

CONTINUING EDUCATION SPECIAL

Today's Dietitian

The Magazine for Nutrition Professionals

FREE CE COURSE

An Early Start on a Vegetarian Lifestyle

*Nutritional Recommendations
for Vegetarian Children*

Cowboy Pinto Bean
Cheeseburger Sliders
(page 10)

provided by



Includes recipes from



www.bushbeansfoodservice.com



AN EARLY START ON A VEGETARIAN LIFESTYLE

Nutritional Recommendations for Vegetarian Children

By Sharon Palmer, RD

In 2005, an Arizona couple was charged with child abuse after their three vegan children were found to be severely malnourished; their 3-year-old weighed only 12 lbs. Although the parents reportedly believed they were feeding their children healthfully, their diets appeared to lack important nutrients.

Thanks to well-publicized stories like this one, many misperceptions shroud the viability of a vegetarian or vegan lifestyle for young children—misperceptions that sometimes find their way into the beliefs of healthcare professionals. While poorly planned vegetarian diets can be harmful for the development and health of young children, it's entirely possible to meet the nutritional needs of even the tiniest individuals. However, it takes thorough knowledge of plant-based nutrition to achieve this, and that's where dietitians can come in.

"I occasionally hear statements from both the public and dietitians to the effect that vegetarian or vegan diets are fine for adults but not for infants and children," explains Reed Mangels, PhD, RD, FADA, LDN, nutrition advisor for The Vegetarian Resource Group, a nonprofit educational organization. "It's entirely possible for vegetarian or vegan diets to meet all nutritional needs of infants and children." Mangels also is an expert in childhood vegetarianism and has developed materials on vegetarianism for children for both the Vegetarian Nutrition Dietetic Practice Group and The Vegetarian Resource Group, published articles on vegan infants and children in the *Journal of Academy of Nutrition and Dietetics*, contributed to the vegetarian section of the Academy of Nutrition and Dietetics'

(the Academy) *Pediatric Nutrition Care Manual*, coauthored two Academy position papers on vegetarian diets, served as nutrition editor and columnist for the *Vegetarian Journal*, and coauthored *The Dietitian's Guide to Vegetarian Diets*.

Mangels' assertion that vegetarian or vegan diets can meet the nutritional needs of infants and children is supported by the review of evidence-based literature appearing in the Academy's position statement on vegetarian diets published in 2009.¹

This continuing education course will discuss some of the current trends in plant-based eating, examine some of the potential health benefits associated with plant-based eating, and set out specific strategies for parents interested in raising vegetarian or vegan children.

Vegetarians and Vegans: What's the Difference?

According to the Academy's position statement, a vegetarian is a person who does not eat meat, poultry, seafood, or products containing these foods.¹ But within this broad definition, there is much variation as to what animal foods people avoid.

Two common plant-based diets are vegetarian and vegan. A vegetarian diet usually is synonymous with a lacto-ovo vegetarian diet, which is devoid of all animal/flesh foods but may include eggs (ovo) and/or dairy (lacto) products. Vegans follow diets devoid of all animal/flesh foods and all egg and dairy products.

It's important to consider that these categories are broad, and people may describe themselves as vegetarian when they sometimes eat fish or chicken; in this case, they usually are referred to as semivegetarian or flexitarian.

Benefits of a Vegetarian Lifestyle

One goal of living la vida vegetarian is to enjoy the documented health benefits that vegetarians tend to experience. According to the Academy, for adults vegetarian diets often are

LEARNING OBJECTIVES

After completing this continuing education course, nutrition professionals should be able to:

1. Discuss recent trends in the popularity of plant-based diets.
2. List and discuss three nutrients of concern for children who eat a vegetarian or a vegan diet.
3. List and discuss two potential benefits of vegetarian or vegan diets for children.
4. Provide nutritional recommendations to clients who want to have their infants or toddlers consume a vegetarian or vegan diet.

associated with lower blood cholesterol levels and blood pressure levels, and a lower risk of heart disease, hypertension, and type 2 diabetes. Vegetarians also tend to have a lower BMI and overall cancer rates. Vegetarian diets usually are lower in saturated fat and cholesterol, and have higher levels of dietary fiber, magnesium, potassium, vitamins C and E, folate, carotenoids, flavonoids, and other phytochemicals.¹

Who Follows a Vegetarian Lifestyle?

