2015 Report Card

Pesticides and Food: What you need to know

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Fruit & Veggie Connection is a publication of Produce for Better Health Foundation, for the public health community.
Welcome

This issue features the National Action Plan To Promote Health Through Increased Fruit and Vegetable Consumption, 2015 Report Card, as well as our Dads’ vs. Moms’ Attitudes Related to Fruit & Vegetable Consumption 2015. Both reports were released late in 2015. From the first report you will see progress that has been made — or not — over the past 10 years in various sectors to aid in increasing fruit and vegetable consumption. The second report showcases some fun differences between dads and moms regarding feeding their family fruit and vegetables. Spoiler alert: mom just cares more than dad about what the family eats!

It’s always exciting when the Dietary Guidelines for Americans (DGAs) are released, as they were in January of this year. Not much changed for fruits and vegetables. In fact, vegetables and fruit were the only characteristics of the diet that were consistently identified in every conclusion statement across health outcomes in the Dietary Guidelines Advisory Committee Report. One item that you may have missed, however, is that the DGAs more precisely indicated that 100% juice can comprise up to half of the fruit recommendations; heretofore no amount was specified, only that most fruit should be whole, not juice. Given the 13% decline in fruit juice consumption over the past 5 years, with only a 2% increase in whole fruit, we welcome the recommendation that up to half of fruit can come from 100% juice. There are many well-meaning individuals who discourage consumption of juice (and canned fruit and veggies), but this is hurting overall fruit and vegetable consumption; consumers are missing key nutrients provided by these nutritious products. We have included in this issue research about the importance of inclusive language when we talk about fruit and vegetables (page 10), and about 100% juice on page 18. Let’s help people feel good about the fruits and vegetables they do consume, regardless of whether they are juiced, fresh, canned, frozen, or dried.

Finally, congratulations to PBH as we celebrate our 25th year, to our Role Models and Champions (page 25), to winners of our 2015 Formula 5 Marketing Competition (page 26), to the six individuals who received the 2015 PBH Supermarket Dietitian of the Year award (page 27), and to the most recent recipients of our Supermarket Tour Training Grants (page 28)! All awardees were well deserved!
2015 Report Card
In 2005, the National Fruit & Vegetable Alliance (NFVA) — led by PBH and the Centers for Disease Control and Prevention (CDC) — developed a National Action Plan, providing a new and comprehensive approach for improved public health through increased fruit and vegetable consumption. Ten years later, the Alliance released a second Report Card to evaluate progress made by schools, restaurants, supermarkets, and federal and state governments in its 2015 National Action Plan (NAP).

Similar to the first Report Card released in 2010, the 2015 NAP Report Card utilizing survey data finds that the average American’s fruit and vegetable consumption remains far below recommended levels, with a 5% decline during the past five years. The decline is largely driven by a decrease in 100% juice consumption, especially at breakfast, and a decline in the dinner side dish for vegetables. There were differences in consumption by age, with positive increases in fruit consumption among all children and vegetable consumption among teens. In contrast, consumers over age 45, who typically eat the most fruits and vegetables, are trending downward in their consumption of both over time. Overall, only 4% of individuals achieve their recommended target for vegetables and only 8% achieve their recommended target for fruit in an average day.

Per capita fruit and vegetable consumption (excluding fried potatoes) declined 5% since our 2010 Report Card, for an average of 1.68 cups per day. Though fruit consumption increased slightly, the overall decline has been driven primarily by decreased consumption of vegetables and fruit juice. This is due to a decline in the dinner vegetable side dish to help simplify meals and reduced consumption of 100% fruit juice, especially at breakfast.

Over the past 5 years, children’s fruit intake increased significantly (18%), while their vegetable consumption decreased slightly (3%) and consumption of 100% juice dropped significantly (13%). Alternatively, both fruit and vegetable consumption declined among all adults over age 45.

Not all forms of fruits and vegetables have fared equally. Fresh fruit and vegetable consumption has grown while canned has lost favor. Despite the health benefits of eating more fruit and vegetables, canned, dried, frozen and juice forms are not perceived as healthy as fresh, a perception that has worsened over time.
The Report Card assigned an ‘A’ grade to schools, given the doubling of fruits and vegetables in school meals as a result of the Healthy, Hunger-Free Kids Act of 2010. An ‘A’ grade was also offered to the Healthy Incentive Pilot program that demonstrated strong positive results at increasing fruit and vegetable consumption among SNAP households, which helped justify the new USDA Food Insecurity Nutrition Incentive (FINI) Program to test other methods of incentivizing SNAP participants to purchase fruits and vegetables. An ‘A’ grade was also offered, once again, to the WIC Fruit and Vegetable Vouchers program, which was introduced in 2009 as part of a special supplemental program for Women, Infants and Children.

Restaurants and cafeterias received a ‘B-’ for providing greater availability and variety in fruit and vegetable choices on menus. Supermarkets and fruit and vegetable suppliers received a ‘C’ grade for some progress over the past five years at making fruits and vegetables more accessible and convenient. A ‘D’ grade was given on the alignment of agricultural policy and research with nutrition policy. Last, a failing grade was once again assigned to the food marketing category given its continued low level of fruit and vegetable marketing (<1%) relative to all food marketing.

The overall objectives of the NAP remain the same and include a set of strategies that, when taken together, would begin to close the gap that exists between actual and recommended fruit and vegetable consumption in this country. The objectives include:

- Increasing the accessibility and desirability of all forms of fruits and vegetables by making them tasty, attractive, convenient, affordable, plentiful, and easily available at all eating and snacking occasions;
- Offering practical strategies to help increase an individuals’ ability to obtain and prepare meals and snacks rich in fruits and vegetables; and
- Changing Americans’ attitudes and habits about including fruits and vegetables at every eating occasion.

This report is located on the NFVFA.org website and is also available for free download at Gumroad.com/pbh#.
C Fruit and Vegetable Suppliers

Several changes in product appeal and packaging improvements have been made over the past 5 years. Packaging technology has aided the convenience that shoppers are looking for, including steamable bags, varying package sizes, meal kits, and more fresh-cut produce. Additionally, the availability and variety of lower sodium vegetables and fruit packed in either light syrup or 100% juice have increased. Innovations are also improving the nutritional profile of French fries by limiting their fat absorption. New seed traits have improved shelf-life, taste, and reduced waste. In the past 5 years, a new website has been developed to combat negative messaging about the safety of produce; negative messaging has declined in recent years as a result.

Finally, growers, shippers, and processors collectively support the Fruits & Veggies—More Matters message. Since its launch in 2007, more than 2,500 labels carry the brand logo, with more than 600 new in the past 5 years. Today, 53% of mothers surveyed online said they were more likely to purchase a product with the Fruits & Veggies—More Matters logo on it, 14% more than 5 years earlier.

D Health Care and Health Organizations

Over the past 30 years, nutrition training in medical schools has been identified as an essential component of medical education. The amount of nutrition education that medical students receive, however, continues to be inadequate. As a result, very little has changed since 1995 in terms of nutrition counseling services ordered or provided by physician offices. In the past 5 years, a new program that fosters coordination between healthcare providers and low-income communities to promote fruit and vegetable intake, in the form of a Fruit and Vegetable Prescription Program, has shown promising results. Changes may occur at a faster rate in the future since two new laws, ACA and HITECH, elevate the prominence of prevention in health care, including new financial incentives for providers to deliver nutrition education to patients.

Common Consumer Question: A colleague tells me we cannot get enough vitamins from our foods anymore because our soils are depleted. She says the vegetables today do not have the same nutrition value as in say, the 50’s. Is this true?

First, uncertainties associated with changing analytical methods call into question how comparable are 60-year old data vs. new data. That said, it is true that environmental factors such as weather, soil type, and soil mineral content result in variable nutrient content in edible plants. Plant genetics also play a factor, as does post-harvest handling and cooking. Soil depletion is a concern, but farmers have become much better at preserving soil health and optimizing nutrients so they have healthy plants and strong yields that can be sustained year after year. Any gross deficiencies or excesses in soil nutrients for the plant result in a poor crop, so there is plenty of economic motivation for farmers to optimize their soil.

