

TCFA JUNIOR FED BEEF CHALLENGE FEED SAMPLING COST & EXPLANATION

Feed Sampling and 100% Dry Matter Feed Conversion

1. The exhibitor will receive six (6) sample bags. This should be enough to take three monthly samples of the ration during the feeding period. Use one bag for the grain part of the ration and one bag for the hay part of the sample (if feeding hay separately, not mixed in the ration). Label each bag as to the contents, i.e., alfalfa hay, wheat straw, whole corn with protein supplement, etc. If hay is used during the feeding period, then a sample of the hay must be sent every month that it is fed separately. If you feed total mixed rations with the roughage included, you only need to send one sample per month.
2. Each sample will be mailed, preferably via UPS, to Servi-Tech Laboratories in Amarillo, Texas for evaluation of the sample. Use the mailing labels sent to you to address the UPS package. The cost of the analysis will be deducted from the cattle check at the end of the contest for each exhibitor's steers. The cost of sampling will be \$10.00 per sample per month. All participants in a partnership pen must account for feed samples. Samples are to be collected and shipped to Servi-Tech by May 10th, June 5th and July 5th. The results will be mailed to the exhibitor each month as soon as they are received in the TCFA office. Samples are to be taken each month for **May, June and July**. Each exhibitor is to include the cost of mailing and the sampling in their record of expenses.

Feed Sampling Technique:

1. Take the sampling bag that is provided and sample three places in the ration. First from the top of the ration, second from the middle of the ration and third from the bottom of the ration. Do this in three places within the bunk, doing each time from the top, middle and bottom. This should give a good sample of the ration. Do the sampling the same way each month. When sampling hay, take three samples from the hay, dividing the samples from three different places within the hay.
2. Send the sample by mail to Servi-Tech by May 10th, June 5th and July 5th.
Servi-Tech Laboratories
6921 S. Bell
Amarillo, TX 79109

(over)

How to read sampling data:

When the sampling sheet is received, the exhibitor will determine the dry matter of the sample by taking the moisture results from the sample sheet and subtracting that from 100. The answer is the dry matter of that sample. Do this for both samples if feeding extra hay on a monthly basis.

For Example: $100 - 19.16\% \text{ moisture} = 80.84\% \text{ dry matter}$, 1800 lbs. of ration fed in May as fed, times 80.84% equals 1455 lbs. ($1800 \times 0.8084 = 1455 \text{ lbs.}$) on a 100% dry matter basis for May.

Do the same calculation for the hay sample. When pounds of dry feed are determined for both feed ingredients for that month, add them together and divide that number by the total pounds of each feed ingredient, on an as fed basis. The resulting answer is the dry matter of that total ration for that month.

For Example:

1800 lbs. grain and protein x 80.84% =	1455 lbs. dry matter
<u>+450 lbs. wheat hay x 0.9000% =</u>	<u>+405 lbs. dry matter</u>
2250 lbs. total as fed	1860 lbs. total 100% dry

$1860 \text{ lbs. dry} / 2250 \text{ lbs. as fed} = 0.8267 \times 100 = 82.67\% \text{ dry matter of ration for that month.}$

At the end of the feeding project, total the three dry matter percentages from the months of May, June and July. Divide that number by three to determine the Average Dry Matter of your rations for the Summary of Expenses.

For Example:

May	82.67%
June	81.50%
<u>July</u>	<u>80.25%</u>

$244.39 / 3 = 81.47\% \text{ Average Dry Matter of the Ration.}$