

# **NDSU Extension Community Education**

**Presented By:**

- **Julie Garden-Robinson, Ph.D., L.R.D.**  
Food and Nutrition Specialist
- **Stacy Halvorson, R.D.**  
Extension Associate

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# Extension's Role

- **Community outreach**
- **Education**
- **Individuals involved:**
  - Julie Garden-Robinson, Ph.D., L.R.D.  
Food and Nutrition Specialist
  - Stacy Halvorson, R.D.  
Extension Associate
  - Kendra Otto (Child Development)
  - Emily Franzen (Dietetics)
  - Amy Hutchinson (Dietetics)
  - Kayla Colvin (Dietetics)

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# Extension's Role

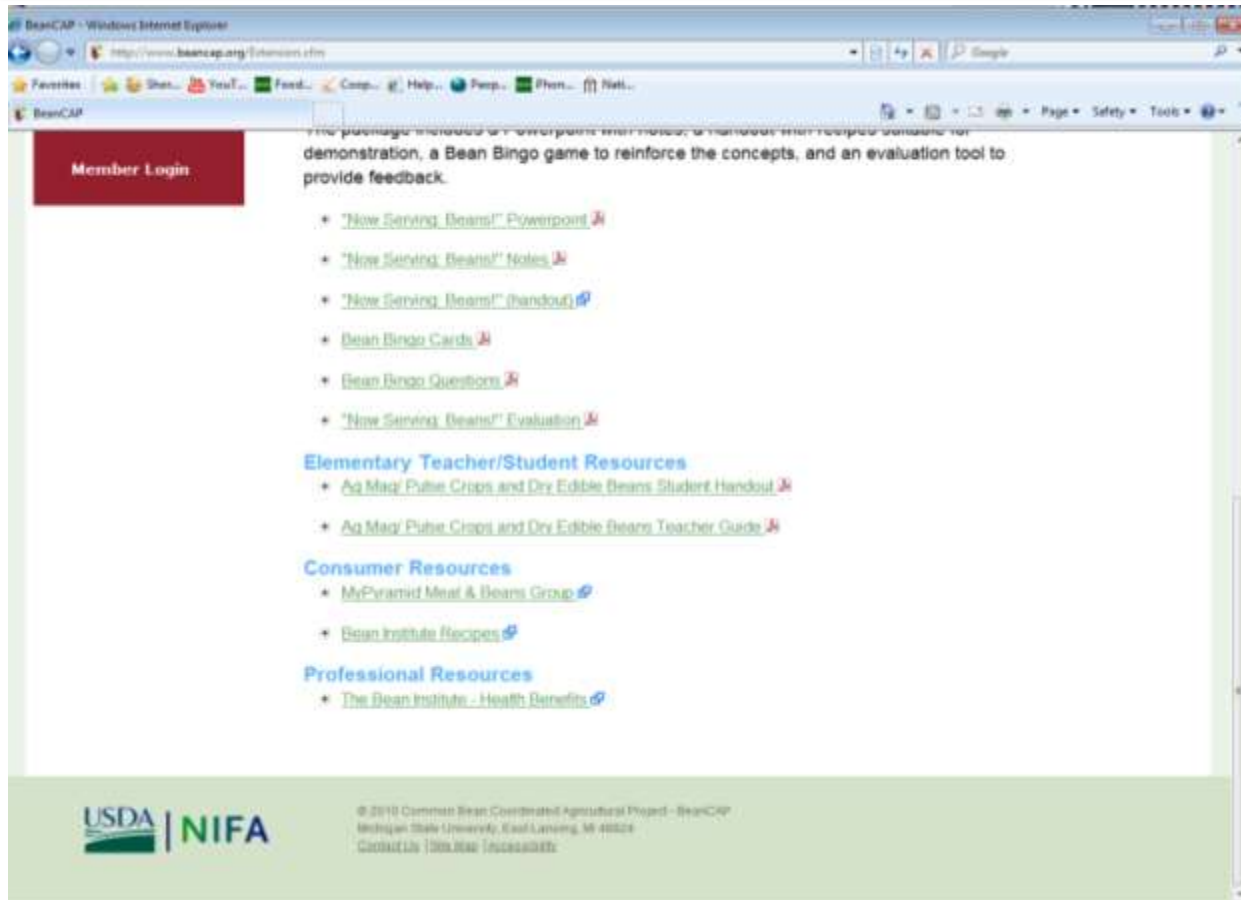
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# Extension's Role