A vegetarian lifestyle has become more popular in the United States, with sales of vegetarian foods and publications on the rise. Although there is no analysis of the incidence of vegetarian or vegan practice among peer-reviewed data, such as the National Health and Nutrition Examination Surveys, polls have been commissioned by vegetarian organizations. A 2008 study based on data collected by Harris Interactive and published by *Vegetarian Times* indicated that 3.2% of US adults (7.3 million people) follow a vegetarian-based diet. Approximately 0.5% of US adults were vegans, and 10% said they largely follow a vegetarian-inclined diet.²

A 2011 survey of 1,010 US adults by Harris Interactive on behalf of The Vegetarian Resource Group reported that 5% never eat meat, fish, seafood, or poultry, which makes them vegetarian. About one-half of these vegetarians are also vegan.³ (Table 1 outlines the survey results.)

Although many of the data on vegetarianism deal with adults, another 2010 poll by Harris Interactive asked 1,258 youths aged 8 to 18 how often they ate meat, poultry, seafood, dairy, eggs, and honey. The results showed that 3% of them were vegetarian or vegan.⁴ (See Table 2 on the next page for additional information on teen vegetarian habits).

There appears to be a slow rise in vegetarianism among children and teens over the past two decades. In 2005, a similar poll was conducted by Harris Interactive in the same age group, finding that the same percentage of 8- to 18-year-olds were vegetarians.⁵ However, Mangels reports that polls by The Vegetarian Resource Group indicate a small increase in the number of vegetarian children and teens since 1995.⁴

Parent Preference

While many parents choose a vegetarian lifestyle for themselves and their children, older children and teens may be attracted to this lifestyle on their own. The reasons for parents choosing a vegetarian lifestyle for their children are numerous and varied, including personal health and wellness, spiritual and religious beliefs, concerns about animal welfare, food safety issues related to meat, and regard for the environmental consequences of a meat-based diet. And the growing popularity of vegetarian lifestyles is certainly influenced by the plethora of celebrities, such as Alicia Silverstone and Tobey Maguire, proclaiming the virtues of vegetarianism. The 2008 Harris Interactive study found that 53% of current vegetarians eat such a diet

Table 1 How Many and How Often Adults Ate Meat³


Males	Females	Frequency
5%	6%	One meal per week
2%	5%	One day per week
13%	20%	Many meals but fewer than one-half
15%	17%	More than one-half of meals but not all
2%	2%	Never eat meat, fish, or poultry (vegetarian but not vegan)
3%	2%	Never eat meat, fish, poultry, dairy, or eggs (vegan)

to improve their overall health. Environmental concerns were cited by 47% of respondents, and 39% cited natural approaches to wellness, 31% food-safety concerns, 54% animal welfare, 25% weight loss, and 24% weight maintenance.²

Mangels notes that recent environmental concerns may provide special motivation for parents to consider vegetarianism for their children. She indicates that livestock production causes environmental damage in several ways. For example, "The livestock sector is responsible for a greater production of greenhouse gas than automobiles and other forms of transportation; livestock produce almost two-thirds of ammonia emissions, a significant contributor to acid rain; and in the United States, livestock are responsible for 55% of erosion and sediment, 37% of pesticide use, and 50% of antibiotic use.⁶ Numbers like these inspire many parents to choose a vegetarian diet for their families. Adopting a vegetarian diet early in life lessens one's lifelong impact on the environment."

With today's focus on the devastating effects of America's obesity epidemic that strikes children at ever-younger ages, the vegetarian lifestyle takes on new meaning as a lifelong approach to better health. According to the Centers for Disease Control and Prevention (CDC), almost one in five youths between the ages of 6 and 19 is obese (BMI in the

How to Earn 1 CPEU



Read this article and select your answers for the examination. Then visit our CE Learning Library at CE.TodaysDietitian.com to complete the online exam and earn your credit certificate. For more information, call our continuing education division toll-free at 877-925-CELL (2355) (M-F, 9 AM - 5 PM ET) or visit www.TodaysDietitian.com.

