



RAISE  
pH OF  
RATION

# AlkabupHa<sup>®</sup>

REDUCE  
ACID  
LOAD

RAISES pH OF RATION **BEFORE** CONSUMPTION  
IMPROVES RUMEN FUNCTION  
90% PROTEIN ALKALIZING PELLETS

**FiveF Alka Ltd**  
alkaline feeding solutions



## ▶ why alkabupHa?

Recent consensus in the UK from certain nutritionists and vets is that subclinical acidosis (SARA) in dairy cows in the UK can be as high as 75% to 80% of the herd in winter feeding months.

**This has significant diverse impacts including:**

- **Poor digestion**
- **Poor use of forages in the diet**
- **Fertility problems**
- **Poor feed efficiency**
- **Reduced growth rate in finishing/growing cattle**
- **Long term liver damage in both dairy cows and finishing cattle**
- **Low food intakes**
- **Poor yield**
- **Foot health problems**
- **Excess greenhouse gas production**
- **Low nutrient intakes**
- **Poor milk quality**
- **Animal welfare issues**

- **AlkabupHa** tackles the root causes of acidosis problems prevalent in many silage based diets for dairy cows, beef cattle, sheep & goats.
- **AlkabupHa** acts directly on the acids in the underlying diet to raise the pH and buffering capacity.
- Alkaline pH buffers and improves rumen function.
- **AlkabupHa** is protein based and this reduces or eliminates the need to buy additional protein supplements. This is particularly important for maize silage based diets and low protein grass silage based diets.



## ▶ what is alkabupHa?

### Typical Analysis of Alkabupha

<b>Dry Matter</b>	<b>93%</b>
<b>Protein</b>	<b>90%</b>
<b>Oil</b>	<b>7%</b>
<b>Ash</b>	<b>11%</b>
<b>Fibre</b>	<b>9%</b>
<b>PAL</b>	<b>-10,100</b>
<b>Calcium</b>	<b>2.3%</b>
<b>Magnesium</b>	<b>1.1%</b>

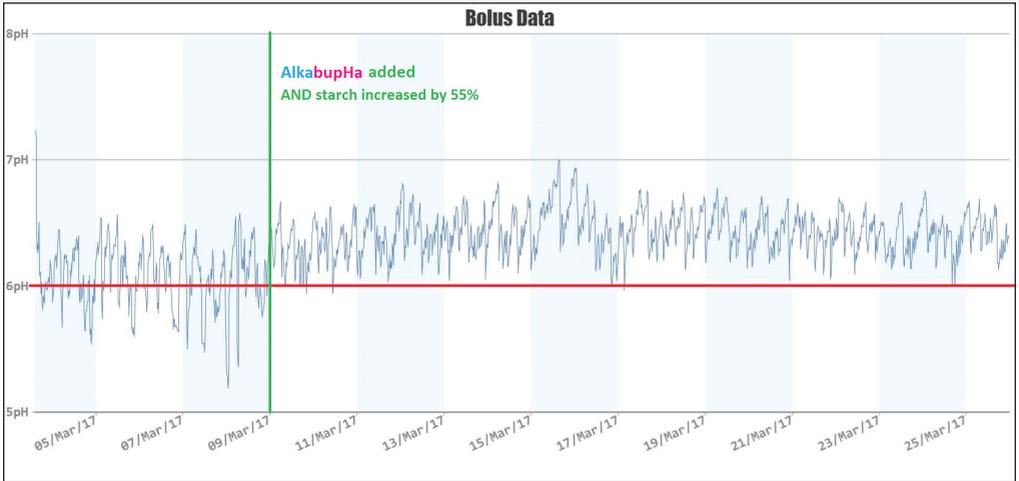
**AlkabupHa** is a carefully formulated mini-pellet feed material designed to harness the power of our alkaline technology. A way of delivering a solution that has been widely proven as Alkalage and Alkagrain in the diet for decades.

This approach allows nearly all farmers to use the technology in the feeding season rather than just using Home n' Dry to conserve crop material at harvest in the long term. The two technology applications are entirely compatible in practice.

**AlkabupHa** fixes 'Base Acid Load' in ruminant diets so as to greatly reduce the risk and severity of acidosis and SARA on rumen performance.

