Opportunities (and Challenges) for New Products and New Markets for DDGS

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Key Questions

How well do you know your product?

How well do you know the needs of your customers or prospective customers?
Did You Know That There Are Value Added Properties in DDGS?

- High available phosphorus
  - reduce P excretion in manure of swine and poultry
- Improve gut health of pigs?
- Increase litter size in sows
- Increase yolk color when fed to layers
  - xanthophyll
- Components of yeast cell walls have immune modulating effects
Are You Prepared to Give Your Customers the Information They Need to Effectively Use DDGS?

- The nutritional value of DDGS is DIFFERENT among livestock and poultry species
  - DE, ME, and NE values for dairy, beef, and swine
  - TME and AME values for poultry
  - Crude protein and amino acid profile
  - True amino acid digestibilities for swine and poultry
  - Available phosphorus values for swine and poultry
  - Maximum dietary inclusion rates for each production phase for each species
US Grains Council Target Export Markets

- Emerging Markets
  - Japan
    - initial interest in dairy rations
    - Japan Science Feed Association
      - currently determining nutrient values of samples from 7 “new generation” plants to establish new DDGS nutrient specifications
      - will be conducting a feeding trial with small ruminants
    - future use in swine and poultry diets
  - Taiwan
    - primary interest in swine and poultry diets
    - will likely be conducting feeding trials this year
US Grains Council Target Export Markets

- Emerging markets
  - Canada
    - Currently produces 200 million liters of ethanol/year
      - US produces about 7 billion liters/year
    - Ethanol production expected to triple (> 650 million liters) by 2010
    - Most of the current and future plants use wheat for ethanol production
      - produce wheat DDGS
      - some corn DDGS and wheat DDGS is imported into the US
US Grains Council Target Export Markets

- Existing/emerging markets
  - Mexico and Latin America
    - Latin America imports approximately 136,000 MT DDGS annually
    - Feeding trials are being conducted for swine and poultry in Mexico
    - Some companies are now using DDGS instead of CGM or CGF
  - Europe
    - Has historically been the primary DDGS export market
    - Approximately 770,000 tons of DDGS are exported annually
Common constraints in developing export markets

- Lack of pricing information
- Lack of consistent supply and quality
- Transportation costs and logistics
- Typically only one supplier available
- Storage space limitations
- Lack of technical information on nutrition and quality
- Small volumes required
FAQ - Nutrition

● What nutrient values do I use?

● What can be done to provide a more consistent, less variable product?
  - Product differentiation
  - Customer uses a single source
  - Develop quality specifications
  - Standardize production procedures

● Is there a quick test available for determining amino acid digestibility of DDGS?

● How is DDGS different from other grain co-products?
FAQ - Safety

- What is the risk of mycotoxins?
- Are there any antibiotic residues present in DDGS?
- Should I be concerned about the relatively high sulfur content in DDGS?
FAQ - Quality

- Is DDGS color a good indicator of quality and nutrient digestibility?

- How do we know which suppliers provide high quality DDGS?

- Are there quality standards for DDGS?

- How do I know if the product I’m buying is really DDGS?
FAQ – Preservation and Stability

- How long can DDGS be stored without degradation of quality?
  - Mycotoxins
  - Rancidity

- Do antioxidants need to be added to preserve DDGS?

- Are mold inhibitors added to DDGS?

- Can flowability agents be added to improve DDGS handling?

- How do you handle and store wet DDG?
FAQ – Feed Manufacturing

- Can DDGS be pelleted?
- Can diets containing DDGS be pelleted?
- What is the flowability of DDGS in various types of storage structures?
- Why is there variation in DDGS particle size among plants?
- What is the bulk density of DDGS?
Reasons Why Some Potential Customers Don’t Want to Use DDGS

- Believe that DDGS has a low energy value
- Concerns about the risk of mycotoxin contamination
- Concerns about soft pork fat in pork carcasses
- Difficult to pellet high fat diets containing > 5% DDGS
- Litter size improvements from feeding diets supplemented with omega 3 fatty acids may not occur due to altering the ratio of omega 3:omega 6 fatty acid when DDGS is added to sow diets
- Do not want to reduce the phosphorus content of manure
Challenges for Marketing DDGS Now and in the Future

- If you know the answers to most of these questions, you are in a great position to gain new, satisfied, long-term domestic and international DDGS customers.

- The key is to know your product and provide the type of information needed by your customers.
Challenges for Marketing your Product Now and in the Future

- As various co-products continue to evolve from the ethanol industry, who will evaluate them and educate prospective customers on how to use them effectively?