

# PULSES

**LENTILS, CHICKPEAS  
AND SPLIT PEAS**

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

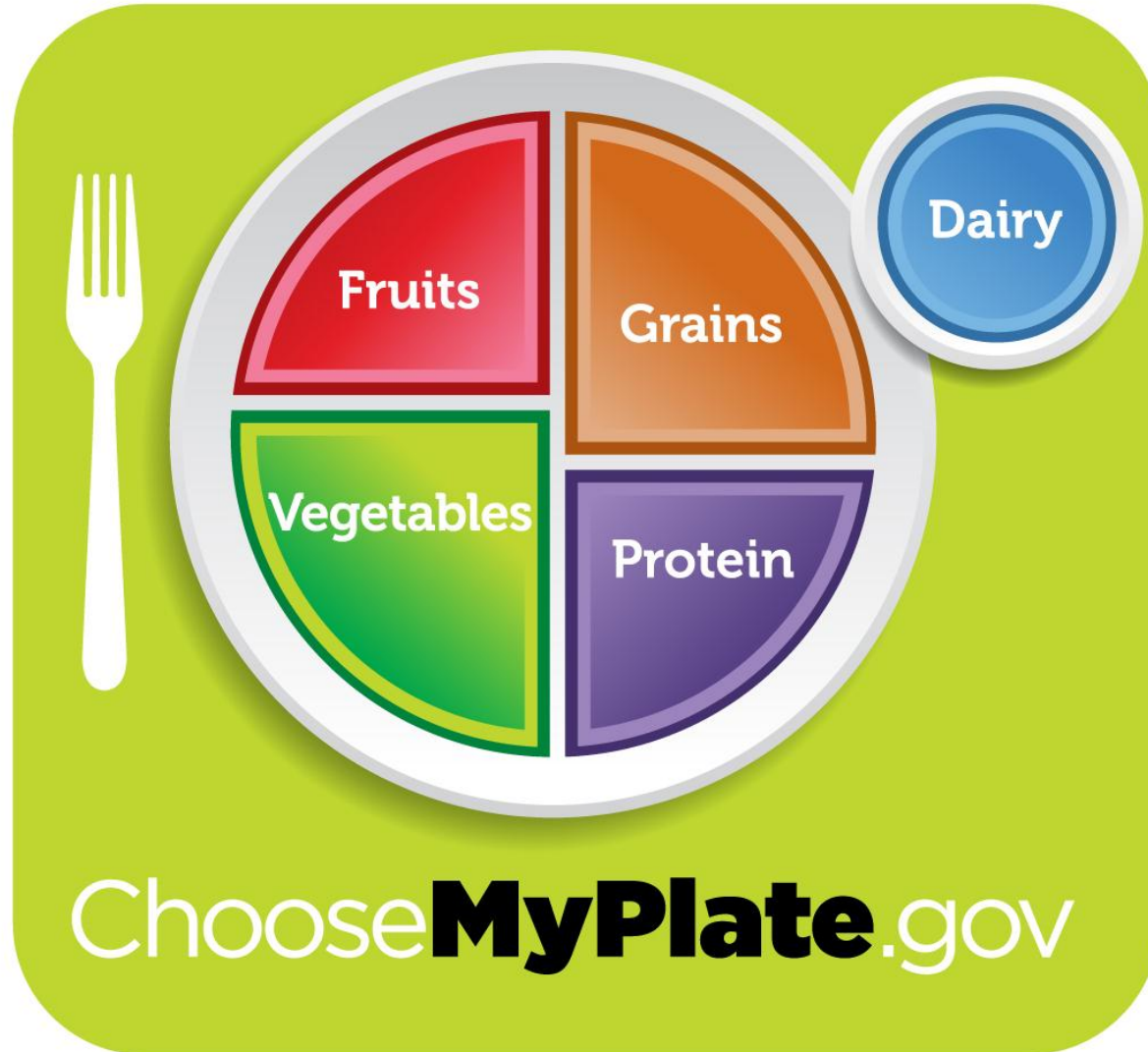
**NDSU**  
**Extension Service**  
North Dakota State University



