## Questions Answered by Farm and Dairy consultant John Smoll on uses of DE with Dairy cows

Do you have a good idea of how much a grain fed dairy cow eats a day and how much DE? For Dairy cows on grain, they should eat 1 lb. grain mix for every 3 lb. of milk. John's general suggested feeding rate of Fossil Shell Flour is 6 oz. per cow per day, or 2% of the total weight of daily feed intake (grain/silage/forages etc). [In other words, if a Holstein is milking 75 lbs per day, she eats 25 lb. grain mix and \_\_\_\_\_ lbs. hay... figure 2% of the total for FSF inclusion .]

Or do you just use the 2% replacement of the rations fed a day as the amount? While we recommend the general rate of 6 oz. per head per day, each farm is dealt with specifically.

Have you noticed how much DE you think your cows are eating when they free feed and are grass fed? varies with animal. Also varies if the FSF (DE) is mixed with other ingredients such as Kelp meal or Redmond salt. Sometimes it requires added ingredients to get the cattle interested in eating the FSF... other times the added ingredients (especially salt) become a limiting factor in FSF intake.

I have a customer in South Texas that was hoping we could give them an amount per cow estimate.

They have a dairyman who has between 1000 to 2000 head. Buying by the truckload for a herd that big would be the best option, but I think he wants to use it on a portion of his herd to see the difference. If they are hesitant to use FSF on entire herd, then it would be best they select a group, feed at the 6 oz. per day for 90-120 days and decide from there. John says it takes 30-60 days minimum to see anything. Not that we haven't seen results in less time than this, but a cow takes longer to heal than smaller animals.

Things they may notice after several months of feeding: *better feed utilization* (less grain passed thru to the manure), *odor and fly control (less quantity of both)*, *better coat health and overall body condition*, not to mention the potential parasite control, viral/bacterial pulling and that of heavy metals if present in the animal. These are only some findings of our work thru the years... and that of Galen Knight's research.

We just need to make sure he uses enough to have it work. Like we have discussed before, the specifics of each farm plays a part in how the DE will work. Texan soil is different than Michigan and Ohio... forages contain different minerals and protein levels. This all affects how the DE (FSF) works within the cow's digestive system. It is best not to tell the farmer what all he will see, but rather to find out his problem and address that first. Usually they will come back and tell you later what else they noticed - ESPECIALLY if they feed it several months... then quit awhile... Then go back on it... yes, they usually do. :) But it takes someone to teach. We have come across multiple people with Perma-Guard in their possession with no clue why they bought it or how to use and it is just 'clutter'. But once they learn how it works and SEE it, they tell all their neighbors!! :)