

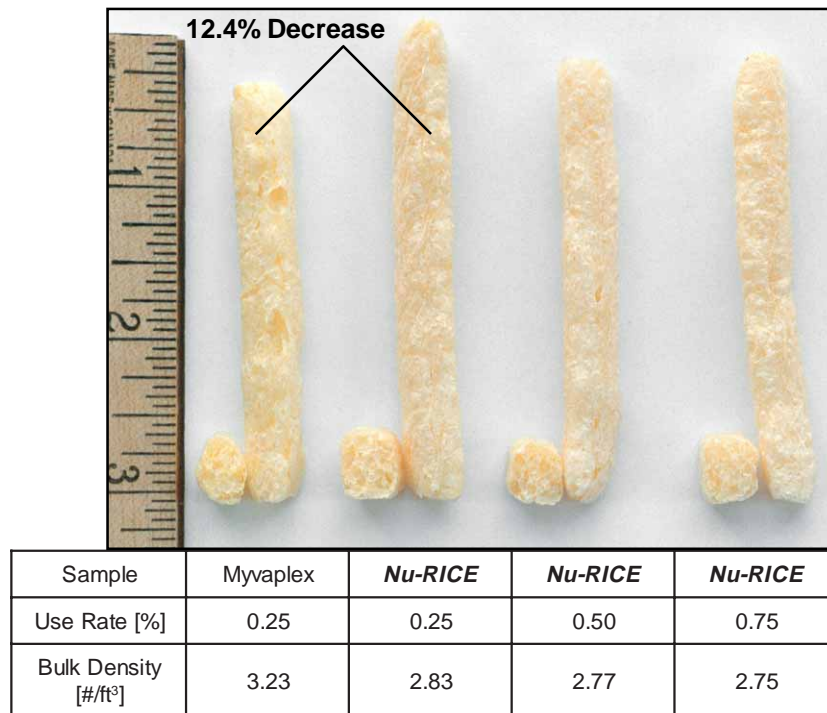
# Bulk Density of Extruded Potato Sticks

Purpose: Test the effects of processing aids (**Nu-RICE**<sup>®</sup> vs. Myvaplex<sup>®</sup>) on bulk density and shape, in potato sticks.

Equipment: American Extrusion Advantage Series  
Screw Speed 250-350 RPM

Processing Aids: **Nu-RICE**<sup>®</sup> Emulsifier and Myvaplex<sup>®</sup>

Formulation: Corn Grits 70%  
Potato 30%  
Moisture 17.5%  
Processing Aid 0.25% - 2.0%



Observations: There was a significant visible expansion and length difference between the **Nu-RICE**<sup>®</sup> Emulsifier and Myvaplex<sup>®</sup> samples.

Conclusion: The **Nu-RICE**<sup>®</sup> Emulsifier can be used anywhere from low to high rates (as needed) and provide lower bulk density than Myvaplex<sup>®</sup>. At equal use rates of the processing aid, the **Nu-RICE**<sup>®</sup> Emulsifier sample was 12.4% lower in bulk density than the Myvaplex<sup>®</sup> (sample 1 vs. 2).

Cost Savings: The **Nu-RICE**<sup>®</sup> Emulsifier allows the snack maker to provide 12-15% more volume per unit to the consumer, or the ability to decrease the weight and provide the same volume. This can create a 10-12% cost savings!

**Nu-RICE**<sup>®</sup> Decreased Bulk Density by 12-15%