Tend-R-Leen® Receiving Program

For receiving and converting roughage fed cattle:
When receiving cattle that were on a roughage fed diet, talk to your veterinarian and Form-A-Feed nutritionist about the best stress product to feed. In addition, feed 393 Tend-R-Leen Beef Starter as a replacement for roughage, introducing whole shelled corn slowly as outlined in the chart below for proper conversion.

Days	Hay or 393 Tend-R-Leen Beef Starter	Whole shell corn	536 Tend-R-Leen Ultra Finisher
1-4	75%	25%	1.5 lbs.
6-8	50%	50%	1.5 lbs.
9-12	25%	75%	1.5 lbs.
13-28	---	Full feed	

(If hay is available, it may be substituted for Code 393, Tend-R-Leen Beef Starter.)

Note: for native beef cattle use 525 NBC for the creep and growing phase and then convert to a Tend-R-Leen finishing product

For ALL received cattle:
Offer loose, trace mineral salt free choice. Fresh, clean water should be available at all times. Utilitze Hydro-Lac® or Bovine BlueLite® 2Bw on arrival to facilitate water and feed consumption and quickly replace lost electrolytes and energy and reduce shipping shrink.

A complete vaccination program is recommended for all Tend-R-Leen Program cattle. Please follow the Tend-R-Leen base vaccination program or consult with your local veterinarian.

Management tips:
Hay can be used to accustom cattle to bunk feeding in all receiving/starting cattle situations. Cattle that have been on the truck in transit without feed or water for more than 4 hours should be allowed to fill up on hay on the first day of arrival in the feedlot.

Note: Smaller beef breeds such as European breeds, Shorthorn, Angus, and Herefords should not be converted to the Tend-R-Leen Program before they reach 500-600 pounds to ensure adequate frame size is established prior to starting on an all grain/high energy diet. Holsteins and large frame beef cattle (such as Simmental and Charolais) can be started at any age. Crossbred exotics and plain type cattle can be started on the program at lighter weights.

Conversion chart – Tend-R-Leen 393

There is a conversion program available in Excel spreadsheet format to calculate mixes for converting cattle. The spreadsheet allows you to select the number of days for conversion and which finisher product will be fed.

Converting steers onto Tend-R-Leen with 393

Enter information in the yellow shaded fields.

Calf in weight	# head	% Body weight intake estimation	Average daily consumption
400	75	3	12

TRL finisher daily amount*	# of days on each diet
2	5

* 529/1529 = 2 lbs
* 536 = 1.5

	Ing	Pounds
Mix 1	Corn	938
	393	2,813
	Finisher	750
	Total	4,500
Mix 2	Corn	1,875
	393	1,875
	Finisher	750
	Total	4,500
Mix 3	Corn	2,813
	393	938
	Finisher	750
	Total	4,500

Total feed budget for the receiving period

Ing	Pounds
Corn	5,625
393	5,625
Finisher	2,250

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Dairy steers (Holstein) should not be fed any roughage if one desires to finish them in the shortest period of time, on the least amount of feed, having the highest rate of gain, lowest feed conversion, highest yielding carcass, and marketing at the youngest age.

Greater than 4 Hours in Transit

If received cattle were in transit for more than 4 hours, their first immediate feeding should contain fiber from grassy hay. Talk with your veterinarian about medication options and also visit with your Form-A-Feed representative about non-VFD nutraceutical options. Allow cattle to get their fill of hay on the first day of arrival. Consult with your Tend-R-Leen or Form-A-Feed representative for special precautions in this situation.

Less Than 4 Hours in Transit

If received cattle were in transit for less than 4 hours, they can be given immediate access to self-feeders containing the proper Tend-R-Leen feed mixed with whole shell corn.

- Only small amounts of feed should be offered 6-8 times per day, for the first 3 days, to provide fresher feed and prevent overeating. The bunk should be cleaned-up after each feeding.

- A shallow depth pen with a long bunk is the ideal feeding setup to allow space for all the animals to comfortably eat at the same time. Make sure all cattle are eating for the first couple of feedings by observing them and physically chasing them up to the bunk if necessary. Cattle which continue to refuse to come up to eat need to be closely monitored and treated, if necessary. It takes 2-3 feedings initially for cattle to become bunk-wise and comfortable with their new surroundings.

- To adjust to automatic waterers, let the water run over on to the ground to attract the cattle. It is a good management practice to provide both automatic waterers and a water tank for the first 7 days cattle are in the lot.