Furthermore, plants can (easily) be bred for higher nutrition if there were a need. One can argue that while old vs. new data may show nutritional composition differences, it likely isn’t nutritionally significant. For example, whether a ½ cup of peppers contains more than the current 140 mg of vitamin C isn’t really that important when only 75-90 mg/day of vitamin C is needed by the body in the first place. Seed breeders today have to balance already very nutritious fruit and vegetables with other factors that are also important to consumers, like: improved plant disease resistance, so less use of pesticides, herbicides or fungicides; increased plant productivity, resulting in less expensive food; increased plant stress tolerance to manage changes in climate, ultimately resulting in less expensive food; more attractive fruit/vegetables to increase the desire to eat them; better shelf-life so produce doesn’t spoil as fast in the fridge at home, resulting in less waste, and ultimately less expensive food; or better flavor, which increases the desire to eat more.

Bottom Line Ultimately, not eating enough (already very nutritious) fruit and vegetables is much more of a problem than any minor changes in nutritional composition that may (or may not have) occurred over time.
Though a national surveillance system to monitor and evaluate employers’ workplace efforts was not developed in the last 5 years, CDC has one in progress: the National Workplace Health Programs and Practices Survey. Until that is available, the 2004 National Worksite Health Promotion Survey continues to serve as a baseline metric, where nutrition programs or activities were found in nearly a quarter of worksites surveyed. Since then, wellness programs have become more common with estimates ranging from half of employers to 92% of large employers offering them. Reports suggest that a range of 20-40% of eligible employees participate. Diet was a commonly targeted health behavior, and in 12 studies, half found significant improvements including an average increase in fruit and vegetable consumption of 0.7 servings (from 2.9-3.6) per day, which is considered very significant.

Strong nutrition standards for foods and beverages sold or provided by government agencies can ensure that healthy options are available in places frequented by the public. In the latest data available, however, 46% of states did not have a policy on nutrition standards at all. Those that did have a policy, did not have strong ones.

Nutrition Promotion and Marketing

Despite modest improvement since the 2010 Report Card, exposure to TV advertising of fruits and vegetables continues to represent no more than 1% of food and beverage ads viewed by children, teens, and adults.

New efforts to market fruit and vegetables are underway. First, in 2011, USDA’s MyPlate replaced MyPyramid, with a key message to “make half your plate fruits and vegetables.” More recently, Sesame Street characters are being placed on produce packaging; a new teen-focused FNV brand with heavy activation in two test markets is underway; and national Cans Get You Cooking and Frozen: How Fresh Stays Fresh campaigns include the promotion of canned and frozen produce. These new efforts are in addition to the national Fruits & Veggies—More Matters campaign noted in the last report card, which replaced 5 A Day in 2007. With a combined annual budget of less than $20 million, most of these marketing and promotion activities do not include paid media. Instead they rely on ‘earned’ media, in-store activation, social media, and working through influencers like media, bloggers, industry, and dietitians.

In contrast, the nutrition education efforts within federal nutrition assistance programs (SNAP-Ed, Team Nutrition, WIC Nutrition Education Program, and EFNEP) are supported by a combined budget of $765 million, which has increased over the past 5 years. However, when viewed as a percent of total nutrition assistance spending, nutrition education spending has declined from 1.2% to 0.7% of spending during that time. In other words, overall nutrition assistance spending in these programs increased by $4.5 billion in 5 years, but nutrition education spending grew by only $79 million. In SNAP alone, bringing nutrition education funding to more effective levels would require a nearly six-fold spending increase from $342 million to $1.97 billion. Given the extensive cost of diet-related diseases, much of it born by government programs, robust and adequately funded nutrition education programming and/or marketing would be a wise investment.

Research and Evaluation

The degree to which the nation’s agricultural policy supports national nutrition policy for fruits and vegetables as a public health priority, compared with information obtained in 2010, shows that fruits and vegetables continue to remain a low priority for the federal government. The annual economic costs to the nation due to the fruit and vegetable consumption gap are very large, $63.3 billion, an increase of 12.6% since the last report. USDA spending contradicts the priority of fruits and vegetables in the dietary guidelines, and this too has worsened over time; lower-priority foods like meat dominated USDA spending, with six times its share, while USDA spending on fruits and vegetables was only about one-third their share. USDA spending for nutrition education continues to remain far short of levels needed to encourage substantial increases in fruit and vegetable consumption.

Fruits and vegetables also remain a low spending priority for NIH and CDC despite the sizable health risks attributable to the consumption gap. For example, similar to the last report, only 1% of NIH research projects on cancer, coronary heart disease and stroke focused on fruits and vegetables, despite the fact that the fruit and vegetable consumption gap contributes between 5.6%-22.2% of the risk of those three major diseases.

Supermarkets and Other Retailers

In the past 5 years, grocers have increasingly employed more dietitians to educate shoppers, which should prove helpful to increasing fruit and vegetable consumption. More grocers are adding healthy checkout aisles. In fact, 13% of all food stores, including drug stores and convenience stores, sell fruits or vegetables at checkout. Grocers continue to deliver the Fruits & Veggies—More Matters message through in-store displays, ads, or on packaging and consumers report that this is a main way they became familiar with the message. The use of shelf labeling programs has also expanded, though their scoring algorithms often rate non-fresh forms of fruits and vegetables lower than is justifiable, possibly contributing to the decreased perception about the healthfulness of other forms.

Since the last report card, the availability of nutritious fruits and vegetables has expanded through a wide range of projects, including the construction of new and renovated grocery stores, farmers’ markets, corner stores, food hubs, mobile markets, kitchen incubators, and cafes. Local food sales are estimated to have doubled, with the largest share as fruit and vegetables. Ten years ago, 36 million people (12% of the population) lived in areas with limited supermarket access; today 20 million people (7% of the population) live in such areas.
Moms vs. Dads

Attitudes about Fruit & Vegetables

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BH conducts regular consumer surveys to identify psychosocial factors associated with fruit and vegetable consumption in an effort to monitor progress and inform industry, health influencers, and policy makers. A new report, Dads’ vs. Moms’ Attitudes Related to Fruit & Vegetable Consumption 2015, was compiled based on data from an on-line survey comparing 600 moms with 600 dads. The survey was conducted to better understand dads’ influence on food shopping, meal planning, feeding their children, and overall consumption of fruit and vegetables. The report is available for free download at Gumroad.com/pbh# and includes the following highlights:

Men Eat Fewer Fruits & Vegetables

Dads are significantly less likely than moms to report that they eat 2 or more cups of vegetables each day. Dads also report eating less fruit than moms, though not significantly.

Men Have Weaker Beliefs About Fruits & Vegetables

While dads are more likely than moms to think it is not important to include fruit and vegetables in family’s meals and snacks, they are more accepting than moms of all forms of fruits and vegetables given the higher availability of canned, frozen, and dried fruits and vegetables they report having in their homes.

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Supermarket flyers, ads, and displays and television were the top communication methods for both dads and moms when it comes to making a food decision. However, dads were more likely than moms to cite radio commercials, internet advertisements, and billboards as effective communication methods.

Regarding Fruits & Veggies—More Matters®, there is a significantly higher awareness of the brand and likeliness to purchase products that bear the brand among moms than dads.