Suggested CDR Learning Codes: 3020, 4010, 4040, 4110, 4150, 5070; Level 1

95th percentile or higher of the CDC growth chart) and 61% of obese children aged 5 to 10 have one or more risk factors for heart disease, and 27% have two or more.⁷

“There are not a lot of recent studies of vegetarian children, so it’s difficult to generalize about their weight status. We do know that vegetarian adults have lower BMIs than nonvegetarian adults. This could suggest that if a child continues to be vegetarian throughout life, he or she will typically have a lower risk of overweight and obesity,” Mangels says.

In one recent literature review, Loma Linda University researchers reported that, compared with nonvegetarians, vegetarian children are leaner, and their BMI difference becomes greater during adolescence. They indicated that studies exploring the risk of overweight and food groups and dietary patterns show that a plant-based diet seems to be a sensible approach for preventing obesity in children because these diets are low in energy density and high in complex carbohydrates, fiber, and water, which may increase satiety and resting energy expenditure.⁸

Of course, it’s important to consider that while some data suggest that vegetarian children may have a lower risk of obesity than their omnivorous peers,¹ some vegetarian kids are

Table 2 Percentages of US Youth and Vegetarian/Vegan Practices⁴

Reported Dietary Practices	Males and Females Ages 8 to 18	Males Ages 8 to 18	Females Ages 8 to 18	Males and Females Ages 8 to 12	Males and Females Ages 13 to 18
Vegetarian or vegan	3	3	3	4	3
Vegan and vegan except honey	2	3	2	N/A	N/A
Never eat fish	22	N/A	N/A	N/A	N/A
Never eat poultry	7	N/A	N/A	N/A	N/A
Never eat meat	7	8	7	8	7
Never eat eggs	11	N/A	N/A	N/A	N/A
Never eat dairy	6	N/A	N/A	N/A	N/A
Never eat honey	21	N/A	N/A	N/A	N/A

Note: Not all vegetarians are vegans. Percentages are rounded to the nearest whole number, with a sampling error of about 3%.

overweight and show signs of diet-related conditions such as type 2 diabetes and high cholesterol. Just like with any child, it’s possible for vegetarian children to be overly dependent on junk foods and high-sugar beverages since “vegetarian” is not synonymous with “healthful.” The bottom line is that modern vegetarian kids can have the same challenges as modern nonvegetarian kids.

Basics of Vegetarianism for Infants and Children

Probably the biggest concern about vegetarianism in early childhood is nutritional adequacy. Yet the Academy’s position on vegetarian diets is that when well planned, such diets are appropriate for individuals during all stages of life, including pregnancy, lactation, infancy, childhood, and adolescence, as

Table 3 Feeding Schedule for Vegan Babies Ages 6 to 12 Months¹⁴

Food Group	6 Months	6 to 8 Months*	7 to 10 Months	10 to 12 Months
Milk	Breast milk or soy formula	Breast milk or soy formula	Breast milk or soy formula	Breast milk or soy formula (24 to 32 oz)
Cereal and bread	Begin iron-fortified baby cereal mixed with milk	Continue baby cereal; begin other breads and cereals	Baby cereal, other breads and cereals	Baby cereal until 18 months; total of four servings (one serving = ¼ slice of bread or 2 to 4 T of cereal)
Fruits and vegetables	None	Begin juice from cup, 2 to 4 oz of vitamin C source; begin mashed vegetables and fruits	4 oz of juice, pieces of soft-cooked fruits and vegetables	Table food; allow four servings per day (one serving = 2 to 4 T of fruits and vegetables, 4 oz of juice)
Legumes and nut butters	None	None	Gradually introduce tofu; begin casseroles, puréed legumes, soy cheese, and soy yogurt	Two servings daily, each about ½ oz

*Overlap occurs because of varying rates of development

well as for athletes.¹ The American Academy of Pediatrics (AAP) also agrees that well-planned vegetarian and vegan eating patterns are healthful for infants and toddlers.⁹ The goals for vegetarian or vegan children are to meet their nutritional needs, help them consume the right amount of calories, and support expected growth patterns.¹⁰

As with any infant, a vegetarian baby's earliest food ideally is breast milk because it enhances the immune system, protects against infection, reduces the risk of allergies, and provides optimal nutrition. Vegetarian women can successfully breast-feed, and studies have demonstrated that their milk is lower in environmental toxins than the milk of women eating meat.¹¹

