



# IODINE AND SELENIUM - OH MY!

## Iodine Now Available!

Due to an increase in demand, iodine (I) is now available at the Dairy One Forage Lab. Similar to selenium requests, this nutrient will be sub-contracted through the Michigan State Veterinary Diagnostic Laboratory. Instead of sending samples to multiple labs, you can now send one sample to Dairy One for all your analytical needs including selenium and iodine.

The price for iodine is \$50.00 per sample. During the period prior to submission forms updates, simply write requests for iodine in the Services box as "115-Iodine". The turnaround time for iodine requests will be similar to selenium at 7-10 business days.

Iodine is important in cattle nutrition because of its role in maintenance of the thyroid, thermoregulation, energy metabolism, reproduction, lactation, and ability to enhance immunity. It also appears effective in controlling foot rot. Ensuring an adequate level in the diet is important as this element tends to be overlooked. Common signs of deficiency may include enlarged thyroid glands, suppressed estrus, low conception rates, reproductive failures, abortions, stillbirths, increased incidence of retained placentas, and longer gestation periods.

Check current recommended guidelines for iodine levels for your livestock and balance rations accordingly, taking into consideration any goitrogenic feeds (feeds that interfere with iodine uptake). Common feeds such as canola, raw soybeans, and brassicas (turnips, rapeseed, and kale) fall into this category. Parts of other feeds such as white clover, carrots, linseed, cassava, sweet potatoes, lima beans, millets, peanuts, cottonseed, and sugar beet pulp also carry the risk of reducing iodine uptake. In these cases, increased dietary supplementation of iodine may be necessary.

The 2001 National Research Council (NRC) guideline for dairy cattle is 0.6 – 1.5mg dietary iodine/100kg of BW, the lower requirement for maintenance and the higher for lactation. Coupling the recommended level with diet and stress of your animals, this amount may or may not be adequate. Work with your nutritionist to determine the correct levels for your animals.

## Selenium Price Update

Beginning February 1, 2020, the price for selenium (Se) will increase from \$40.00 per sample to \$50.00 per sample. A pricing change from our sub-contracted lab necessitated an increase in the price for this service.