

TOTAL TRACT NUTRIENT DIGESTIBILITY AND *IN VITRO* GAS PRODUCTION OF POST-MSC DDGS IN GESTATING SOW DIETS.

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CORN DRIED DISTILLER GRAINS WITH SOLUBLES (DDGS)

- High fiber content ideal for gestating sow diets
- Ingredient nutrient specifications based on grower pigs
 - **Problem:** Nutrient and energy utilization greater in sows than grower pigs fed fibrous ingredients
 - Inaccuracies → over-formulation and increase \$
- Sustainability:
 1. Accurate formulation = proper nutrient utilization
 2. Lessen gas emissions = environmental stewardship



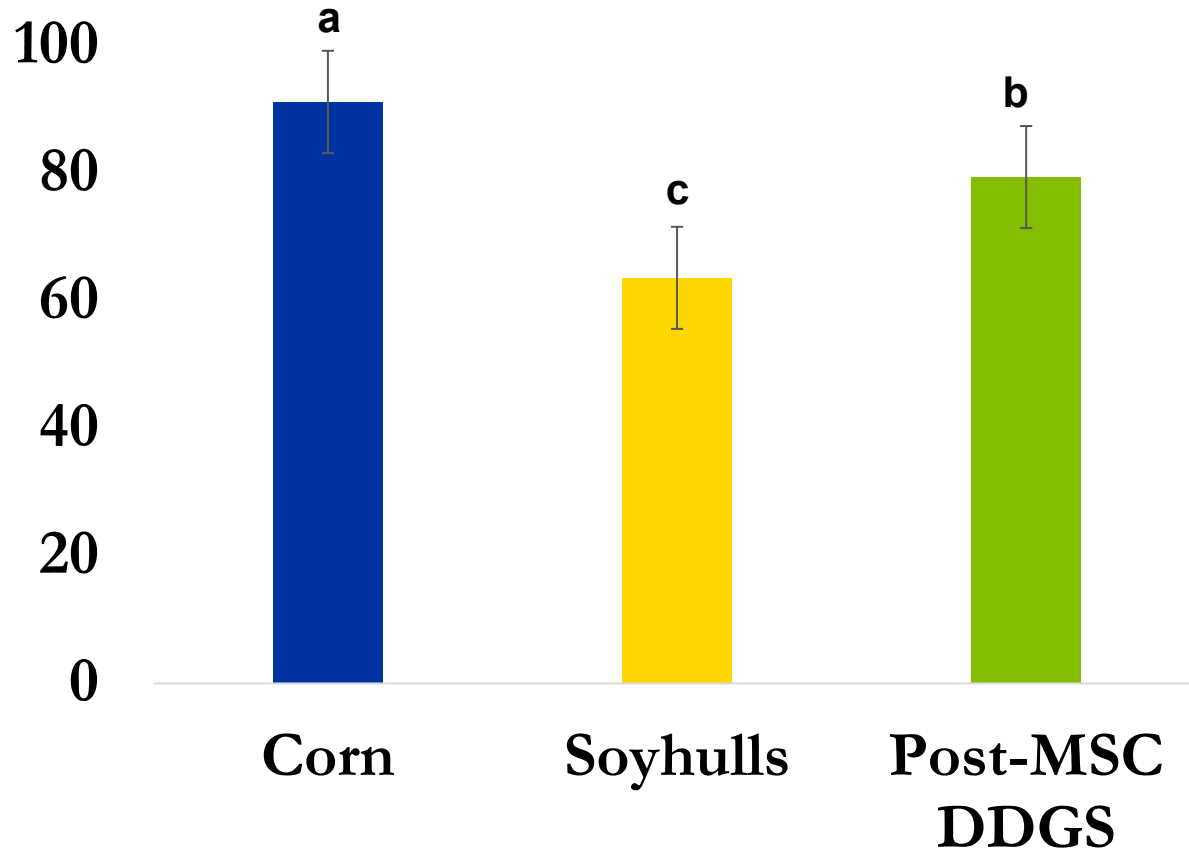
EXPERIMENT

1. Evaluate ATTD of energy and nutrients of post-protein separation (post-MSC) DDGS provided to gestating sows in comparison to soyhulls.
2. Characterize hindgut gas production following *in-vitro* fermentation using fecal inoculum collected from the sows.