The screenshot shows a web browser window displaying the BeanCAP website. The page features a navigation menu with a "Member Login" button. The main content area lists several resources:

- "New Serving Beans!" Powerpoint
- "New Serving Beans!" Notes
- "New Serving Beans!" Handout
- Bean Bingo Cards
- Bean Bingo Questions
- "New Serving Beans!" Evaluation

Below these are three sections of resources:

- Elementary Teacher/Student Resources**
  - Ag Mag Pulse Crops and Dry Edible Beans Student Handout
  - Ag Mag Pulse Crops and Dry Edible Beans Teacher Guide
- Consumer Resources**
  - MyPyramid Meat & Beans Group
  - Bean Institute Recipes
- Professional Resources**
  - The Bean Institute - Health Benefits

The footer of the page includes the USDA | NIFA logo and copyright information: © 2010 Common Bean Coordinated Agricultural Project - BeanCAP, Michigan State University, East Lansing, MI 48824, Contact Us | 1000.880.1100.880.1100.

<http://www.beancap.org/Extension.cfm>

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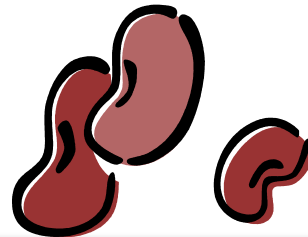


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# Community Outreach

- Distribution of materials:
  - 90 Family and Consumer Science teachers
  - 60 Extension agents in Family and Consumer Sciences, Expanded Food and Nutrition Education Program and the Family Nutrition Program



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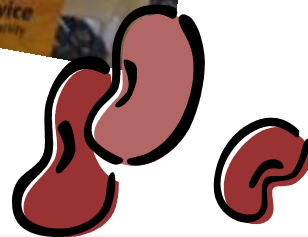


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# Community Outreach

- Health Fairs



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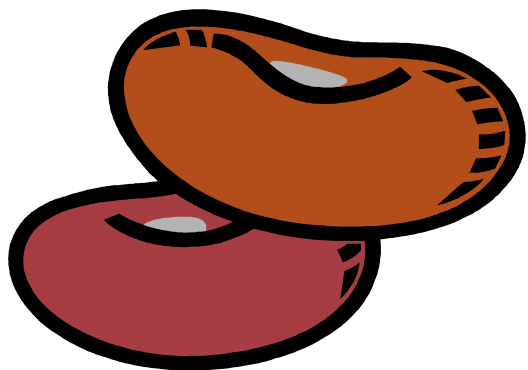
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# Bean Lesson Plan

- Now Serving: Beans! PowerPoint
- Now Serving: Beans! Handout
- Bean Bingo Kit



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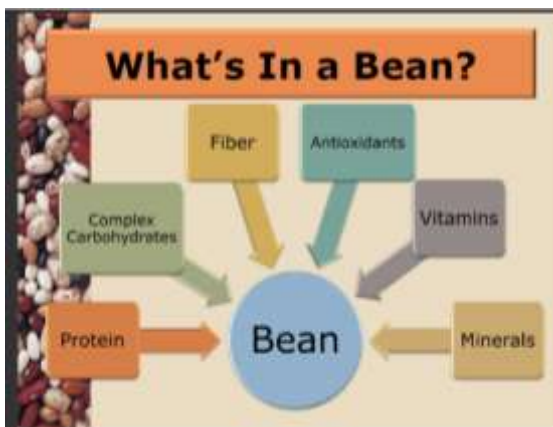
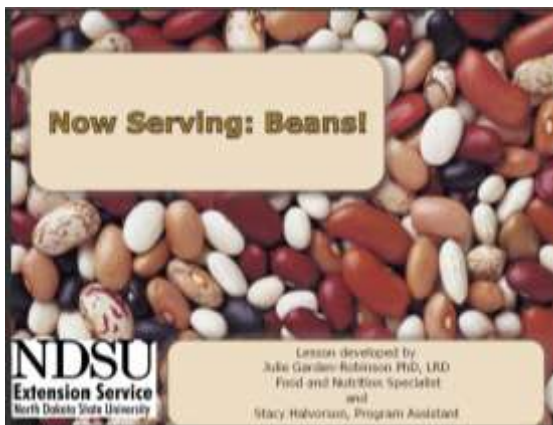
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# Educational PowerPoint

