

wellness-cv connection

An e-newsletter from the Wellness CV RDs Subunit

**Sports,
Cardiovascular,
and Wellness
Nutrition**
a dietetic practice group of the
Academy of Nutrition
and Dietetics

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A Message From the Directors

Summer's here! It's a time when even those who are not fruit-and-veggie loving, physically active people often embrace some increase in exercise and produce consumption. That means the questions we are asked by patients, colleagues, and friends may change, too.

- What about juicing and other options for fruits and vegetables as beverages?
- What about choosing from the many options for hydration through summer's heat and activities?
- What about the practical tips people seek for eating that promotes heart health, exercise performance, and overall wellness?

You'll find updates and links to resources that address all these questions right here!

As we wrap up this issue of the newsletter, we are also wrapping up our time as co-directors of the Wellness and Cardiovascular Nutrition subunit. We both do so with sincere thankfulness for all the terrific SCAN members we've gotten to know during these last 3 years. Because this experience has been so incredibly rewarding to us, we'd like our final message to be one that encourages you to find a way to get involved with SCAN...in whatever way makes sense for you at this time in your life.

Whether it's volunteering to be part of a one-time project or something more ongoing, if you have energy and expertise to share, we urge you to do it. Or simply sign up for the Wellness/CV electronic mailing list (EML) to stay in touch with other members. You may have just the answer someone needs one day...and another day, you will be delighted to see how many colleagues from all across the country jump in to answer your question. If you're not on the EML already, please see [page 3](#) for how to sign up. That way we don't have to say goodbye; we can say, "See you there!"

With our deepest thanks,

Karen Collins, MS, RDN, CDN, and Rosie Gonzalez, MS, RD, LD



Have Ideas...For This Newsletter?

We are always looking for talented professionals to join our team. If you feel that you have the knack for writing and would like to see your name in our newsletter, send inquiries to **Rebecca Rebmann** (managing editor) at rebecca.a.rebmann@gmail.com or **Allison Knott** (assistant editor) at allisonknott@gmail.com. Don't want to write but still want to contribute? We are also looking for reviewers for articles submitted to the newsletter. If you believe your experience qualifies you as an "expert" in a particular topic area, send us an e-mail describing your qualifications, and we will match you with an article when the opportunity arises. If you have topic ideas, e-mail those too!

Publication in the newsletter does not indicate endorsement by SCAN or the Academy.



If you're not already participating in our subunit electronic mailing list (EML), you can find more information about how to sign up and how to change settings here: <http://www.scandpg.org/benefits-of-scan-membership/electronic-mailing-list/>. You can also find important guidelines for the use of material posted to the EML on the SCAN website.

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Contribute to this newsletter with your creative writing skills or by reviewing dietetic-related hot topic articles

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6 NAVIGATING THE SPORTS DRINK AISLE

Staying hydrated is important for all physically active people. Consumers can get easily confused by what drinks can best maintain euhydration for their situation, so it is essential that RDs know the ins and outs of these types of beverages.

7 PISTACHIOS POSTEXERCISE

Find out about the role pistachios can play in health and exercise recovery.

8 RESOURCES

So much is going on in our industry that it's hard to keep track of everything. This list of valuable resources showcases new research, informative reads, and useful aides for professional counseling.

8 BE THERE... CALENDAR OF EVENTS

Don't miss out on all of the opportunities in our industry. Allow yourself the opportunity to learn, network, and enhance your profession by attending these seminars and conferences.

8 KEEPING CONNECTED

Stay up-to-date on all of the events and fun things SCAN has to offer!

Can Juicing Replace Fresh Fruit and Vegetables?

By Heather Caplan, RD



If you're searching for more information about juicing and juice cleanses, one thing is certain: you will find endless pages of internet search results for products and opinions, but only a select few studies with solid scientific facts. Consumers are often drawn to the quick-fix "detox," or a subjectively tastier way to eat a variety of fruits and vegetables through "100% juices." Practitioners, on the other hand, are rightfully weary of the health claims, food safety risks, and nutrition pitfalls juices may be bottling.