Moms and Dads rated these items as their child’s favorite fruit and vegetable

<table>
<thead>
<tr>
<th>Fruit &amp; Vegetable</th>
<th>% Respondents</th>
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<tbody>
<tr>
<td>Strawberries</td>
<td>19%</td>
</tr>
<tr>
<td>Banana</td>
<td>18%</td>
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<tr>
<td>Apple</td>
<td>15%</td>
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<tr>
<td>Watermelon</td>
<td>10%</td>
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<tr>
<td>Grapes/Raisins</td>
<td>8%</td>
</tr>
<tr>
<td>Orange</td>
<td>5%</td>
</tr>
<tr>
<td>Blueberries</td>
<td>5%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
</tr>
<tr>
<td>Pineapple</td>
<td>4%</td>
</tr>
<tr>
<td>Peach</td>
<td>3%</td>
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<tr>
<td>Pear</td>
<td>3%</td>
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<tr>
<td>Cantaloupe</td>
<td>2%</td>
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<tr>
<td>Avocado</td>
<td>2%</td>
</tr>
<tr>
<td>Cherries</td>
<td>2%</td>
</tr>
<tr>
<td>Corn</td>
<td>18%</td>
</tr>
<tr>
<td>Broccoli</td>
<td>15%</td>
</tr>
<tr>
<td>Carrot</td>
<td>13%</td>
</tr>
<tr>
<td>Potato</td>
<td>11%</td>
</tr>
<tr>
<td>Green beans</td>
<td>9%</td>
</tr>
<tr>
<td>Other</td>
<td>6%</td>
</tr>
<tr>
<td>Tomato (includes spaghetti sauce)</td>
<td>5%</td>
</tr>
<tr>
<td>Peas</td>
<td>5%</td>
</tr>
<tr>
<td>Lettuce</td>
<td>4%</td>
</tr>
<tr>
<td>Beans (navy, kidney, etc)</td>
<td>3%</td>
</tr>
<tr>
<td>Spinach</td>
<td>3%</td>
</tr>
<tr>
<td>Mushroom</td>
<td>3%</td>
</tr>
<tr>
<td>Bell pepper</td>
<td>2%</td>
</tr>
<tr>
<td>Celery</td>
<td>1%</td>
</tr>
<tr>
<td>Onion</td>
<td>1%</td>
</tr>
</tbody>
</table>

*Represents statistically significant difference between moms and dads.
**Common Consumer Question**

**Head lettuce is the only lettuce my family likes but it doesn’t have any nutrients so should I even bother?**

It is true that darker greens, like spinach and Romaine and leaf lettuce are very nutritious, providing Vitamin A and other carotenoids, vitamin C and potassium. The cruciferous greens, like arugula, collard greens, kale, mustard greens and turnip greens have these same great nutrients, but they also contain other beneficial compounds, called isothiocyanates and indoles, that are unique to cruciferous vegetables. The most nutritious greens are those that you actually EAT, however, so any of them are fine, including head lettuce!

Head lettuce is still very important in salads, especially for those who prefer its crunch. It is a great carrier for other salad ingredients like tomatoes, peppers, beans, carrots, cucumbers, mushrooms, avocados and any variety of fruit. As long as you don’t over-indulge on the cheese, bacon bits, and creamy dressings, head lettuce may be just the ticket to get finicky eaters to eat more vegetables in the form of salads.

Lettuce/salad consumption has actually gone down about 9 salads per person each year compared to 5 years ago. Much of this is thought to stem from a decline in side dishes generally, which include salads, as people strive to make more convenient meals. But some of the decline could be because people don’t think they should eat head lettuce and they don’t like leaf lettuce, so they don’t eat any lettuce at all.

**Bottom Line** Head lettuce is still very important in salads, especially for those who prefer its crunch. It is a great carrier for other vegetables like tomatoes, peppers, carrots, and beans, which may help finicky eaters eat more vegetables.
Impact of Limiting Language
in Government Recommendations on Fruit and Vegetable Consumption

INCLUSIVE LANGUAGE
Inclusive language incorporates words and phrases that encourage consumption of fruits and vegetables regardless of form. For example:
- Include more fruits and vegetables in your diet. Fruits and vegetables may be fresh, canned, frozen, or dried.
- When including more fruits and vegetables in your diet, all forms of fruits and vegetables matter—fresh, frozen, canned, dried and 100% fruit or vegetable juice.
- With 200+ options and a variety of convenient packaging, prepared fruits, vegetables and beans are easy to store and easy to serve.

LIMITING LANGUAGE
Limiting language is defined as words and phrases that devalue packaged forms of fruits and vegetables or overemphasize the value of fresh. For example:
- Include more vegetables and beans (without added salt or fat), and fruits (without added sugars) in your diet.
- Include canned or frozen fruits and vegetables when fresh produce is not available.
- Overall, fruits and vegetables that are just picked or fresh from the farmers market are healthier than frozen or canned ones. However, including frozen and canned fruits and vegetables can still be a good choice.

DURING A TIME WHEN CONSUMERS ARE NOT EATING EVEN HALF OF THEIR RECOMMENDED AMOUNT OF FRUITS AND VEGETABLES, PRODUCE FOR BETTER HEALTH FOUNDATION (PBH) COMMISSIONED RESEARCH TO MEASURE THE IMPACT OF THE FEDERAL GOVERNMENT’S FRUIT AND VEGETABLE RECOMMENDATIONS ON CONSUMERS’ PERCEPTIONS OF, AND INTENT TO PURCHASE, VARIOUS FORMS OF FRUITS AND VEGETABLES.1

An on-line survey of 1,200 consumers was conducted in October 2015. Half of respondents were exposed to inclusive recommendations for increased intake of fruit and vegetables and the other half were exposed to limiting language that reinforced fresh produce intake at the expense of packaged forms. All were then asked a series of questions after being exposed to both sets of current government recommendations.

Research Results

Perception of Healthfulness
Government guidelines impact consumers’ perceptions of the healthfulness of packaged fruits and vegetables:
- Inclusive language more strongly and consistently reinforces the healthfulness of all forms of fruits and vegetables — fresh, frozen, canned, 100% juice and dried.
- Limiting language that over-emphasizes the benefits of fresh fruits and vegetables, compared to packaged forms, detracts from the perceived healthfulness of packaged fruits and vegetables.

Among vulnerable2 consumers, inclusive language more consistently reinforces their perceived healthfulness of packaged fruits and vegetables.

Vulnerable consumers feel that limiting language recommendations would most likely cause a decrease in their intake of packaged fruits and vegetables.
Intent to Purchase

Government recommendations with inclusive language more strongly and consistently increase consumers’ intent to purchase packaged fruits and vegetables, without decreasing their intent to purchase fresh produce.

PBH thanks the American Frozen Food Institute (AFFI), Canned Food Alliance (CFA), Can Manufacturers Institute (CMI) and Seneca for their support of this research.

Policy language should encourage all forms of fruits and vegetables so people can feel good about the purchases they’re making and find more ways to increase their intake.

Impact of Policy Statements on Consumer Perceptions about Fruits and Vegetables

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<thead>
<tr>
<th></th>
<th>Inclusive</th>
<th>Limiting</th>
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<tbody>
<tr>
<td>Is more realistic</td>
<td>59%</td>
<td>41%</td>
</tr>
<tr>
<td>Is more encouraging of all forms</td>
<td>59%</td>
<td>41%</td>
</tr>
<tr>
<td>Is more affordable on current budget</td>
<td>63%</td>
<td>37%</td>
</tr>
<tr>
<td>Encourages decreased intake of packaged fruit &amp; vegetables</td>
<td>38%</td>
<td>61%</td>
</tr>
<tr>
<td>Increases likelihood fresh fruit &amp; vegetables would go to waste</td>
<td>42%</td>
<td>58%</td>
</tr>
</tbody>
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Endnotes:
1. Inclusive of beans, like kidney beans.
2. Vulnerable consumers are those individuals who receive government food assistance, eat less than the recommended levels of fruit and vegetables or have limited access and budget for purchasing fresh fruit and vegetables.

Common Consumer Question:

Can I meet my nutrient needs by eating canned fruits and veggies?

