# NDS Dynamics

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### Welcome to NDS Newsletter

By Rachel Eickman NDS-NA Staff

With the busy holiday season upon us we just wanted to send a quick newsletter to update you on the two major changes that have occurred in the new update for NDS.

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Merry Christmas from NDS Dynamics!!!

#### Brief CNCPS 6.5 Update

By Rachel Eickman From the CNCPS 6.5 Overview email from NDS staff

As everyone is getting ready for the Holidays we just wanted to quickly summarize the letter that was sent out a couple weeks ago with the details of the CNCPS 6.5 Update Overview. Ermanno and his staff have made some major changes to the program and we just wanted to give a quick rundown of those changes.

**aNDFom:** The new version of the model adopted the aNDFom value. It means that NDF will be correct for ash content, decreasing the NDF, on average, 1 to 2 units for forages. The NDF supply will be affected, while recommendations for NDF levels will remain unchanged. This will also reduce the "mass balance" errors with forage samples.

**CNCPS Feed Library:** The CNCPS feed library has been re-edited and the amino acid values have been updated to match contemporary AA profiles. This means that the amino acid profile of <u>every feed</u>, in the feed library has been reviewed and is expressed on a % CP basis. Pay attention when you update an older ration as these new profiles may affect some values. The efficiency of the essential amino acids have been updated and simplified now that the AA efficiencies have collapsed the efficiencies for maintenance and lactation into a single efficiency of use. Based on the Cornell evaluations, the new approach appears to provide a much better relationship between cattle requirements and supply.

**uNDF and NDF rate calculator:** Recent feeding studies show that uNDF is an important component of the intake effect on NDF. This is a major change since it is moving away from the original calculations for NDF indigestibly. The uNDF system provides a more accurate estimate of the concentration of digestible and undigestible NDF, and thus better predictions for energy supply and DMI. Intake of uNDF is very closely tied to DMI, so this newer system allows predicting intake more accurately and better predicting the impact of different sources of forage NDF and fiber byproducts. The uNDF intake of the diet is now described on the recipe output screen as % of BW.

The Raffrenato rate calculator: used to calculate the CHO B3 Kd, has been updated according the digestibly data being generate by commercial laboratories. The ruminal degradation rate for NDF (Kd CHO B3) is now based on this new model providing more time points for NDFD. For forages the uNDF and the resulting CHO B3 Kd requires 30, 120, and 240 hours NDFD, with 240 representing uNDF. Non-forage feeds utilize a 12, 72, and 120 hours NDFD, with the 120 representing uNDF. Bottom line: the Kd rate for NDF degradation is now calculated based on multiple time points versus only a single time point as done previously in CNCPS version 6.1.

**Ross uN:** Cornell has developed and tested an assay to estimate indigestible or unavailable nitrogen (uN) in feeds, especially feeds that do not, by definition, contain a significant amount of NDF. If you had values for the uN assay from commercial labs, you can check the uN checkbox (Feed section- Protein tab) and just input the data in the ADIP cell. Then the label will change to uN, and when you do that the NDIP is automatically set at the same value. With this new approach, all of the protein in the feed will be in the A2, B1 and C fractions, providing more accurate values for RUP digestibility.

#### New Manual in NDS

Tomorrow when you open up your NDS take a moment to look at the new button on your home screen called 'Manual'. The staff at NDS has been working their tail feathers off to get this new manual up and running for our convenience. When you open up the manual you will find a web browser opening up and in it all the answers to questions you have never thought of asking. This manual has put Dave and my PDF tutorials to shame! So next time you run into a problem or have a question, check out the manual first. Boy, Dave and I will really miss talking to you guys!



The staff at NDS and NDS-NA would like to wish you a very Merry Christmas from our families to yours! May you have safe travels and make many happy memories with your family & friends!

## Thank you for another great year!!!





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