

2010 Connections Conference

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U.S. Soy Meal Quality Issues Related to Human Consumption

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CHS Oilseed Processing

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CHS Oilseed Processing

- Operate refining and crushing facilities
 - Refine more than 1 billion pounds oil
 - Process 90 million bushels, 2 million acres
- Produce over two million tons soy meal
- Soy hulls
- Honeysoy[®] flour
- Ultra-Soy[®] textured soy protein



My Responsibilities

- Overall sales management and business development
 - Includes soybean procurement
 - Sales of all protein products
- Industry involvement
 - NOPA board chair
 - Minn. Soybean Assoc., Minn. Grain & Feed, NW Feed Manufacturers Assoc.
 - Local community boards





Soybean Market Overview

- 2010/11 production: 3.408 billion bu.
- 2010/11 exports: 1.57 billion bu.
 - 1.498 billion in 2009
 - Exports through Oct. were 203 mill bu. ahead of last year
 - Increased Chinese demand; 60% of sales are to China
 - Exports as percentage of production- 43%

Soy Meal Market Overview

- 2010/11 domestic crush 1.665 billion bu.
- 2010/11 domestic meal production 39.532 million short tons
- 2010/11 exports
 - 9.1 million short tons, compared to record of 11.15 million in 2009/10
 - Reduction due to competition from Argentina and India
 - Argentine DET
- Export values rose 21% versus last year



Quality

- Declining U.S. soybean protein
 - Yield is king
 - Producing oil at the expense of protein
 - Defensive traits
- Producer/Industry trade-off
 - More bushels per acre, but discounted price
 - Market access
 - Lower protein than Brazilian meal
 - Increased competition from DDGs and canola meal



Other Negative Impacts

- Slower weight gain in livestock
 - Less competitive livestock producers versus global competitors
 - Reduced profitability in livestock sector
- Reduction/stagnation of domestic soy meal off-take
 - Reduced U.S. domestic crush
 - Value added margins throughout the “soybean” value chain are exported
 - Negative impact on rural economies sustainable businesses: providing good jobs and benefits, charitable contributions, local property taxes



Protein for Human Consumption

- Soy flour provides important protein source
 - lower cost per unit of protein and less fat than meat
 - longer shelf life than meat
 - ease of preparation
 - natural enzymes extend bread shelf life, texture, flavor
- Strong global demand and growth
 - bread is part of culture, both food and utensil
 - CHS sales in 23 countries, **increased 35% since 2005**



Protein for Human Consumption

- Requires significant educational effort
 - product samples and bakery trials
 - requires long-term commitment, patience
 - lingering resistance to GMOs



Other Uses for Soy-Flour

- Pet food - growing market up to \$56.4 **billion** by 2015
- U.S., Europe are 80% of world market
 - Number of pet owning households growing
 - Pet owners want healthier, organic, natural and functional foods
- Adhesives (replacing non-renewable)
 - California "CARB" legislation
- Foams (replacing non – renewable)
 - Furniture
 - Vehicles



Collaborative Opportunities

- Entire industry working together to develop higher protein U.S. soybeans without hampering oil yield or bushel per acre yields.
- Eliminate global trade barriers
 - Argentine DET
 - Resistance to GMO
- Increased market development of soy-protein
 - New market development & education
- Vigilance against over regulation
 - Differentiate Food and Feed
 - U.S. food system is the safest in the world



Questions



CHS

The image features the letters "CHS" in a white, serif font, centered in the upper half. A thick white swoosh underline starts under the 'C', loops under the 'H' and 'S', and ends under the 'S'. At the bottom of the image, a blue particle trail of small dots curves across the width of the frame.