A recent study explored the impact of canned fruits and canned veggies on diet quality in children and adults from 2001-2010. Researchers wanted to determine if those who consumed canned produce had higher quality diets than those who do not. In total, 17,344 children (ages 2-18 years) and 24,807 adults ages 19 and older participated. Based on dietary intake, a score was used to measure overall diet quality per 1,000 calories.

According to the research, those who ate canned fruits and vegetables had greater overall fruit and vegetable consumption, better diet quality, and increased nutrient intake compared to children and adults who did not eat canned fruits and vegetables.

The most commonly consumed canned items were string beans, corn, peaches, fruit cocktail, pineapple, tomatoes (including sauce), green peas, pears and olives.

Bottom Line Canned fruit and vegetable consumption is associated with better overall diet quality in both children and adults, as well as increased consumption of all forms of fruits and vegetables. Eating canned fruits and vegetables is an affordable and easy way to include more fruits and veggies in your diet!

In the News
Review headlines for the latest fruit and vegetable news

FEBRUARY

The Packer
“Sodexo mushroom burger lands in school lunches”
“Eight a day, berry commission urges”
“Cuties return to McDonald’s menus”
“SNAP incentive program promising, study shows”
“USDA projects citrus output will continue slide”

The Produce News
“Florida ag continues to receive brunt of El Niño’s impact”
“Water tops list of concerns in 2016 for California tree fruits”

MARCH

The Packer
“Water tops California group’s 2016 list of concerns”
“School meals improving, but CDC says gaps remain”
“Feeding America to double produce”
“Online grocery rising, study funds”
“Demand still hot for trendy brussels sprouts”
“Federally sanctioned sprout grower issues yet another recall”

Frozen Express
“Campbell Soup Company to switch to non-BPA lined cans in 2017”
“ConAgra ready to roll out nationwide GMO labels”
“General Mills to label products with GMOs ahead of Vermont law”

PMA SmartBrief
“Data: 42% of school districts have farm-to-school programs”

APRIL

The Packer
“Retailers offer free fruit to young consumers”
“USDA seeks fines on states that fight school lunch rules”
“Shopper education boosts sales, marketers say”

The Produce News
“Biotech crop acreage fell in 2015 for first time”
“Study: Frozen microwavable foods represent largest, fastest growing market”

Frozen Express
“Push to up the fresh game at convenience stores continues”
“Fruits and veggies step up to the plate in food trends for 2016”
“South Florida growers rebound from unprecedented winter rains”
“USDA announces $22 million available to combat citrus greening”

PMA SmartBrief
“Del Monte to cut BPA from packaging, GMOs from food”
“Startup Infarm tests growing produce inside the grocery store”
In order to help health professionals in their effort to increase fruit and vegetable consumption, PBH offers webinars for 1 hour of continuing education credit for dietitians. PowerPoint and audio recordings can be found at PBHFoundation.org/pub_sec/webinars/

NEW - What Consumers Think of Biotech & the Arctic® Apple
The first-ever GM apple, the Arctic® apple, will be test marketed in select locations in fall 2016! Based on recent qualitative and quantitative consumer research, this webinar shares current perceptions of biotech and the Arctic®apple.

NEW - Maximizing Nutrition with Pumpkin Year-Round
Explore the nutritional benefits of canned pumpkin and how it can be used to boost the taste and nutrition of meals with trained chef and nutrition expert Michelle Dudash, RD. Learn ways to enhance mealtime with this always-in-season, versatile superfood with practical, consumer-friendly tips plus delicious snack and meal ideas.

2015 State of the Plate, An Overview of Fruit & Vegetable Consumption Trends
This webinar shares insights into American’s eating habits and new data on fruit and vegetable consumption trends. Learn about who is eating fruit and vegetables today and hear about future consumption estimates based on current population characteristics.

Understanding Food Risks
Organic foods, all natural ingredients, pesticide residues, food additives, genetically modified foods, allergens: what are the relative risks of consuming these in the food we eat? Dr. Bruce Chassy, Professor Emeritus, University of Illinois at Urbana-Champaign presents basic food risks, including an overview of toxicology, and then applies this knowledge to discuss the safety of foods.

The Whole Truth About 100% Fruit Juice
Learn more about 100% fruit juice, with emphasis on the unique benefits from polyphenols in 100% grape juice made from Concord grapes, with polyphenol expert Mario Ferruzzi, PhD of Purdue University. Nutrition blogger Sarah-Jane Bedwell, RD, LDN also offers consumer-friendly tips, techniques and recipes to help squeeze more fruit into the day.

Strawberries as a Functional Food: A Sweet Strategy for Health
This webinar covers the protective power of strawberries in a variety of health conditions, including chronic inflammation, cardiovascular disease, cancer, insulin resistance, diabetes and age-related declines in cognitive function.

The Power of the Pour: The Nutrition & Health Benefits of 100% Fruit Juice
Review evidence that supports the benefits of consuming 100% fruit juice as part of a healthy diet, including improved nutrient adequacy and diet quality. Review findings from studies on 100% orange juice/100% fruit juice consumption and health concerns such as overweight/obesity, insulin resistance, diabetes and heart health risk factors.

Setting the Nutrition Record Straight on Frozen Fruits and Vegetables
Learn about new research on the nutritional quality of fresh and frozen fruit and vegetables that can help encourage consumers to “think frozen.”

Cans Get You Cooking!
Understand how nutritious and versatile canned fruit and veggies are, including ways they can be incorporated into everyday meals for overall health and wellness.

Food Safety Efforts in Produce Production
Understand how the produce industry is working to prevent microbial contamination of fruit and vegetables in order to instill confidence about produce safety.

Building a Better Breakfast with High-Quality Protein and Produce
Review the research on how high-quality protein paired with fruit and vegetables can influence nutrient adequacy, satiety and health. Learn practical tips to help build a better breakfast.

Grapes and Cardiovascular Health: The Heart of the Matter
An in-depth look at the science supporting the role of grapes in heart health plus an overview of emerging new areas of grape health research. Numerous serving suggestions are included.

Pesticide Residues: What to Communicate to Consumers
This webinar addresses the importance of accurately communicating to consumers that eating either conventional or organic fruit and vegetables is the right choice and eating more is the healthy choice.
PBH WEB RESOURCES
About the Buzz Articles

The media is full of nutrition news and misinformation. “About the Buzz” helps sort it out for consumers, providing factual online information on questions commonly heard about fruit and vegetables, as well as perspectives on recent fruit and vegetable research. Nearly 300 “About the Buzz” articles can be found at FruitsAndVeggiesMoreMatters.org, dealing with various subject areas including weight loss, health remedies, beauty and skin, disease prevention, health promotion, children, color groups, forms (e.g. canned, frozen), beverages, and even the environment. We encourage health professionals to use these materials as they need them.

Healthy Recipes to Make at Home

For nutritious, quick, and easy recipes you can cook for any meal or snack, FruitsAndVeggiesMoreMatters.org is the perfect go-to resource. Search our Fruit & Vegetable Recipe database for 1,000+ fruit and veggie recipes. Find your perfect fruit or veggie entrée, side dish, soup, salad, drink, or snack. There are also tips on healthy cooking with fruit and vegetables, special recipes you can make in 30 minutes or less, tips for buying fruit and veggies on a budget, and healthy cooking ideas for entertaining. Be sure to take a look at our featured Recipe of the Week, and sign up on the FruitsAndVeggiesMoreMatters.org home page to get that recipe update automatically delivered to your inbox.

MyPlate Food Photography

Sometimes people want to see what ½ a plate of fruits and veggies looks like when part of a mixed dish, so PBH has developed 80 meals showing what this looks like as part of a healthy MyPlate — with real food! Each of these plates can be found as separate information sheets and as ‘before’ or ‘after’ photos in a PowerPoint presentation on PBH’s ‘influencer’ website: PBHFoundation.org/pri_sec/retail/mar_tools/half_the_plate/.

