

Concentrate usage

- In 2017 - 1.35 m cows × 1 t/cow = 1.4 m t = €360 m
- In 2018 - 1.37 m cows × 1.3 t/cow = 1.8 m t = €500 m

Why do we feed concentrate??

- Great response, get cows into parlour, keep them quiet?
- Fill a deficit in diet – energy, minerals, protein

What is limiting performance?

	16 kg DM Grass	2 kg 12% CP nut	Total PDI (g)
PDIN (g)	2065	160	2225
PDIE (g)	1680	180	1860
PDI requirement 600 kg dairy cow - 27 kg milk at 3.6% protein = 1 kg milk protein			1858

- Energy is the most limiting factor in diet on farm level
- Protein only limiting in highest yielding cows (35 kg +)
- Extra protein excreted- increased ammonia emissions

Guideline ration crude protein content

Stage of lactation	Early	Mid	Late
Milk solids (kg/day)	2.0-2.2	1.8-2.0	1.5-1.7
Diet type	Ration CP%		
Grass (80 OMD)	12-14	12	12
Grass + silage	16	14-16	14
Grass (75 OMD)			
Silage or hay	18-20	16-18	16

- Cows (450 to 500 kg MS)
- Choose based on most probable diet
- Feed levels will vary
- No compromise on energy in diet

Take home messages

- Reduce CP % in concentrate at grass
- Examine how you use concentrate