## Now Serving: Beans!

- Quick Facts
- What's In a Bean
- Knowledge Question
- MyPyramid Recommendations
- A Healthy Choice
- Adding Beans to Your Diet
- Preparing Beans
- Cooking Tips



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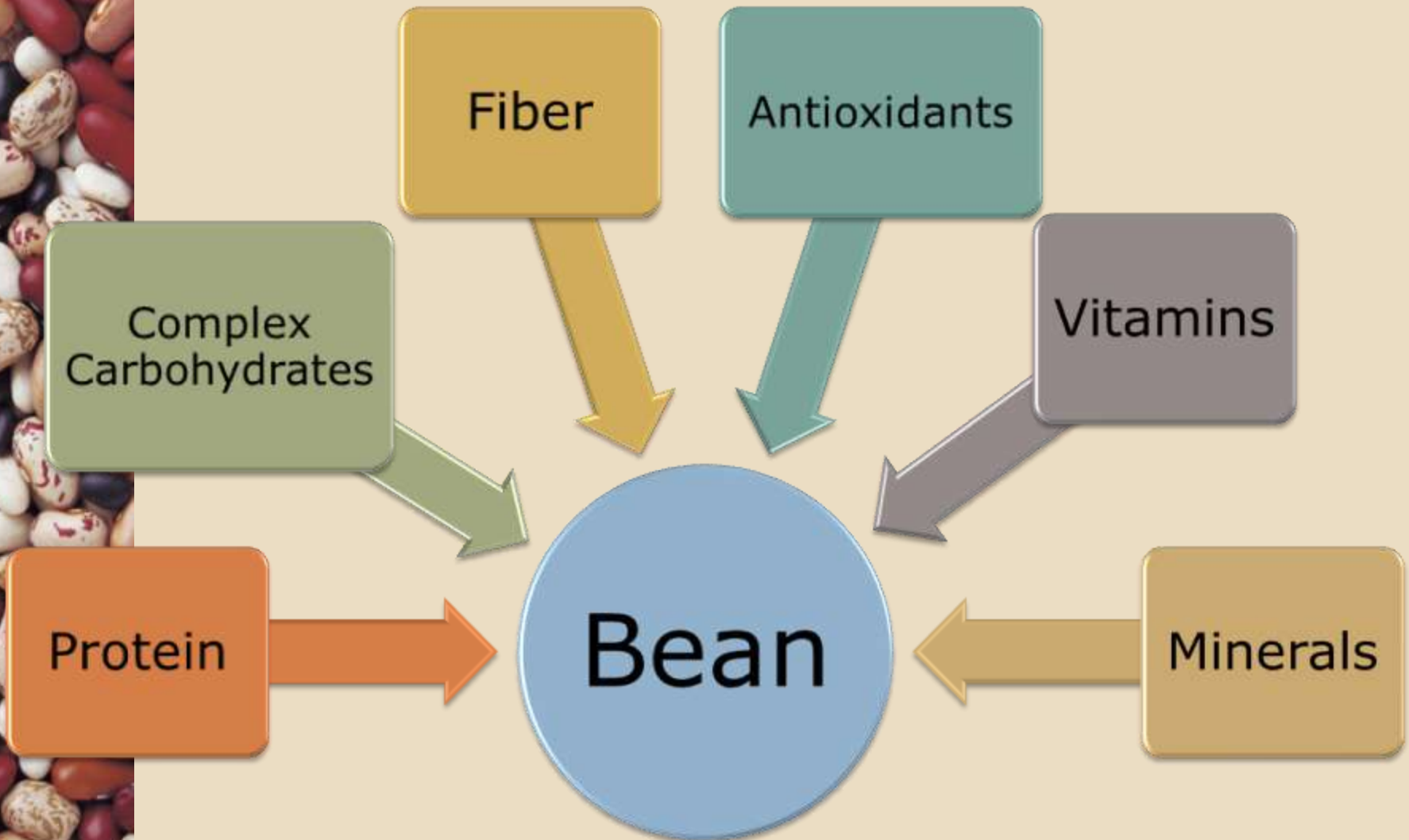


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# What's In a Bean?