Fruit & Veggie How-to-Videos

Do you know how to cook an artichoke or cut a watermelon quickly? Check out our Fruit & Vegetable Video Center at MoreMatters.org hosted by Michael Marks, Your Produce Man. This popular site, designed specifically for consumers, features Marks in online videos demonstrating ways to select, store, and prepare fruit and vegetables. Michael Marks tapped over 300 segments on practical tips and lots of fun, entertaining information about your favorite fruit and vegetables. The videos cover a range of topics, including:

- Themed topics like seasonal cooking, smart snacking, kid-friendly recipes, healthy lunchboxes, and creative ways to use fruits and veggies on a budget;
- How to select, store, and prepare specific fruit, vegetables, and nuts; and
- 176 healthy meal preparation ideas, with direct online access to easy-to-make recipes.
Experts agree that as a complement to whole fruit and vegetables, 100% juice can be a convenient, delicious and nutritious way to squeeze more fruit and vegetables into the day. In fact, in the recent release of the 2015 Dietary Guidelines for Americans, not much changed for fruits and vegetables other than more precisely indicating that 100% juice can comprise up to half of the fruit recommendations; heretofore there was no amount of juice specified. We believe this is a positive step given that the steep decline in 100% juice consumption over the past 10 years has hurt overall fruit consumption goals. Some myths persist about the role of 100% juice in a healthy diet. Get the facts in our latest toolkit about 100% juice: The Power of the Pour. Found at: PBHFoundation.org/pri_sec/retail/mar_tools/

MYTH: 100% Fruit Juice Contains Added Sugar.
FACT: 100% on the Label Means Just That — 100% Fruit Juice, No Sugar Added.

- By definition, 100% fruit juice contains no added sugar.
- The grams of sugar listed on the Nutrition Facts Panels of 100% fruit juice are naturally occurring fruit sugars only.

MYTH: Whole Fruit is More Nutritious than 100% Fruit Juice.
FACT: All Forms of Fruit Fit.

Enjoying a variety of fruit in all its forms — including fresh, frozen, canned, dried and 100% fruit juice — can help you get the range of nutrition benefits fruit offers.

- While whole fruit can be a better source of fiber, 100% fruit juice delivers important vitamins, minerals and plant nutrients, such as polyphenols.
- In some cases, drinking 100% fruit juice may actually give you more healthy polyphenols than eating the fruit. For example, making 100% grape juice involves crushing whole Concord grapes — including the seeds and dark purple skin — to release polyphenols straight from the grape.

MYTH: Drinking 100% Juice Leads to Being Overweight.
FACT: 100% Juice Can Be Part of a Healthy Diet Without Causing Weight Gain.

- The majority of studies show that drinking moderate amounts of 100% fruit juice is not linked to overweight or obesity in healthy adults and children.
- With any food and beverage, balance is the key. 100% juice should be enjoyed in moderation.
- Drinking 100% juice can help children and adults reach daily fruit and vegetable goals.

MYTH: 100% Fruit Juice Is Just “Empty Calories.”
FACT: 100% Fruit Juice Delivers Nutrition Squeezed from Whole Fruit.

For every calorie, 100% fruit juice packs in more nutrition than many other beverage options.

- Nearly twenty years of research shows that certain juices may be linked to specific health benefits. For example, nearly two decades’ worth of research suggest some 100% fruit juice can help support heart health. Some juice can also reduce urinary tract infections.
- Drinking 100% fruit juice is associated with higher intakes of vitamins A and C, magnesium, folate, phosphorus and potassium in children.
- Studies show that children who drink 100% juice have higher quality diets than those who don’t drink juice. Overall, those who drink juice consume less solid fats and added sugars and more whole fruit and have the same or higher intakes of total fiber.
- Drinking certain 100% juices may actually give you more healthy plant nutrients than eating some fruit. For example, making 100% grape juice involves crushing whole Concord grapes — including the seeds and dark purple skin — to release polyphenols from the grape. Similarly, research suggests that the actual processing of orange juice and tomato juice make some carotenoids more available to the body as well!

American Academy of Pediatrics 100% Juice Guidelines for Children

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Amount Daily</th>
</tr>
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<tbody>
<tr>
<td>Infants 12 months of age and under</td>
<td>No Juice</td>
</tr>
<tr>
<td>Children 1-6 years</td>
<td>4-6 ounces</td>
</tr>
<tr>
<td>Children 7-18 years</td>
<td>8-12 ounces</td>
</tr>
</tbody>
</table>

Note: Juice should not be fed by bottle to small children.
The latest government report on pesticide residues in foods reassures Americans that their produce is safe to eat. USDA’s 2014 Pesticide Data Program (PDP) report was released to the public in mid-January. PDP has been informing federal pesticide risk assessments since 1991.

Each year, USDA and EPA work together to identify foods to be tested on a rotating basis. These include foods grown in various regions of the United States and overseas. The USDA tested for pesticides in 10,619 samples of food in 2014:

- 8,582 samples of fruits and vegetables
- 314 samples of oats
- 314 samples of rice
- 1,055 samples of infant formula
- 354 samples of salmon

The 2014 PDP Annual Summary shows that more than 99% of products sampled had residues below Environmental Protection Agency (EPA) tolerances, while 41% had no residues at all. Residues exceeding the tolerance were detected in only 0.36% of the samples tested.

The PDP pesticide residue results are reported to Food and Drug Administration (FDA) and EPA through monthly reports. In instances where a PDP finding may pose a safety risk, FDA and EPA are immediately notified. EPA has determined the extremely low levels of those residues are not a food safety risk, and the presence of such residues does not pose a safety concern.

The findings of the Pesticide Data Program Annual Summary, Calendar Year 2014 can be downloaded at ams.usda.gov/pdp.

**Common Consumer Question:**

Food imported into the U.S. is subject to a variety of Federal laws, administered by a number of different Federal agencies. A food safety program of the United Nations and the World Health Organization, known as Codex, plays a key role. Codex develops international food safety and quality standards, including Maximum Residue Limits (MRLs) for pesticides. EPA participates actively in Codex and contributes technical expertise to the development of these international standards and related policies. A database of MRLs, or tolerances, for U.S. specialty crops is maintained by the US Department of Agriculture. This database can be searched by crop or pesticide, for the United States or for 70 foreign countries. The U.S. Food and Drug Administration (FDA) samples imported and domestic foods to ensure that pesticide residues are within established tolerances or are covered by exemptions. In addition, the USDA’s Pesticide Data Program, which monitors pesticide residues on agricultural commodities in the U.S. food supply, includes sampling and analysis of imported fruits and vegetables.

**So the US has strict standards for use of pesticides, but what about the safety of imported foods?**

For more information, visit safefruitsandveggies.com

**Bottom Line** USDA’s Pesticide Data Program consistently shows that any residues found on either imported or domestically-grown fruits and vegetables pose no safety concern.
Pesticides and Food: What you need to know

From supermarkets to farmers markets, Americans can enjoy hundreds of nutritious, fresh and high-quality fruits and vegetables. In order to provide such a plentiful food supply, conventional and organic farmers have multiple options to protect crops from weeds and pests—including pesticides. Even with strict safety standards in place to help ensure the safety of the food supply, you may have questions about the use of pesticides in food production, as well as pesticide residues on food.

What is a pesticide?
A pesticide is any substance or mixture of substances—natural, organic or man-made—used to prevent, destroy or manage pests. Not all pesticides are the same. Different types of pesticides target different types of pests. For example, insecticides target insects, herbicides target weeds, and fungicides target fungi that may cause plant diseases.

Why are pesticides used to grow food?
There are thousands of insects, weeds and plant diseases that can have a devastating effect on conventional and organic crops and, ultimately, threaten our food supply. Pesticides are one of many tools farmers use to protect their crops, similarly to how you may use pesticides to protect plants in your home garden.

