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SUGGESTIONS FOR THE FEEDING OF DAIRY CATTLE

by

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THE FEEDING OF MILK COWS

General Recommendations

1. Grain mixtures from at least four plant sources are generally recommended for variety of proteins and minerals and greater palatability.
2. The maximum amount of ingredients from a single plant source should not be over 50%.
3. Since the growing of roughages on the farm is almost indispensable to a dairy enterprise, it is recommended that the growing of legume hays be stressed.
4. The feeding of succulents is recommended, the amount to feed being 2 to 3 pounds per 100 pounds of live weight. Silage, roots, kale and pasture all serve the purpose, the one to grow depending on the yield and cost.
5. Two per cent of steamed bone flour or other satisfactory source of calcium and phosphorus, is recommended for all grain mixtures. Heavy milking cows should have access to steamed bone flour at will as a separate feed regardless of the remainder of the ration.
6. The following schedule of grain feeding is recommended:

	Holsteins and Ayrshires	Jerseys and Guernseys
6# grain - - - - -	25# milk -	20# milk
8# " - - - - -	30# milk -	25# "
10# " - - - - -	35# " -	30# "
12# " - - - - -	40# " -	35# "
13# " - - - - -	-- -	40# "
14# " - - - - -	50# milk -	--
15# " - - - - -	60# " -	50# milk

7. Grain feeding should be unnecessary when a cow is getting all the good roughage she will consume and producing less than 15 pounds of milk or 20 pounds of fat per month. This holds true when the roughage consists of alfalfa hay alone, or a good hay and a succulent feed, or a good pasture.

Grain mixtures recommended for milk cows with roughages indicated.
(Linseed oil meal, cottonseed meal, soybean meal, and peanut meal can be used inter-changeably in any of the following grain mixtures.)

Group A. A legume hay, such as alfalfa or red clover and a succulent feed such as silage, roots or kale.

(1) Ground barley	300	pounds
Ground oats	200	"
Wheat bran or mill run	500	"
Salt	20	"
Bone flour	20	"
Total	1040	pounds

(2) Ground oats	400	pounds
Wheat bran or mill run	300	"
Ground wheat	300	"
Salt	20	"
Bone flour	20	"
Total	1040	pounds

(3) Ground oats	500	pounds
Ground barley	400	"
Linseed oil meal	100	"
Salt	20	"
Bone flour	20	"
Total	1040	pounds

Group B. A mixed legume and non-legume hay such as oats and vetch, or clover and grass, and a succulent feed.

(1) Ground barley	300	pounds
Wheat bran or mill run	300	"
Ground oats	200	"
Cottonseed meal	100	"
Linseed oil meal	100	"
Salt	20	"
Bone flour	20	"
Total	1040	pounds

(2) Wheat bran or mill run	500	pounds
Ground barley	200	"
Ground oats	100	"
Soy bean meal	200	"
Salt	20	"
Bone flour	20	"
Total	1040	pounds

(3) Ground wheat	300	pounds
Ground oats	300	"
Wheat bran or mill run	250	"
Peanut meal	150	"
Salt	20	"
Bone flour	20	"
Total	1040	pounds

Group C. A grass hay, such as ryegrass, or a cereal hay, such as oat hay, and a succulent feed.

(1)	Ground barley - - - - -	250	pounds
	Ground oats - - - - -	250	"
	Wheat bran or mill run - - -	250	"
	Linseed oil meal - - - - -	250	"
	Salt - - - - -	20	"
	Bone flour - - - - -	20	"
	Total	1040	pounds
(2)	Wheat bran or mill run - - -	500	pounds
	Ground barley - - - - -	200	"
	Ground oats - - - - -	100	"
	Cottonseed meal - - - - -	100	"
	Peanut meal - - - - -	100	"
	Salt - - - - -	20	"
	Bone flour - - - - -	20	"
	Total	1040	pounds
(3)	Ground wheat - - - - -	300	pounds
	Ground oats - - - - -	300	"
	Wheat bran or mill run - - -	200	"
	Soy bean meal - - - - -	200	"
	Salt - - - - -	20	"
	Bone flour - - - - -	20	"
	Total	1040	pounds

Group D. Alfalfa hay alone or good pasture.

(1)	Wheat bran or mill run - - -	600	pounds
	Ground barley - - - - -	200	"
	Ground oats - - - - -	200	"
	Salt - - - - -	20	"
	Bone flour - - - - -	20	"
	Total	1040	pounds
(2)	Ground barley - - - - -	250	pounds
	Ground oats - - - - -	250	"
	Ground wheat - - - - -	250	"
	Wheat bran or mill run - - -	250	"
	Salt - - - - -	20	"
	Bone flour - - - - -	20	"
	Total	1040	pounds
(3)	Ground barley - - - - -	400	pounds
	Ground oats - - - - -	500	"
	Linseed oil meal - - - - -	100	"
	Salt - - - - -	20	"
	Bone flour - - - - -	20	"
	Total	1040	pounds

The Feeding of Young Animals

1. The young calf should be removed from its mother on the second or third day after birth.

2. Whole milk should be fed the young calf for at least three weeks and skim milk until six months if available.

3. The minimum milk plan works out only in the hands of the skillful feeder.

4. Powdered skim milk, powdered buttermilk and semi-solid buttermilk are good substitutes if they can be purchased at a reasonable price.

5. Calf meal consisting of 80 lbs. cornmeal, 120 lbs. ground oats, 50 lbs. wheat bran, 50 lbs. linseed oil meal and 100 lbs. skim milk powder has given very good results at the Oregon Agricultural Experiment Station. This meal is fed dry. The young calf is fed whole milk for about four weeks, and in case of an unthrifty animal skim milk, to six or eight weeks, the calf being gradually changed to the dry grain mix and good quality hay. Two pounds of the calf meal per day should be the average consumption at five to seven weeks of age. Fresh water in unlimited quantities should be available at all times. Further information can be obtained in Oregon Experiment Station Bulletin 290.

6. Calves can be fed limited quantities of silage after four months of age and can utilize pasture to a limited extent at about that age.

7. Mineral supplements of steamed bone meal or spent bone black are recommended for calves when skim milk feeding is discontinued either fed with the calf meal or grain mixture or placed in a box with the salt.

8. Legume or mixed legume and non-legume hays of good quality are recommended for young animals in as large amounts as they will consume. Calves will also do well when fed oat hay along with a small additional amount of linseed oil meal.