Fighting Blindness with Diet · Vegan Thickeners

LUME XXVI, NO 1

VEGETARIAN

JOURNAL HEALTH ECOLOGY ETHICS

10 Simple Ways to Improve Your Vegetarian Lifestyle

Cozying Up With

Casseroles

Broccoli-Cauliflower Bake (page 7)



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Omega-3s

What They Are, Why They Matter, and How to Get More of Them

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NUTRITION HOTLINE

REED MANGELS, PhD, RD



This issue's Nutrition
Hotline examines
what "whole wheat"
and "whole grain"
statements on food
packages mean and
explains why protein
values for similar
products may differ
considerably.

QUESTION: "I heard that some 'whole wheat' pastas do not have enough fiber. Are the labels misleading?" S.H., via e-mail

ANSWER: With increasing evidence of the health benefits of whole grains, food labels are much more likely to include information about whole wheat and whole grain than they did even a few years ago.

In February 2006, the Food and Drug Administration (FDA) issued draft guidance on use of the term "whole grain" at <www.cfsan. fda.gov/~dms/flgragui.html>. This guidance says, by law, food producers can use terms like "100% whole grain" or "10 grams of whole grain" as long as these statements are not false or misleading. The FDA recommends that products indicating "whole grain" or "whole wheat" are labeled as such when they contain whole grains or whole wheat flour and no refined versions of these ingredients.

The FDA has not defined "whole grain," so you may find some packages with misleading labels. Some products labeled "whole wheat" or "whole grain" have no more fiber than similar products made with refined white flour. To see if a product labeled "whole wheat" or "whole grain" is a good source of fiber, check the Nutrition Facts part of the label. Refined pasta averages approximately 1 gram of fiber per serving. A good whole wheat pasta should have between 3 and 6 grams of dietary fiber per 2-ounce serving. You can also check the ingredient listing to be sure that the first listed ingredient is whole wheat.

Thanks to Blythe Tucker, a dietetics student at the University of Houston, for his help in responding to this question about food labeling.

OUESTION: "I just found your site today and was reviewing the protein information for vegans. I am trying to eat vegan, but I am having some difficulty. My question is this. The information from the USDA (U.S. Department of Agriculture) says that 1 cup of cooked lentils yields only 18 grams of protein. My organic green lentils say on the package that 1/4 cup is 11 grams of protein; thus, a cup would be 44 grams. What is going on here?"

C.H., via e-mail

ANSWER: There are a couple of possibilities that could explain the difference between the values. It's most likely that the package values are for raw lentils while the USDA values are for cooked lentils. Since lentils increase in size with cooking, the protein in 1 cup of cooked lentils will be lower than in 1 cup of raw lentils.

If you are buying uncooked lentils, and the Nutrition Facts label does not specify that nutrient content is for cooked lentils, chances are that the values are for uncooked lentils. There's a small possibility that differences in the type of lentil or in processing or growing conditions could lead to different protein values.

See an article on The VRG's website at <www.vrg.org/nutrition/protein.htm> for more information on protein.

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The *Vegetarian Journal* is one project of The Vegetarian Resource Group. We are a nonprofit organization that educates the public about vegetarianism and the interrelated issues of health, nutrition, ecology, ethics, and world hunger. To receive *Vegetarian Journal* in the USA, send \$20 to The Vegetarian Resource Group, P.O. Box 1463, Baltimore, MD 21203.

NOTE FROM THE COORDINATORS

SELECTIVE CITATION





hen VRG's Food Service Advisor spoke at the School Nutrition
Association Conference, the audience mostly wanted to know what
vegetarian products had "CN labeling" (contribution toward USDA
meal pattern requirements). Many were surprised to learn TVP (texturized vegetable protein), a common meat extender, is vegetarian. Most had never used tofu.

Recently, a vegetarian activist encouraged us to do more selective citation—that is, only picking nutrition studies that are positive about vegan diets and focusing on those rather than giving a whole picture. We understand this perspective. As with the food service staff above, most people just need the basics and simplicity.

We realize that telling your audience what they want to hear is the way to be popular and earn the most supporters. However, we believe that working towards a less violent world means helping people to develop a holistic view and understand other sides while encouraging them to still hold to their own beliefs.

