How can we find out the nutrient content of different poultry feedstuffs?

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**Current status**
- Feed is the most expensive item in commercial poultry production.
- The feed market has experienced considerable volatility over the years.
- It is important to get the most nutrients out of feedstuffs.
- Nutrient content of feedstuffs can vary significantly.
- We need to know the actual nutrient content of feedstuffs in order to formulate diets to meet poultry’s requirements more closely.

**What can be done?**
- We can test feedstuffs by feeding them to chickens and measuring some parameters (*i.e.* *in vivo*).  
  I. Requires frequent use of animals.  
  II. Expensive and time-consuming.
- We can test feedstuffs in laboratory environment by providing some conditions similar to the digestive tract of chickens (*i.e.* *in vitro*).  
  I. Substantial reduction in the use of animals.  
  II. Faster and less expensive.

**Where are we headed?**
- *In vitro* results should be validated with results of animal studies.
- Predicting nutrient content of feedstuffs using NIRS (*i.e.*, accurate and time efficient).
- Providing a more reliable basis for payment according to feedstuff quality and more accurate diet formulation for optimal animal performance.

**Reference**
ACIDF Project - Feed Quality Evaluation/NIRS.

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