



DIETITIAN TOOLKIT

# Dear Dietitian,

hank you for downloading the Juice Products Association's online nutrition toolkit. We value the work that you do to give consumers the resources they need to make healthier food choices. According to the 2015-2020 Dietary Guidelines, only one in four Americans meet their daily recommendations for fruit consumption. Research shows that those who do hit their goals are likely to do so with a combination of both 100% juice and whole fruit. Nutrition education focusing on the variety of options available to help consumers reach those goals — like adding a serving of 100% juice into the diet — is essential.

The members of the Juice Products Association want to ensure that you have the right tools in hand when you counsel, provide in-store recommendations or write about 100% juice. We've created this toolkit so that you have a one-stop location for science-backed nutrition information about juice. It includes a diverse offering of materials, including:

- "The Juicy Facts" Nutrition Fact Sheet and Infographic: Find out what you need to know about juice and why it fits into a healthy diet.
- Sample Blog Posts and Social Media Content: Do you need content for your newsletter, blog, or social media accounts? Share our pre-crafted posts or take the ideas and make them your own.

- Delicious and Nutritious Recipes: Make your recipes shine with 100% juice. One-hundred percent juice can add flavor, cut fat and provide an extra nutritional boost to many dishes and drinks! We're sharing eight of our favorites and you can use them to suit your needs.
- A Cooking Demo: We've laid out everything you need to demonstrate our delicious nutrient-packed Farro Salad recipe in an easy-to-read, easy-to-do format. Take this demo into a broadcast studio and use it as a lesson plan for your next instore cooking class for your clients!
- A Kid's Activity: Teaching kiddos about nutrition can be hard. Our Juice Word Search is not only educational but is sure to be 100% fun!
- Juice Myth-Buster: There are a lot of inaccurate myths about juice that need to be squashed. This one-pager lays out science-backed responses to some of these common misconceptions.
- Research Synopsis: New nutrition science is constantly being published on 100% juice and its role in the diet. Learn about cutting-edge science with this easy-to-read synopsis complete with sourced links that can help expand your knowledge.



# Get in Touch

Let us know if you have any questions or would like any additional information. You can also visit our consumer website **SipSmarter.org** for more information. In addition, if you are looking for a more customized program, we'd be happy to discuss. Please don't hesitate to contact us at 202-591-2438.

#### Sincerely,

**The Juice Products Association Team** 



# What You Need to Know About 100% Juice

- About 75% or three in four Americans are NOT consuming enough fruit every day. That is why the 2015-2020 Dietary Guidelines recommend increasing fruit in all forms, including 100% juice. In fact, as part of a healthy diet pattern, up to half of your daily fruit intake may come from 100% juice.<sup>1</sup>
- The Dietary Guidelines recognize one cup of 100% fruit juice as equivalent to one cup of whole fruit.<sup>1</sup>
- In addition to water, the Dietary Guidelines say beverages that contribute beneficial nutrients, such as "fat-free and lowfat milk and 100% juice, should be the primary beverages consumed" by Americans. 1
- According to the American Academy of Pediatrics, (AAP), children 1 to 3 years of age can have up to 4 ounces of 100% juice per day. Up to 6 ounces is appropriate for children 4 to 6 years of age, and children 7 years and older may consume up to 8 ounces per day.<sup>2</sup>
- 100% fruit juice and fortified juices deliver essential vitamins and minerals, such as vitamin C, potassium, vitamin D, and calcium, with no added sugars. They also provide healthpromoting plant nutrients like polyphenols.<sup>3</sup>

- 100% fruit juice is the number one source of vitamin C (35%) among children 2-18 years of age and the second major contributor of potassium (8%), second only to milk (19%). Fruit ranks third (12%) and fourth (5%), for these nutrients, respectively.<sup>4</sup>
- Research shows that people who drink juice tend to eat more whole fruit and have better quality diets than people who do not drink juice. Furthermore, juice complements rather than competes with fruit in the diet.<sup>5</sup>
- Juice is an easy, convenient, accessible, and cost-effective way for both children and adults to obtain their daily fruit servings. It is available from a variety of sources year-round and nationwide.<sup>67</sup>
- The majority of science on obesity and children overwhelmingly shows no association between drinking 100% juice and trends in weight gain or obesity.<sup>5,8,9,10</sup>
- Juice is not the culprit behind cavities in young children. There are several scientific studies that found no association between drinking 100% juice and early dental carries.<sup>11</sup>



#### Sources:

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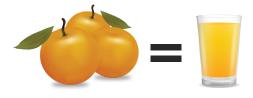
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#### 2015-2020 Dietary Guidelines for Americans Say...



1/2 cup fruit is equal to 1/2 cup fruit juice





Juice is a primary beverage choice



#### Sources

Choosemyplate.gov: Fruit Group

- Added

Sodium

Sugar

+ Magnesium

± Fiber

U.S. Department of Agriculture and U.S. Department of Health and Human Services. 2015-2020 Dietary Guidelines for Americans. 8th Edition, Washington, DC: January 2016.

U.S. Department of Agriculture. Scientific Report of the 2015 Dietary Guidelines Advisory Committee February 2015: 1-571

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1254-1261. Daniels SR and Hassink SG. "Clinical Report: The Role of the Pediatrician in Primary Prevention of Obesity" Pediatrics. July 2015; vol 136 (1): e275-e292 JPA is the national trade association representing the juice products industry. Our manufacturers represent over 80% of juice and fruit beverage production in the US. To learn more about JPA visit: www.juiceproducts.org and SipSmarter.org

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SipSmarter.org



Dental health



# Recipe Demo Farro Veggie Salad A vegetarian dish that the whole family will love



#### **Talking Points**

- Farro is an ancient wheat grain that has been eaten for thousands of years around the world. Today, you're likely to find farro in many Mediterranean, Ethiopian or Middle Eastern recipes but its versatility allows it to be the the center of almost any cuisine. Look for it in the specialty grain section of your supermarket.
- Using farro as the base of a dish is a delicious, healthy, and easy way to get your family to eat more fruits and vegetables. This recipe even "sneaks" a serving of fruit into the dressing!
- If asparagus, cherry tomatoes or arugula aren't a hit at your house, try switching them out for other veggies. How about using broccoli, red pepper and kale? Green beans are another option. Can't find basil? Parsley or mint will work too.
- Want something more substantial than a side? With a few extra touches, you can quickly transform this side dish into a hearty "grain bowl" that is filling enough for dinner. Add in some lean protein like chicken or shrimp. Or top it off with a sprinkle of feta or goat cheese and a handful of nuts.
- The base of the dressing is grapefruit juice which gives a tart, citrusy note, as well as supplies important vitamins and minerals like vitamin C, folate, and potassium. Don't like grapefruit juice? Try orange, apple or any other 100% juice.
- Incorporating juices into your dressings and sauces, like in this recipe, allows you to fit in an additional serving of fruit, while enhancing the dish with a flavor that the whole family will love!

#### Food Prep

Depending on time available, you can have the ingredients premeasured or measure them during the demo. If time restrictions apply, you may choose to pre-cook the farro and blanch the asparagus ahead of time so it is ready to mix with the rest of the ingredients. One cup of cooked farro yields approximately 3 cups cooked.