Breast-feeding women should ensure that their diet is balanced and that they get enough vitamin B₁₂. Infants should receive at least 30 minutes of sunlight exposure per week wearing only a diaper or two hours per week fully clothed without a hat for adequate vitamin D levels. The AAP currently recommends that all breast-fed infants receive 400 IU of supplemental vitamin D starting within the first few weeks after birth.¹²

The iron in breast milk is adequate for the first four to six months, but recommendations call for iron supplements (1 mg/kg/day) for exclusively breast-fed infants beginning at four months to make sure that the infant gets sufficient iron.¹³ Breast-fed infants may require supplemental fluoride after six months if fluorinated water intake is low or if supplements are prescribed by the physician.^{1,10,14}

Soy-based infant formulas (or cow's milk-based for lacto vegetarians), which support normal infant growth and development, are available for women who do not breast-feed or must supplement breast-feeding for the first year of life. While many soy infant formulas are appropriate for vegan diets, some may contain animal fats, so it's important to read the ingredient list. Soy, rice, and other plant-based milks and homemade formulas should not be used to replace breast milk or commercial infant formula during the first year because they may not contain the proper ratio of protein, fat, and carbohydrates, and they do not have enough of the essential vitamins and minerals needed during the first year.¹⁴

Since breast milk (or infant formula) is a rich source of important nutrients, vegetarian and vegan infants should breast-feed (or use infant formula) for at least one year or up to 24 months as they transition to solids. Infants should be weaned to fortified soy milk

containing calcium and vitamins B₁₂ and D. Low-fat or nonfat soy milks should not be used prior to age 2. Rice and many other plant-based milks are not recommended as a primary beverage for infants and toddlers because they are low in protein and calories.¹⁴

Recommended Diet for Infants and Toddlers

As foods are introduced to breast- or formula-fed babies in the middle of their first year, parents should introduce one new food at a time to identify potential allergies. A commercial iron-fortified infant cereal based on a single grain mixed with breast milk or formula is an ideal first food, as it is a good source of iron and unlikely to cause an allergic response.

Ground oats, barley, corn, and other grains that are cooked until very soft and smooth can be introduced one at a time, but iron supplements should be continued since these grains are low in this mineral. Mashed or puréed vegetables and fruits as well as fruit juice can be offered to the infant next. Grain foods such as soft, cooked pasta or rice; soft breads; dry cereals; and crackers can be introduced as the baby shows appropriate signs of readiness.

At 7 to 8 months of age, protein sources such as well-mashed, cooked beans; mashed tofu; and soy yogurt can be offered to the infant. Smooth nut and seed butters spread on bread or crackers can be introduced after the baby's first birthday.¹⁴

Commercially prepared baby foods also are available for vegetarian and vegan infants, but it's important to read labels. Many parents of vegetarian infants prepare their own baby foods for better control and variety as well as for cost reasons.

Table 4 Diet Plans for Vegan Children Ages 1 to 3¹⁴

Food Group	Number of servings
Grains	Six or more servings; one serving is ½ to one slice of bread; ¼ to ½ cup of cooked cereal, grains, or pasta; or ½ to ¾ cup of ready-to-eat cereal.
Legumes, nuts, and seeds	Two or more servings; one serving is ¼ to ½ cup of cooked beans, tofu, tempeh, or textured vegetable protein; 1½ to 3 oz of meat analogue; or 1 to 2 T of nuts, seeds, or nut or seed butter.
Fortified soy milk, etc	Three servings; one serving is 1 cup of fortified soy milk, infant formula, or breast milk.
Vegetables	Two or more servings; one serving is ¼ or ½ cup of cooked vegetables or ½ to 1 cup of raw vegetables
Fruits	Three or more servings; one serving is ¼ to ½ cup of canned fruit, ½ cup of juice, or 1 medium-sized fruit.
Fats	Three servings; one serving is 1 tsp of margarine or oil. Use ½ tsp of flaxseed oil or 2 tsp of canola oil daily to supply omega-3 fatty acids.

Note: Serving sizes vary depending on the child's age. The calorie content of the diet can be increased by adding greater amounts of nut butters, dried fruits, soy products, and other high-calorie foods.