Northern  
Pulse Growers  
Association



# MYPLATE





## Search FNS

  
**Go**

- Search all USDA
- Search Tips
- Topics A-Z

## Email Updates



Sign-up to receive  
free email updates

## Browse by Subject

- Applications
- Income Eligibility
- Reimbursement Rates
- Legislation
- Regulations
- Program Policy
- Guidance & Resources
- CN Labeling
- Food Safety
- School Nutrition

You are here: [Home](#) > [School Meals](#) > [Legislation](#) > [Healthy, Hunger-Free Kids](#) > [Nutrition Standards](#)

# Nutrition Standards for School Meals

Through the [Healthy, Hunger-Free Kids Act](#) championed by the First Lady and signed by President Obama, USDA is making the first major changes in school meals in 15 years, which will help us raise a healthier generation of children.

The new standards align school meals with the latest nutrition science and the real world circumstances of America's schools. These responsible reforms do what's right for children's health in a way that's achievable in schools across the Nation.



## Regulation

- [Final Rule: Nutrition Standards in the National School Lunch and School Breakfast Programs \(1/26/12\)](#)
  - [Press Release](#)
  - [School Meals Sample Menu \(PDF\) \(JPG\)](#)
  - [Final Summary of Public Comments on Proposed Rule](#)
- [Interim Rule: Certification of Compliance With Meal Requirements for the National School Lunch Program Under the Healthy, Hunger-Free Kids Act of 2010 \(4/27/12\)](#)
  - [Press Release: USDA to Provide Additional Funds for Nation's School Meals \(4/27/12\)](#)
  - [Child Nutrition Reauthorization 2010: Questions and Answers Related to the Certification of Compliance with Meal Requirements for the National School Lunch Program \(4/27/12\)](#)
  - [Presentation: Certification of Compliance with New Meal Pattern Requirements \(PDF\)](#)
  - [Performance Based Certification: Prototype Performance Work Statement, Performance](#)