#### **Pre-demo Prep**

- Cook 1 cup farro in water according to directions
- Cut 2 cups asparagus into 1" lengths
- Cook asparagus in large pot of boiling water for 1 minute, drain
- Finely chop or grate 1 tsp. fresh garlic
- Roughly chop ½ cup fresh basil
- Halve 2 cups cherry or grape tomatoes
- Roughly chop 2 cups arugula

#### **Equipment List**

#### FOR COOKING FARRO:

- Portable hotplate or stove for farro
- Pot and lid
- Potholder

#### FOR DEMO:

- Measuring cups and spoons
- Paring knife
- Cutting board
- Whisk
- Hand held grater or zester (optional)
- Mixing spoon
- Large mixing bowl
- Small mise-en-place bowls for measured ingredients
- Serving spoon for plating
- Hand towels
- Apron

#### FOR SAMPLING:

- Small plates/bowls
- Forks
- Napkins





## Recipe Demo

Farro Veggie Salad with Basil-Grapefruit Dressing





Yields: 6 (1 cup) servings

#### Ingredients

- 1 cup/6 oz. farro
- 2 cups/8 oz. asparagus, cut into 1" lengths
- 4 oz. ruby red grapefruit juice
- 1 tsp. garlic, finely chopped or grated
- 2 tsp. Dijon mustard
- 3 tbsp. extra virgin olive oil
- <sup>1</sup>/<sub>2</sub> cup/<sup>1</sup>/<sub>2</sub> oz. fresh basil, sliced or very roughly chopped
- 2 cups/8 oz. cherry or grape tomatoes, halved
- 2 cups/2 oz. arugula, washed and roughly chopped

#### **Cooking Instructions**

Place farro in a large pot with plenty of salted water. Bring to a boil and cook until al dente, about 40 minutes. One minute (depending on the size of the asparagus) before the farro is done, add the asparagus to the pot. Drain.

While the farro is cooking, make the dressing. Whisk together the grapefruit juice, garlic, mustard and olive oil. Stir in the basil. When the farro is done and while it's still hot, toss half the dressing with the farro. Taste and season with salt and pepper. Let sit for 10 minutes to allow the flavors of the dressing to absorb. Stir in the tomatoes and arugula along with the remaining dressing. Taste once more and serve!

#### **Nutrition Information**

**Per 1 cup serving:** 200 calories, 8 g total fat, 1 g saturated fat, 27 g carbohydrate, 6 g protein, 6 g dietary fiber, 4 g sugar, 243 mg sodium, 0 mg cholesterol

VISIT: **SipSmarter.org** for more information about recipes made with 100% juice



# Sample Blogs

Five Super Easy Ways to Add More Fruits and Vegetables to Your Diet

### TIPS FROM A REGISTERED DIETITIAN



et's face it: most of us can all use a little more fruits and vegetables in our lives. According to recent US consumption data, more than 75% of Americans do not meet the 1½ to 2 cups of fruit per day recommended by the U.S. Dietary Guidelines. For vegetable intake this number is even higher! Getting more fruits and vegetables doesn't have to be a chore. In fact, with these simple tips, upping your fruit and vegetable intake can be as easy as one, two, three!

**1. Soups On** – Soup is one of the easiest and most nutritious ways to add more vegetables to your diet. It's also a great way to increase variety, use up vegetables that are sitting in your refrigerator, and add some creativity into your meals. Broth soups are your best bets but pureed vegetable soups can be good choices too. For more substance, add some beans and pasta to your soup.

**2. Double Down** – Increasing your fruit and vegetable intake doesn't have to create more work in the kitchen. It may just be a matter of bumping up portions. Why not try having a second

helping of your favorite vegetable, grabbing an extra handful of grapes or taking two fruits – say an apple and an orange — to the office?

**3. Be Sneaky** – Incorporating more fruits and vegetables in everyday meals is a snap, if you just keep them in mind. To sneak an extra serving into your diet, try adding 100% fruit juice in place of some oil in your homemade salad dressing. Not only will it cut the fat, but it will add sweetness to your salad and extra vitamins and minerals. This fruity dressing will also boost flavor and moisture in meat, fish or chicken dishes.

**4. Drink Up** – If you just don't have the time to fit more fruits and vegetables into your busy lifestyle, consider drinking 100% juice to help meet your needs. In addition to 100% fruit juice, there are also fruit and vegetable blends so you can get the best of both worlds. The 2015-2020 U.S. Dietary Guidelines recognizes one cup of 100% juice to be the equivalent to one cup of whole fruit, so grab a glass and drink to health!

**5. Grab and Go** – To save time, pre-wash and cut your fruits and vegetables when you get home from the grocery store. This way, you will be more likely to grab them as a snack instead of going for something ready-made! If you keep them front and center in the fridge, they will be hard to miss when you get hungry.

Looking for more tips on how to squeeze more fruits and veggies into your diet? Check out SipSmarter.org! Or follow @SipSmarter on your favorite social channels!





## Sample Blogs More Than Just a Drink

### MAKE MARINADES, SAUCES AND SALAD DRESSINGS WITH 100% JUICE



ake 100% fruit juice do double duty by creating flavorful marinades, sauces and salad dressings! Start with 100% fruit juice as a base and then add oil, a little acidity with lemon or lime juice and a seasoning ingredient such as ginger, garlic or fresh herbs. Just mix together and pour. It's that simple! Convenient and healthful, 100% juice can bring almost any dish to a new level! Interested in what else juice can do? Check out the tips below.

#### **Juice Adds Flavor:**

Experiment with different juices — try adding grape juice to salad dressings or cranberry juice to sauces. Each variety of juice can give your recipe a new kick!

#### Juice Lightens Up Salad Dressings:

Replace half the oil in your favorite salad dressing recipe with 100% juice. You'll add a new flavor and lighten your recipe up at the same time!

#### Juice Stretches Your Dollars:

Want to extend bottled sauces and marinades? 100% juice can help! Try whisking grape juice or apple juice into smoky barbeque sauce, adding pineapple juice to an Asian marinade, or mixing orange juice into mojo marinade.

To get your creative juices flowing, here are three recipes made with 100% juice that you can enjoy as is or customize:

#### Marinade

#### **Orange Chutney Marinade**

#### (Makes <sup>1</sup>/<sub>2</sub> cup)

This sweet-spicy marinade is perfect for chicken or fish. To tone down the heat, skip the jalapeño and replace it with a sweet bell pepper.

- ¼ cup orange juice
- 2 tbsp. sweet mango chutney
- 1 tsp. Dijon mustard
- 2 tbsp. chopped red onion
- 1 small jalapeño, seeded and chopped
- 2 tbsp. chopped cilantro
- 2 tbsp. canola oil
- ½ tsp. ground cumin

Whisk together in a small bowl. Pour over chicken or fish and let marinate at room temperature for 30 minutes or in refrigerator for an hour.

Per 1 tbsp.: 30 calories, 1 g fat, 10 g carbohydrate, 0 g protein, 0 g dietary fiber, 122 mg sodium



## Sample Blogs

### MAKE MARINADES, SAUCES AND SALAD DRESSINGS WITH 100% JUICE

#### Sauce

#### Pineapple Teriyaki Sauce

#### (Makes 1/2 cup)

Marinate a flank steak, shoulder steak, or London broil, in this tangy sauce. Besides adding flavor, pineapple juice contains enzymes that help tenderize the meat. Brush this savory-sweet sauce liberally on salmon before grilling or broiling, or add it at the end as a finishing sauce. Pineapple Teriyaki Sauce is also perfect for a stir-fry.

- ¼ cup 100% pineapple juice or 100% orange-pineapple juice blend
- ¼ cup fat-free, reduced-sodium chicken broth
- 2 tbsp. reduced-sodium soy sauce
- 1 tbsp. mirin (or 2 tsp. sake plus 1 tsp. sugar)
- 1 garlic clove, pressed
- ¼ tsp. ground ginger (or 1 tsp. grated fresh ginger)
- Freshly ground black pepper
- 2 oz. canola oil
- 2 tsp. cornstarch, optional

**For marinade:** In a large mixing cup, combine the 100% fruit juice, broth, soy sauce, mirin, garlic, and ginger. Add about 8 grinds of black pepper. Pour the Teriyaki Sauce into a 1-gallon resealable plastic freezer bag and add the oil. Add the desired beef or salmon, seal the bag, and marinate at room temperature for 30 minutes. Discard the marinade after using.

**For stir-fry sauce:** Omit the oil, but mix in the cornstarch. Add to the wok at the end, cooking just until the sauce thickens to coat the other ingredients, 60-90 seconds. This sauce keeps, covered in the refrigerator for 2 days.