When your clients express interest in juicing or juice cleanses or your opinion of the health benefits of 100% fruit and vegetable juices, here are a few things to consider prior to making a recommendation.

Processing Matters

Blending may leave some of the skin, peel, or seeds intact, which keeps some of the natural fiber and phytochemicals available for consumption. Juicing often removes most, if not all, of the natural fiber and results in a loss of the nutrients found in the skin, peel, and seeds. One study found blending to maintain significantly higher phytochemical levels versus juicing.¹



Food Safety

When buying premade juices, it's safest to purchase pasteurized products,² although this may decrease some of the nutrient content. Bacteria growth in fresh juice is dependent on various conditions, such as the temperature the juice is held at and the duration of time following juicing.³ Therefore, to help limit these types of risks when making juices at home, it is best to only produce the amount of juice that will be consumed in that sitting.

Serving Sizes Add Up

One study cited that consumption of 100% orange juice was associated with higher intake of key nutrients, such as vitamins C and B₆, folate, and potassium, as well as increased overall fruit intake.⁴ The 2010 American Dietary Guidelines equates 1 cup (8 ounces) of 100% fruit juice to 1 cup of fresh fruit. The typical American-style of food consumption, however, entails drinking more than 8 ounces at a time. While this could be a positive on the micronutrient front, it could also potentially lead to an overconsumption of calories.



There are some circumstances under which juicing might be a good option for your client. For example, juices may help provide nutrients and carbohydrate-dense calories to help fuel highly active individuals. They may also be helpful for clients with extremely low fruit and/or vegetable intake due to taste and texture preferences.

For the majority of the population, however, consuming the whole fruit or vegetable, versus just the juice, is a healthier option. There are many nutrients, such as potassium, glutathione, vitamins C and A, resveratrol, beta-carotene, and chlorogenic acid, found in the skin and

peel of some fruits and vegetables, and the whole fruit or vegetable has higher fiber content.^{5,6} These advantages wouldn't necessarily be preserved in a fruit or vegetable's corresponding juiced product. Some fruit seeds are also nutrient dense—such as cantaloupe seeds, which contain protein, vitamins, and minerals—thus, consuming these intact may provide additional benefits. Overall, while juicing can be a convenient way to increase fruit and vegetable intake, doing so may increase dietary sugar intake and limit the nutritional benefits offered by fruits and vegetables. Additionally, juice cleanses used for detoxification are unnecessary, as our body has built-in processes that do this job efficiently and effectively without the added financial and calorie costs.⁷

AUTHOR'S BYLINE

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SPORTS RDs TOLD US WHAT TO DO – AND WE DID. INTRODUCING THE NEW EAS SPORTSRD2ATHLETE E-TOOLKIT.

As a part of our dedication to sports dietetics, we have developed an e-toolkit just for you. Approved by your sports nutrition colleagues and created by RDs, the free EAS *SportsRD2Athlete* e-toolkit is designed to be customizable and personalized for your practice.

The EAS *SportsRD2Athlete* e-toolkit includes:

- *The Anatomy of a Protein Supplement* worksheet
- Sharable infographic
- Quick & dirty (but informative) athlete nutrition I.Q. tests
- Athlete meal plans at 2,000, 2,500 and 3,000 calories
- Videos highlighting the latest research, from top experts
- *Recovery Rx* Prescription Pad

To view the *SportsRD2Athlete* e-toolkit and join Team EAS, visit: EAS.com/RD



For the science behind our brands, visit: EASAcademy.org.
Share the EAS love on social media, using #EAS4RDs.

Navigating the Sports Drink Aisle

By Natalie Rizzo, MS, Dietetic Intern



A consumer walks into a store, and there are “smart” waters, “vitamin” waters, flavored waters, old-fashioned plain water, coconut waters, watermelon juices, and sports drinks, but which is best for exercise? As dietitians, it’s sometimes difficult to keep up with the many options on the market. We know that any moderate to intense exercise exceeding 1 hour in duration should include a drink with the proper ratios and amounts of carbohydrates and electrolytes to replace lost fluids, provide fuel for muscles, and replace sodium and potassium lost through perspiration.¹ Let’s examine if any of these products meet these criteria.