# MyPyramid Recommendations



**1 cup cooked beans  
=  
1 cup vegetables**



**1/4 cup cooked  
beans =  
1 ounce equivalent**

# Adding Beans to Your Diet



**Main  
Dishes**



**Pasta**



**Side  
Dishes**



**Dips and  
Spreads**



**Salads**



**Baked  
Goods**

# Handout



## Now Serving: Beans!

Jake Gordon-Rubenstein, Ph.D., L.R.D., Food and Nutrition Specialist  
Sheryn Robinson, Program Assistant

If you're looking for a way to stretch your budget and improve your family's nutrition, look no further. Consider adding more beans to your meals. They're convenient, versatile and lend themselves to many tasty dishes. Beans are a rich source of protein, fiber, vitamins and minerals.

Beans add into the kitchen to help you make bean dips or accompany baked chips or vegetables. Replace some of the fat in cooked goods such as breads with mashed black beans. Beans can be added to casseroles or soups to add beans, texture and more nutrients.

### Aim for MyPyramid Recommendations

Beans are a part of the legume family. MyPyramid classifies beans into two groups: the Meat and Beans Group and the Vegetable Group. MyPyramid recommendations for meats and beans are measured in ounces whereas recommendations for vegetables are measured in cups.

■ ½ cup cooked beans = 1 ounce equivalent for the Meat and Beans Group

■ 1 cup cooked beans = 1 cup of vegetables

The recommended amounts for both food groups vary from person to person depending on age, gender and activity level. To learn more about what is right for you and your family, visit [www.hippocampus.gov](http://www.hippocampus.gov)

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605.274.3100



Beans are composed of protein, complex carbohydrates, fiber, antioxidants and important vitamins such as B6 and minerals, including manganese, potassium, iron, phosphorus, copper and magnesium. On average, ½ cup of beans contains 110 calories, 8 grams of protein and less than 1 gram of fat. This makes beans a good addition to any diet.

### Beans for Your Health!

**Heart health:** Beans are naturally low in fat and contain no saturated fats, trans fats or cholesterol. Studies show a diet that includes beans may reduce the risk of heart disease.

**Cancer-reducing agents:** Beans such as the small red bean have an abundance of antioxidants and phytochemicals (natural plant chemicals), which have been shown to reduce the risk of certain cancers such as colon cancer.

**Blood sugar management:** Beans contain complex carbohydrates the body digests slowly. This makes them a good choice for diabetics to help keep tight control over their blood sugar levels.

**Weight control:** Beans are low in fat and an excellent source of fiber and protein. Fiber and protein will help the body feel full longer. Protein, along with exercise, will help build lean muscle.

**Pregnancy and healthy babies:** Folate (the natural form of the B vitamin folic acid) is one of the many vitamins found in beans. Folate acid has been shown to reduce the risk of neural tube defects in newborns significantly. Pregnant women and women of child bearing age should get the daily recommendation of 400 micrograms of folic acid. Eating a diet rich in beans will contribute to this goal.

## Now Serving: Beans!

- Aim for MyPyramid Recommendations
- Beans for Your Health!
- Tips for Adding Beans to Your Diet
- Preparation and Cooking Tips

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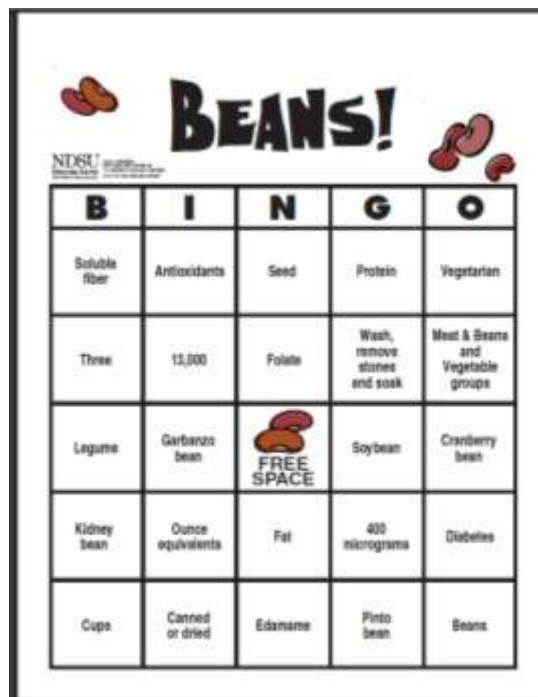
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# Bean Bingo!