Per 1 tbsp.: 70 calories, 7 g fat (<1g saturated fat), 3 g carbohydrate, 0 g protein, 0 g dietary fiber, 95 mg sodium

#### Salad Dressing

#### **Pomegranate Rosemary Vinaigrette**

#### (Makes 1<sup>1</sup>/<sub>2</sub> cups)

Take your salad up a notch with this flavor-filled vinaigrette! By cooking the pomegranate juice until it reduces, you get a rich flavor that will complement the fruit and vegetables on your salad.

- 1½ cups 100% pomegranate juice
- 1 sprig fresh rosemary
- 1/4 cup rice wine vinegar
- 2 tbsp. lemon juice
- 2 tbsp. honey
- <sup>1</sup>/<sub>2</sub> tsp. chopped fresh rosemary
- 1/4 tsp. minced garlic
- ¼ tsp. black pepper
- ¼ cup olive oil

Add the pomegranate juice to a small saucepan and place on the stove. Remove the rosemary leaves from the stem and add the leaves to the saucepan. Turn the heat to low and let reduce until it is about one half the original volume (should be about 1 hour). Strain to remove the rosemary leaves.

Combine the reduced pomegranate juice with the vinegar, lemon juice, honey, chopped rosemary, garlic, and black pepper in a blender. Blend together. After this is blended, continue to let the blender run while slowly drizzling in a stream of olive oil.

Be sure to shake dressing before each use. This dressing will keep covered in the refrigerator for 3 days.

For more marinade, sauce or salad dressing recipes visit **SipSmarter.org** 

Per 2 tbsp.: 71 calories, 5 g fat (1 g saturated fat), 8 g carbohydrates, 0 g protein, 0 g dietary fiber, 5 mg sodium



# Social Calendar

### SWEETEN' UP YOUR SOCIAL MEDIA



re you looking for some JUICY social content? We've laid out some fun material that will keep your Facebook, Twitter or Instagram followers excited about juice!

Incorporating messaging around juice can fit into any time of the year. Below, you'll find both versatile content and specific suggestions for each month!

#### **General:**

- If you're not sure what the proper serving of 100% fruit juice is for your child, here are simple guidelines to follow: <u>http://bit.ly/2CISIID</u>
- Yes, you CAN eat healthy on a budget! Here's how to get your servings of produce without breaking the bank: <u>http://bit.ly/2Cjf1JL</u>
- Did you know? 100% fruit juice can help you meet your daily nutrition goals. Find out how: <u>http://bit.ly/2Cilwv8</u>
- There are lots of healthy ways to use 100% fruit juice when you cook. Get inspired with these delicious recipes: <u>http://bit.ly/2Cp1ksE</u>

#### January



**Facebook:** Start the New Year off right with a focus on healthy eating! Get expert tips on small changes you can make each day, how to get more fruits and vegetables in your diet, and more: http://bit.ly/2MOSykf

Twitter: Start the New Year with a

focus on healthy eating! Learn tips from the experts to get the nutrients you need: <u>http://bit.ly/2M0KK1G</u>

**Twitter:** Start the New Year with a focus on nutrition! Get expert tips on small changes that make a big impact: http://bit.ly/2M0KK1G

#### **February**



**Facebook:** Show your heart some love during #NationalHeartMonth by getting your servings of heart-healthy foods like pomegranates and grapes. Here's how 100% juice can help: http://bit.ly/2M0LnIA

Twitter: Show your heart some love

during #NationalHeartMonth. Find out how 100% juice can help: <a href="http://bit.ly/2M0LnlA">http://bit.ly/2M0LnlA</a>



# Social Calendar

### SWEETEN' UP YOUR SOCIAL MEDIA

#### March



**Facebook:** What better time than #NationalNutritionMonth to improve your diet? If you're not sure how to get started, @sipsmarter has health tips, expert nutrition information, and delicious recipes: <u>http://bit.ly/2M0cYty</u>

**Twitter:** #NationalNutritionMonth is the perfect time to improve your diet! Start with yummy, RD-approved recipes: <u>http://bit.ly/2M0cYty</u>

#### June



**Facebook:** Cool down during hot days with fruity, refreshing drinks! @sipsmarter lists their favorite summertime thirst-quenchers: http://bit.ly/2M12cDf

Twitter: Cool down on hot days with fruity, delicious drinks! @sipsmarter lists

their favorite summertime thirst-quenchers: http://bit.ly/2M12cDf

#### April



Facebook: Not getting enough fruits and veggies in your diet? Here's how to eat more produce every day: http://bit.ly/2Cilwv8

**Twitter:** Not getting enough fruits and veggies in your diet? Here's how to eat more produce every day:

#### http://bit.ly/2Cilwv8

### July



**Facebook:** Liven up your cook-out with fruit-filled drinks and meals that everyone will love: <u>http://bit.</u>ly/2Cvmm9k

**Twitter:** Liven up your cook-out with fruit-filled drinks and meals that everyone will love: <u>http://bit.ly/2Cvmm9k</u>

#### May



**Facebook:** If you're not sure what the proper serving of 100% fruit juice is for your child, here are simple guidelines to follow: <u>http://bit.ly/2CISIID</u>

**Twitter:** If you're not sure what the proper serving of 100% fruit juice is for your child, here are simple guidelines to

follow: http://bit.ly/2CISIID

#### August



**Facebook:** 100% fruit juice is a healthy way to round out lunches and afterschool snacks. Find out more and get tasty recipe ideas: http://bit.ly/2CvnI3U

**Twitter:** 100% juice is a healthy complement to lunches and after-

school snacks. Find out more & get tasty recipes: <u>http://bit.ly/2Cvnl3U</u>



# Social Calendar

### SWEETEN' UP YOUR SOCIAL MEDIA

#### September



http://bit.ly/2M0qa1J

**Facebook:** Gearing up for fall sports? Find out how 100% fruit juice can help athletes rehydrate: http://bit.ly/2M0ga1J

**Twitter:** Gearing up for fall sports? Find out how 100% fruit juice can help athletes rehydrate:

#### November



http://bit.ly/2Cmml1K

December

**Facebook:** Vegetarians? Kids? Picky eaters? There's a nutritious Thanksgiving recipe idea for everyone at your table: <u>http://bit.ly/2Cmml1K</u>

**Twitter:** Vegetarians? Kids? Picky eaters? There's a nutritious Thanksgiving recipe idea for everyone at your table:

#### October



**Facebook:** Whip up fun – and healthy! – Halloween treats this year with these spooky ideas: <u>http://bit.ly/2M1xMAT</u>

**Twitter:** Whip up fun – and healthy! – Halloween treats this year with these spooky ideas: <u>http://bit.ly/2M1xMAT</u>



http://bit.ly/2M1yfmD

SipSmarter.org

**Facebook:** Get in the holiday spirit with fruity, seasonal cocktails that are sure to delight your guests: http://bit.ly/2M1yfmD

**Twitter:** Get in the holiday spirit with fruity, seasonal cocktails that are sure to delight your guests:

The the Sip Smarter social media team is always ready to connect and share content with you and your team. Tag us in your posts and we'll be sure to respond. @SipSmarter

@SipSmarter

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This delicious apricot orange bread makes a great addition to any brunch or breakfast. It's the perfect contrast of sweet and tart with fruity notes of orange and apricot. Plus, it bakes in less than an hour so you won't have to spend hours in the kitchen.

Yield: 16 (1-inch) slices

#### Ingredients

#### For the cake:

- 1¾ cups all-purpose flour
- <sup>3</sup>⁄<sub>4</sub> cup granulated sugar
- ½ tsp. salt
- 1 tsp. baking soda
- 1/2 cup sliced almonds, divided
- <sup>1</sup>/<sub>2</sub> cup finely chopped dried apricots (about 15)
- <sup>2</sup>/<sub>3</sub> cup orange juice
- <sup>1</sup>/<sub>3</sub> cup (5<sup>1</sup>/<sub>3</sub> tbsp.) unsalted butter, melted and cooled
- 1 egg
- 1/2 tsp. almond extract

- 1/2 tsp. vanilla extract
- 1 tbsp. finely grated orange peel (optional)

#### **Orange glaze:**

- 1/2 cup confectioners' sugar
- 1 tbsp. orange juice

#### Directions

Heat oven to 350° F. Spray bottom only of 8 x 4-inch metal loaf pan with cooking spray. In large bowl, stir together flour, granulated sugar, baking soda and salt. Add apricots and 3 tablespoons of the almonds; mix well. Set aside.

