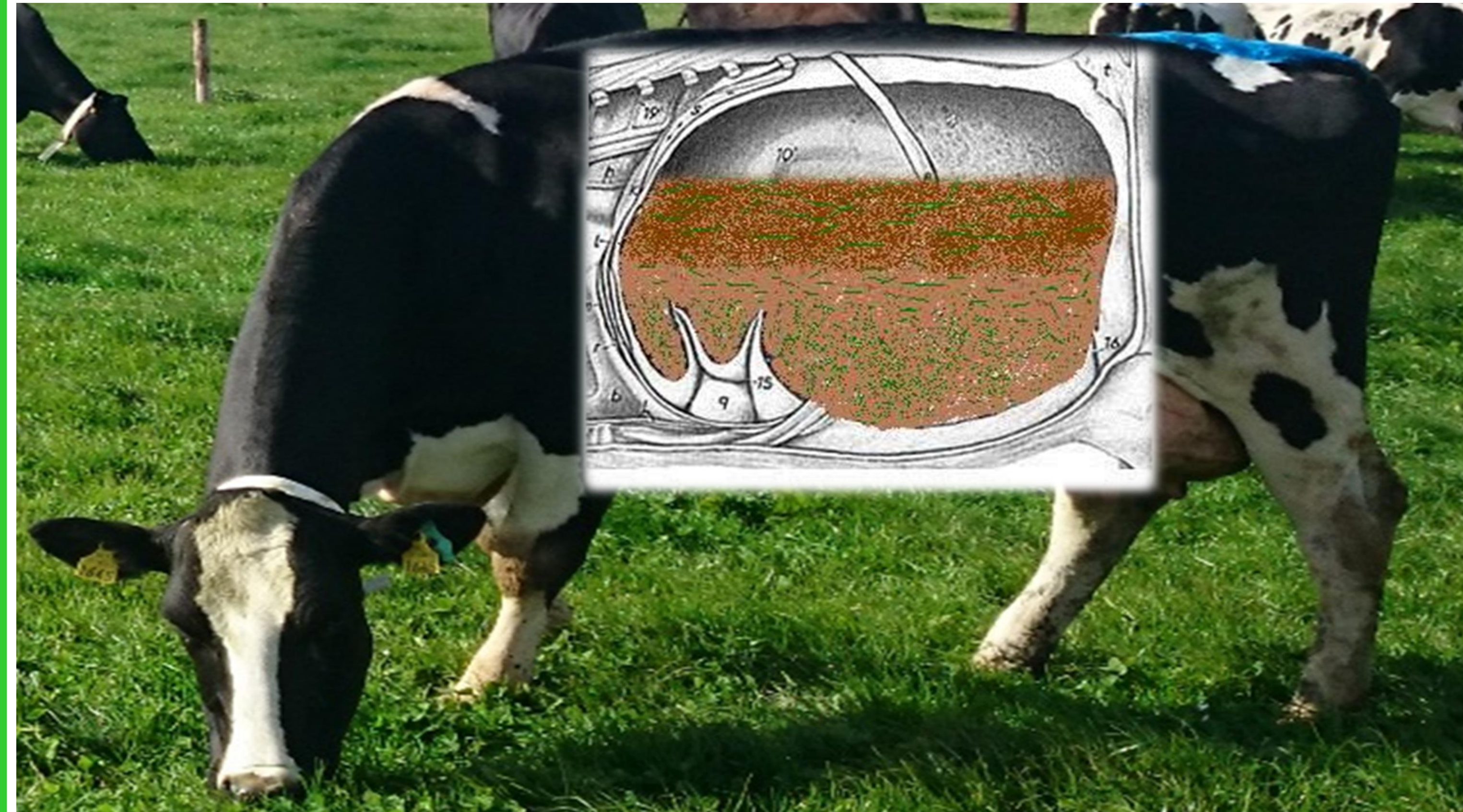


Omasal sampling experiment



	Pasture- only	Pasture + Barley
Pasture intake (kg DM/day)	15.9	13.0
Barley intake (kg DM/day)	-	3.3
Total intake (kg DM/day)	15.9	16.3
DM digestibility (g/g)	0.83	0.80
NDF digestibility (g/g)	0.83	0.75

Supplementation with barley resulted in:

