


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

Dr. Jerry Shurson  
Dept. of Animal Science  
University of Minnesota



# Key Questions

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**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?