How are pesticides tested for safety?
Pesticides are strictly regulated in the United States to ensure that they may be used safely and will not harm human health or the environment. All pesticides are rigorously screened before being allowed for use. Three government agencies share responsibility for regulating conventional and organic pesticides and ensuring the food supply is safe: U.S. Environmental Protection Agency (EPA), United States Department of Agriculture (USDA) and U.S. Food and Drug Administration (FDA).

Who monitors pesticide residue levels on fruits and vegetables?
Small amounts of pesticide are sometimes present on produce after it leaves the farm, these are known as “pesticide residues.” The U.S. Environmental Protection Agency (EPA) has developed strict limits (or “tolerances”) for the amount of pesticide residue that can be present on food. The FDA and USDA share responsibility for monitoring levels of pesticide residues in and on foods.

Are fruits and vegetables that have been treated with pesticides safe to consume?
Yes. Most pesticide residues, if present at all, are typically well within safe levels (as determined by the EPA) for both adults and children. The website www.safefruitsandveggies.com has a “safe produce” calculator that shows how much of a food can be eaten before reaching a minimal level of health concern. For example, a child could consume over 1,500 servings of strawberries in one day (a feat that would be physically impossible) without any adverse

FAST FACTS

- The benefits of consuming fruits and vegetables far outweigh any risks from the use of pesticides. Conventional or organic, both types of produce are highly regulated and safe.
- Both conventional and organic farmers may use pesticides.
- Federal and state sampling programs consistently show that pesticide residues on conventional and organic foods are at very low levels, when present at all.
- Washing fruits and vegetables often eliminates any pesticide residues, if they are present at all.
- Farmers use the smallest amount of pesticide necessary to protect their crops, so they only apply pesticides at the right time, in the right amount, and at the right location.
health effect from pesticide residues, even if the strawberries have the maximum pesticide residue levels identified by FDA or USDA.

**Do conventional and organic farmers always use pesticides?**

No. Pesticides are expensive, so both conventional and organic farmers try to control insects, weeds, fungi or diseases using a variety of lower cost methods and tools. The section below highlights some of these methods, such as integrated pest management. The decision to use pesticides can be based on scouting fields for pests, historical experience or inspections conducted by certified crop advisors.

**Are pesticides used in organic production?**

Yes. "Organic" does not necessarily mean "pesticide free". In fact, organic production can and often does include pesticides. The United States Department of Agriculture (USDA) organic regulations provide a national list of allowed and prohibited substances—man-made and natural, available at http://www.ams.usda.gov/nop.

**How do farmers manage the amount of pesticides used to grow food?**

Both conventional and organic farmers take steps to ensure that pesticides are applied at the right time, in the right amount, and in the right location. Some examples include:

- **Integrated pest management (IPM):** Used by conventional and organic growers, IPM is a process that focuses on managing insects, weeds and diseases through a combination of cultural, biological and chemical measures. Pesticides are used only when needed and in combination with other approaches. Pest control materials are selected and applied in a manner that minimizes pesticide exposure for humans and the environment.

- **Precision agriculture:** Precision agriculture—also known as site-specific crop management—incorporates technologies that increase crop yields, decrease the amount of agricultural inputs (pesticides, fertilizers, water, etc.), and minimize impacts on the environment. Global positioning systems (GPS), geographical information systems (GIS), and satellite and aerial remote sensors are used in precision agriculture to pinpoint areas of need in a field. Sometimes, only a small section of a field may need to be treated for pests or weeds. Using the data from these tools, conventional and organic farmers will apply the right amount of a pesticide, at the right time, and in a precise location of a field, thus reducing the amount of pesticides applied.

- **Biotechnology:** Scientists can use biotechnology to add genes with desirable characteristics, like insect protection or herbicide tolerance, to crops. These plants are often called “Genetically Modified Organisms” or “GMOs”. Herbicide-tolerant crops allow the crop to survive while weeds are eliminated and reduce the need for tillage that, in turn, decreases soil erosion. Biotech (or “GMO”) crops with insect control traits reduce insect damage and require fewer or no insecticide applications. There also are biotech crops on the market that tolerate drought stress, avoid viral infections and produce healthier oils. Upcoming biotech crops include apples that stay fresh longer and potatoes that resist browning, thus reducing food waste.

**QUICK TIPS TO FURTHER REDUCE YOUR EXPOSURE TO PESTICIDE RESIDUES**

The risk of exposure to pesticide residues in fruits and vegetables is extremely low. However, by following the FDA's proper handling and rinsing practices, you can further minimize or eliminate pesticide residues, dirt and bacteria (if present). The tips below apply to conventionally-grown and organic produce.

- **Rinse and scrub:** All fruits and vegetables should be rinsed thoroughly with clean running water before eating. For firm produce, scrub with a clean produce brush on the surface while rinsing. Scrubbing will remove most wax coatings and residues, along with any dirt and bacteria. If the item package indicates "pre-washed," "pre-rinsed" or "ready-to-eat," you can consume safely without further rinsing. Do not use soap. Dry with a paper towel or clean towel.

- **Peel and discard:** Peeling produce can also remove any residues (if present) that may be on the skin. Rinse the produce before peeling. Throw away outer leaves of leafy vegetables.
PBH 2015

Successes!
For PBH, 2015 was highlighted by excellent media (print and digital) and social media impressions, strong traffic to our consumer website, significant and varied industry support and involvement, and a successful introduction of the new Formula 5 university marketing competition. Ongoing outreach to health professionals, implementation of two grant programs, and the development of four research reports rounded out the year at PBH. Ultimately, a record high percent (49%) of moms say that the Fruits & Veggies—More Matters® brand motivates them to eat more fruits and vegetables, compared to just 24% in 2007. Highlights include:

**MEDIA**
The year 2015 was again particularly strong for media and social media impressions. Nearly 44 billion media impressions were generated through print and electronic PR and communications efforts surpassing the 2015 goal, 34% higher than 2014, and almost 4-fold higher than 2013. Facebook likes surpassed goal for the year (Q4=719K), 67% more than 2014. The year ended with Twitter followers up 22% (Q4=53.5K), Pinterest likes up 17% (Q4=10.8K), and Instagram followers up 467% (Q4=6.4K) over 2014.

**WEB**
Also noteworthy is continued strong growth in visits to the FruitsAndVeggiesMoreMatters.org consumer website. The 2015 year ended with an average of 350K web visits/month, 18% higher than the prior year average. There were nearly 15K new ‘opt-in’ participants for e-communications, 18% over 2014, for a total of 96K opt-ins by the end of 2015.

**INDUSTRY**
The year ended with 72 Industry Role Models, 17 Champions, and 6 Supermarket RDs of the Year, demonstrating significant industry support and involvement. PBH continued to work with our retail partners and supporters including seeking ongoing support from retailers (current and prospects); hosting Business Exchange Roundtables with buyers and supermarket dietitians at the PBH 2015 Consumer Connection Annual Conference; maintaining outreach to independent retailers, including attending/exhibiting/speaking at the National Grocers Association conference in February; and hosting 22 RD’s at the PBH 2015 Supermarket RD Program at Fresh Summit.

**HEALTH INFLUENCERS**
PBH’s outreach to roughly 20,000 educators and health professionals continued throughout 2015. This included the marketing of education materials on our websites, including monthly pre-drafted social media posts, and 2 webinars. Two issues of the Fruit & Veggie Connection Magazine were also released. The new Store Tour Training Grants were awarded to 18 universities in 2015. They will train 400 nutrition/dietetic students who, in turn, will give tours to 4K fellow millennials and local community members. Six Role Models and 2 Champions were identified among the public health community for 2015.

**RESEARCH**
PBH awarded grantees to two university researchers to test marketing of fruits and vegetables. These were presented at the 2016 PBH Annual Conference, April 4-6. Four reports were also completed in 2015:

- State of the Plate Report: 2015 Study on America’s Consumption of Fruit & Vegetables
- Dads’ vs. Moms’ Attitudes Related to Fruit & Vegetable Consumption and

Join us in celebrating 25 years of PBH success in 2016!
PBH’s RECOGNITION and GRANT Programs

Important Deadlines!