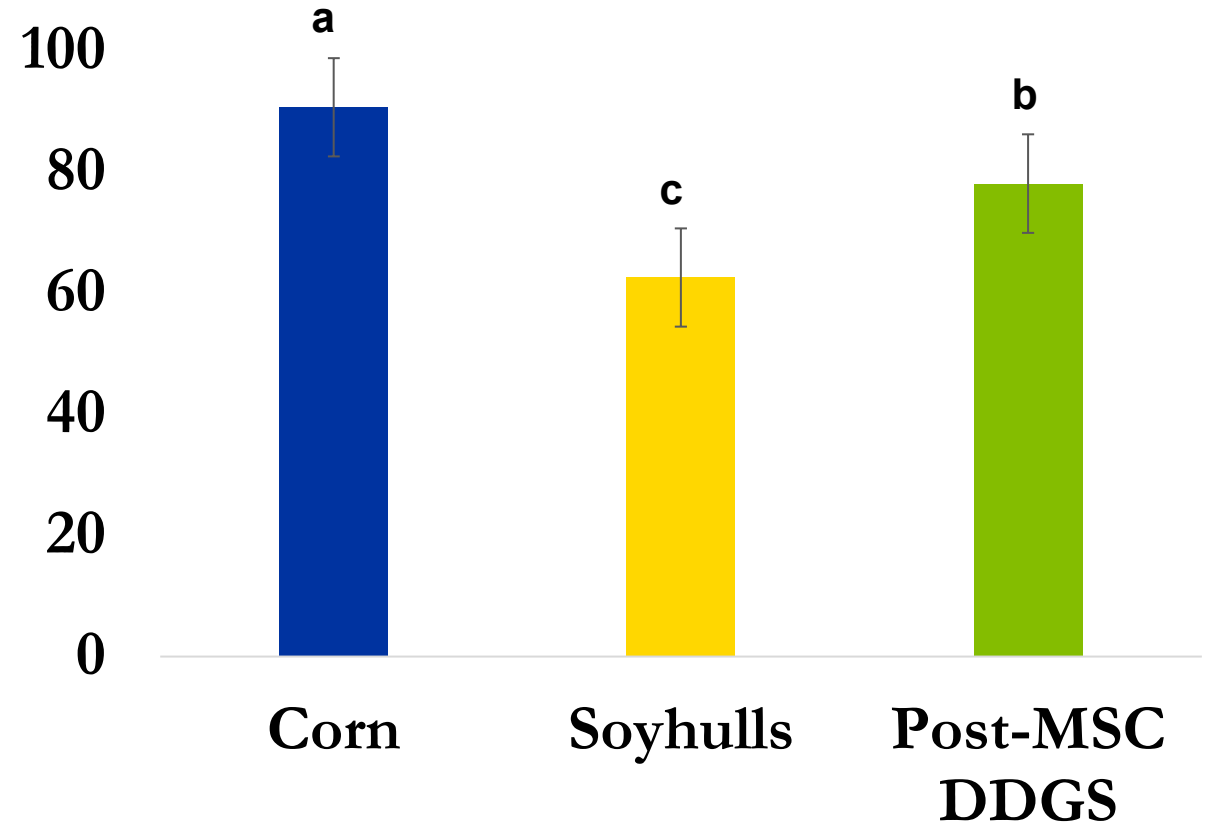


ENERGY DIGESTIBILITY AND METABOLIZABILITY