Tend-R-Leen® Receiving Program

- Providing hay in the bunk or on the ground leading up to the bunk is sometimes necessary initially to get cattle accustomed to bunk feeding.
- Utilize Hydro-Lac® or Bovine BlueLite® 2Bw for the first 3 to 5 days to facilitate water and feed consumption and quickly replace lost electrolytes and energy and reduce shipping shrink.
- Never start stressed cattle on a urea feed. Urea is harder for stressed animals to breakdown and convert to protein.
- Use Tend-R-Leen 532 or 525 for the first 30 days of receiving cattle.
- Group cattle in the feedlot by size, sex, and breed if possible. It reduces stress and allows for better average daily gains for the whole group.
- Consult your local veterinarian for a specific vaccination program.
- The recommended time to deworm, delouse, and implant is two to four weeks after cattle arrive, providing no major problems exist, to maximize benefits from these management practices. Consult with your local veterinarian for his/her recommendations.

Grubs and Lice - Use pour-on insecticide according to manufacturer's directions.

Worming - Worm all cattle with an approved wormer according to directions.

Implant - Implant all cattle with an approved implant for the age and sex of cattle. Most of the common implants are fine, with the exception of Revalor, which may have negative effects on carcass quality.

Practice Coccidiosis Prevention – Cattle just entering the feedlot are at highest risk for coccidiosis. The highest incidences occur in the first 21 days after arrival.

- Signs of coccidiosis infection include watery diarrhea in mild cases. In more advanced cases, rapid dehydration, weight loss, and anorexia can occur.
- Coccidiosis results in reduced feed consumption, body weight, and feed efficiency, and in severe cases, mortality.
- Clinical signs do not develop until the final stages of the parasites cycle in the host. By the time the signs appear, the intestines have already been damaged.
- Approximately only 5% of infected cattle exhibit clinical signs, while the infection rate could be much higher. Therefore, prevention of coccidiosis is vital.
- On arrival, administer a coccidiostat labeled for prevention and treatment.
- Other prevention strategies include minimizing stress, avoid feeding on the ground, and keep feed & water clear of fecal contamination.

High Moisture Corn

Can I feed ensiled high moisture shelled corn to my Tend-R-Leen® steers?

High moisture shelled corn can be fed to Tend-R-Leen cattle if the guidelines for adding roughage and rolling the corn are followed. High moisture shelled corn can be fed to cattle under 600 pounds just as dry corn is fed; unless it is fed for more than 100 days. Any time high moisture shelled corn is fed more than 100 days, roughage must be added to the ration to provide a scratch factor for the rumen.

For cattle over 600 pounds, course roughage should be added free choice to the ration when feeding high moisture corn. If the corn is above 24 percent moisture and/or if high moisture shelled corn is fed for more than 100 days, the corn must be rolled.

The general guidelines for feeding **ensiled high moisture shelled corn** are:

Body Weight	Moisture Level	Protein Supplement	Sodium Diacetate Supplement	Roll or Add Roughage
Up to 600 lbs.	<24%	Yes	Yes	No
	>24%	Yes	Yes	No
Over 100 days and	>24%	Yes	Yes	Roll + Roughage
Over 600 lbs.	<24%	Yes	Yes	Roughage
	>24%	Yes	Yes	Roll + Roughage
Over 100 days and	>24%	Yes	Yes	Roll + Roughage

The addition of roughage and rolling the corn is done to compensate for the reduction of saliva and to provide a scratch factor to the rumen.

Since the corn is soft and doesn't require as much chewing, less saliva is produced.

Saliva is necessary to provide adequate buffering to the digestive system. This makes supplementing buffers and minerals important. 536 Tend-R-Leen Ultra Finisher provides both the buffers and the minerals needed.

High Moisture Corn

The rumen is also affected by high moisture shelled corn. Since the corn is softer, the rumen is not provided with a source of scratch. Over a period of time, this weakens the rumen wall where some absorption of nutrients takes place. As the rumen walls get thinner, more rumen microorganisms are absorbed into the blood stream where they must be filtered out (detoxified) by the liver. This can lead to increased incidence of liver abscesses and, over a period of time, can cause death to the animal. Feeding an antibiotic like Tylan, becomes very important since they reduce the incidence of liver abscesses.

High moisture corn is also susceptible to mold. Mold can lead to problems such as: Kidney and liver damage, reduced weight gain, diarrhea, hemorrhaging, reduced feed consumption and diminished rumen function. Adding Crop Cure at ensiling, proper packing and fermentation can reduce this problem, along with feeding off at least 2-3 inches per day in cold weather and 4-5 inches per day in warm weather.

Bloat is also a concern when feeding high moisture corn. The addition of an ionophore, such as Rumensin and Bovatec, seems to help reduce or eliminate this problem.

When high moisture shelled corn is fed, bunk management becomes very important for two reasons:
1. The high moisture corn will have a lot of fines.
2. The moisture from the corn will soften the pellets.

This problem can be solved by feeding so all areas of the bunk are cleaned thoroughly. Feeding one end of the bunk heavy today, then feeding the other end of the bunk heavy tomorrow will help eliminate build-up of feed and fines in one area.