There are negative and positive articles about vegetarianism in the media. It's important to appreciate these studies in context, as we report in our Scientific Updates (page 12). Consumers also need to grasp that nutrition is constantly evolving. If anyone says, "This is the absolute truth," whether pro- or anti-vegetarian, you can be sure it probably isn't. Life is about continually learning and evaluating.

When we report about individual studies, we are looking at one study. When a VRG dietitian co-authors a document such as the American Dietetic Association position paper on vegetarianism, she and her colleagues synthesize a massive group of studies—some conflicting—within a larger framework, and they make recommendations based on the current science. Each time the paper is revised, the recommendations are going to change somewhat. There are always limitations to—and inherent biases within—studies, starting with what is selected to be studied.

What's important to know is, if you want to be vegan, it can be done simply. It's a matter of figuring out what works for you. If you are vegan for health reasons, what you do today may change tomorrow and be different for another person.

According to Reuters (July 3, 2006), the CEO of Whole Foods Market, Inc., pledged \$10 million for supporting locally grown food. Whole Foods will make long-term, low-interest loans to small farms, especially producers of grass-fed beef and organic pasture-based eggs.

After not finding certain vegan items at our local Whole Foods, we spoke to the store's buyer, who told us that distributor storage space limitations and distribution in general are the problem. Perhaps Whole Foods can dedicate resources to resolving this issue, which is keeping vegan products out of their stores.

Though people want simple answers, life is full of contradictions. Today, please be nice and give support to a person, group, or business that has made a positive contribution to society, get some exercise, and put aside time to laugh. Happy eating!

Debra Wasserman & Charles Stahler

Dehauboseura Charle Stabler

Coordinators of The Vegetarian Resource Group

VRG'S MEMORIAL AND HONORARY GIFT PROGRAM

How often have you wanted to make a gift in honor of a loved one or friend but weren't sure which charities are vegetarianfriendly, pro-environmental, or pro-animal rights? Please remember The Vegetarian Resource Group. You can make a gift in memory of a loved one or as a living tribute to honor someone you care about on a special occasion, such as a wedding or birth. We'll send an acknowledgement to you and to the recipient(s) you choose. Your gift will support educational outreach programs and help promote vegetarianism.

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Thank you to the following VRG members who have volunteered to staff VRG booths throughout the United States in recent months: Arnie Alper, MD; Ryan Andrews, RD; Phil Becker; Mike Billian; Bill Conway, MD; Cathy Conway, MS, RD; Ellen Campbell; Chef Ralph Estevez; Jay Lavine, MD; Shannon Martinez-Pedersen; Alisa Mills; Allison Parks; Mark Rifkin, RD; Ben Shaberman; Jenny Saccenti; Elsa Spencer, PhD, RD; and Janet Washington, RD.

VRG Scholarship Recipient Expresses Her Gratitude

Dear Debra and Charles,
I would like to thank both of you once again for dedicating your lives to creating a more peaceful world through vegetarianism and for taking the time to read through hundreds of applications each year for The Vegetarian Resource Group's scholarship to reward young people like myself who often feel like we do not get recognized for the work we do.

Seema Rupani, 2006 Scholarship Winner

Editors' Note: For more information about entering the 2007 scholarship competition, visit <www.vrg.org/student/scholar.htm>.

Edward & Sons Makes Foraging for Organic Tapioca a Cinch!

In response to *Foraging for Brambles* in Issue 3, 2006:

I enjoyed "Wildman" Steve Brill's article on *Foraging for Brambles*. If you have a hankering for making his Wild Raspberry Tapioca Pudding, Edward & Sons Trading Company's Let's Do...® Organic™ line now has *organic* tapioca in three forms: Starch (to use in place

of cornstarch), Granulated (for quick cooking), and Small Pearls. Check them out at <www.edward andsons.com>! Mimi Clark Veggie Gourmet Cooking Classes Fairfax Station, VA

Spreading the Word with VRG Brochures

Thank you very much for providing us with 50 copies of your *Vegan Diets in a Nutshell* brochure. I have several people at my job and at my church who are considering adopting a vegan or semi-vegan diet, and my wife and I have many family members who are trying to reduce their consumption of meats and dairy. I'm sure my co-workers, family members, and friends will greatly enjoy the brochures. Please accept this donation as thanks. K.D., via e-mail

Correction: The Easy as Apple Pie recipe article by Chef Nancy Berkoff that ran in Issue 3, 2006, contained a slight error. On page 6 under the "Pie Crusts" heading, there is the statement "The resulting mixture should have fat lumps no smaller than peas." This sentence should read, "The resulting mixture should have fat lumps no larger than peas." We apologize for the error.