In medium bowl, beat orange juice, egg, melted butter, extracts and, if desired, orange peel with whisk or fork until well blended. Add all at once to dry ingredients. Stir just until dry ingredients are evenly moistened. Do not overmix.

Pour batter into prepared pan. Sprinkle with remaining almonds. Bake 50 to 55 minutes, until golden brown and a wooden pick inserted in center comes out clean. Cool 10 minutes; remove from pan. Cool completely.

For glaze, combine confectioners' sugar and orange juice in small bowl, stirring until smooth. Drizzle over bread while still warm. Let stand until glaze has set. Store tightly wrapped at room temperature for up to 2 days.

#### **Nutritional Information**

**Per Serving** (1 Slice): 172 calories, 6 g fat (3 g saturated fat), 28 g carbohydrate, 17 g sugars, 3 g protein, 1 g dietary fiber, 155 mg sodium



### **Ricotta Stuffed French Toast**





Coconut milk and ricotta cheese give this classic French toast an upscale twist, while 100% grape juice adds a fruity spin. Serve this elegant French toast recipe on special occasions or anytime you want to impress your brunch guests.

Yield: 4 (2 slice) servings

#### Ingredients

#### For syrup:

- 2 cups 100% grape juice
- 2 tbsp. cornstarch dissolved in 2-3 tbsp. water

#### For French toast:

- 4 eggs, beaten
- <sup>1</sup>/<sub>2</sub> cup unsweetened canned coconut milk (full-fat)
- 2 tbsp. sugar
- 1 tsp. cinnamon
- 1½ tsp. vanilla extract
- Pinch nutmeg
- 8 thick slices brioche
- 1 cup low-fat ricotta cheese
- 1 tbsp. unsalted butter

#### Directions

In a small pot, stir together grape juice and cornstarch dissolved in water. Set to medium heat and cook, stirring almost constantly, until bubbling. Cook about 3 minutes more until slightly thickened, making sure it doesn't bubble over. Turn off heat and let sit. It will thicken a little more as it cools.

In a large bowl, whisk together eggs, coconut milk, sugar, cinnamon, vanilla and nutmeg.

Pull a little bit of bread out of the center of each slice of bread, making a little well, being careful not to make a hole. Scoop about 1/4 cup ricotta cheese in the well of four of the slices. Top with the other slice of bread.

Heat the butter in a large skillet on medium heat. Swirl to coat the pan. Dip the "sandwiches" into the egg mixture on each side, pressing down slightly so it soaks up the liquid. Add to the hot pan and cook about 4-5 minutes until golden brown. Flip and cook 4-5 minutes on the other side. Serve warm, drizzled with the grape juice syrup.

#### **Nutritional Information**

**Per Serving** (One Sandwich): 679 calories, 33 g fat (21 g saturated fat), 73 g carbohydrate, 20 g protein, 1 g dietary fiber, 652 mg sodium



### **Mediterranean Salsa Verde**



Italians serve classic salsa verde as a condiment accompanying meat and fish. This updated recipe includes a refreshing splash of orange juice. Spread on grilled chicken and fish, toss it with cooked shrimp, or spoon it on salmon. It's so good that you may be tempted to eat from the bow!!

Yield: 1/2 cup or 8 (1 tbsp.) servings

#### Ingredients

- <sup>1</sup>⁄<sub>2</sub> cup flat-leaf parsley leaves, lightly packed
- 2 tbsp. chopped spearmint
- 2 tbsp. capers, rinsed and chopped
- 1 tsp. finely chopped garlic
- ½ tsp. dried oregano

- ¼ cup 100% orange juice
- 1 tbsp. lemon juice
- 2-3 tbsp. extra virgin olive oil
- 2 anchovy filets, finely chopped (optional)

#### Directions

Finely chop the parsley by hand (there should be ¼ cup chopped) and place it in a small mixing bowl. Add the mint, capers, garlic, and oregano.

The sauce can be made up to this point and refrigerated, covered, for 8 hours. Just before serving, mix in the orange and lemon juices, then stir in the olive oil. Mix in the anchovies, if using.

#### **Nutritional Information**

**Per Serving** (1 tbsp.): 55 calories, 5 g fat (1 g saturated fat), 2 g carbohydrate, 0 g protein, 0 g dietary fiber, 146 mg sodium





### **Spicy Peanut Sauce**



Use our Spicy Peanut Sauce as a marinade for chicken or toss it with noodles for an Asian pasta salad. It marries the taste of peanuts and the spice of sriracha chili together with the sweet flavor of apple juice to produce an explosion of flavor.

Yield: 1/2 cup or 8 (1 tbsp.) servings

#### Ingredients

- ¼ cup smooth peanut butter
- 3 garlic cloves, finely chopped
- 2 tbsp. reduced sodium soy sauce
- 1 tbsp. brown sugar

- 1 tbsp. rice vinegar
- 1 tbsp. sriracha chili sauce
- 1 tbsp. roasted sesame oil
- ¼ cup 100% apple juice

#### Directions

Place the peanut butter, garlic, soy sauce, brown sugar, vinegar, and sriracha sauce in a food processor and whirl to combine. With the motor running, slowly add the sesame oil followed by the apple juice.

For Sichuan-style noodles, toss the sauce with cooked pasta, allowing 2 tablespoons sauce for every 3 oz. of noodles.

This sauce keeps, tightly covered in the refrigerator, for 5 days. If it gets thick, use a bit of the pasta cooking water to thin it out.

#### **Nutritional Information**

SipSmarter.o

**Per Serving** (1 tbsp.): 80 calories, 6 g fat (1 g saturated fat), 5 g carbohydrate, 2 g protein, 1 g dietary fiber, 211 mg sodium



### **Butternut Squash Soup**



Looking for a sweet pickme-up for the chilly winter weather? This fruity twist on a classic butternut squash soup recipe is guaranteed to satisfy your taste buds.

Yield: 6 (1<sup>1</sup>/<sub>2</sub> cup) servings

#### Ingredients

#### For soup:

- 2 tbsp. olive oil
- 3 medium carrots, chopped
- 2 medium celery stalks, chopped
- ½ medium onion, chopped
- 2 cloves garlic, minced
- 1 apple, peeled, cored, and chopped
- 6 cups chopped butternut squash, fresh or frozen
- 4 cups low-sodium chicken broth
- 1 cup 100% apple juice
- 1 tsp. sea salt
- 1 tsp. chopped fresh thyme
- 1 tsp. chopped fresh sage
- ½ tsp. ground pepper
- ½ tsp. ground ginger
- 1 tsp. fresh lemon juice

### For Cranberry Compote:

- 2 cups fresh cranberries
- 1 cup 100% cranberry-apple juice
- ¼ cup dark brown sugar
- ½ tsp. cinnamon
- 1/4 tsp. ground ginger
- 1% tsp. ground nutmeg

#### Directions

#### To Make Soup:

Heat olive oil in a large saucepan over medium-high heat. Add carrots, onion, celery, garlic, apple, and butternut squash to pan; cook for 5-7 minutes or until fragrant and beginning to cook through, stirring occasionally.

Add broth and juice; bring to a boil and reduce to a simmer. Add salt, thyme, sage, pepper, and ginger. Simmer for 15 minutes or until vegetables are tender. Use an immersion blender (or transfer mixture to a blender container) and blend until smooth. Stir in lemon juice.

#### To Make Cranberry Compote:

Combine cranberries, juice, brown sugar, cinnamon, ginger, and nutmeg in a medium saucepan over medium-high heat. Bring to a boil, reduce heat, and simmer for 5 minutes or until cranberries have popped and mixture thickens. Allow to cool slightly.

#### **To Assemble:**

Stir a spoonful of Cranberry Compote into center of each bowl of soup. Swirl, if desired.