Smart Waters

Smart waters are typically plain water with added electrolytes. According to the label on one brand, the “electrolytes [are] added for taste,” but the amount of added electrolytes is unclear and could be negligible. Depending on the individual’s needs, it might be best to recommend your clients save their money by consuming a well-balanced diet and water straight from the tap.



Vitamin-Enhanced Waters

Vitamin-enhanced waters are flavored or unflavored waters available with multiple varieties of vitamins, minerals, and phytochemicals. The average brand contains 120 calories per 20 fluid ounces and 32 to 34 grams (11%) of carbohydrates. Current hydration recommendations for activity lasting longer than 1 hour suggest consuming 6 to 12 ounces of a 4% to 8% carbohydrate containing sports drink every 15 to 20 minutes during activity for sustained fuel and optimal hydration and gastric emptying.² The excessive amount of carbohydrate in vitamin drinks is unwarranted during athletic activity and could lead to gastric distress. With their high

sugar content, these drinks are comparable to fruit juice and should not be recommended to endurance athletes for hydration during activity. Lastly, these products do not always contain any potassium or sodium to replace lost electrolytes.

Coconut Water

Coconut water naturally contains electrolytes that are lost in sweat and has, thus, been marketed recently as a sports beverage. An 8-ounce serving contains approximately 11 grams (4%) of carbohydrates and 100% of the daily value of vitamin C. While it’s on the lower end of the ideal carbohydrate concentration, coconut water may be able to provide sufficient carbohydrates to help sustain energy levels in some people partaking in activity lasting longer than 1 hour. Preliminary research corroborates the claim that coconut water may be as hydrating as a sports drink,³ but further studies are needed to substantiate the recommendation for coconut water as an adequate sports drink substitute.



Watermelon Juice

Watermelon juice is relatively new to the sports drink market. According to one manufacturer’s label, an 8-ounce serving contains 15 grams of carbohydrates (5%), 740 mg of potassium (6 times the average sports drink), and no sodium.⁴ While replenishment of potassium lost in sweat is important, such an extreme amount of potassium is unnecessary in a sports drink. What has really made watermelon juice a topic of recent sports nutrition research is its high citrulline content. Citrulline is a precursor for nitric oxide, which allegedly enhances oxygen and nutrient delivery to the muscles during athletic activity.⁵ The verdict is still out on this drink, however, as the research on its benefits in physical activity is still limited and potentially conflicting. One study found watermelon juice ineffective in improving exercise performance,⁶ while another showed it may help alleviate muscle soreness.⁷ Overall, watermelon juice is hydrating, may provide adequate amounts of potassium and carbohydrates, and contains nutrients that may ease muscle soreness. However, it has yet to be proven to boost athletic performance and does not help replace sodium.



Sports Drinks

Sports drinks have been proven to aid in athletic performance, maintain hydration, and help with recovery. The Academy of Nutrition and Dietetics suggests drinking

sports drinks with 6% to 8% (about 15 grams per 8 ounces) carbohydrate composition for moderate to high intensity activity lasting longer than 60 minutes.¹ Many sports drinks have surfaced in the market since the inception of this drink category; however, most of the traditional ones contain around 80 calories, 21 grams of carbohydrates (7%), 150 mg of sodium, and 35 to 45 mg of potassium in 12 fluid ounces. Although these sports drinks are too high in calories/sugar for the everyday moderate gym goer, they may provide an optimal blend of carbohydrates, fluid, and electrolytes for the endurance athlete.

With the large variety of “sports drinks” on the market, it’s often difficult for clients to determine which drink will live up to its claims. With hydration and fueling being the main purposes of a sports drink, ample electrolyte and carbohydrate concentrations are necessary. In general, guide your clients away from flavored and electrolyte-enhanced waters during and immediately following activity if they hope to improve their athletic performance and recovery. Coconut water and watermelon juice are good sources of hydration with various vitamins and minerals, and they may be helpful for clients who need to focus on muscle soreness. However, for any competitive athlete, the research still supports traditional sports drinks being an optimal source of combined hydration and fuel during and after endurance activity.

