# PURDUE OFFICE OF TECHNOLOGY COMMERCIALIZATION

### **Innovation Infosheet**

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## Improved Extraction Method for Separation of Mucilage from Chia Seeds

**Track Code: 2020-LICE-68853** 

#### **Categories:**

- Food and Nutrition

#### **Keywords:**

- Food and Nutrition
- Food Processing
- Food Products
- food technology
- Nutrition

Researchers at Purdue University have developed an improved extraction method for the separation of mucilage from chia seeds, yielding a protein-rich chia seed flour with improved bioactivity and functionality compared to conventional methods. Current methods for separation of mucilage, such as freeze-drying or oven-drying, are inefficient which can lead to wasted time and product. In comparison, the Purdue method has demonstrated higher mucilage extraction yield  $(7.65 \pm 0.19\%)$ , compared to freeze-drying  $(4.21 \pm 0.29\%)$  and oven drying  $(3.65 \pm 0.18\%)$ . This improved efficiency can save both time and money for companies processing chia seeds for nutritional, pharmaceutical or other applications.

#### Advantages:

- -More efficient
- -Higher yield

#### **Potential Applications:**

- -Nutrition
- -Pharmaceuticals

#### **People:**

- Liceaga, Andrea M (Project leader)
- Urbizo-Reyes, Uriel

#### **Intellectual Property:**

**Application Date:** December 11, 2020

**Type:** Utility Patent

**Country of Filing:** United States

**Patent Number:** (None) **Issue Date:** (None)

Application Date: December 12, 2019

**Type:** Provisional-Patent

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