<table>
<thead>
<tr>
<th>Program</th>
<th>Deadline</th>
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<tbody>
<tr>
<td>Champion and Role Model Program</td>
<td>January 5</td>
</tr>
<tr>
<td>Supermarket RD of the Year</td>
<td>January 5</td>
</tr>
<tr>
<td>Formula 5 Marketing Competition</td>
<td>September 30, Intent to Submit a Proposal December 31, Full Proposal</td>
</tr>
<tr>
<td>Store Tour Training Grant Applications Due</td>
<td>September 30 for spring semester, April 30 for fall semester</td>
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Fruits & Veggies—More Matters

Role Model or Champion

Each year PBH honors organizations, within the fruit and vegetable industry, as well as externally, who meet the criteria to be recognized as a Fruits & Veggies—More Matters* Champion or Role Model. Certain criteria must be met to be honored as a Champion and that same criteria plus more to be honored as a Role Model. Companies and associations within the private and public sectors are eligible to apply. For more information, visit: PBHFoundation.org/Get Involved – Criteria for Champion and Role Model Program.

Supermarket Dietitian of the Year

Another annual recognition program is PBH’s Supermarket Dietitian of the Year. Like with the Champion and Role Model program, there is a set of criteria that must be met in order for a dietitian to be considered. The submission can be made by the dietitian or, and ideally, by a colleague or supervisor. For more information, visit PBHFoundation.org/Get Involved – Supermarket RD of the Year.

Formula Five Marketing Competition

This competition offers marketing majors, at accredited colleges and universities within the United States, the opportunity to influence fruit and vegetable marketing, sales, and consumption within America. Three to five proposals are selected and team representatives associated with each proposal are invited to attend PBH’s Annual Conference each spring to present the marketing proposal to conference attendees. For more information, email development@PBHFoundation.org.

Supermarket Tour Training Grant

The Supermarket Tour Training Grants are used to encourage enhanced collaboration between supermarkets and university nutrition and dietetic programs with a specific emphasis on training nutrition and dietetic students to deliver grocery store tours about fruit and vegetables. At least 5 universities are awarded grants each fall and spring semester. For more information, email storegrant@PBHFoundation.org.
PBH was pleased to honor the 2015 Fruits & Veggies—More Matters® Role Models and Champions at a special luncheon during PBH’s 2016 Annual Conference. Industry (non-retail) Role Models and Champions were recognized for their efforts to support the Fruits & Veggies—More Matters national health campaign. Honorees engaged in a variety of activities such as placing the Fruits & Veggies—More Matters® logo on POS materials and packaging, linking to FruitsAndVeggiesMoreMatters.org, and engaging with PBH on social media channels.

Industry Role Models
AJ Trucco
American Frozen Food Institute
Bard Valley Medjool Date Growers
Association
Barsotti Family Juice Company, Inc.
Black Gold Farms
Blue Book Services
Borton and Sons
Braga Fresh Family Farms
California Avocado Commission
California Cling Peach Board
California Strawberry Commission
Campbell Soup Company
Can Manufacturers Institute
Canned Food Alliance
Chelan Fresh Marketing
Chilean Fresh Fruit Association
Dave’s Specialty Imports
Del Monte Foods
Del Monte Fresh Produce
Dole Packaged Foods, LLC
Domex Superfresh Growers
Duda Farm Fresh Foods
Earthbound Farm
Florida Fruit & Vegetable Association
Giorgio Fresh Mushrooms
Green Giant Fresh
Grimmway Farms
Juice Products Association
Mastronardi
Melissa’s Produce, Inc.
Michigan Apple Committee
Monsanto Company
Monterey Mushrooms
Mushroom Council
Naturipe
Nestle USA
Nickelodeon™
Ocean Mist Farms
Pacific Coast Producers
The Packer
Pear Bureau Northwest
Rainier Fruit Co., Inc.
Red Sun Farms
Robinson Fresh
Ruiz Sales, Inc.
Sage Fruit Co.
Seneca Foods Corporation
Southern Specialties
Stemilt Growers, Inc.
Subway
Sun-Maid Growers of CA
Sunkist Growers, Inc.
Syngenta Corporation
Sysco/FreshPoint
Taylor Farms
The Oppenheimer Group
The Walt Disney Company
Tomato Products Wellness Council
U.S. Apple Association
Ventura Foods
Welch’s
Wonderful Citrus
Zespri® Kiwifruit

Industry Champions
Alliance for Potato Research & Education
Blanc Industries
Corey Brothers
Crown Poly, Inc.
Frieda’s
Matthews Ridgeview Farms
M&R Farms
National Watermelon Promotion Board
Okanagan Specialty Fruits
Produce Business
Rijk Zwaan
Seald Sweet
Valley Fig Growers

During the annual conference, PBH also honored ten retailers as Role Models and three as Champions.

Retail Role Models
Balls Foods
HAC Retail
Hen House Markets
Meijer, Inc.
Niemann’s Foods
Redner’s Markets, Inc.
Robins Air Force Base
Roudy’s Supermarkets, Inc.
Skogen’s Festival Foods
The Kroger Company
Village Supermarkets

Retail Champions
Ahold USA
HEB
Jewel-Osco
K-VA-T Food Stores, Inc.
PBH is pleased to announce the finalists for the 2nd Formula 5 Marketing Competition, a competition that offers marketing majors the opportunity to influence fruit and vegetable marketing, sales, and consumption within America. From 36 submissions, the finalists included:

**Arizona State University**, Rob’s Jalapeños, 1st Place

**Concordia University, St. Paul**, Beet Booster, 2nd Place

**California State University, Fresno**, Fresh-Ta-Bowl, 3rd Place

**Concordia University, St. Paul**, Go Bananas!, 4th Place

**West Chester University**, Go Animals!, 5th Place

**Millersville University**, Pineapples, 6th Place

The first, second, and third place winners’ marketing concepts, can be found on the PBHFoundation.org site in the Annual Meeting section.

PBH will continue sponsorship of its 3rd annual Formula 5 Marketing Competition in 2016. The competition is not only another way PBH is delivering value to donors, supporters, and the fruit and vegetable industry, but also an avenue for industry companies to tap into new ideas from millennial marketers, as well as the opportunity to identify talent through internships and build relationships with top marketing colleges across the country.

To participate in the competition, small groups of college junior and senior marketing students need to create a complete marketing proposal and plan, including market analysis, indicators of success and financials. Three to five proposals will be selected and team representatives will be invited to attend PBH’s 2017 Annual Conference to present the marketing proposal to conference attendees. The 2017 Annual Conference will be held April 5-7, 2017 at the Omni Hotel & Spa at Montelucia.

The full outline of and criteria for the competition can be found on the PBHFoundation.org site. If you work with a local university, consider letting them know about the Formula 5 Marketing Competition. An email of intent to submit a completed submission must be sent to marketingcomp@PBHFoundation.org by September 30, 2016. Questions on the marketing competition can be directed to Kristen Stevens, kstevens@PBHFoundation.org or 302.235.2329, x312.
PBH invites you to nominate a supermarket dietitian or health and wellness professional who provides outstanding support to PBH and for the Fruits & Veggies—More Matters national health campaign. Nominations will be accepted through January 5, 2017 for the 2016 calendar year. Winners will be recognized during PBH’s Annual Conference, April 5-7, 2017. The eligibility information, criteria and nomination form can be found on the PBHFoundation.org website on the Get Involved tab.

