

Protein and fiber digestibility of DDGS from different sources

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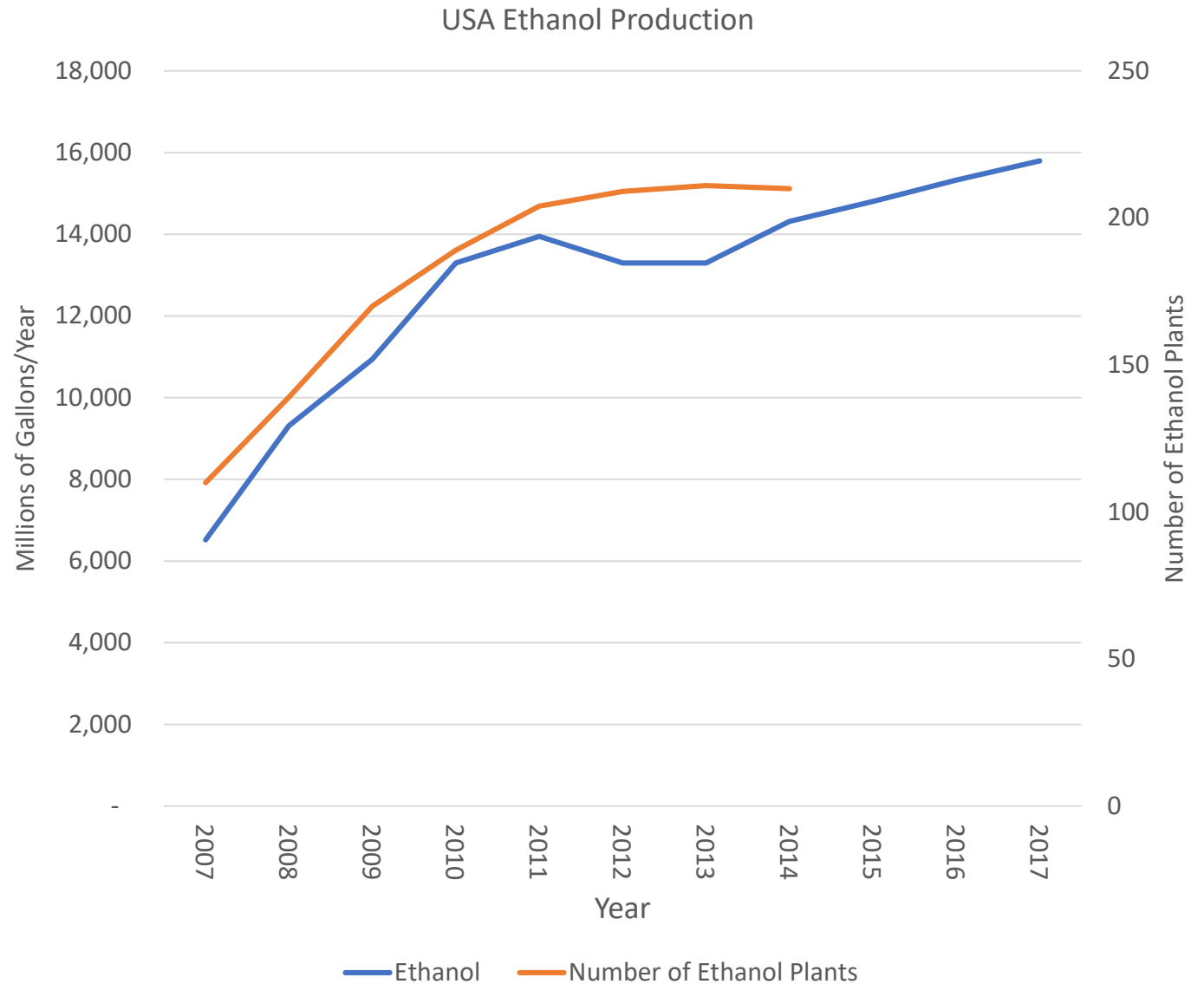
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Introduction

- With different plants and processes, it is reasonable to expect differences in DDGS nutrient profile and digestibility
- **Big picture:** Does the source of DDGS impact the end user by having a different nutrient profile and digestibility?

