

FULLY CALF-N-ATED 

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Evaluating Your Colostrum Management Program:

Having a good colostrum program is imperative to overall calf health and performance. Once your colostrum program in place it is essential to evaluate the success or potential failure of the program. This can easily be done by taking a blood sample on farm. Blood must be collected from calves that are in good health. If a calf is dehydrated it can cause an elevation in blood serum and give you a false, pass reading.

The IgG's consumed from colostrum cause the protein in the calf's blood to nearly double during the first week of life. It is for this reason we can use blood serum levels to draw a conclusion about pass or fail of passive immunity. Blood should be collected on calves that are at least 24 hours old and not more than 7 days. Test at least 10% of the calves born each month to get a good sampling.

Let's walk through how one could do this on their operation. The supplies needed are: 3 cc syringe, 1 inch 20 G needle, red top vacutainer tube and a refractometer that has a grams per deciliter scale.

Stabilize the calf for drawing blood by either using your legs to secure the neck or having a partner hold the calf while you draw. Blood should be collected from the jugular vein (which runs along the side of the neck). An alcohol wipe may be used to clean the area and will also help make the vein visible. The next step is to collect 2 cc of blood.



Once the blood is collected it should be placed into a red top vacutainer tube. When transferring the blood from the syringe to the tube be sure to let the vacuum of the tube do the work, do not force the sample into the tube via the plunger. Forcing the sample can cause damage to the sample. Once the blood is in the tube you can let the sample sit upright for spontaneous clotting to occur. This can take several hours to see good separation of the clot and serum. If you have access to a centrifuge the sample can be spun to decrease clotting time.



The serum can be collected and placed into the reservoir of the refractometer to get a g/dl value.

- Above 6.0- Excellent
- 5.6 – 6.0- Adequate
- 5.2 – 5.5 – Marginal
- Below 5.2 – Failure

The goal should be 90% of calves above 5.2 g/dl.

Calf Management Tips video: [Testing Serum Total Protein](#)