Letters to the Editors can be sent to: *Vegetarian Journal*, P.O. Box 1463, Baltimore, MD 21203. You may also e-mail your letters to vrg@vrg.org.

Coming in the Next Issue:

CINCO DE MAYO RECIPES

Plus: Falafel Fever, Satisfying Summer Salads, What Labels on Egg Cartons Really Mean, and more!

Comforting Casseroles

By Peggy Rynk

want to make for dinner. You just know that, although you may love to cook, you do not love it right this minute. A simple casserole can be a welcome answer to this dilemma. Casseroles are easy to put together and require little else to complete the meal—bread and a small salad or bowl of fresh fruit may be all you need.

Casseroles are wonderfully accommodating where ingredients are concerned. Let's say you have "a little of this and a little of that" in the fridge, freezer, or cupboard. By themselves, these ingredients may not seem like much, but combined into a casserole, they may be terrific.

So, let's say you have a cup of cooked beans, a little frozen corn, a carrot or two, half an onion, and maybe a partial package of frozen greens. You're in business! Heat a Tablespoon or two of oil in a skillet. Add the carrots first because they will take longer to cook. Then, stir in the onions and let cook for a few minutes.

Next, add the leftover beans and the frozen corn to the skillet along with any other leftover vegetables you're using. (The volume of ingredients you include will vary according to the size of the skillet.) Season as you wish, and spoon into a greased casserole dish or pan. Top with vegan cheese, slivered almonds, bread crumbs, or whatever you have on hand that appeals to you—or with no topping at all, if you prefer.

Many casseroles can be made ahead of time and kept in the fridge or freezer for even greater convenience. If you're not going to bring them to room temperature before baking them, make sure the casserole dishes they're in will go safely from refrigerator or freezer to the oven.

When you're ready to bake, slide the casserole into a 350- to 375-degree oven for 30 minutes or so while you assemble the rest of the meal—bread, raw vegetables, fresh fruit, or whatever you have on hand that appeals. And dinner is made!

Possible Casserole Combinations

- Sliced leftover (or raw) baking potatoes or any cooked leftover vegetables you have on hand, vegan sour cream, seasonings to taste, and a sprinkling of bread crumbs.
- Melange of leftover vegetables and chopped onions and/or garlic, topped with whole grain bread cubes tossed with enough melted vegan margarine to lightly coat.
- Leftover pasta, leftover pasta sauce, and leftover cooked vegetables. If desired, sprinkle with a little parmesan-style vegan cheese.
- Leftover vegan chili, whole kernel corn (canned, frozen, or leftover), chopped fresh or canned tomatoes, and seasonings of choice.

 Cooked grits (common in the South) seasoned with garlic or onion powder to taste and enough soymilk so the mixture is not overly thick. Top with shredded vegan cheese.

Casseroles make wonderful desserts, too. Bake at 350 degrees until heated through and, if desired, very lightly browned on top. Here are two possibilities:

- Combine sliced or diced fresh fruit—such as peaches, nectarines, strawberries, blueberries, apples, or pears—peeled and seeded as necessary. Crumble vegan cookies over the top, if desired.
- Peeled and cored sliced or diced apples, tossed with lemon juice, vegan sugar, and ground cinnamon to taste. Top with pecan pieces or slivered almonds, if desired.

ORIENTAL NOODLE-VEGETABLE BAKE

(Serves 6)

Richly flavored, with a mix of colors and textures, the toasted sesame oil makes this casserole extra special.

1 cup frozen shelled edamame One 8-ounce package thin Chinese noodles Salted, boiling water 5 Tablespoons toasted sesame oil, divided 11/2 cups peeled, sliced carrots 2 cups bite-sized cauliflower florets 2 cups bite-sized broccoli florets 2 Tablespoons slivered garlic 2 cups fresh spinach leaves, packed 1/2 teaspoon salt Non-stick vegetable oil spray to prepare casserole dish 1/3 cup slivered almonds

Cook the edamame according to package directions, either by microwaving or boiling. Set aside.

Cook the noodles in the boiling water according to package directions. Drain and stir in 3 Tablespoons of the sesame oil.

Heat the remaining 2 Tablespoons of oil in a 12" skillet. Add the carrots, cauliflower, and broccoli and sauté until almost tender. Stir in the garlic and continue to sauté another minute or two. Remove from heat. Stir in the spinach and the salt.

