

OMSCO/LMS Trial to try to improve mineral levels and herd health.

The trial commenced in November 2012 with the aim of using mineral supplementation to improve cow mineral status and overall herd health. The initial stages involved LMS site surveying potential organic farms to assess their suitability for a Liquid Mineral system. Once a farm was approved for installation of a Liquid Mineral system the farms were analysed for their current mineral status. This involved analysis of the farms water supply and their forages as well as testing the levels of minerals in the milk and the cow's bloods. Once the overall mineral status of the herd was confirmed a mineral blend was manufactured by LMS to supplement the herd with, aiming to increase the levels of minerals within the cow and help to improve herd health. This was carried out during October 2012 and 5 systems were installed on farm by November 2012.

During the trial period the mineral status of the herd was continuously assessed by monthly bulk milk sample testing and blood tests every 3 months. Based on the results of these tests the mineral levels being supplemented to the cows were altered if necessary. This can involve both increasing the supplementation of one element if levels recorded were not sufficient, or reducing supplementation of another element should levels be higher than optimum. LMS manufacture bespoke blends of minerals and therefore they are able to only supplement what is required. For the purpose of the trial farmers were asked to monitor indicators of herd health such as cell counts, retained cleansings, milk fevers, mastitis, etc. On farm reports have indicated that farmers involved in the trial have seen improvements in cell counts and a reduction in the number of cases of milk fevers and retained cleansings. The graphs below indicate the changes in levels that occurred during the trial. The milk selenium iodine levels are measured in parts per billion and are a sample taken from the bulk tank. The GSHPx levels measures the activity of glutathione peroxidase and gives an indication of the long term selenium status. The optimum level for herd health is a GSHPx value between 100-150 U/ml PVC.

