

# Accepted Manuscript

Process conditions influencing wheat gluten polymerization during high moisture extrusion of meat analog products

Valerie L. Pietsch, M.Azad Emin, Heike P. Schuchmann



PII: S0260-8774(16)30388-0  
DOI: [10.1016/j.jfoodeng.2016.10.027](https://doi.org/10.1016/j.jfoodeng.2016.10.027)  
Reference: JFOE 8704  
To appear in: *Journal of Food Engineering*  
Received Date: 20 July 2016  
Revised Date: 08 September 2016  
Accepted Date: 29 October 2016

Please cite this article as: Valerie L. Pietsch, M.Azad Emin, Heike P. Schuchmann, Process conditions influencing wheat gluten polymerization during high moisture extrusion of meat analog products, *Journal of Food Engineering* (2016), doi: 10.1016/j.jfoodeng.2016.10.027

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**Highlights:**

- Differences in product appearance were related to wheat gluten polymerization.
- Wheat gluten polymerization only took place in the screw section of the extruder.
- Thermal treatment was the major parameter influencing wheat gluten polymerization.
- In the range investigated, SME and pressure had no influence on wheat gluten polymerization.
- Determining polymerization behavior at high moisture extrusion conditions will enable a more targeted design of the extrusion process for the production of meat analog products.

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