These foods and ingredients should be washed well, cooked thoroughly, blended or mashed to the appropriate consistency, and stored safely.¹⁴

During the vegetarian and vegan toddler years (ages 1 to 3), it's important to focus on helping the child consume a variety of nutrient-dense foods and ensuring adequate intake of calories, protein, fat, calcium, vitamins B₁₂ and D, iron, and zinc.¹⁴ (More information on diet plans for infants and children can be found in Tables 3 and 4 on the previous pages.)

What Can Dietitians Do?

It's clear that parents and children can benefit from the help of a nutritional professional in planning nutritionally adequate vegetarian or vegan diets for children. With the increasing interest in vegetarianism and veganism, dietitians may benefit from becoming well versed on the issues, concerns, and benefits of this lifestyle for infants and children.

Remember that the absence of meat does not necessarily guarantee a healthful diet. Even vegetarian children can overindulge in unhealthy foods such as sugar-coated cereals, macaroni and cheese, veggie hot dogs, pizza, and even fast food, all of which can lead to obesity and other health problems. It's also important to remember that while some people exclude animal products from their diets, others base their diets on fresh plants and use animal products sparingly, finding it a satisfying approach to good health.

While the path to vegetarianism can veer off in many directions, one thing's for sure: Dietitians are perfectly situated to guide parents in making healthful food decisions for their children.

— Sharon Palmer, RD, is a contributing editor at *Today's Dietitian*, a freelance food and nutrition writer in southern California, and author of *The Plant-Powered Diet*.

References

1. Craig WJ, Mangels AR; American Dietetic Association. Position of the American Dietetic Association: vegetarian diets. *J Am Diet Assoc.* 2009;109(7):1266-1282.
2. Vegetarianism in America. *Vegetarian Times* website. <http://www.vegetariantimes.com/article/vegetarianism-in-america/>. Accessed April 20, 2012.
3. Stahler C. How often do Americans eat vegetarian meals? And how many adults in the U.S. are vegan? The Vegetarian Resource Group website. <http://www.vrg.org/journal/vj2011issue4/vj2011issue4poll.php>. Accessed April 18, 2012.
4. Stahler C. How many youth are vegetarians? The Vegetarian Resource Group asks in a 2010 national poll. The Vegetarian Resource Group website. http://www.vrg.org/press/youth_poll_2010.php. February 24, 2010. Accessed April 18, 2012.
5. Stahler C. How many youth are vegetarians? *Vegetarian Journal*. <http://www.vrg.org/journal/vj2005issue4/vj2005issue4youth.htm>. Accessed September 4, 2012.

6. Steinfield H, Gerber P, Wassenaar T, Castel V, Rosales M, de Haan C. *Livestock's Long Shadow: Environmental Issues and Opinions*. Rome, Italy: Food and Agricultural Organization of the United Nations; 2006.

7. Centers for Disease Control and Prevention. *The Power of Prevention: Chronic Disease ... the Public Health Challenge of the 21st Century, 2009*. <http://www.cdc.gov/chronicdisease/pdf/2009-power-of-prevention.pdf>. Accessed January 7, 2013.

8. Sabate J, Wien M. Vegetarian diets and childhood obesity prevention. *Am J Clin Nutr.* 2010;91(5):1525S-1529S.

9. AAP Committee on Nutrition. *Pediatric Nutrition Handbook*. 6th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2009:219.

10. Feeding vegetarian and vegan infants and toddlers. Academy of Nutrition and Dietetics website. <http://www.eatright.org/Public/content.aspx?id=8060>. Accessed April 24, 2012.

11. Healthy milk, healthy baby — chemicals: dioxins and furans. Natural Resources Defense Council website. <http://www.nrdc.org/breastmilk/chem9.asp>. May 22, 2001. Accessed April 20, 2012.

12. Wagner CL, Greer FR. Prevention of rickets and vitamin D deficiency in infants, children, and adolescents. *Pediatrics.* 2008;122(5):1142-1152.

13. Baker RD, Greer FR. Diagnosis and prevention of iron deficiency and iron-deficiency anemia in infants and young children (0-3 years of age). *Pediatrics.* 2010;126(5):1040-1050.