Preheat over to 350 degrees. Add the vegetables to the cooked noodles, blending gently and well. Spray a shallow greased 3-quart casserole dish with oil and spoon the mixture into it. Sprinkle the almonds evenly over the top. Bake, uncovered, for 30 minutes.

Total calories per serving: 366 Carbohydrates: 41 grams Sodium: 246 milligrams

Fat: 18 grams Protein: 13 grams Fiber: 6 grams

BROCCOLI-CAULIFLOWER BAKE

(Serves 6)

*Pictured on the cover. With its rich, creamy flavors and textures, this is a casserole even die-hard non-vegetarians will love.

4 Tablespoons nonhydrogenated vegan margarine

1/4 cup cornstarch

3 cups soymilk

2 teaspoons salt, divided

2 dashes pepper, divided

4 cups bite-sized broccoli florets

4 cups bite-sized cauliflower florets

Non-stick vegetable oil spray to prepare casserole dish

2-21/2 cups whole wheat bread torn into 1/4- to 1/3-inch pieces

1 cup shredded cheddar-style vegan cheese

Melt the margarine in a 12" skillet. Stir in the cornstarch and let cook 2 minutes. Stirring often with a fork, add soymilk, 11/2 teaspoons of salt, and one dash pepper and cook until thickened, keeping the mixture smooth.

Add the cauliflower and broccoli, then blend in the remaining salt and pepper. Cover and cook, stirring often, until vegetables are tender.

Spray a 13" x 9" x 2" baking pan with oil and spoon the mixture into it.

Preheat oven to 350 degrees. In a 1-quart mixing bowl, toss together the bread and the cheese. Sprinkle evenly over the cauliflower-broccoli mixture. Bake for 35 minutes or until topping is lightly browned.

Total calories per serving: 255 Carbohydrates: 29 grams Sodium: 1,074 milligrams

Fat: 13 grams Protein: 9 grams Fiber: 6 grams

BAKED BURRITO CASSFROLE WITH MILD **ENCHILADA SAUCE**

(Serves 6)

So full-flavored and enjoyable, this dish is worth making often.

Non-stick vegetable oil spray to prepare casserole dish

One 14-ounce can mild enchilada sauce, divided

One 16-ounce can vegan refried beans One 15½-ounce can black beans, not drained

1/4 teaspoon salt

1/2 teaspoon chili powder

1/2 teaspoon garlic powder

11/2 cups vegan sour cream, divided

Six 10-inch whole wheat tortillas One 21/4-ounce can sliced black olives.

drained

1 cup shredded cheddar-style vegan cheese

Preheat oven to 350 degrees.

Spray a 13" x 9" x 2" baking dish or pan with oil and spread half of the enchilada sauce in it. Set aside.

In a medium-sized mixing bowl, blend the beans, salt, chili powder, garlic powder, and 1/2 cup of the vegan sour cream.

Lay out the tortillas and put an even amount of this mixture in the center of each. Fold the tortilla edges toward the center, overlapping to make a packet.

Place the packets, folded side down, in the pan. Sprinkle the black olives evenly over them. Then, sprinkle on the cheese. Drizzle the remaining enchilada sauce over all. Top evenly with dollops of the remaining sour cream. Bake for 30 minutes.

Total calories per serving: 473 Fat: 17 grams Carbohydrates: 75 grams Sodium: 1,555 milligrams

Protein: 18 grams Fiber: 14 grams

CREAMY POTATO-VEGAN CHEESE CASSEROLE (Serves 5)

This dish has a rich, hearty flavor.

Non-stick vegetable oil spray to prepare casserole dish

1½ cups chopped green bell peppers 1½ cups chopped sweet onions

1/2 teaspoon salt

4½-5 cups russet potatoes cut into ¼-inch slices (not peeled if skins are good)

Additional salt to taste

1/2 cup vegan sour cream, divided

4 ounces shredded cheddar-style vegan cheese or cheddar-style slices

Preheat oven to 375 degrees.

Spray an 8" x 8" x 2" casserole dish with oil. Set aside.

Mix together the bell peppers, onions, and the 1/2 teaspoon salt in a l-quart mixing bowl. Set aside.

Layer a third of the sliced potatoes in the casserole dish, then sprinkle lightly with salt to taste. Distribute half the bell pepperonion mixture over the potatoes. Over this, add half the sour cream in small dollops.