# FOCUS ON VEGETABLES

**Offer  $\frac{3}{4}$  cup of  
vegetables to  
grades K-8 and  
1 cup of  
vegetables to  
grades 9-12**



# MUST OFFER VEGETABLES FROM THESE GROUPS WEEKLY

Dark green

Starchy

Orange/red

Other

Dry edible beans/lentils



# **WHICH OF THESE ARE CONSIDERED PULSE CROPS?**

**Lentils**

**Oats**

**Chickpeas**

**Corn**

**Dry Peas**

**Wheat**

**Barley**

**Rye**

**Green  
Beans**

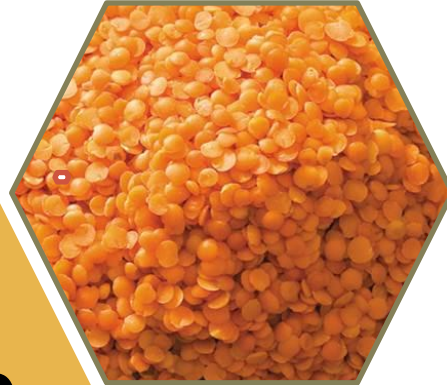


# **PULSES ARE LEGUMES, (SEEDS THAT GROW IN THEIR PODS)**

**Today's  
focus**



**Lentils**



**Dry  
Peas**



**Chickpeas**



# **WHAT HEALTH BENEFITS ARE ASSOCIATED WITH PULSE CROPS?**

**Skin health**

**Reduce risk  
of birth  
defects**

**Bone health**

**Heart  
health**

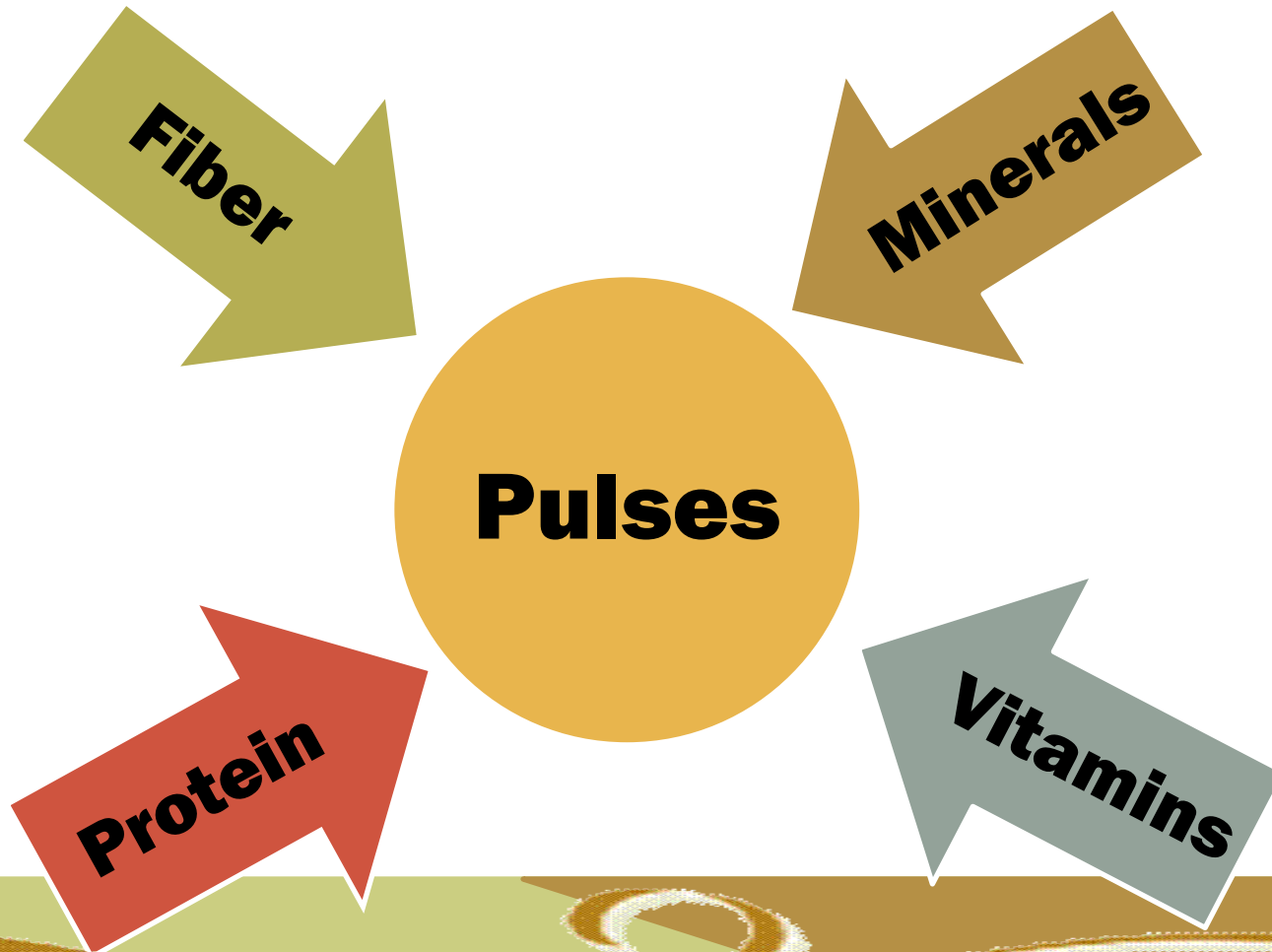
**Eye health**

**Reduce risk  
of certain  
cancers**





# NUTRITIONAL CHARACTERISTICS



Nutrient (unit)	Reference Diet (used on food labels)	Chickpeas/garbanzo beans (per cup, cooked, without added salt)	Lentils (per cup, cooked, without added salt)	Split peas (per cup, cooked, without added salt)
Calories (kcal)	2,000	269	230	231
Total Fat (g)	Less than 65	4.3	0.8	0.8
Saturated Fat (g)	Less than 20	0.4	0.1	0.1
Trans Fat (g)	(No value set; minimize in diet)	0	0	0
Cholesterol (mg)	Less than 300	0	0	0
Sodium (mg)	Less than 2,400	11	4	4
Total Carbohydrate (g)	300	45	39.9	41.3
Fiber (g)	25	12.5	15.6	16.3
Protein (g)	50	14.5	17.9	16.4
Vitamin A (IU)	5,000	44	16	14
Vitamin C (mg)	60	2.1	3.0	0.8
Calcium (mg)	1,000	80	38	27
Iron (mg)	18	4.7	6.6	2.5
Folate (mcg)	400	282	358	127

