Applications of low-bloom pork gelatin to extruded pet food and injection molded pet treats.

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Goals:
- Evaluate a low bloom pork gelatin product relative to conventional gelatins for functional and quality parameters
- Evaluate a low bloom pork gelatin product relative to conventional gelatins in extruded pet food – both traditional dry and semi-moist varieties
- Evaluate a low bloom pork gelatin product relative to conventional gelatins in injection molded treat applications

Statement of Problem:
Pet food is a multi-billion dollar per year global industry that is constantly changing. Improvement and innovation is particularly seen in the fields of extruded pet food and injection molded treat applications. Innovations can include the higher protein and higher fresh meat levels in extruded products. High bloom gelatin is commonly used in human foods such as Jell-O, jams and jellies, marshmallows, and many other applications. With customer demand for more “humanized” pet food products, ingredients common to human food may be valued in pet food. However, little literature has reported the use of gelatin in pet food applications, and no literature discusses the use of low-bloom gelatins. The goal of this project is to increase the value of low-bloom gelatin products by exploring its use in dry and semi-moist extruded pet foods and injection molded pet treats.

Current Activities:
- Performing lab-scale and pilot-scale extrusion tests on dry pet food formulations including gelatin.
- Analyzing dry extruded products for additional product characteristics.
- Analyzing low-bloom gelatin products and conventional gelatins for gel strength, viscosity, and other functional and quality parameters.
- Researching and writing a literature review of previous work with conventional and low-bloom gelatins in food and pet food applications.