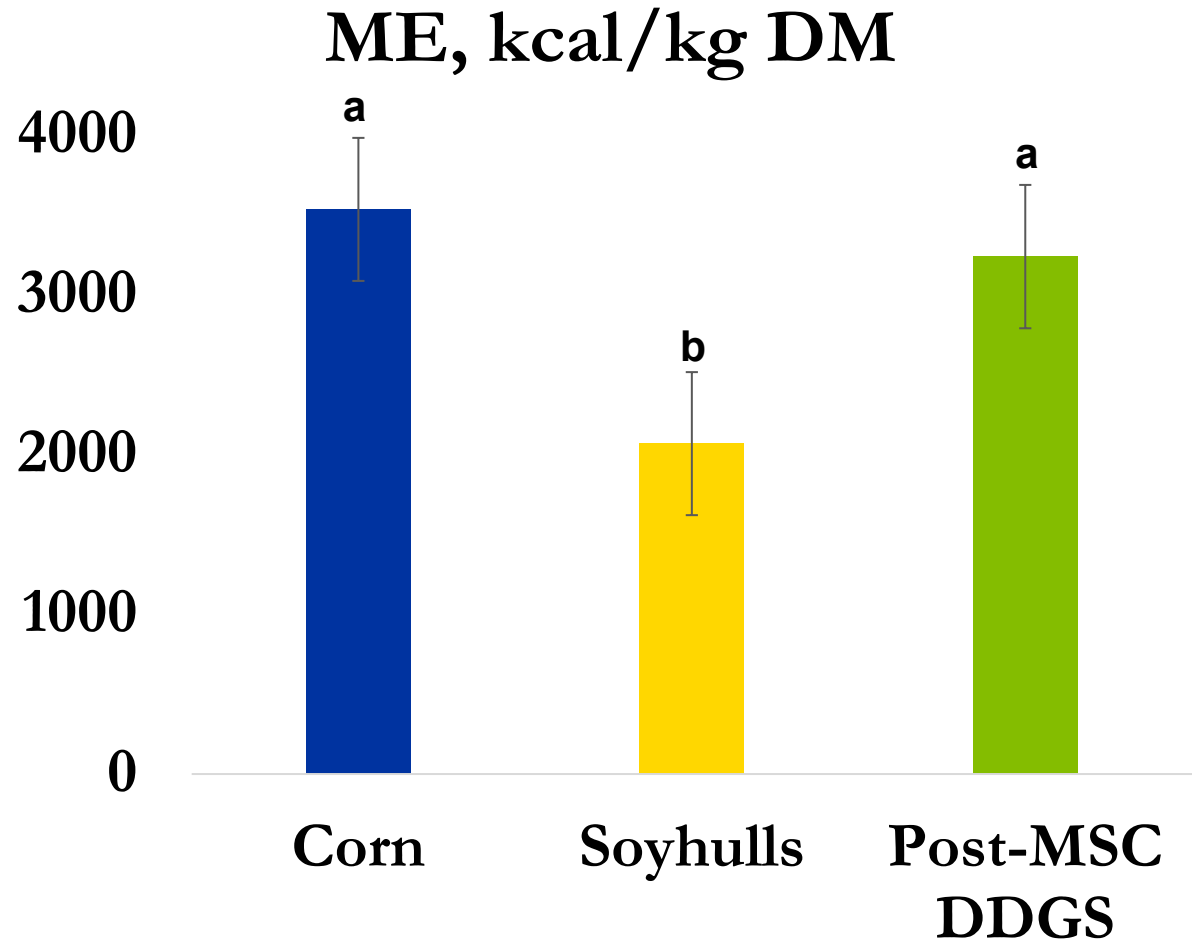
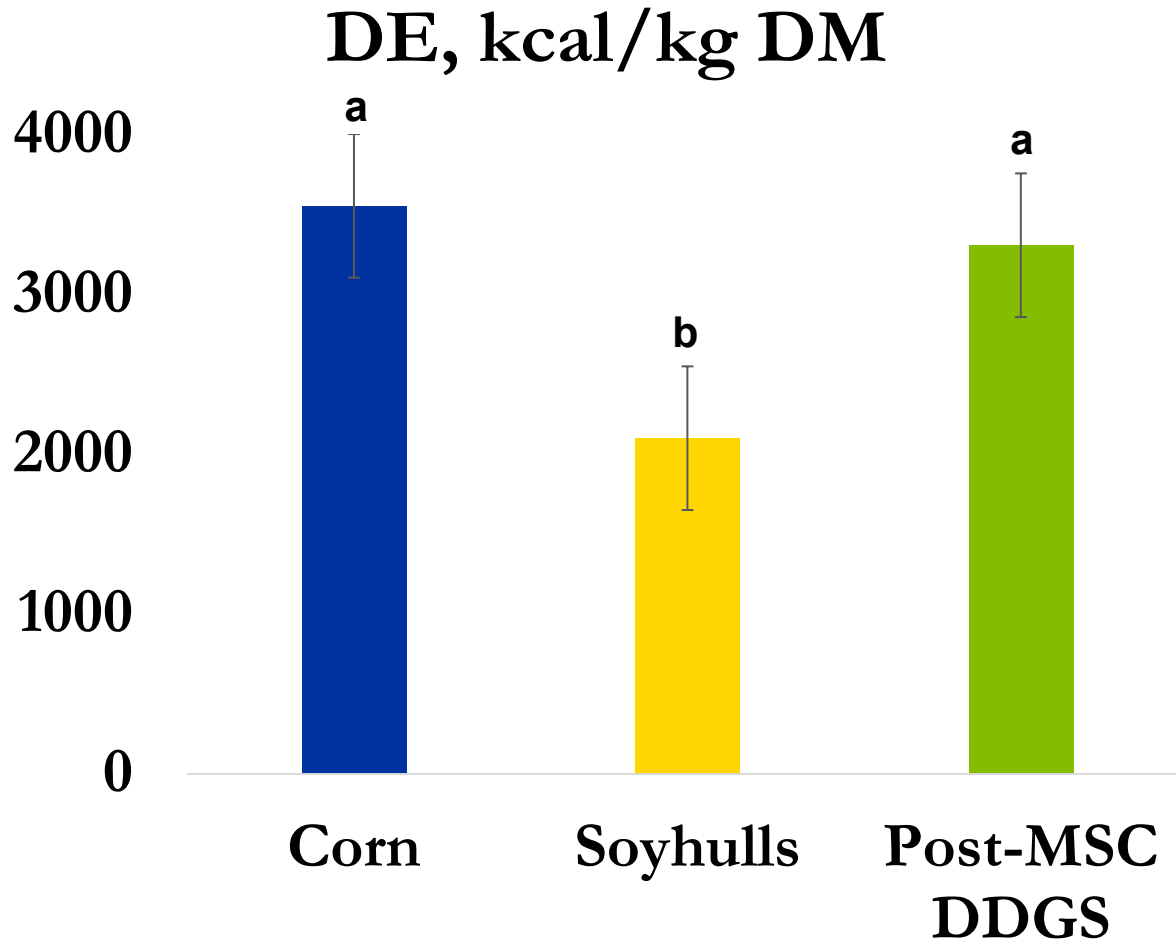
ATTD of GE, %