14. Mangels R. Feeding vegan kids. The Vegetarian Resource Group website. <http://www.vrg.org/nutshell/kids.htm>. Accessed April 10, 2012.

RESOURCES (CLICK FOR LINK)

- The Academy's 2009 position statement on vegetarian diets
- Vegetarian Nutrition Dietetic Practice Group
- Vegetarian Diets: A Dietitian's Guide
- *VegFamily Magazine*
- Vegetarian Resource Group
- The Veggie Queen
- *Vegetarian Times*
- *The Dietitian's Guide to Vegetarian Diets: Issues and Applications* by Reed Mangels, PhD, RD, LDN, FADA; Virginia Messina, MPH, RD; and Mark Messina, PhD.
- *Raising Vegetarian Children: A Guide to Good Health and Family Harmony* by Joanne Stepaniak, MS Ed, and Vesanto Melina, MS, RD
- "Vegetarian Infants," a 2013 resource by the Academy's Vegetarian Nutrition Dietetic Practice Group

CPE Examination

1. Vegetarian or vegan diets can meet all nutritional needs for infants and children.
 - a) True
 - b) False

2. According to recent polls, approximately what percentage of Americans follow a vegetarian diet?
 - a) 2%
 - b) 5%
 - c) 10%
 - d) 15%

3. Vegetarian women can't successfully breast-feed.
 - a) True
 - b) False

4. Which of the following is an ideal first-choice solid food for infants?
 - a) Ground oats
 - b) Iron-fortified rice cereal
 - c) Ground barley
 - d) Corn

5. At what age is it appropriate to introduce protein sources such as well-mashed, cooked beans; mashed tofu; and soy yogurt?
 - a) 4 to 5 months
 - b) 6 to 7 months
 - c) 7 to 8 months
 - d) 9 to 10 months

6. Rice milk is not recommended as a primary beverage for infants and toddlers because it is:
 - a) low in protein and high in fat.
 - b) low in calories and high in protein.
 - c) high in protein and low in fat.
 - d) low in protein and low in calories.

7. From ages 1 to 3, it's important to focus on a variety of nutrient-dense foods and ensure adequate intake of which of the following?
 - a) Calories, protein, and fat
 - b) Calcium, vitamin D, and iron
 - c) Vitamin B₁₂ and zinc
 - d) All of the above

8. It's possible for vegetarian children to become overly dependent on junk foods and high-sugar beverages.
 - a) True
 - b) False

9. Vegetarian diets often are associated with numerous health advantages in adults, including which of the following?
 - a) Lower blood cholesterol levels and lower risk of heart disease
 - b) Lower blood pressure levels
 - c) Lower risk of hypertension and type 2 diabetes
 - d) All of the above

10. According to recent studies, what percentage of males and females ages 8 to 18 are vegetarian or vegan?
 - a) 1
 - b) 3
 - c) 10
 - d) 25

Take this exam and earn 1 FREE CPEU by visiting our CE Learning Library at CE.TodaysDietitian.com.

Healthy Meals Kids Will Love



Crispy Garbanzo Cheese Tots

YIELD: about 15 servings; 8 tots + ¼ cup cheese

PREP TIME: 15 minutes

COOK TIME: 5 minutes

Ingredients

- 1 #10 can Bush's® Low Sodium Garbanzo Beans, drained, rinsed
- 3 each eggs, large, lightly beaten
- 6 each garlic cloves
- 3 cups bread crumbs, panko style
- 1 cup white onion, grated
- 3¾ cups nacho cheese sauce, warm

Recipe Instructions

1. Preheat deep fryer to 350°F.
2. In food processor, combine beans, eggs, garlic cloves, bread crumbs and grated onion; pulse until smooth. Can be done in batches.
3. Remove from food processor, take 0.7 ounces and roll into tater tot shape, flattening the ends, set aside. Continue this process until mixture is used.
4. To make one serving, fry 8 tots for 3-5 minutes or until internal temperature of 145°F and golden and crisp on outside. Serve with ¼ cup warm nacho cheese sauce.