PBH is pleased to recognize the following supermarket dietitians for their outstanding work in 2015:

MELANIE KLUZEK, Niemann Foods
LAUREN LINDSLEY, Skogen’s Festival Foods
JOANNE HEIDKAMP, Hannaford
ELIZABETH HALL, K-VA-T
STEPHANIE RUpp, Hy-Vee
LaCHELL MILLER, Village Super Market/Shoprite

PBH hosts a monthly Twitter party on the first Wednesday of every month at 4:00 pm EST to provide fruit and vegetable information, tips and recipes directly to consumers, members of the fruit and vegetable industry, daycares, and even chefs! We never know who will join our party! On average, 220 participants join our monthly party generating an average of 4,200 mentions and retweets and 4.6M impressions.

Be sure to check our Twitter feed often for party updates and topics, Twitter.com/Fruits_Veggies.
PBH is pleased to announce the latest Supermarket Tour Training Grant recipients for the collegiate spring 2016 semester. The grant funding is used to encourage enhanced collaboration between supermarkets and university nutrition and dietetic programs with a specific emphasis on training nutrition and dietetic students to deliver grocery store tours about fruit and vegetables.

These schools and their partnering grocers include:
- **California State University, Fresno**, Save Mart
- **Medical City Dietetic Internship Program, Dallas**, United Supermarkets
- **Middle Tennessee State University**, Kroger
- **The University of Arizona**, Fry’s
- **The University of Southern California**, Vons
- **University of Nevada, Las Vegas**, Vons, Trade Joe’s, Albertson’s, Sprouts
- **Viterbo University, La Crosse**, Hy-Vee

Including these grantees, a total of 28 universities have been awarded grants for store tour training. More than 500 nutrition/dietetic students will have been trained and hosted tours in stores. More than 5000 consumers will have participated in the store tours: half as fellow college students and half as members of the community.

The 2016 Request for Proposal is available for fall semester applications. This funding period will coincide with the collegiate fall semesters. Grants again will be limited to no more than $5,000 per internship program per semester. Look for an announcement about the 2017 program soon.

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Common Consumer Question:

**What are those 4-digit numbers on the stickers when I buy produce?**

Those numbers are called price look-up codes (PLU), which have voluntarily been used by grocers since 1990 for pricing, inventory control and sales data to identify bulk produce (and related items such as nuts and herbs).

PLU codes are 4 or 5 digit numbers and will appear on a small sticker applied to the individual piece of fresh produce. The PLU number identifies produce items based upon various attributes which can include the commodity, variety, growing methodology (e.g. organic), and the size.

The 4-digit PLU codes for produce are randomly assigned within a series of numbers within the 3000 and 4000 series. There is no intelligence built into the 4-digit code. For example, no one number within the 4-digit number represents anything in particular. The 4-digit codes are for conventionally grown produce; 5-digit codes are used to identify organic produce. The prefix of ‘9’ would be placed in front of the 4-digit conventionally grown code for organic produce.

Though the ‘8’ prefix was once reserved for GMO produce items, the prefix was never used by grocers. In the future, PLU codes will utilize the ‘8’ prefix to keep up with growing demand for more PLU codes world-wide. Unlike the ‘9’, the leading digit ‘8’ will have no significance.

The PLU coding system is voluntary. The numbers are assigned by the International Federation for Produce Standards (IFPS), a global coalition of fruit and vegetable associations that standardizes their use globally. There are currently over 1400 PLU codes issued for fresh produce and produce related items.

**Bottom Line** Those 4-digit numbers are called price look-up codes (PLU), which are used by grocers to identify sales of bulk produce (and related items such as nuts and herbs). They are randomly assigned. The prefix of ‘9’ is placed in front of the 4-digit conventionally grown code to depict organic produce. You may see the prefix ‘8’ in the future and it has no significance. Grocers just needed more PLU numbers for produce.
Join a Fruits & Veggies—More Matters Twitter party, the 1st Wednesday of each month.

Share 30 ways to use fruits and vegetables in 30 days. Find this toolkit at PBHFoundation.org.

Spread the “all forms matter” message through social media initiatives.

Highlight a fruit or veggie of the month through displays and signs.

Use PBH social media posts as they are written, or tweak them to fit your needs.

Use PBH’s free marketing tools at PBHFoundation.org/pub_sec/st_coor/mar_tools/

Encourage others to ‘opt-in’ to receive recipe of the week, healthy meal ideas, gardening tips and more.

Add a link to your website for FruitsAndVeggiesMoreMatters.org.

Encourage parents to do fun activities with their kids like Take Your Kids to the Supermarket, a tour available at PBHFoundation.org

Sign up for PBH Foundation website updates at PBHFoundation.org/get_inv/updates/
PBH sponsors three educational programs and events each calendar year for supermarket dietitians. Attendance is complimentary and by invitation only. All events provide Continuing Professional Education Units from the Commission on Dietetic Registration. Two of the programs coincide with the timing of the National Grocers Association’s Annual Expo and the Produce Marketing Association’s Fresh Summit. The third event is PBH’s Annual Conference.

PBH PROGRAM AT NGA
PBH hosts a small group of dietitians, from small chain and independent retailers, at the annual National Grocers Association (NGA) Expo, typically held in February in Las Vegas, Nevada. The program includes: Complimentary attendance at all NGA breakfast sessions and workshops, networking dinners, and time on the expo floor. The 3rd annual program will be held February 12-14, 2017.

PBH PROGRAM AT FRESH SUMMIT
For the 5th consecutive year, PBH will host approximately 20 supermarket dietitians for a 3-day educational and networking program during PMA’s Fresh Summit October 13-16, 2016 in Orlando, Florida. In addition to several workshops and networking opportunities, this event allows supermarket dietitians to explore the exposition of the largest produce trade show in North America.

PBH ANNUAL CONFERENCE: THE CONSUMER CONNECTION
The final educational program and event PBH sponsors annually for retail dietitians is our own annual conference, which will be held April 5-7, 2017 in Scottsdale, Arizona. The conference affords attendees the opportunity to build strategic alliances, grow their brand, learn from vibrant speakers, partner with colleagues, and connect with peers.

If you are interested in attending any one of these events, contact Cyndy Dennis, cdennis@PBHFoundation.org or Elizabeth Pivonka, epivonka@PBHFoundation.org.
Produce for Better Health Foundation

Produce for Better Health Foundation (PBH) is a non-profit 501 (c) (3) consumer education foundation whose mission is to motivate Americans to eat more fruit and vegetables to improve public health. PBH partners with government agencies like CDC, non-profit organizations, health professionals, educators, and members of the fruit and vegetable industry to promote increased consumption of fruit and vegetables. We leverage private industry and public sector resources, influence policy makers, motivate key consumer influencers, and promote fruit and vegetables directly to consumers.

Fruits & Veggies—More Matters

Managed by PBH, Fruits & Veggies—More Matters is the nation’s largest public-private fruit and vegetable nutrition education initiative. The foundation of Fruits & Veggies—More Matters is a brand logo and messaging designed to motivate Americans to eat more fruit and vegetables. Fruits & Veggies—More Matters materials and messages are widely featured in print, on websites, and on social media platforms like Facebook, Twitter, Pinterest, Instagram, YouTube, and blogs. Since its inception in 2007, it is estimated that the Fruits & Veggies—More Matters logo has been seen an average of 336 times by every American.

Fruit & Veggie Connection is a publication of Produce for Better Health Foundation for the public health community. Reprinting with credit is encouraged. Direct comments or questions to FVConnection@PBHFoundation.org
PBH Offers FREE Resources on Fruit & Vegetables!
Access is quick and easy . . .

Visit our websites

PBHFoundation.org
(for health influencers)

MoreMatters.org
(for consumers)

FoodChamps.org
(for kids)

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Fruit & Veggie Connection Magazine
Webinars

Signing up is as easy as 1, 2, 3!
1. GO to PBHFoundation.org/get_inv/updates
2. ENTER your email and click ‘Join’
3. CHOOSE the information you want to receive

Join the Discussion

PBH Twitter Party: the first Wednesday of each month at 4 p.m. EST

Fruit & Vegetable Blog: Stem & Stalk . . . Let’s Talk
(MoreMatters.org/?cat=27)