Have you got your blend right for grazing

DR RUTH LAWSON

After a long hard winter cows are now out at grass reducing both costs and workload. Any dairy farmers who haven't finalized their grazing diets should consider what they need to get out of a blend to complement grass. Ingredients should be selected that will provide rumen energy sources to balance the rumen nitrogen in grass. These energy sources should include a range of starch, sugar and digestible fibre sources so that the rumen bugs can maximize microbial protein supply.

Depending on grass quality sugar should be supplied from the grass, so its sources of starch and digestible fibre that are needed. Digestible fibre can be found in soya hulls and starch from rolled barley, wheat or maize.

Cows will also benefit from some bypass protein in the form of soya or protected rape. A supply of bypass protein will help to top up microbial protein supply to make up metabolizable protein requirements.

Some protected fat can also be included to supply bypass energy for high yielders. As this form of energy bypasses the rumen, there are no effects on rumen stability.

Ask us to formulate a blend especially for you.
Stubble turnips

PETER HARLAND

Stubble turnips can provide a fast growing crop to help reduce the costs of finishing lambs. Based on current figures, cost per tonne of DM is £66, resulting in a cost per kilo of live weight gain of 17.8p (EBLEX figures). Stubble turnips can be sown between May and August depending on when they are to be used. It is important to choose fields that can be grazed over winter as the crop can’t be lifted. Soil pH will need to be 6.5 or above and P and K status checked and adjusted accordingly.

Pests include flea beetle and slug damage. From sowing to feeding, allow 10-14 weeks and sheep can be set stocked. Animals will need a fibre source such as straw. Varieties include Samson, Barkant & Delilah; Rondo & Tyron. Samson produces huge roots and is very palatable. Delilah is ideal for finishing lambs and is resistant to mildew. Tyron has a leafy habit with some regrowth potential. Rondo has excellent root anchorage which helps reduce wastage in the field.

Fancy a day out?

Why not attend the Livestock Event at the N.E.C. at Birmingham on the 3rd & 4th July? This year, livestock will feature more prominently with showing classes for both dairy and beef cattle. As well as visiting the vast array of trade stands and seeing the latest machinery and equipment, there are demonstrations scheduled including ones on foot trimming & mixer wagons. You can hear about the latest developments in farm business management at the business debates or get practical advice on Farm Health Planning. Alternatively, explore the latest technologies in feed science in the dairy, beef, sheep, pig & poultry sectors.

Finishing beef cattle

GRAHAM JAMESON

You can’t beat barley or crimped maize plus a protein concentrate for maximum finish and live weight gain in beef cattle. However, it is always a delicate balance between high starch levels for fast finish and rumen stability which can challenge animal health.

David & Austin Richardson finish suckler bred cattle at Blacken House Farm, Ripley, North Yorkshire. Young bulls and steers are purchased from local markets. Due to the current high store prices, the Richardsons like to maximize the genetic potential of their cattle by taking them to 450kg deadweight.

Austin says, for the cereal part of the diet, we use 50% rolled wheat with 50% crimped barley. Austin believes that the crimped barley increases palatability and improves dry matter intakes. Cattle Pro Gold is then added at 12% of the ration at which some cattle will be kept Actilal yeast. David says that natural proteins are preferred to non-protein (NPN), uses as it enables flexibility for feeding to younger cattle. Also, he thinks they grow better when fed natural protein sources. Ursul should not be fed to young cattle or poorly grown ones as it results in poor growth rate as the rumen is not yet well enough developed. Since young animals do not produce enough microbial protein to meet requirements, NPN sources will not support maximum growth rates. However, for finishing cattle the protein requirement can usually be met through microbial protein. Grain is high in available energy needed to incorporate ammonia N (from urea) into microbial protein. This allows for greater use of Urea in finishing rations. However, this assumes the rumen bugs are working well, which isn’t always the case due to the rumen environment for finishing cattle. So some bypass protein (soya or protected rape) may help to meet protein requirement where rumen conditions are less than ideal.

For fast finishing beef cattle, providing straw will help prevent acidosis. In fact, straw straw is preferred to barley as it provides more scratch factor in the rumen. Farmers could also consider including 10% soyabuts in high starch rations to help stabilize the rumen.

Care should be taken against the excessive use of byproduct ingredients such as brewers’ grains, biscuit meal and waste chips which have upper inclusion levels due to their oil content. Too much oil coats the rumen bugs and can lead to acidosis and reduced dry matter intake.

David says their system provides a consistent diet and is easy to do. He says he is more comfortable with waste products like straw and biscuit meal is the continuity of supply. Also, he says you need to be a nutritionist to get the diets right as each load can vary. As waste products are always priced relative to barley anyway, Austin & David prefer to stick with their home grown cereals. With varying cereal quality this year, most processing of the cereal is less destructive of this hull and reduces the likelihood of acidosis. To sell high moisture barley, some adjustment of these is needed with roller tension reduced. This will reduce dust and stop grains coming out in the dent. Farmers should target moisture at 18%, this also results in less energy required in the rolling process than dry rolling. Malodies inclusion will also help palatability and reduce dust.

An effective changeover protocol is essential so that the population of rumen bugs can change from mainly fibre digesting to starch digesting bacteria. When cattle first come onto Blacken House Farm, they receive a vaccination for BFR and are wormed. During the growing phase, cattle are offered silage and fodder beet. The changeover regime takes 4 weeks with small increments of barley being fed to growing cattle over a period of 2 weeks. Then the growing ration is removed and the cattle are fed straw, by gradually building up the cereal component, cattle will be on ad lib by 3 weeks.

The protein requirement of finishing cattle declines with age when a greater proportion of their weight gain in fat, correct supplementation will result in cattle with good levels of finish and will be financially efficient. However, underfeeding protein can cost much more than overfeeding because of the resulting slow gains & poor feed conversion efficiency. Protein level in the finishing diet will depend on breed, with black & white bulls requiring a far lower protein level than continental animals. Holsteins have a propensity to lay down lean tissue rather than fat. As they grow older they can continue to grow frame without finishing. For black & white bulls, the diet should contain protein supplementation around 15-16% in the dry matter for bulls up to six to seven months old. However, black & white bulls at around 200 kg can move straight from rearing to finishing and will do best on a protein content of 14% in the DM or 12% as fed. Suckler bred or beef cross bulls from the dairy herd weighing over 200kg will respond best to finishing rations formulated with around 15% CP.
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March 2013 – Not Staggeringly Obvious – an article about spotting if you’re in trouble with the wif.

January 2013 – Melts and Rine – well obviously an article about Melts and Rine.

January 2013 – What’s up pussy cat? – one for the feline lovers or the wif.

May 2012 – You are what you eat – well you guessed it, all thoughts of McDonald’s happy meal take their tod.

June 2012 – Built to last – an article about John England’s transit van.

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My suggestion, please don’t take our titles literally, it’s only a bit of fun!