## Bean Bingo Kit:

- Question Booklet
- 25 Bingo Cards
- Evaluation Sheet



The image shows a sample 'Bean Bingo' card. At the top, it says 'BEANS!' in large, bold letters, flanked by illustrations of beans. Below the title is a 5x5 grid. The first row contains the letters B, I, N, G, O. Each letter corresponds to a column of information. The grid contains the following text:

B	I	N	G	O
Soluble fiber	Antioxidants	Seed	Protein	Vegetarian
Three	13,000	Folate	Wash, remove stones and soak	Meat & Beans and Vegetable groups
Legume	Garbanzo bean	 FREE SPACE	Soybean	Cranberry bean
Kidney bean	Dance equivalents	Fat	400 micrograms	Diabetes
Cups	Canned or dried	Edamame	Pinto bean	Beans



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# Bean Bingo!

## Test Your Knowledge

1. What component of beans may help reduce cholesterol levels?

Soluble Fiber

2. Beans are a part of which plant family?

Legumes

3. How many legumes, such as beans, are recommended each week?

3 cups



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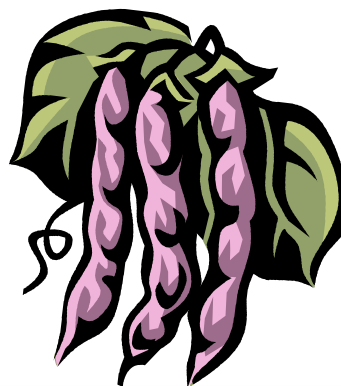
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# Bean Bingo Feedback

- Evaluation tool:
  - 6 questions
  - Rating scale 1 (lowest rating) to 5 (highest rating)
  - Ability for multiple evaluations
  - Entry for gender data



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# Bean Bingo Feedback

- Question 1:

5 = Very good

- How would you rate the effectiveness of this learning tool?

Average score: 4.7

- Question 2:

- How would you rate the participants' interest in the material?

Average score: 4.4

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# Bean Bingo Feedback

- Question 3:

5 = Very good

- How would you rate the participants' knowledge of the material **prior to** the activity?

Average score: 2

- Question 4:

- How would you rate the participants' knowledge of the material **following** the activity?

Average score: 3.8

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# Bean Bingo Feedback

- Question 5:
  - Did you prepare or sample any bean recipes along with this lesson? **63% reported YES**
- Question 6:
  - Did you use other techniques to reinforce the concepts (PowerPoint, discussion, handout, etc.)? **88% reported YES**

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# Bean Bingo Feedback

- Comments from educators:
  - “Good way to present knowledge; participants had fun learning.” – Sioux County, ND
  - “It (kit) was all ready to go and did not require a lot of prep time. The participants enjoyed playing the game.” - Nelson County, ND
  - “ My students enjoyed it and it reinforced the lesson.” – Logan/McIntosh Counties, ND
  - “The questions brought up discussion about much more than just beans. Games help keep interest too.” - Ward County, ND

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# Recipe Development



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# Recipe Development



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# Consumer Video

## “Country Chili Mix”



<http://www.youtube.com/user/NDSUExtension#p/u/0/Rqz3KKMh5Po>

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# In Development

- Preschool Project
  - Lesson Plan
  - Plant Experiment
  - Sensory Evaluation – Taste-testing
  - Parent Education



- Middle/High School Project
  - Lesson Plan
  - Plant Experiment

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# In Development

- Survey of Extension agents, teachers, and Extension Specialists in agriculture, nutrition and family and consumer sciences.



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# Thank you.

## Any questions????



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