

## Introduction:

In 2010, Congress passed the Healthy, Hunger Free Kids Act ( HHFKA, 2010), updating nutrition standards for school meals based on guidance from the Institute of Medicine and Dietary Guidelines for Americans, 2010. Changes included: adding daily & weekly requirements to serve nutrient dense foods while, limiting total calories, fat, saturated fat, and sodium. HHFKA 2010 established the vegetable subcategory: “Beans and Peas (legumes)” including weekly serving requirements for dry beans, peas, lentils, chickpeas ( collectively known as pulse crops or pulses). Nutritionally unique, pulses are recognized as either a vegetable or as a meat alternate. The APA and US-ADPLC support HHFKA 2010’s positive impact on US school meals and encourages its reauthorization.

## NUTRITION GAPS

**“93% of children consume fewer vegetables than recommended.”<sup>1</sup>**

The USDA identifies FIBER, POTASSIUM, vitamin E, calcium, and vitamin D as nutrients of concerns for kids.

**Meaning = kids are not eating enough of these nutrients.**

## FILLING NUTRITION GAPS WITH NUTRIENT DENSE PULSES

Beans, dry peas, lentils, chickpeas are uniquely situated to help address both the nutrient gaps and chronic disease risk factors facing many Americans, including children. In fact, the National Collaborative on Childhood Obesity Research found that diet quality scores of children and adolescents would be improved by increasing the intake of vegetables, especially dark greens and beans<sup>2</sup>.

Pulse crops are the least expensive source of dietary fiber and potassium in the food supply<sup>3</sup> offering a cost-effective way to increase the nutritional quality of school meals.

Increasing pulses in school meals is an economical way to add plant proteins, vitamins, minerals, and fiber into children’s diets without increasing saturated fat or cholesterol.

Despite these wonderful attributes, pulses are not widely used in most large school food service operations. Based on 2012 survey of 141 school nutrition professionals, the major barriers to using pulses in schools included:

- lack of labor to prepare pulses, and
- lack of heat & serve ready products.

Recently, the USDA allowed for smoothies with pureed vegetables ( including subcategory beans and peas) to be counted towards vegetable requirements. This type of increased flexibility in using pulse crops will decrease barriers to using these nutrient dense foods in federal feeding programs.

## Recommendations

1. Continue requirements for minimum weekly servings of vegetables from subcategories including “BEANS AND PEAS (LEGUMES)” in the school meal program.
2. Include the term *Pulses* collectively known as beans, dry peas, lentils, and chickpeas into the “BEANS AND PEAS (LEGUMES)” category definition.
3. Allow both whole or pureed pulses and ingredients derived from an eligible pulse crop to be credited in federally reimbursable meals. These food products include pulse flours and pulse-based products such as chips and pastas.

With 7-8 grams of fiber per 1/2 cup, lentils, beans, peas, chickpeas, are considered excellent sources of fiber!

Pulse crops are also rich in protein, potassium, iron, and magnesium.

| 1 serving =<br>1/2 cup | Pinto<br>Beans | Lentils |
|------------------------|----------------|---------|
| Kcals                  | 116            | 115     |
| Fat (g)                | < 0.5          | < 0.5   |
| Protein (g)            | 7.0            | 8.9     |
| Carbohydrates (g)      | 22             | 20      |
| Fiber (g)              | 7.3            | 7.8     |
| Potassium (mg)         | 398            | 365     |
| Iron (mg)              | 2.2            | 3.3     |
| Magnesium (mg)         | 43             | 36      |

<sup>1</sup> Morbidity and Mortality Weekly Report Vital Signs: Fruit and Vegetable Intake Among Children — United States, 2003–2010 (August 2014)

<sup>2</sup> Healthy Eating Index scores: diet quality based on the Dietary Guidelines for Americans 2010 (scores range from 0-100) <http://www.nccor.org>

<sup>3</sup> Drewnowski, and Rehm ( 2013) Vegetable cost Metrics Show that potatoes and beans provide most nutrients per penny. PlosOne.