#### **Nutritional Information**

**Per Serving:** (1½ cups soup plus 1 spoonful compote): 248 calories, 5 g fat (1 g saturated fat), 50 g carbohydrate, 3 g protein, 6 g dietary fiber, 507 mg sodium



### Pomegranate Chicken with Sweet Potatoes and Brussels Sprouts



Vegetables don't have to be boring – and this recipe is proof! Adding a splash of pomegranate juice to this one-pot meal is a great way to boost flavor with a healthy twist.

Yield: 4 servings

#### Ingredients

- 2 tbsp. olive oil
- 1 lb. brussels sprouts, stems trimmed, halved
- 1½ lb. sweet potatoes (about 2 medium), peeled, cut into 1-inch cubes
- 1 lb. boneless skinless chicken breasts, cut into 1-inch cubes
- 1 small onion, chopped
- ¾ tsp. sea salt

- ½ tsp. ground black pepper
- ½ tsp. dried rosemary leaves
- 1 cup pomegranate juice
- 2 tbsp. honey
- 1 tbsp. balsamic vinegar
- ¼ cup pomegranate arils (seeds)

#### Directions

Add the oil to a 12-inch non-stick high-sided skillet. Place over medium-high heat for 2 minutes. Add the brussels sprouts and sweet potatoes. Cook for 8 minutes, stirring occasionally.

Add the chicken, onion, salt, pepper, and rosemary to the skillet. Cook for 6 minutes, carefully stirring occasionally (skillet will be full). Reduce the heat to medium-low.

Add the pomegranate juice, honey, and balsamic vinegar to the skillet. Let the liquid simmer for 5-10 minutes, stirring occasionally, until most of the liquid has been absorbed by the meat and vegetables and the remaining liquid has thickened. Remove the skillet from the heat. Top with pomegranate arils.

#### **Nutritional Information**

SipSmarter.or

**Per Serving:** 464 calories, 10 g fat (2 g saturated fat), 66 g carbohydrate, 28 g protein, 7 g dietary fiber, 593 mg sodium



### **Cranberry Marinated Steak**



Looking to impress your significant other? This beef marinated in cranberry juice, soy sauce, and other spices tastes extravagant but is so easy to make! Pair it with your favorite veggie to make it a complete meal.

Yield: 4 oz. servings

#### Ingredients

- 1 cup cranberry juice
- ¼ cup reduced sodium soy sauce
- 2 tbsp. grated ginger
- 2 tsp. thyme leaves
- 4 (4 oz.) well-marbled steaks such as hanger, skirt or rib eye
- 1 tbsp. vegetable oil

#### Directions

Combine the cranberry juice, soy sauce, ginger and thyme in a bowl that can hold the steaks. Add the steaks and marinate for a minimum of 30 minutes and up to 24 hours (in refrigerator).

Heat a grill over medium-high heat. Remove steak from marinade, reserving liquid, and blot excess moisture. Drizzle with vegetable oil. Grill until nicely charred on both sides and cook to desired doneness. Cooking time will depend on the cut of steak, about 4-5 minutes per side for a 1" steak to be cooked to medium rare.

While the steak is cooking, place the marinade in a saucepan and boil it down by half. Mixture should be syrupy. Pour over steak.

#### **Nutritional Information**

SipSmarter.or

**Per Serving** (4 oz.): 268 calories, 15 g fat (5 g saturated fat), 10 g carbohydrate, 24 g protein, 0 g dietary fiber, 383 mg sodium



### **Icky Eyeballs**



If you recall the fun of squishing grape "eyeballs" at Halloween, you'll love to revisit the gross-out factor and enjoy this juicy snack along with your kids. One hundred percent white grape juice gives the lime gelatin a creepy, swamp-like feel, but feel free to use any flavor gelatin your family likes.

Yield: 4 (1/2 cup) Servings

#### Ingredients

- 1 (3-oz.) package lime gelatin dessert or any flavor
- 2 cups 100% white grape juice
- 8 seedless green grapes
- 2-4 raisins

#### Directions

Set four 9-oz. plastic glasses on a tray and set aside. Make the gelatin dessert according to package directions, using the juice at room temperature and heated, in place of the water. Divide the liquid gelatin among the plastic glasses.

Add 2 grapes to each glass, rolling to coat them with the gelatin. Nudge the grapes together to look like a pair of eyeballs. Cut the raisins into thin slices. Gently dip each slice into the warm gelatin and set each one on top of a grape.

Set the tray with the glasses in the refrigerator. Refrigerate until the gelatin is firmly set, 3 to 4 hours. Icky Eyeballs keep, covered with plastic wrap in the refrigerator, for up to 3 days.

#### **Nutritional Information**

**Per Serving** (½ cup): 169 calories, 0 g fat (0g saturated fat), 42 g carbohydrate, 1 g protein, 0 g dietary fiber, 93 mg sodium



# Kid's Activity



### JUICY WORD SEARCH

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Word Bank Beverage Cranberry Delicious Fruit Juice Glass Good For You Grape Grapefruit Healthy Minerals Nutrients **Nutritious One Hundred Percent Orange Juice** Pomegrante Potassium Vegetable Juice Vitamin C Vitamins



# **Dispelling the Myths Around Juice**

### мүтн

### Drinking juice causes weight gain and contributes to obesity.

**FACT:** The majority of the science on obesity in children overwhelmingly shows no association between drinking 100% juice and trends in weight gain.<sup>3,4,5</sup> In fact, a recent meta-analysis published in Pediatrics found that drinking appropriate amounts of juice was not associated with significant weight gain in children, and in their report the American Academy of Pediatrics noted the weight of scientific evidence shows drinking appropriate amounts of 100% juice is not associated with obesity.<sup>6,7</sup> Furthermore, an extensive scientific review commissioned by the Academy of Nutrition and Dietetics (AND) for its Evidence Analysis Library on the Dietary Metabolic Impact of Juice specifically looked at the association between intake of 100% fruit juice and weight status or adiposity (e.g., BMI percentile, weight gain, BMI Z-score and fat mass) in children. The evidence reviewed by a team of registered dietitian researchers and nutrition scientists did not support an association between 100% fruit juice consumption and weight status or adiposity in children ages 2 to 18 years.<sup>8</sup> Details of this analysis were published June 2015 in Critical Reviews in Food Science and Nutrition.

### МҮТН

### Juice drinking causes dental cavities.

**FACT:** Juice is not the culprit behind cavities in young children. A 2014 study published in the *Journal of the American Dental Association*, looking at nearly 2,300 American children ages 1-5 years, found no association between drinking 100% juice and early dental caries and other studies support those findings.<sup>9</sup> A 2015 study published in the *Community Dentistry and Oral Epidemiology* looking at nearly 100 African-American children ages 3–22 months found that greater frequency in consumption of 100% fruit juice (more than two times per day) was associated with lower incidence of dental caries suggesting a possible, protective effect.<sup>10</sup>

### MYTH Juice contains empty calories.

**FACT:** Juice is a healthy, nutrient-dense beverage which delivers significant nutrients to the diets of children and adults. One hundred percent juice is the #1 and #2 source of vitamin C and potassium respectively, in the diets of children 2 to 18 years old, while supplying only 2.7% of total calories. In adults, 100% juice amounts to less than 2% of total calories in the diet.<sup>1,2</sup> In addition:

- 100% juice is a main source of vitamin D (ranked #5) and calcium (ranked #7) from fortified juices (in children 2 to 18 years old).<sup>1,2</sup>
- For children under 2, 100% juice is a major contributor of vitamin C, potassium, folate, magnesium, iron, thiamin, riboflavin and vitamin B6.<sup>11</sup>

### мүтн

#### It's better to avoid juice and just eat whole fruit.

**FACT:** There's no question that eating fruit is important to overall health. However, fruit consumption remains surprising low, with more than 75% of Americans not getting enough. While whole fruit alone effectively increases dietary fiber, the combination of juice and fruit shows a greater positive effect on vitamin C, potassium, and calcium. **This demonstrates that the combination of fruit and juice has a better nutrient profile than just fruit.**<sup>13,14</sup> Research also shows children who drink juice tend to eat more whole fruit overall and have better quality diets than those who don't drink juice.<sup>4</sup> This suggests juice complements rather than competes with fruit in the diet.