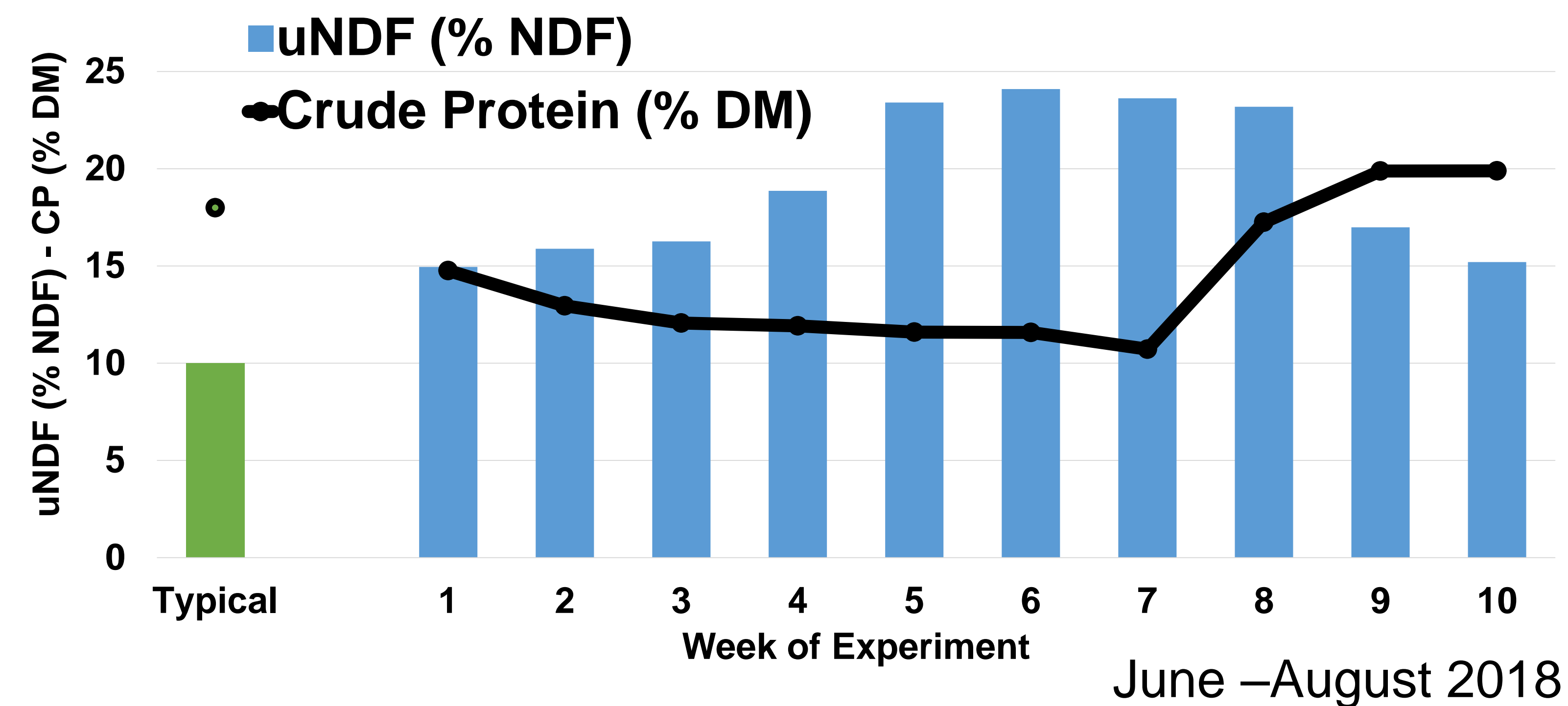
- a large substitution effect
- reduced digestibility

First limiting nutrient(s)

Investigated variables:

- Dry matter intake control
- Supply of protein to the small intestine

	PRG	Citrus	TSBM	Mix
Pasture intake (kg DM/day)	15.6	12.8	15.3	13.8
Supplement intake (kg DM/day)	0	4.8	0.8	3.1
Total intake (kg DM/day)	15.6	17.6	16.1	16.9
Milk production (kg/day)	18.5	20.6	20.3	21.3
Crude Protein (%)	3.39	3.30	3.47	3.37
Milk solids production (kg/day)	1.41	1.49	1.55	1.59
DM digestibility (g/g)	0.72	0.70	0.72	0.72



CNCPS

- Mathematical model for the prediction of animal performance
- Evaluating potential for grass-based system
- Increase efficiency of milk solids production

Take home messages

- Nutrient supply from grass swards can be variable
- Need to understand what is limiting in order to supplement effectively
- Evaluation of CNCPS as a decision support tool for the Irish dairy industry