Feeding for Milk Solids at grass

Low Milk Protein %

- Low Milk Protein % is predictably an issue on many farms in Spring.
- Many herds calve relatively thin and grass-silage quality and quantity can be tight indoors.
- After turnout, grass may be scare and supplementary feeding levels low.
- Milk Protein % is directly related to the cow's feed energy supply.
- A+B-C milk payment system increases the focus on milk composition.
- There is a strong stage-of-lactation influence on Milk Protein %.
- Milk Protein % drops from calving, bottoms out at peak yield and increases to drying-off.
- A 3.3% herd average might dip to 3.1% at peak and hit 3.7% at end of lactation.
- Compact-calving herds have a lower Milk Protein trough with more cows peaking together.
- Very low Milk Protein (<3.0%) is usually a sign of **Energy** shortage i.e. underfed cows.
- Underfed cows milk off their backs in the short-term but drop Milk Protein % immediately.
- Milk Protein will increase again if feeding improves but will not recover fully.
- If body condition drops and is not corrected by breeding time, fertility will also suffer.
- Grazed grass is much better for Milk Protein production than grass-silage.
- However, Milk Protein will drop if grass is scarce and not supplemented.
- Concentrates increase Milk Protein % while grass-silage depresses it at grass.
- Milk Protein response can reach +0.1% per 2kg extra nuts where grass is tight.
- Higher energy concentrates will also help but feeding enough is relatively more important.
- High protein feeds will depress Milk Protein % where energy supply is the real problem.

Low Milk Fat %

- Low Milk Fat % on grass indicates a fibre shortage leading to low rumen pH.
- Long fibre (hay/straw) helps on lush spring grass, particularly soft re-growth.
- Gain pasture feeds with digestible fibre and rumen buffers will also help.

Supplementing Spring Grass

- Cows need their supplement if they are still clearing their grass allocation.
- Outdoor cows on tight grass require approx 1kg nuts for each 1kg grass DMI short.
- Cows in early-lactation typically require 16-17% Protein in the total diet DM.
- Grass-silage averages 10-14% protein.
- Stored-up first-grazing grass is higher at approx. 18-20% protein.
- Second grazing Spring regrowth can be particularly high at 25%+ protein.
- Excess diet protein should be avoided to reduce scouring, increase milk yield and fertility.
- Gain 18% protein concentrates (4.5-9kg/day) suit on grass-silage with restricted grass.
- Gain 13-14% protein concentrates (2.5-4.0 kg/day) suit when on grass alone.
- Gain Pasture Micro Nuts supply 2oz Cal Mag and minerals in **1.5kg** where grass is plentiful.
- Gain Spring Breeder Nuts contain NOVATAN to help reduce protein scouring on pasture.
- Where cows need to be fed, Gain Pasture feeds supplying Cal Mag and minerals will beat straights and alternative sources of Magnesium and Minerals, both on cost and convenience.