#### Sources:

<sup>1</sup> Keast DR, et al. Food sources of energy and nutrients among children in the United States: NHANES 2003-2006. *Nutrients*. 2013;5:283-301 and Supp Data for Vitamin C.

<sup>2</sup> O'Neil CE, et al. Food sources of energy and nutrients among adults in the US: NHANES 2003–2006. Nutrients. 2012;4:2097-2120.
<sup>3</sup> O'Neil CE and Nicklas TA. Childhood obesity and the consumption of 100% fruit juice: where are the evidence based findings? In J. Rippe (ed.), Fructose, High Fructose Corn Syrup, Sucrose and Health. New York: Springer, 247-275.

<sup>4</sup> Nicklas, T., O'Neil, C., & Fulgoni III, V. Consumption of 100% fruit juice is associated with better nutrient intake and diet quality but not with weight status in children: NHANES 2007-2010. *International Journal of Child Health and Nutrition*, 2015; 4(2), 112-121. <sup>5</sup> Rampersaud G. Commentary 100% Fruit juice: perspectives amid the sugar debate. *Public Health Nutr.* 2015; 20:1-8.

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 <sup>7</sup> Heyman MB, Abrams SA, AAP Section on Gastroenterology, Hepatology, and Nutrition, AAP (American Academy of

Pediatrics) Committee on Nutrition. Fruit Juice in Infants, Children, and Adolescents: Current Recommendations. *Pediatrics*. 2017;139(6):e20170967

<sup>8</sup> Crowe-White K, O'Neil CE, Parrott JS et al. Impact of 100% fruit juice consumption on diet and weight status of children: An evidencebased review, 2016; *Crit Rev Food Sci Nutr*;3;56(5):871-884.

<sup>9</sup>Vargas CM, et al. Early childhood caries and intake of 100 percent fruit juice: Data from NHANES, 1999-2004. *J Am Dent Assoc*. 2014; 145(12): 1254-1261. <sup>10</sup> Ghazal T, Levy SM, Childers NK, et. al. Factors associated with early childhood caries incidence among high caries-risk children. *Community Dent Oral Epidemiol* 2015; 43: 366–374. © 2015 John Wiley & Sons A/S. Published by John Wiley & Sons Ltd.

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<sup>12</sup> Clements R., et al. Squeezing fact from fiction about 100% fruit juice; Workshop proceedings. *Adv in Nutr.* 2015; 6:6-2:236s-241s.

<sup>13</sup> USDA, ARS, Nutrient Data Laboratory. USDA National Nutrient Database for Standard Reference, Release 28, Version Current: September 2015, slightly revised May 2016. 2016.

<sup>14</sup> Drewnowski, A., & Rehm, C. Dietary and economic effects of eliminating shortfall in fruit intake on nutrient intakes and diet cost. *BMC Pediatrics*, 2016, 16, 83. doi: 10.1186/s12887-016-0620-z





Beverage consumption patterns among 4–19 y old children in 2009–14 NHANES show that the milk and 100% juice pattern is associated with better diets

Matthieu Maillot, PhD, Colin D. Rehm, PhD, Florent Vieux, Chelsea M. Rose, PhD and Adam Drewnowski, PhD.

**Nutrition Journal** May 2018; 7(1):17:54

**Key Findings:** An analysis of NHANES data evaluating diet quality on children in four beverage categories: 1. Milk drinkers, 2. 100% juice drinkers, 3. Milk and 100% juice drinkers and 4. Other beverages. Milk drinkers had higher levels of dairy, calcium, potassium, vitamin A and vitamin D; 100% juice drinkers had higher levels of total fruit and vitamin C and the same amounts of whole fruit; milk and 100% juice drinkers had the highest Healthy Eating Index score (HEI) of all the groups, followed by 100% juice drinkers and then milk drinkers. Based on this analysis, beverage patterns build around milk and 100% juice were associated with better dietary choices and higher quality diets. This supports current Dietary Guidelines which state that milk and 100% juice along with plain water, should be beverages of choice. The diets of milk and juice drinkers did not differ in terms of energy, total or added sugars, fiber or vitamin E.

#### Review of 100% Fruit Juice and Chronic Health Conditions: Implications for Sugar-Sweetened Beverage Policy

Brandon Auerbach, MD, MPH, Sepideh Dibey PhD, MPH, RDN, Petra Vallila-Buchman, MPH, Mario Kratz, PhD, James Krieger, MS Advances in Nutrition April 2018; 9(2): 78-85

**Key Findings:** A systematic review and meta-analysis evaluated the relationship between juice and various chronic health outcomes. The study concluded that no adverse health effects were found to be associated with 100% juice consumption and diabetes, cardiovascular disease, glucose homeostasis, lipid levels, or blood pressure. The study found no significant associations between juice and weight gain in children or adults. While, (based on limited data) the study did find an increased risk of tooth decay in children, overall the findings support 100% juice recommendations by the American Academy of Pediatrics and the Dietary Guidelines and the continued inclusion of juice in food public policy programs.

#### 100 % fruit juice and measures of glucose control and insulin sensitivity: a systematic review and meta-analysis of randomised controlled trials

Mary M. Murphy, PhD; Erin C. Barrett; Kara A. Bresnahan; Lelia M. Barraj Journal of Nutritional Science. 2017. V 6:e59. Published online 2017 Dec 15. doi: 10.1017/jns.2017.63

**Key Findings:** A systematic review and meta-analysis of 18 randomized controlled trials (RCT) evaluating the impact of 100% juice from fruits, such as apple, berry, citrus, grape, and pomegranate found 100% juice does not have a significant effect on fasting blood glucose, fasting blood insulin, or insulin resistance. Overall research suggests a neutral effect of 100% juice on glycemic control. The findings are consistent with previous research indicating that 100% fruit juice is not associated with an increased risk of developing Type 2 Diabetes and support a growing body of evidence that 100% fruit juice has no significant effect on glycemic control.

#### Associations of 100% fruit juice versus whole fruit with hypertension and diabetes risk in postmenopausal women: Results from the Women's Health Initiative

Brandon Auerbach, MD, MPH; Alyson J. Littman, PhD, MPH; Lesley Tinker, PhD, RD; Joseph Larson, MS; et. al.

**Preventive Medicine.** 2017 Sep 6. pii: S0091-7435(17)30315-8. doi: 10.1016/j. ypmed.2017.08.031. Epub 2017 Sep 6.

**Key Findings:** Longitudinal analysis of food frequency questionnaires of postmenopausal women enrolled in the Women's Health Initiative between 1993-1998. Standardized questionnaires assessed outcome every 6-12 months during a 7.8 year follow up. Study evaluated incidence of hypertension (36,314 incident cases/80,539 total participants) and diabetes (11,488 incident cases/114,219 total participants). In multivariable analyses there was no significant association comparing the highest to lowest quintiles of 100% fruit juice consumption (8oz/day compared to none) and incident hypertension or diabetes. There was also no significant association between whole fruit consumption and incident hypertension or diabetes. Consuming moderate amounts of





100% fruit juice (8oz./day) or whole fruit was not significantly associated with risk of hypertension or diabetes among postmenopausal US women.

### Satisfying America's fruit gap: Summary of an expert roundtable on the role of 100% fruit juice

Carol Byrd-Bredbenner, PhD, RDN; Mario Ferruzzi, PhD; Victor Fulgoni III, PhD; et. al. **Journal of Food Science.** June 2017; 82(7): 1523–1534.

**Key Findings:** This roundtable discussion focused on the current fruit intake vs. recommendations in the United States and the role of 100% fruit juice in improving nutrient intakes, diet quality and health outcomes. As highlighted by the roundtable, the 2015-2020 Dietary Guidelines for Americans (DGAs) notes that 100% fruit juice is not being over consumed, is not associated with obesity/overweight or childhood dental caries and does not compromise fiber intake. The participating experts agreed that there is no science-based reason to restrict access to 100% fruit juice in public health nutrition policy and programs such as WIC. They further believe that reducing or eliminating 100% fruit juice could lead to unintended consequences such as reduced daily fruit intake and increased consumption of less nutritious beverages.