Nutrition Facts per serving

Calories: 680; Total fat: 40 g; Sat fat: 6 g; Trans fat: 0 g; Cholesterol: 40 mg; Sodium: 710 mg; Total carbohydrate: 59 g; Dietary fiber: 15 g; Sugars: 1 g; Protein: 20 g

Mini Baked Nachos With Garbanzo Nacho Cheese Sauce

YIELD: 84 servings

PREP TIME: 8 minutes

COOK TIME: 20 minutes

Ingredients

- 168 each 6" whole wheat tortillas, cut into ¼^{ths}
- As needed non-stick cooking spray
- 1 #10 can Bush's® Low Sodium Garbanzo Beans, drained, rinsed
- 1 #10 can prepared mild cheese sauce
- 1 #10 can Bush's® Low Sodium Black beans, drained, rinsed
- 10½ cups tomatoes, diced
- 5½ cups green onions, diced

Recipe Instructions

1. Preheat convection oven to 325°F.
2. Spray non-stick spray on one side of tortilla wedges. Place tortilla wedges on parchment-lined sheet pans in single layer. Bake in oven for 15-19 minutes or until crisp.
3. Meanwhile, in a food processor, pulse garbanzo beans just until smooth. Fold into mild cheese sauce and heat in a sauce pan over medium-high heat until 145°F and hot and bubbly; hold hot for service.
4. To make one serving, arrange 10-12 crisp tortillas on a plate, spoon ¼ cup of garbanzo cheese over top and sprinkle with 2 Tbsp black beans, 2 Tbsp tomatoes, and 1 Tbsp green onions.

Nutrition Facts per serving

Calories: 290; Total fat: 10 g; Sat fat: 2.5 g; Trans fat: 0 g; Cholesterol: 5 mg; Sodium: 650 mg; Total carbohydrate: 42 g; Dietary fiber: 5 g; Sugars: 3 g; Protein: 10 g





White Bean Butter Noodles With Broccoli

YIELD: about 24 servings; 8 oz serving (noodles, broccoli, butter)
PREP TIME: 20 minutes
COOK TIME: 5 minutes

Ingredients

- 1 #10 can Bush's® Great Northern Beans, drained, rinsed
- 1½ cups flour
- 3 each eggs, large, lightly beaten
- ¾ tsp salt
- As needed flour
- 8 cups broccoli florets
- 1½ cups parmesan cheese, fresh grated
- 3 cups clarified butter

Recipe Instructions

1. In a food processor, pulse beans until smooth. Add eggs and salt; pulse until mixed well. In batches, add flour until all incorporated and a dough ball forms. Can be done in batches.
2. On a floured surface, knead dough ball, incorporating additional flour as necessary. Continue to knead until smooth and elastic, about 6-8 minutes. Cut dough into 12 even pieces, wrapping each piece until ready to use. Set smooth rollers of pasta machine on widest setting. Using 1 piece of the previously cut dough, cut into 4 pieces and wrap 3 of them separately in plastic wrap. Flatten piece of dough into rectangle and feed through rollers. Fold rectangle in half and feed through

rollers 8 or 9 more times, folding in half each time and dusting with flour as necessary to prevent sticking.

3. Turn dial down to next (narrower) setting and feed dough through rollers without folding. Continue to feed dough through, without folding, making space between rollers narrower each time, until 1 mm thickness is reached or until desired thickness is reached.

4. To make one serving, boil 5 oz of uncooked pasta for 2-3 minutes or until al dente, drain; in a small bowl, toss with ½ cup steamed broccoli florets. Toss in 2 Tbsp clarified butter, and top with 1 Tbsp grated parmesan cheese.

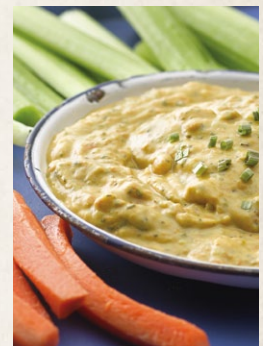
Tip: Try a combination of vegetables or meat. Pasta can also be served topped with tomato sauce, basil pesto or other already featured menu item.

