

**NEW**

# CORN PROCESSING AT PENNFIELD

**Beginning Monday, May 13, all Flaked Dairy Feeds will contain Pennfield's new flat rolled steam flaked corn.**

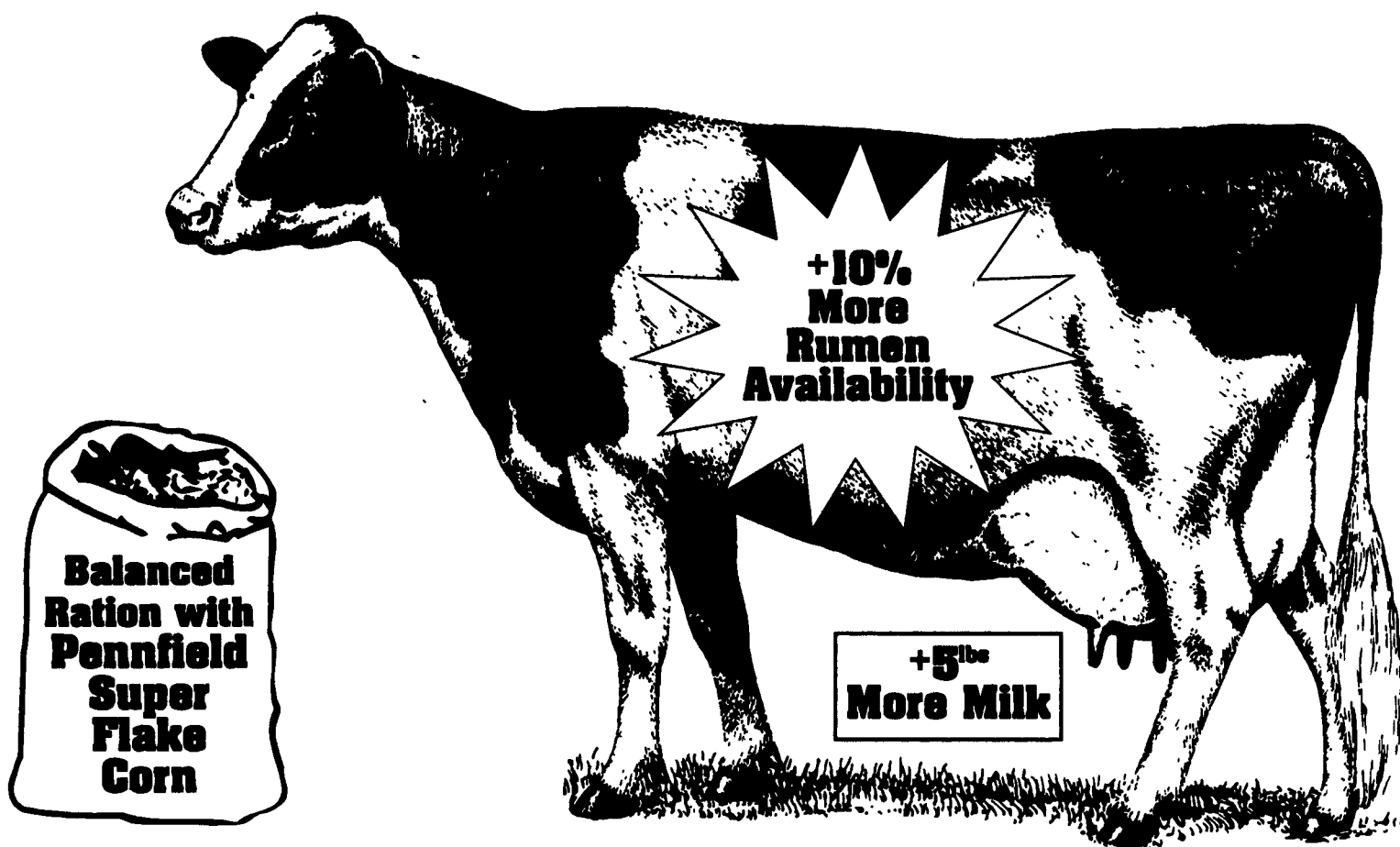
Approximately 18 months ago, Pennfield's Feed Mill at Mt. Joy, Pa. began construction of a \$600,000 grain processing unit that has the capability of significantly improving the nutrient availability of shell corn.

## The Process Involves

- 1) Cleaning the corn
- 2) Soaking or steeping the corn for a prescribed period of time
- 3) Applying steam to the corn before rolling
- 4) The specially conditioned corn is then rolled between 2 large rollers
- 5) The wet flat rolled corn is then processed by a special unit that removes the moisture and dries the finished flake back down to normal corn moisture
- 6) The finished product resembles a bright yellow corn flake (makes you want to get a bowl full and add milk and sugar)

## WHY IS SUPER FLAKED CORN BETTER?

Flat rolled steam flaking disrupts the cellular structure of the corn kernels (gelatinization) and increases sites for microbial attachment resulting in improved starch (carbohydrate) digestion in the rumen. In simple terms, the cow uses more of the nutrients because the rumen bugs can get to them and much less corn nutrient goes out in the manure.



## EFFECTS OF CORN PROCESSING ON DAIRY COW PERFORMANCE

Research conducted by the University of Arizona on Western Processed Flat Rolled Steam Flaked Corn shows the kind of improvement you can expect. In the studies below, average milk production **INCREASED ABOUT 5LBS./COW/DAY**, protein yield increased about .2 lbs./cow/day and % usually increased, fat yield increased about .1 lb./cow/day and % decreased.

Item	Regular	Flat Rolled	Item	Regular	Flat Rolled	Item	Regular	Flat Rolled
	Steam Rolled	Steam Flaked		Steam Rolled	Steam Flaked		Steam Rolled	Steam Flaked
Milk, lbs/day	83.8	88.4	Milk yield, lbs/day	70.8	76.3	Milk, lb/day	76.3	81.6
Protein, lbs/day	1.18	1.28	Milk protein, lbs/day	2.03	2.23	Protein, lb/day	2.26	2.40
Protein, %	3.11	3.2	Milk protein, %	2.89	2.93	Protein, %	2.99	2.95
			Milk fat, lbs/day	2.17	2.30	Fat, lb/day	2.32	2.40
			Milk fat, %	3.06	3.01	Milk fat, %	3.06	2.96

Univ. of AZ JDS 77(Suppl. 1):383 1994

Univ. of AZ JDS 77: 1038 1994

Univ. of AZ JDS 78(Suppl. 1):210,1995

NOTE: Because of processing a flatter flake there is less weight per volume of feed. This means that less will fit on trucks and in bins. Volume will increase 5 to 15% depending on the inclusion level of corn. Keep this in mind when ordering feed. Also, grain scoops or volume based grain feeders need to be recalibrated for SUPER FLAKE containing feeds. Feed amounts required based on actual weights.

Round The Clock Service - 24 Hours Per Day

# pennfield feeds

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