#### Fruit juice and change in BMI: A meta-analysis

Brandon Auerbach, MD, MPH; Fred Wolf, PhD; Abigail Hikida, MD; et al. **Pediatrics.** March 2017; 139(4): e20162454.

**Key Findings:** A review of 8 cohort studies, this University of Washington study found no association between 100% fruit juice consumption and weight gain in children older than six years old. In children ages 1 to 6 years old, fruit juice consumption was associated with a small (but clinically insignificant) amount of weight gain averaging a quarter pound over a one year period. The scientists noted that more research is needed in this younger age group.

#### Commentary: Fruit juice and child health

Steven Abrams, MD; Stephen Daniels, MD, PhD **Pediatrics.** March 2017;139(4): e20170041.

**Key Findings:** Written by two esteemed pediatricians, this article reviews the results of the Auerbach study (see above) and finds the results to be reassuring. Based on the data, the authors support the inclusion of 100% juice in the diets of young children and in public policy initiatives including government programs such as WIC. This research also supports the American Academy of Pediatrics current guidance allowing 4 to 6 oz of 100% juice for children 1-6 years of age and 8 to 12 oz for children 7-18 years of age, daily.

#### Dietary and economic effects of eliminating shortfall in fruit intake on nutrient intakes and diet cost

Colin Rehm, PhD; Adam Drewnowski PhD **BMC Pediatrics**. July 2016; 16: 83.

**Key Findings:** Based on food cost data, the study concluded that meeting total fruit shortfalls by whole fruit alone increased diet cost by almost twice as much than with a combination of juice and fruit. Furthermore, while modeling only whole fruit consumption did increase dietary fiber, the combination of juice (one part) and fruit (two parts) showed a greater beneficial effect on vitamin C, potassium and calcium than just whole fruit alone.

The combination of fruit and juice is cost neutral while meeting fruit shortfalls with whole fruit alone increased cost. The fruit and juice model was nutritionally similar or better with the exception of fiber to the whole fruit model. The combination of 100% juice and fruit is an optimum way to meet fruit shortfalls.

#### Replacing 100% fruit juice with whole fruit results in a trade off of nutrients in the diets of children

Theresa Nicklas, PhD; Carol O'Neil PhD, RD; Victor Fulgoni, III, PhD **Current Nutrition and Food Science**. October 2015; 11(4): 267-273.

**Key Findings:** Overall, fruit juice is nutritionally similar to whole fruit with a "trade-off" for vitamin C for fiber and total sugars and is an easy and important way to help children meet USDA



Dietary recommendations. The study also mentions that 100% juice drinkers significantly consume more whole fruit and have better quality diets than non-juice drinkers.

# Impact of 100% fruit juice consumption on diet and weight status of children: An evidence-based review

Kristi Crowe-White, PhD, RD; Carol O'Neil PhD, RD; J. Scott Parrott PhD; et al. Critical Reviews in Food Science and Nutrition. June 2015; 56(5): 871-884.

**Key Findings:** An independent, in-depth critical systematic review conducted by the Academy of Nutrition and Dietetics looking at research from 1995-2013 found drinking 100% juice is not associated with increased weight or adiposity in children. As part of a healthy diet, this evidence shows that consumption of 100% fruit juice can provide beneficial nutrients without contributing to pediatric obesity.

#### Consumption of 100% fruit juice is associated with better nutrient intake and diet quality but not with weight status in children: NHANES 2007-2010

Theresa Nicklas, PhD; Carol O'Neil, PhD, RD; and Victor Fulgoni, III, PhD International **Journal of Child Health and Nutrition**. May 2015; 4: 112-121.

**Key Findings:** Consumption of 100% fruit juice was associated with higher nutrient intake, better diet quality and greater consumption of whole fruit than non-fruit juice drinkers in a nationally representative sample of US children. In addition, drinking 100% juice was not associated with body weight and adiposity. Based on these results, 100% juice complements, rather than competes with, whole fruit consumption and does not replace milk in the diet.

### Commentary: 100% fruit juice perspectives amid the sugar debate

Gail Rampersaud MS, RD Public Health Nutrition. April 2015; 20: 1-8.

**Key Findings:** One hundred percent fruit juice consumed in appropriate amounts is beneficial and not detrimental to health.

#### Squeezing fact from fiction about 100% fruit juice: Workshop proceedings

Roger Clemens PhD; Adam Drewnowski PhD; Mario Ferruzzi PhD; et al. Advances in **Nutrition**. March 2015; 6(6-2): 236s-241s.

**Key findings:** Overall conclusion is that 100% fruit juice is associated with many health benefits, delivers essential nutrients and bioactives and plays an important role in helping individuals meet fruit recommendations without impact on energy intake or food costs.

# Socioeconomic gradient in consumption of whole fruit and 100% fruit juice among US children and adults

Adam Drewnowski, PhD and Colin Rehm, PhD **Nutrition Journal**. January 2015; 14(3): 1-9.

**Key Findings:** Fruit juice is not overconsumed, does not displace fruit in the diet and falls into a pattern of two parts whole fruit, one part juice. Whole fruit is influenced by socioeconomics and this may pose challenges for the economically disadvantaged and some minority groups, whose fruit consumption falls short of national goals. For those segments of the population who are unable to afford whole fresh fruit, 100% fruit juice offers a convenient, affordable and nutrient-dense option that can help them meet recommended dietary goals and fill in the gaps.

# A review and critical analysis of the scientific literature related to 100% fruit juice and human health

Dianne Hyson, PhD Advances in Nutrition. January 2015; 6: 37-51.

**Key Finding:** Research review summarizing nearly two decades (1995-2012) worth of data suggests bioactives found in fruit juice may have the potential to have positive and possibly protective effects on human health.





#### **DENTAL HEALTH**

### Longitudinal associations between children's dental caries and risk factors

Oitip Chankanka, DDS, PhD; Joseph Cavanauh, PhD; Steven Levy, DDS; et al. Journal of Public Health Dentistry. Fall 2011; 71(4): 289-300.

**Key Findings:** Greater frequency of drinking 100% juice was related to fewer caries in children, indicating that 100% juice may have a protective effect on dental health.

## *Early childhood caries and intake of 100 percent fruit juice: Data from NHANES, 1999-2004.*

Clemencia Vargas, DDS, PhD; Bruce Dye, DDS; Catherine Kolasny, BS; et al. Journal of the American Dental Association. December 2014; 145(12): 1254-1261.

**Key Findings:** Researchers at the University of Maryland's School of Dentistry in Baltimore which analyzed data on nearly 2,300 US preschool children from several studies found no association between intake of 100% fruit juice and early childhood caries (ECC). These results are consistent with those of other studies and show that consumption of 100% fruit juice is not associated with early childhood caries.

### Factors associated with early childhood caries incidence among high caries-risk children

Tariqu Ghazal, DDS; Steven Levy, DDS, MPH

Community Dentistry and Oral Epidemiology. August 2015; 43(4): 366-374.

**Key Findings:** Frequent consumption of 100% juice among young children was associated with lower incidence of early childhood dental caries.

#### Association of healthy eating, juice consumption, and bacterial counts with early childhood caries

Wafaa Abdelaziz, PhD; Karin Dowidar, PhD; Maha El Tantawi, PhD Pediatric Dentistry. Sept/Oct. 2015; 37(5): 462-467.

**Key Findings:** This small study conducted in Egypt supports other research which shows drinking 100% juice is not associated with early childhood cavities in preschool children and, in fact, is associated with lower rates of caries in children. It also supports research showing that children who drink juice have higher Healthy Eating Index scores than children who do not drink juice.

