



# DN NEWSLETTER

## issue 22

**Digital Dermatitis (DD) and trace minerals have an impact on dairy heifer development. To calve heifers down at 22 to 24 month old the nutrition must be balanced, which includes trace minerals, to provide the building blocks for structural development, healthy calving and lifetime performance. Trace elements are needed to develop a strong immune system, reproductive tract, to maintain skin and claw integrity to boost the heifer's ability to resist disease.**

One of the biggest challenges in heifers is controlling DD, which is often seen in around puberty. If a heifer develops this infectious disease whilst she is in her growing period, it will affect her throughout her lifetime due to the nature of the disease and how difficult it is to treat a chronic lesion.

DD will change the behaviour of the animal. The primary behavioural changes, depending on severity, include discomfort when walking, pain, longer periods of rest, expending more energy to walk. The impact of these behavioural changes leads to a reduction in feed intake because the heifer will not visit the feeding area as often. Nutrients are being diverted from growth and development to dealing with digital dermatitis and the infection associated with DD.

Trace minerals help to manage DD. In particular Zinc promotes a healthy immune system and prevent cell damage. Zinc has an important role in maintaining good foot health and reduces the incidence of DD. Poor foot health can be a contributory factor to poor reproductive performance as well.



The incidence of digital dermatitis was reduced by at least 50% where animals received optimum trace mineral supplementation, which had a significant consequence for fertility. Heifers with digital dermatitis during the rearing period had a 13% lower conception rate and an extra 25 days open during the first lactation.

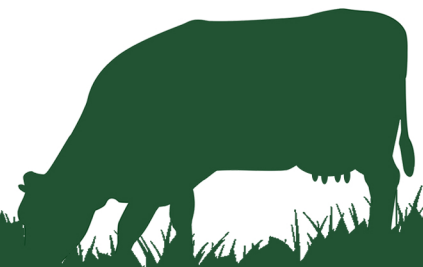
In trials where heifer diets were supplemented with this performance minerals product containing complexed zinc, manganese, copper chelates of amino acids plus iodine, animals showed improved feed efficiency by 11%, reaching the target weight by consuming significantly less total feed. Later during lactation, increased feed efficiency is achieved by maximizing dry matter intake and milk production.

Once they entered the herd the supplemented heifers continued to perform better, producing on average 200kg more in the first lactation.



**PERFORMANCE MINERALS®**

A 4% higher survival rate between their first conception and the end of the subsequent initial lactation was also achieved by feeding Availa-Plus, meaning not only did heifers stay in the herd longer to repay the rearing costs and contribute to the farm's profitability, but also less replacements would be needed to be reared, saving considerable investment in rearing costs.



## Key Trace Minerals For Dairy Heifer Nutrition

As researchers learn more about DD, how it infects and how it spreads through the herd it becomes clear that prevention and control strategies can be successful when started early in an animal's life.

Effective control strategies include three important components:

- Regular inspection of heifers for early digital dermatitis lesions and prompt treatment will reduce the chronic lesions, which become a source of further infections
- A clean, dry environment and the use of footbaths, as needed, reduces stress on the skin to prevent infections. Additional manure removal and reduced crowding (stocking density) can often have very positive impacts on leg hygiene
- A well-fortified dairy heifer nutrition program including performance trace mineral supplementation can play a key role in preventing digital dermatitis during all growth phases

Nutrition can be part of a prevention strategy that provides benefits later in the cow's productive life.



For more information about performance trace minerals such as Availa® minerals, contact your local DN Sales Specialist or DN HQ on 01200 420200 and they will direct you to your local DN Representative.

## Upcoming Events from Dugdale Nutrition

### Zoom Farmer Meetings

Our next Zoom meeting is on Thursday 21st January at 7.30pm. This online meeting, in conjunction with Zinpro, will focus on mastitis.

If you would like an information pack following the meeting, please enter your address details during registration.

Register for our online events and view our Auction & Show calendar for 2021 via the DN website at:

[www.dugdalenutrition.com/dn-events](http://www.dugdalenutrition.com/dn-events)



## Availa® Minerals

Availa® minerals are proven to be more readily absorbed and utilised by the cow to ensure optimal results.

Benefits of Availa® minerals:

1. Increased milk production
2. Better reproduction
3. Improved hoof health
4. Improved udder health

