

is a patented & specialised cooking procedure utilising infra-red heat, moisture and pressure to alter the structure of starch granules. This process, known as gelatinisation, makes starch more available for digestion by enzymes in the small intestine. This in turn reduces the amount of starch reaching the hind gut where it can cause problems such as excess acid and gas formation.







## Premium quality Micronized grains

## What is Micronization?

Micronization is a cooking process using moisture and high intensity infra red heat to open up the tough starch granules inside grains. This process, called *gelatinization*, renders the starch more available for digestion by enzymes in the small intestine thereby improving digestibility and reducing the amount of starch entering the hind gut. After heating, the grain is rolled flat to further increase surface area and exposure to enzyme attack.

## Why use Micronized grains instead of raw, unprocessed or even steamed & rolled grain?

Because micronizing reduces the risk of overspill of starch into the hind gut where it can cause disturbance to the micro flora populations. **With Micronized grains there is -**

- Less chance of excess acid formation from the overgrowth of acid forming bacteria. This changes the pH which can result in behavioural stress effects such as excitability and nervousness, as well as fatigue and poor performance.
- Less likelihood of bacterial cell death releasing endotoxins which are absorbed into the circulation causing endotoxaemia linked to sourness, poor appetite, laminitis and stomach ulcers.
- **Reduced occurrence of "Over"-fermentation** with excess gas production leading to distension, pain and colic.
- Improved motility of the normal large intestine which in turn decreases the risk of impaction.

Micronizing grains increases safety by moving the site of starch digestion forward to the small intestine where it is more efficient and will do no harm.

	NUTRITION INFORMATIO				
NORSEPOWER	NUTRIENT	UNITS	MICRO LUPINS	MICRO BARLEY	MICRO CORN
HORSEPOWER	Energy	MJ/kg	18.2	13.9	14.3
MICROFFEDS  AUCHOFFEDS  VEROBARLEY  MICROFFEDS  AUCHOFFEDS  AUCHOF	Crude Protein	%	34	11	10
	Lysine	g/kg	12	4.1	2.4
	Fat	%	5.9	2.2	4.1
	Starch	%	8	60	68
	Calcium	g/kg	2.2	0.55	0.35
	Phosphorous	g/kg	3.0	0.35	0.26

Horsepower uses grains micronized in state-of-the-art equipment ensuring consistently high rates of starch gelatinization and quality.