AUTHOR’S BYLINE

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Pistachios Postexercise



As a postexercise snack, pistachios are portable and satisfying and supply the body with some of the energy and important nutrients it needs to refuel. Read on to find out how pistachios can help meet the postexercise needs of casual fitness enthusiasts and athletes.

Physical activity is an essential component of a healthy lifestyle but can sometimes lead to exercise-induced muscle damage and soreness from oxidative stress and inflammation.¹ This can lead to a decline in muscle activity and delayed recovery. While further studies are needed to confirm preliminary results, evidence suggests that antioxidants may help with muscle recovery. Pistachios are a natural source of the antioxidants lutein, beta-carotene, and gamma-tocopherol, and laboratory studies suggest that pistachios support the body's antioxidant defenses and can reduce levels of oxidized-LDL, the form of the lipoprotein some studies link to greatest atherogenic damage.²

While adequate hydration and balanced carbohydrate intake are important postexercise, research has also shown that eating protein after intense exercise is beneficial for muscle recovery.³ The Academy of Nutrition and Dietetics suggests that a carbohydrate intake of 1.0 to 1.5 g/kg body weight during the first 30 minutes after exercise, and again every 2 hours for 4 to 6 hours after exercise, will help to replace glycogen stores.⁴ Additionally, protein consumed after exercise provides amino acids for building and repair of muscle tissue. With 6 grams of protein per serving, pistachios can be part of a complete postexercise snack.

Pistachios offer far more than just calories and protein for active people. They also contain a variety of phytochemicals that may have protective benefits, and they are a good source of copper and manganese. In a randomized, crossover, controlled feeding study, Kay et al found that people eating pistachios had greater levels of plasma lutein and gamma-tocopherol than matched controls.² Additionally, research has shown that those who eat nuts such as pistachios tend to have a diet with overall higher nutrient quality.⁵

Another goal of postexercise recovery is to restore fluids and electrolytes that are lost in sweat, including sodium and potassium.⁴ Thus, including potassium-containing foods along with water after exercise can help replenish this important mineral. With a 1-ounce serving having as much potassium as half of a large banana, pistachios may be a beneficial source.

The standard serving size of pistachios is 1 ounce, or about 49 kernels—more nuts per serving than any other nut! While these green kernels are a calorie-dense food, research suggests that eating nuts, including pistachios, does not increase body weight.⁶ Not only do pistachios take longer to crack open, but they are also satiating, which helps keep a person feeling fuller longer.

Overall, American pistachios contain important vitamins, minerals, and other nutrients that can help support healthy, active lifestyles.

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This American Pistachio Growers article is part of a SCAN/American Pistachio Growers Agreement that includes unrestricted educational funding for SCAN programs and activities.

American Pistachio Sports Bars



INGREDIENTS

- 1¾ c pistachios
- 1 c dried banana chips
- 1½ c cornflakes
- ⅓ c dried pears
- ⅓ c dried apricots
- ⅓ c honey
- ⅓ c brown sugar
- ¾ c crisp oat flakes

DIRECTIONS

1. Preheat oven to 350°F. Chop the pistachios coarsely and banana chips finely. Partly crush the cornflakes. Cut the pears and apricots into small cubes.
2. Heat the honey and sugar over a double boiler until well combined. Mix in pistachios, banana chips, cornflakes, pears, apricots, and oat flakes. Spread mixture about ½ inch deep in a 9½ x 9½ inch dish lined with baking paper. (Alternatively, the bars can be formed individually and then put on a baking tray lined with baking paper.)
3. Bake for about 10-15 minutes. Cut into 1½ x 2 inch bars, and leave to cool on a tray.