High Moisture Corn

Can I feed recently harvested shelled corn?
(Corn which is freshly combined and is not ensiled.)
Recently harvested shelled corn is okay to feed just as you would dry corn if it meets certain requirements:

1. **The corn moisture is below 24 percent.**
   Follow ensiled high moisture corn chart above for corn which is fed over 24 percent moisture.

2. **Do not store corn over 15 percent moisture for more than 2 days in ambient temperature of +20° F.**
   If temperatures are above 20° F, only enough corn should be harvested for a 2 day supply.

3. **Corn properly preserved with Crop Cure® and less than 24 percent moisture is safe to feed.**
   If greater than 24 percent moisture and preserved with Crop Cure, it should be rolled and course roughage should be fed per the above chart.

4. **Corn that is freshly harvested can be stored on wooden barn floors and in gravity boxes from the middle of November until the middle of March, if the moisture of the corn is less than 20 percent and an aerator is used to help keep the corn cool.**

What about high moisture ensiled ear corn and recently harvested ear corn for my Tend-R-Leen steers?
Both high moisture ensiled ear corn and recently harvested ear corn are safe to feed, although rate of gain will be reduced due to the volume of cob included.

When feeding high moisture ensiled ear corn, the corn must be course ground prior to fermenting and roughage should be added free choice.

Recently harvested or stored ear corn should be ground course and fed. This type of corn requires no roughage since the cob will provide adequate scratch factor to the rumen.

Interpretation of Mold and Mycotoxin Counts

Mold Count	<1000 – 10,000	Relatively Safe
	10,000 – 100,000	Transition Zone
	100,000 – 10,000,000	Caution Advised
	>10,000,000	Feeding may not be recommended

Yeast Count	1,000,000 High	Results: Smell
	CS or Haylage: 5,000,000	Stomach upset – off feed
	HMSC: 20,000,000 High	May be able to neutralize with buffer

Toxins – Predetermined Dangerous Levels

Aflatoxin = 20 ppb (Upper limit)

Molds which can produce Aflatoxin:

Aspergillus flavus	Most Common
Asperfillus parastiticus	Most Common

Levels	**Dairy Cows**	**Cattle (sc/cs/hay)**	**Swine (sm. grains)**
Low	<5.0 ppb	<20.0 ppb	____
Moderate – High	5.0 ppb – 20.0 ppb	20.0 ppb – 100.0 ppb	____
High (concern)	20.0 ppb or more	100.0 ppb or more	____

Zearalenone = 6.0 ppm (Upper limit)

Molds which can produce Zearalenone:

Fusarium graminearum	Most Common

Levels	**Cattle (sc/cs/hay)**	**Swine (sm. grains)**
Low	<1000 ppb (<1.0 ppm)	<200 ppb (<.20 ppm)
Moderate – High	1100 – 5500 ppb (1.1 – 5.5 ppm)	<450 ppb (<.45 ppm)
High (concern)	>6000 ppb (>6.0 ppm)	>500 ppb (>.50 ppm)

Vomitoxin = 6.0 ppm (Upper limit)

Molds which can produce Vomitoxin:

fusarium species	Most Common

Levels	**Cattle (sc/cs/hay)**	**Swine (sm. grains)**
Low	<1.0 ppm	<1.0 ppm
Moderate – High	1.1 – 5.9 ppm	approx. 1.0 ppm
High (concern)	>6.0 ppm	>1.0 ppm

T-2 Toxin = 500 ppb (Upper limit)

Molds which can produce T-2 Toxin:

Fusarium species	Most Common

Levels	**Cattle (sc/cs/hay)**	**Swine (sm. grains)**
Low	<150 ppb (.15 ppm)	____
Moderate – High	<450 ppb (.45 ppm)	____
High (concern)	>500 ppb (.50 ppm)	____

Mold Identification

Mold	Color	Toxin Producer	Comments
Penicillium	Blue/Green	Yes	Several potential toxins associated with certain species. Most common toxin producer in silage.
Aspergillus Aflatoxin	Yellow/Green	Yes	Found in drought, heat stress conditions or insect infected fields.
Fusarium Zearalenone Vomitoxin (DON) T-2 Toxin Fumonism	Red/White/Pink	Yes	Common in cold, wet seasons, certain strains produce extremely potent toxins.
Mucor	White	No	Found especially in sealed corn. Grow at low temps.
Rhizopus	Black	No	Requires high moisture and an advanced decay mold.

Interpretation Guidelines for Mold and Yeast Counts

Mold Counts

10 – 10,000	Relatively Safe
10,000 – 100,000	Transition Zone
100,000 – 10,000,000	Caution Advised
Over 10,000,000	Feeding may not be Recommended

Yeast Counts

≤1,000,000	O.K. for hay, dry corns, grain
≤4,000,000 – 5,000,000	O.K. for corn silage, haylage
≤20,000,000	O.K. for HMSC
>1,000,000	On fermented feeds may indicate unstable feed