#### **INDIVIDUAL JUICE RESEARCH**

**Apple Juice Consumption and Rehydration** *Effect of dilute apple juice and preferred fluids vs electrolyte maintenance solution on treatment failure among children with mild gastroenteritis* 

Stephen Freedman, MDCM; Andrew Willan, PhD; Kathy Boutis, MD; et al. Journal of the American Medical Association. May 2016; 315(18): 1966-1974

**Key Findings:** The study demonstrated that drinking apple juice can be beneficial for rehydration in children with mild dehydration, vomiting, and diarrhea.

### Cranberry Juice Consumption and Adhesion of Bacteria

Atomic force microscopy-guided fractionation reveals the influence of cranberry phytochemicals on adhesion of Escherichia coli

Prachi Gupta; Biqin Song; Catherin Neto, PhD; et al. Food & Function. June 2016; 7(6): 2655-2666

**Key Findings:** This study reveals that cranberry juice decreased the attachment of E.coli bacteria to a test surface, suggesting that the anti-adhesion properties of cranberry juice may be beneficial in preventing and treating bacterial infections.

#### Cranberry Juice Consumption and Urinary Tract Infections

Consumption of a cranberry juice beverage lowered the number of clinical urinary tract infection episodes in women with a recent history of urinary tract infection

Kevin Maki, PhD; Kerrie Kaspar, PhD; Christina Khoo, PhD; et al. American Journal of Clinical Nutrition. June 2016; 103(6): 1434-1442





**Key Findings:** The study showed that consuming cranberry juice reduced the reoccurrence of clinical urinary tract infections (UTI) in women with a recent history of UTI. Cranberry juice can be a useful strategy for reducing recurrent clinical UTI episodes and the use of an antibiotic treatment.

#### **Grapefruit Juice Helps Arterial Stiffness**

Flavanones protect from arterial stiffness in postmenopausal women consuming grapefruit juice for 6 mo: a randomized, controlled, crossover trial.

Habauzit V, Verny MA, Milenkovic D, et. al. American Journal of Clinical Nutrition. 2015 July;102(1):66.

**Key Findings:** This study examined endothelial function in 48 post menopausal women consuming grapefruit juice or a grapefruit like drink without flavonones (flavonones are naturally present in grapefruit juice). Regular grapefruit juice consumption by middle-aged, healthy postmenopausal women may prevent arterial stiffening and potentially reduce the risk of cardiovascular disease. Researchers believe this effect may be related to flavanones present in grapefruit.

#### **Grape Juice Consumption and Cognitive Function**

Concord grape juice, cognitive function, and driving performance: A 12-wk, placebo controlled, randomized crossover trial in mothers of preteen children

Daniel Lamport, PhD; Clare Lawton, PhD; Natasha Merat, PhD; et al. American Journal of Clinical Nutrition. February 2016; 103(3): 775-783

**Key Findings:** For the first time, researchers found that the cognitive health effects (i.e. memory benefits) associated with the Concord grape are not exclusive to older adults and that younger, healthy women may also benefit from drinking 100% grape juice made from Concord grapes.

#### **Grape Juice Consumption and Vascular Function**

### Concord grape juice improves endothelial function in overweight, older adults

#### Dorsey PG, et al.

**American College of Nutrition.** Presented at 55th Annual Conference, San Antonio, TX. October 15-18, 2014.

**Key Findings:** This study showed that circulation was improved when healthy adults drank Concord grape juice daily versus a sugar-sweetened drink (the placebo), building on over 20 years of research that supports 100% grape juice made with Concord grapes can provide heart-health benefits.

#### Mangos May Reduce Risk for Inflammation and Chronic Illness

### Mangos and their bioactive components: adding variety to the fruit plate for health

Britt M. Burton-Freeman, Amandeep K. Sandhu and Indika Edirisinghe **Food and Function.** June 2017 [Epub ahead of print].

**Key Findings:** This study summarizes the available literature assessing the health promoting potential of mango flesh. Additionally, this review explores new insights on the benefits of mango for brain, skin and intestinal health and supports the potential role of mangos in reducing risk for inflammation and metabolically-based chronic diseases.

#### Orange Juice Consumption and Cognitive Function

# Flavonoid-rich orange juice is associated with acute improvements in cognitive function in healthy middle-aged males

Mudi Alharbi, PhD; Daniel Lamport, PhD; Georgina Dodd, PhD; et al. **European Journal of Nutrition**. September 2016; 55(6): 2021-2029.

**Key Findings:** Researchers conclude that consumption of orange juice can significantly enhance cognition in healthy middle-aged adults.



**Orange Juice Consumption and Weight Loss** Orange juice allied to a reduced-calorie diet results in weight loss and ameliorates obesityrelated biomarkers: A randomized controlled trial

Carolina Ribeiro, MS; Grace Dourado, PhD; Thais Cesar, PhD Nutrition. June 2017; 38: 13-19.

**Key Findings:** Research demonstrates that drinking 100% orange juice in conjunction with a reduced calorie diet can improve insulin sensitivity, anti-inflammatory status, and the nutritional quality of the diet.

#### **Pomegranate Juice Consumption and Arthritis** The effect of pomegranate juice on clinical signs, matrix metalloproteinases and antioxidant status in patients with knee osteoarthritis

Nasrin Ghoochani; Majid Karandish, PhD; Karim Mowla, MD; et al. Journal of the Science of Food and Agriculture. October 2016; 96(13): 4377-4381.

**Key Findings:** Research shows that pomegranate juice may help adults to improve physical function and stiffness, decrease breakdown cartilage enzymes and increase antioxidant status. The reduction of arthritis symptoms might be due to the presence of the anti-inflammatory compounds, polyphenols.

### Pomegranate Juice Consumption and Blood Pressure

Effects of pomegranate juice on blood pressure: A systematic review and meta-analysis of randomized controlled trials

Amirhossein Sahebkar, PhD; Claudio Ferri, MD; Paolo Giorgini, MD; et al. **Pharmacological Research**. January 2017; 115: 149-161.

**Key Findings:** The study demonstrates that drinking pomegranate juice may be an effective method for reducing blood pressure due to the polyphenols and antioxidants abundant in pomegranate juice.

### Tart Cherry Juice Consumption and Vascular Function

Effects of Montmorency tart cherry (Prunus Cerasus L.) consumption on vascular function in men with early hypertension

Karen Keane, PhD; Trevor George, PhD; Costas Constantinou, PhD; et al. American Journal of Clinical Nutrition. May 2016; 103(6): 1531-1539

**Key Findings:** The study shows that drinking tart Montmorency cherry juice can significantly lower high blood pressure in early hypertensive men. These benefits may be due to the phenolic acids found in cherry juice.

### Watermelon-Pomegranate Juice and Physical Activity

#### Consumption of Watermelon Juice Enriched in L-Citrulline and Pomegranate Ellagitannins Enhanced Metabolism during Physical Exercise

Ascension Martínez-Sanchez, Fernando Alacid, Jacobo A. Rubio-Arias, et. al. Journal of Agricultural and Food Chemistry. June 2017;65(22):4395-4404.

**Key Findings:** This small double-blind randomized crossover in vivo study was performed in healthy male subjects and tested the effect of four watermelon juices enriched with bioactives on muscle soreness after high-intensity exercise.

While all watermelon juice combinations saw a faster reduction in muscle soreness, the watermelon/pomegranate cocktail saw significantly reduced muscle soreness compared to the placebo and no muscle soreness was reported after 48 hours.



# **Additional Resources**

# LOOKING FOR ADDITIONAL RESOURCES OR INFORMATION ABOUT 100% JUICE? VISIT OUR PARTNERS:

Produce for Better Health Cranberry Institute Florida Department of Citrus Fruit Juice Matters Grape Science Center National Berry Crops Initiative Pomegranate Science US Apple

### WEBINARS:

Produce for Better Health: The Whole Truth About 100% Fruit Juice Webinar The Power of the Pour: The Nutrition & Health Benefits of 100% Fruit Juice Webinar

#### Society for Nutrition Education and Behavior:

Sip Your Way to Better Health: What's the Truth about 100% Fruit Juice?

#### **School Nutrition Association**

100% Fruit Juice - Truth vs. Pulp Fiction