Pinto Bean Hummus With Veggie Sticks

YIELD: about 36 servings (¼ cup) servings
PREP TIME: 7 minutes
COOK TIME: N/A

Ingredients

- 1 #10 can Bush's® Low Sodium Pinto Beans, drained, rinsed
- 1½ cups parsley leaves
- 6 Tbsp lemon juice
- 6 Tbsp rosemary-infused olive oil
- ¾ tsp white pepper, ground
- ¾ tsp ground mustard
- ¼ tsp turmeric, ground
- 6 each garlic cloves
- ¾ tsp rosemary, fresh, minced
- As needed sea salt



Recipe Instructions

1. In food processor, combine all ingredients; pulse until smooth. Can be done in batches. Refrigerate for service.
2. To plate one serving, serve ¼ cup prepared hummus with various seasonal vegetable sticks and whole wheat pita chips.

Nutrition Facts per serving

Calories: 110; Total fat: 3 g; Sat fat: 0 g; Trans fat: 0 g; Cholesterol: 0 mg; Sodium: 95 mg; Total carbohydrate: 16 g; Dietary fiber: 6 g; Sugars: 0 g; Protein: 6 g

Cowboy Pinto Bean Cheeseburger Sliders

YIELD: about 29.5 servings; 2 patties/serving

PREP TIME: 10 minutes

COOK TIME: 5 minutes

Ingredients

Pinto Bean Cheeseburger Sliders

- 1 #10 can Bush's® Low-Sodium Pinto Beans, drained, rinsed
- 3 cups bread crumbs, plain
- 3 Tbsp cumin, ground
- 6 each garlic cloves
- 6 each eggs, large, lightly beaten
- 2½ cups bread crumbs, plain
- 59 each slider rolls, split
- 15 each American cheese slices, quartered
- 5.9 oz shredded lettuce
- 1¼ cups Enchilada Mayo (recipe follows)

Enchilada Mayo

- ¾ cup mayonnaise, light
- ½ cup enchilada sauce, red

Patty Recipe Instructions

1. Preheat deep fryer to 350°F.
2. In a large bowl, combine pinto beans, 3 cups of bread crumbs, cumin, garlic, and eggs; mix lightly until combined. In batches, transfer to a food processor and pulse ingredients until smooth. Hold refrigerated.
3. Scoop 1.5 oz of pinto bean mixture, and form into patty, ¼" to ⅜" thick, lightly roll each patty in remaining bread crumbs to coat. Fry for 2-3 minutes, or until internal temperature of 165°F is reached and golden brown on outside. Hold warm for service.
4. To make one serving, lightly toast inside of each slider. On heel, place patty, quartered slice of cheese, 0.1 oz of lettuce, and 1 tsp of Enchilada Mayo on crown. Serve two per order.

To Make Enchilada Mayo

1. In a bowl combine mayo and sauce; whisk until well combined.
2. Refrigerate for service.

Nutrition Facts per serving

Calories: 580; Total fat: 24 g; Sat fat: 7 g; Trans fat: 0 g; Cholesterol: 75 mg; Sodium: 680 mg; Total carbohydrate: 70 g; Dietary fiber: 10 g; Sugars: 14 g; Protein: 19 g



Black Bean and Mango Salsa

YIELDS: 12 servings

SERVING SIZE: ½ cup

PREP TIME: 20 minutes

COOK TIME: N/A

Ingredients

- 3 cups Bush's® Black Beans, drained, rinsed*
- 2 cups mango, peeled, pitted and diced
- 1 cup pepper, bell, red diced
- 1 cup scallions, sliced
- 1 cup corn kernels, fresh
- ½ cup cilantro, fresh, chopped
- 1 Tbsp jalapeño, seeded, minced
- ½ cup olive oil
- ½ cup lemon juice, fresh
- 1 Tbsp lemon zest
- 1 tsp each kosher salt and ground black pepper

Recipe Instructions

1. Combine beans, mango, red pepper, scallions, corn, cilantro, and jalapeños. Toss to combine.
2. Whisk together oil, lemon juice and zest. Toss with beans to mix well. Season salsa to taste with salt and pepper. Cover. Refrigerate at least 4 hours before serving.

*Other beans may be substituted, including pinto, kidney, or garbanzo.

Serving suggestion: Serve as a condiment for grilled chicken, fish or seafood or an accompaniment for barbecued meats, sausage, pork, lamb or game. Serve ½ cup per serving.





Times have changed, but beans have remained the same. And Bush's Best® can be the key to creating meatless options that inspire your clients to break out of their routine. Find out how Bush's Best® can make your menu better at bushbeansfoodservice.com®



CAN DO.