**AlkabupHa** does this by releasing alkaline, reactive ammonia in to the forage part of the diet. This reacts with the acid raising the pH and reducing or eliminating acid loading. Whilst capturing the nutrients in new ammonium salts that are high quality nutrients within the rumen system. This also fixes these valuable nutrients as ammonium salts.

For the rumen to work effectively it must operate within a band of pH that is mildly but not too acidic. Ideally between pH 5.75 and 6.75. Below are the results from bolus data gathered in dairy cows before and after the inclusion of AlkabupHa in the base ration. AlkabupHa delivers this in a protein based system that addresses the dietary causes of acidosis & SARA and then is utilised as a cost effective protein source.



The ruminant has a remarkable ability to buffer pH levels by natural processes of chewing the cud and saliva production. However, in modern production systems, this is often inadequate and needs support. Traditionally this has involved feeding additional buffers, feed yeasts and the formulation of lower powered diets than ideally required for optimum production and health. Often the 'base acid load' is treated as an uncontrollable issue.

**AlkabupHa** is unique and allows Base Acid Load to be directly tackled and reduced or eliminated BEFORE the animal consumes it.

**AlkabupHa** delivers this in a protein based system that addresses the acidosis & SARA issues and then is utilised as a cost effective protein source.

▶ alkabupHa in the diet

**AlkabupHa** can be used in diets for all types of ruminant livestock. Typical feed rates are between 300g and 1500g per day for dairy cows – equivalent to about 3% to 12% of the forage dry matter according to the acid loading in the silage(s) available.

To work effectively the **AlkabupHa** pellets need to be well mixed in to the forage portion of the diet. It needs to be mixed with all forages and therefore in every mix. The **AlkabupHa** will start to work immediately but it takes an hour or two to reach full effect – but this continues happily in the trough and does not cause any intake or palatability problem for the animal.

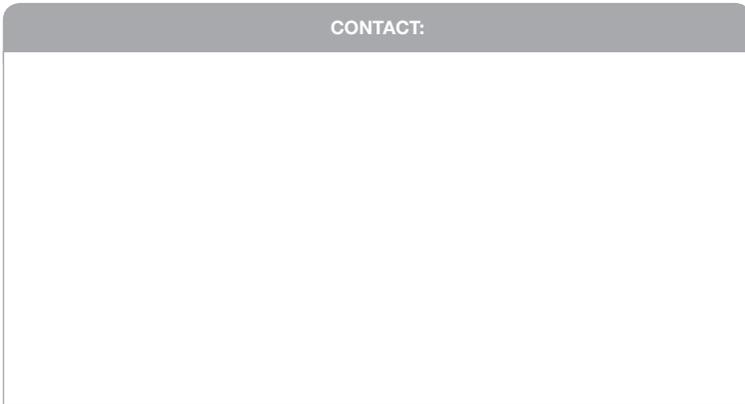
**The steps below show what needs to be considered to introduce AlkabupHa into the diet:**

- 1** It is clear that it is not necessary to remove all the acid load from the diet to begin to see the benefits from the introduction of AlkabupHa in to the mix, so an initial feed rate of around 500g per day for dairy cows is likely to deliver improvements in feed intake and reduction in acid loading effects on the animals.
- 2** After this initial phase, perhaps after a week to 10 days, you can leave the diet as it is or try to improve things further. This requires a rebalancing of the diet and consideration of using a higher, or possibly lower, level of AlkabupHa inclusion. This also means considering the following points:

- **Increasing AlkabupHa feed rate to enhance the 'Alkalizing' effect.**
- **Make sure that protein levels are adjusted to allow for the significant contribution from AlkabupHa.**
- **Formulate a 'faster' diet necessary for higher performance.**
- **As the rumen function improves there is an increased need for rumen degradable protein provided by the AlkabupHa allowing reductions in the amount of costly bypass protein fed.**
- **Review whether any supplements and buffers in the diet are now necessary given the improved rumen function achieved by using AlkabupHa.**

**All details available on website**

**fivefalka.com**



**alkaline feeding solutions for every farm**

For more detailed nutritional information and technical support for farmers, nutritionists and feed advisers – please use the contact details below.

**▶ technical support**

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