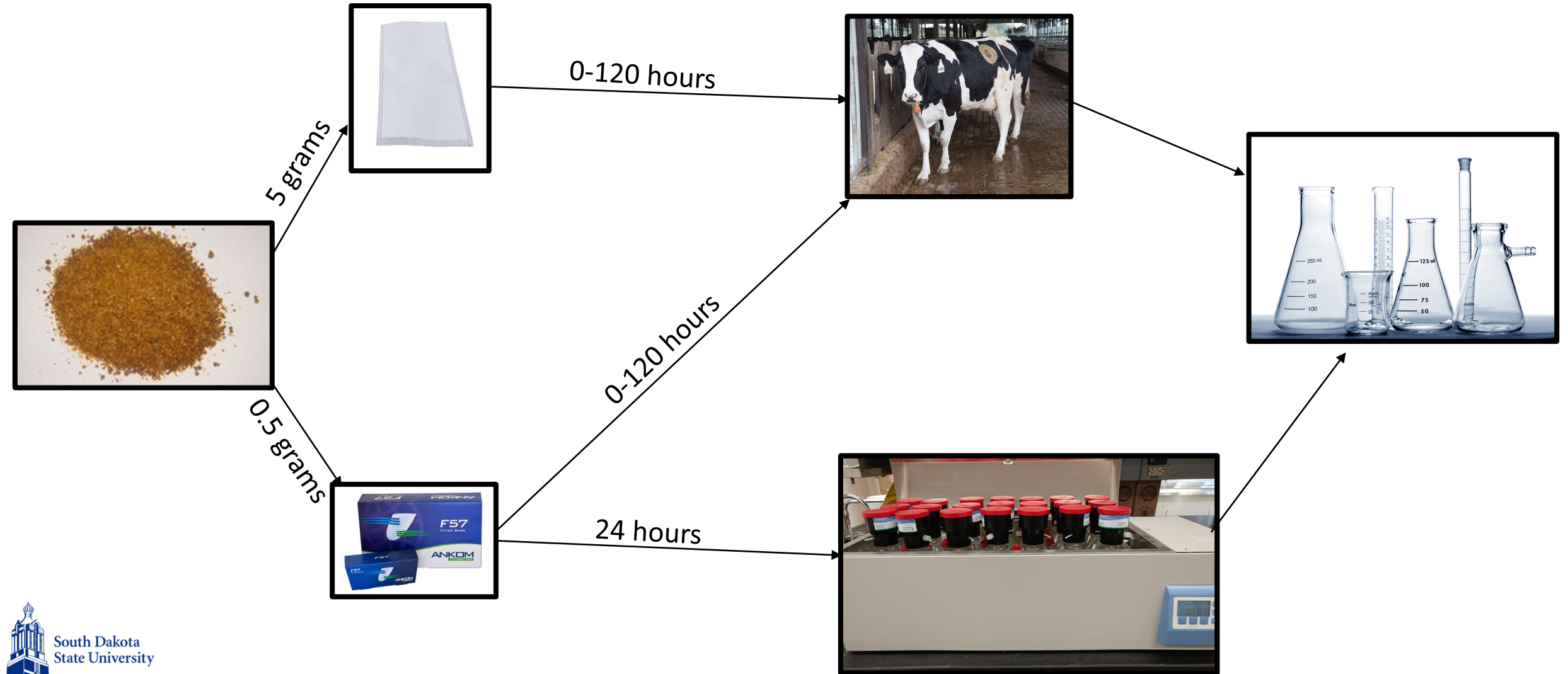


Objectives

- Determine if fat content or source of DDGS are related to nutrient digestibility
- Determine if methodology or bag type influences nutrient digestibility results
- **Hypothesis:** DDGS digestibility would vary by source and fat content. Evaluation methods would lead to same rankings of feeds.



Materials and methods



Results

Nutrient digestibility of DDGS from different ethanol plants and soybean meal

Item	DG1	DG2	DG3	DG4	DG5	DG6	SBM	SEM	P-value
RDDM, %DM	58.36 ^b	49.74 ^d	46.36 ^e	59.13 ^b	59.88 ^b	55.07 ^c	66.00 ^a	1.90	<0.01
RDNDF, %NDF	33.10 ^{ab}	34.66 ^{ab}	31.00 ^b	40.81 ^a	34.69 ^{ab}	34.98 ^{ab}	-	2.46	0.04
RDP, % of CP	61.1 ^a	44.9 ^{cd}	41.8 ^c	57.7 ^{ab}	58.0 ^{ab}	51.8 ^{bc}	61.4 ^a	2.58	<0.01
RUP, % of CP	38.9 ^d	55.1 ^{ab}	58.2 ^a	42.3 ^{cd}	42.0 ^{cd}	48.2 ^{bc}	38.6 ^d	2.58	<0.01
IDP, % of RUP	59.1 ^b	48.7 ^b	56.0 ^b	68.0 ^{ab}	72.8 ^{ab}	62.8 ^b	94.0 ^a	4.80	<0.01
IADP, % of CP	22.7	26.7	32.0	28.3	30.3	30.2	37.3	3.92	0.26
TDP, % of CP	84.1 ^{bc}	72.3 ^d	75.0 ^{cd}	86.7 ^b	88.6 ^{ab}	82.2 ^{bc}	97.6 ^a	2.08	<0.01

Overall Conclusions

- DM, NDF, and CP digestibility were different across samples
 - DG1, DG4 and DG5 had the greatest RDDM and TDP
- RDNDF was greatest for DG4, but results were not consistent across bag type or method
- Methodology did not produce same rankings of feeds
- **Take home:** DDGS vary in nutrient profile and digestibility, which could impact animal performance for the end user.