## Fiber Recommendations for Adults

Women < 50 years	25 grams
Men < 50 years	38 grams
Women > 50 years	21 grams
Men > 50 years	30 grams



## Fiber Recommendations for Kids

4 to 8 year olds boys and girls	25 grams
9- to 13-year- old girls (boys)	26 grams (31 grams)
14- to 18-year- old girls (boys)	26 grams (38 grams)





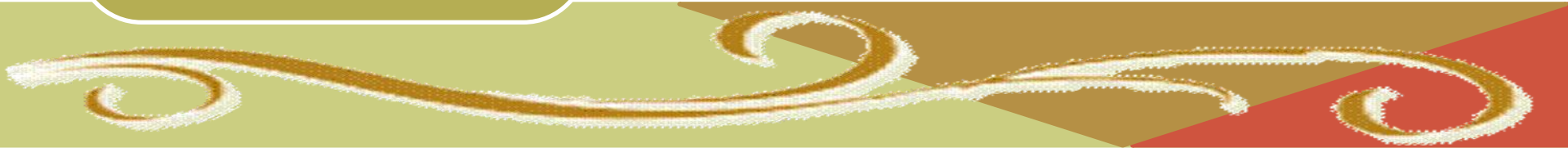
# **MYPYRAMID RECOMMENDATIONS**

## **Vegetable Group**

**1 cup whole or mashed peas  
or lentils  
= 1 cup of vegetables**

## **Meat and Beans Group**

**$\frac{1}{4}$  cup of cooked chickpeas,  
lentils or peas  
= 1 ounce equivalent**



# **MYPYRAMID RECOMMENDATIONS**



**2.5 cups to  
3.5 cups of  
beans, peas  
or lentils per  
week**



# ROLE IN SPECIAL DIETS

**Gluten-free diet**

**Diabetic Diet**

**Vegetarian Diet**

**Weight Management Diet**



# PREPARING LENTILS

**Remove stones and rinse  
lentils**



**No soaking required**



**Add 2.5 cups water for  
every 1 cup of lentils**



**Heat water to boiling, simmer  
lentils for 15 to 20 minutes**

**Yield:  
1 cup lentils  
+ 2.5 cups  
water =  
About 2.5 cups  
cooked  
lentils**



# PREPARING CHICKPEAS

**Remove stones and rinse chickpeas**



**Must soak using one of the following methods: slow soak, hot soak, or quick soak**



**Add 2 cups water for every 1 cup of chickpeas**



**Simmer for 1.5 to 2 hours**

**Yield:**

**1 cup chickpeas  
+ 2 cups water**

**=**

**About 2 cups  
cooked  
chickpeas**

# PREPARING SPLIT PEAS

**Remove stones and rinse  
split peas**



**No soaking required**



**Add 2 cups water for  
every 1 cup of split peas**



**Heat water to boiling, simmer  
split peas for 30 minutes**

**Yield:**

**1 cup split peas  
+ 2 cups water**

**=**

**About 2 cups  
cooked  
split peas**

# ON THE MENU



**Curry**



**Salsa**



**Stir-fry**



**Hummus**



**Pasta**



**Baked goods**

# Creamy Mashed Potatoes

Replace part of  
the potato flakes  
with roasted  
yellow pea flour.





# Tacos, Spaghetti Sauce with Added Lentils



# STORING PULSES

## Uncooked

**Store dry, uncooked pulses in a sealed container in a cool, dry place.**



## Cooked

**Refrigerate leftovers at 40 degrees F and use within three days.**



# **TOP 10 REASONS TO USE PULSES**

**Excellent  
source of  
fiber**

**Good source  
of protein**

**Low fat**

**Low sodium**

**Good source  
of iron**

**Excellent  
source of  
folate**

**Good source  
of  
potassium**

**Low  
glycemic  
index**

**Gluten-free**

**Cholesterol-  
free**



# ADDITIONAL INFORMATION

NDSU Extension Service

<http://www.ag.ndsu.edu/ndsuag/food-nutrition>

Northern Pulse Growers Association

[www.northernpulse.com](http://www.northernpulse.com)

MyPyramid Website

[www.mypyramid.gov](http://www.mypyramid.gov)



Northern  
Pulse Growers  
Association

**NDSU**  
**Extension Service**  
North Dakota State University