ME:DE, %

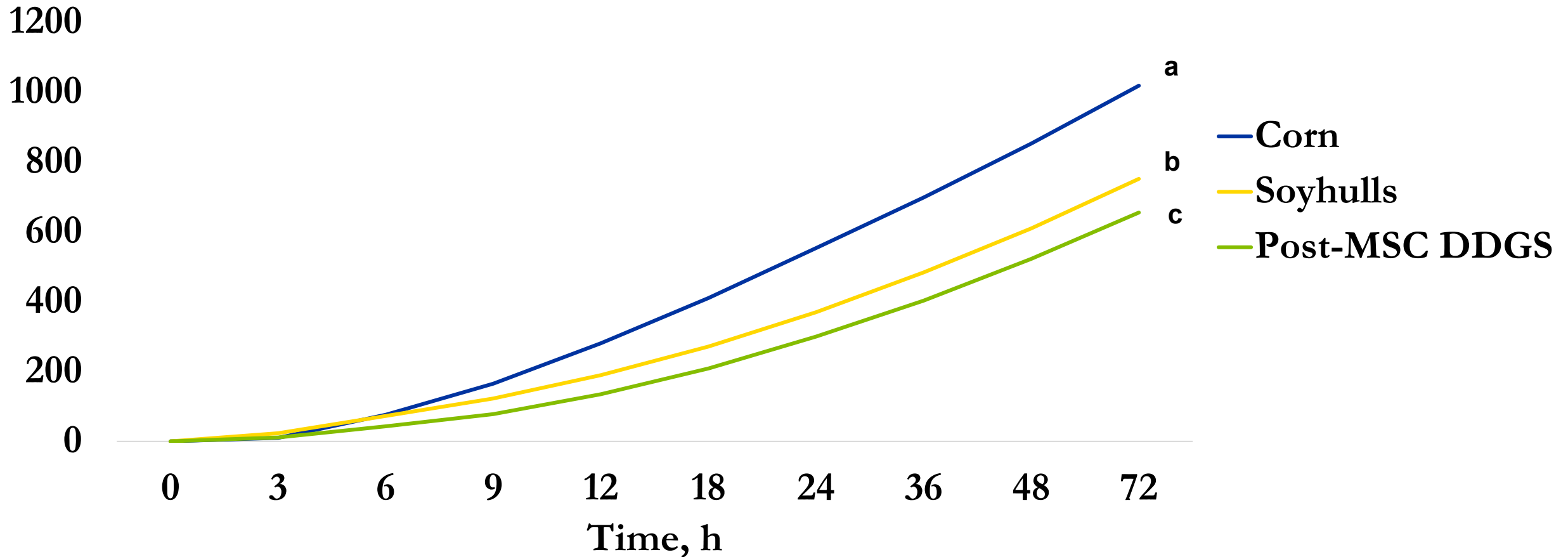


ENERGY VALUE



GAS PRODUCTION

Cumulative Gas Production, ml/g DM



CONCLUSION

- Post-MSC DDGS is a suitable energy and fiber source for gestating sow diets
 - DE and ME in Post-MSC DDGS > Soyhulls
- Post-MSC DDGS is a sustainable ingredient
 - Minimize gas emission
 - Promote sustainable swine production



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