

Introduction, History, Raw Materials, and Production: Toward a Scientific Understanding of DDGS. Overview of Fuel Ethanol Production and Distillers Grains. Historical Perspective on Distillers Grains. Grain Structure and Composition. Manufacturing of Fuel Ethanol and Distillers Grains—Current and Evolving Processes. Ethanol Production from Starch-Rich Crops Other than Corn and the Composition and Value of the Resulting DDGS. **Properties, Composition, and Analytics:** Physical Properties of DDGS. Chemical Composition of DDGS. Lipids in DDGS. Analytical Methodology for Quality Standards and Other Attributes of DDGS. Mycotoxin Occurrence in DDGS. **Traditional Uses:** Feeding DDGS to Beef Cattle. Feeding DDGS to Dairy Cattle. Feeding DDGS to Swine. Feeding DDGS to Poultry. **Further Uses:** Feeding DDGS to Finfish. Feeding DDGS to Other Animals. Using DDGS as a Food Ingredient. **Emerging Uses:** Using DDGS in Industrial Materials. Using DDGS as a Feedstock for Bioenergy via Thermochemical Conversion. Using DDGS as a Feedstock for Bioenergy via Anaerobic Digestion. Dry Grind Coproducts as Cellulosic Ethanol Feedstock for Fuel Ethanol. Extraction and Use of DDGS Lipids for Biodiesel Production.. **Process Improvements:** Improved and New Enzymes for Fuel Ethanol Production and Their Effect on DDGS. Fractionation of DDGS Using Sieving and Air Classification. Concluding Thoughts—Toward Increasing the Value and Utility of DDGS. **Index.**