MAKES: 24 bars

Calories per serving: 120 | Calories from fat: 51.3 | Total carbohydrates: 14.8g | Protein: 2.3g | Total fat: 5.7g | Saturated fat: 1.3g | MUFA: 2.2g | PUFA: 1.2g | Sodium: 58.6 mg

Resources

By Crystelle Fogle, MBA, MS, RD



American Diabetes Association (ADA) (www.diabetes.org)

If your patients with diabetes need ideas on meal plans, ADA offers many sample meal plans that include recipes and ideas to adjust the calories or carbohydrates. From the home page, click on Recipes and then the One-Day Meal Plan tab.

American Heart Association (AHA)/ American Stroke Association (ASA) (www.heart.org)

For patients who want to learn more about sodium, refer them to AHA's <http://sodiumbreakup.heart.org/sodium-411/>. The site covers sodium sources, lower-sodium recipes, sea salt versus table salt, and several sodium infographics.

AHA, American College of Cardiology, and American Society of Hypertension released a scientific statement on hypertension treatment for patients with coronary artery disease. The statement can be accessed at <http://content.onlinejacc.org/article.aspx?articleid=2212514>.

National Diabetes Education Program (NDEP) (<http://ndep.nih.gov>)

It's easy to discuss the connection between cardiovascular disease and diabetes with local media if you use NDEP's talking points. From the home page, click on Diabetes Resources and then "Diabetes and CVD Talking Points."

National Stroke Association (NSA) (www.stroke.org)

Stroke patients can view animations on stroke risk factors and the effects of stroke on the NSA website. There are also short online videos; several feature stroke survivors, while others review the connection between atrial fibrillation and stroke. To access the videos, at the bottom of the home page, click on Resource Library.

Preventive Cardiovascular Nurses Association (www.pcna.net)

The Preventive Cardiovascular Nurses Association offers a free 2-page cholesterol fact sheet for patients with dyslipidemia. To download, click on Clinical Tools and then Cholesterol.

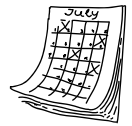
Wellness Council of America (WELCOA) (www.welcoa.org)

Even small businesses can implement wellness programs that meet their needs. To learn more about one small business initiative, click on WELCOA's Seven Benchmarks, and then under BUILD, click on "Wellness for Small Business."

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Be There... Calendar of Events



AUGUST 5-8, 2015

American Association of Diabetes Educators (AADE)
Annual Meeting, New Orleans, LA

For information: www.diabeteseducator.org

SEPTEMBER 9-12, 2015

American Association of Cardiovascular and Pulmonary
Rehabilitation (AACVPR) Annual Meeting, Washington, DC.

For information: www.aacvpr.org

October 3-6, 2015

2015 Food & Nutrition Conference & Exhibition (FNCE),
Nashville, TN.

*SCAN events include Member Meeting & Reception
and 2 breakfast sessions.*

For information: www.scandpg.org

NOVEMBER 2-7, 2015

Obesity Week, Los Angeles, CA.

For information: American Society for Metabolic & Bariatric
Surgery and the Obesity Society <https://asmbs.org> or
obesityweek.com/about/

NOVEMBER 13-15, 2015

Annual Renfrew Center Foundation Conference,
Philadelphia, PA.

For information: www.renfrew.org

Keeping Connected



Join the Wellness/Cardiovascular subunit! This subunit was created to provide enhanced member involvement, networking, visibility, professional growth, and leadership development in the practice areas of wellness and cardiovascular nutrition. The concerted efforts of the Wellness/CV RDs will serve to expand our expertise and give SCAN members a broader scope of recognition. You can join the subunit free of charge as a benefit of SCAN membership. Visit www.scandpg.org; sign in to the Members Only section; click on My Profile; under Subunits, check the Wellness and Cardiovascular RDs (Wellness/CV) box. While you are signed in, please join our electronic mailing list! Go to About Us; click on Benefits of SCAN Membership; and click "here" on the third item. This is a great way to connect with other Wellness/CV RDs. If you wish to volunteer, visit this link www.tinyurl.com/277ms2x. We would love to have you!

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