



Estimating Nutritive Value Using A Feed Information Expert System



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Background

- The nutritive value of a feed today is primarily estimated by the feed's fiber and protein content. While this is better than using feed tables, these measurements do not account for all of the variability in nutritive value.

- If farmers had better estimates of feed nutritive value, more precise rations could be developed to:

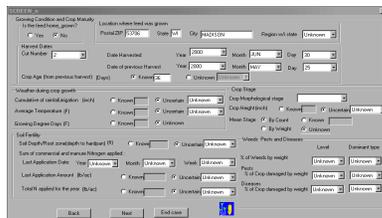
- Minimize feed costs
- Maximize feed utilization by cows
- Minimize nutrients excreted in manure

Solution

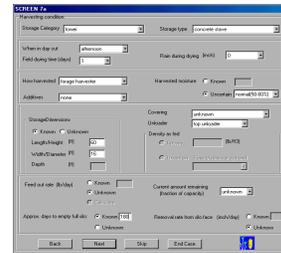
- Develop a computer program for farmers, farm consultants and feed testing laboratories that would take into account all available information about a feed and how it will be fed to provide more accurate estimates of nutritive value.



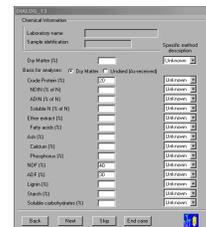
- The program will use information about crop growing conditions,



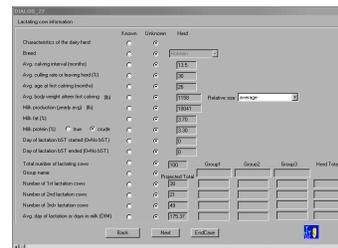
- crop harvesting and storage,



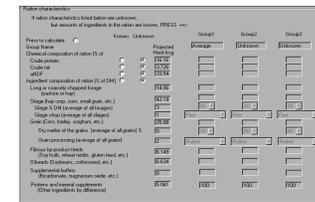
- any feed analyses done,



- the type and productivity of the animals fed,

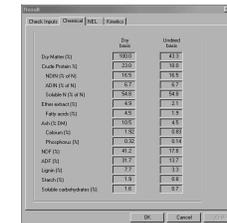


- and other feeds and supplements included in the ration.



Result

- A comprehensive, more accurate estimate of the nutritive value of a feed when fed in a specific ration for a specific group of cattle.



Status

- A prototype computer program is in the final stages of development. It will initially provide estimates for alfalfa hay and silage, and corn silage.

- This program will be tested across the country in collaboration with nutritional consultants.