Layer on another third of the potatoes and sprinkle with a little more salt to taste. Distribute the

remaining bell pepper-onion mixture over this layer and top it with small dollops of the remaining vegan sour cream.

Layer over this the remaining third of the potato slices and again sprinkle with a little more salt to taste. Bake, uncovered, for approximately 45 minutes or until potatoes are almost tender.

Remove casserole from oven. Distribute the shredded or sliced vegan cheese evenly over the top and return casserole to oven for approximately 15 minutes longer or until cheese is melted and potatoes are tender.

Total calories per serving: 258 Carbohydrates: 40 grams Sodium: 529 milligrams

Fat: 9 grams
Protein: 5 grams
Fiber: 4 grams

BAKED MIXED BEAN, CORN, AND VEGETABLE CHILI

(Serves 6)

This dish, with its well-balanced flavors, is especially good served with cornbread and a tossed salad.

2 Tablespoons canola oil
1½ cups peeled, chopped carrots
6 Tablespoons seeded, finely chopped fresh jalapeño peppers 1 cup chopped yellow onions 1 Tablespoon minced fresh garlic

One 12-ounce package frozen vegan ground burger

2 cups frozen whole kernel corn One 15.5-ounce can Great Northern beans,

One 15.5-ounce can red kidney beans, not drained

One 15-ounce can black beans, not drained One 14.5-ounce can diced tomatoes, not drained

One 6-ounce can tomato paste 1/2 teaspoon salt

1 teaspoon chili powder

not drained

1 teaspoon ground ancho chili powder*

1/4 teaspoon cayenne

Non-stick vegetable oil spray to prepare casserole dish

4 ounces shredded or thinly sliced cheddarstyle vegan cheese

Heat the oil in a 4½- to 5-quart skillet or pot. Add carrots and sauté 5 minutes or until they begin to soften slightly. Stir in jalapeños, onions, and garlic. Sauté 5 minutes longer.

Add the ground burger and continue to sauté until it begins to brown lightly. Stir in corn and cook 5 minutes.

Add the beans along with the tomatoes and tomato paste. Stir in the salt, chili powders, and



cayenne. Simmer for approximately 10 minutes, stirring occasionally.

Preheat over to 375 degrees. Spray a 4½- to 5-quart baking dish or pan with oil and spoon the mixture evenly into the dish. Distribute vegan cheese evenly over the top. Bake for approximately 20 minutes or until cheese melts.

Note: Ancho, the most popular chili pepper for Mexican cooking, is not hot, just richly flavorful. It is available in the ethnic foods aisle of well-stocked supermarkets.

Total calories per serving: 475 Fat: 13 grams Carbohydrates: 67 grams Sodium: 1,067 milligrams

Protein: 27 grams Fiber: 16 grams

CINNAMON APPLE-**SWEET POTATO BAKE** (Serves 6)

This fragrant casserole goes well with vegan sausages.

1 cup orange juice

5 cups peeled, diced sweet potatoes

4 cups peeled, cored, and diced tart apples, such as Granny Smith

1/2 teaspoon salt

Non-stick vegetable oil spray to prepare casserole dish

- 1 cup sugar (Use your favorite vegan variety.)
- 1 teaspoon ground cinnamon
- 2 Tablespoons nonhydrogenated vegan margarine

Preheat oven to 350 degrees.

Mix together the orange juice, sweet potatoes, apples, and salt. Spray a shallow 3-quart casserole with oil and spoon mixture into it.

In a small bowl, blend together the sugar and cinnamon and sprinkle evenly over the apple mixture. Dot with the margarine. Bake until sweet potatoes are tender, approximately 45 minutes.

Total calories per serving: 359 Carbohydrates: 81 grams Sodium: 221 milligrams

Fat: 4 grams Protein: 2 grams Fiber: 8 grams

Peggy Rynk is a frequent contributor to Vegetarian Journal.

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Inside each issue:

- Nutrition Hotline—answers to your questions about vegetarian diets.
- Vegan Recipes—quick and easy dishes, international cuisine, and gourmet meals.
- Natural Food Product Reviews
- Scientific Updates—a look at recent scientific papers relating to vegetarianism.
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Eating a Variety of Colorful Fruits and Vegetables May Protect Against a Leading Cause of Blindness

by Ben A. Shaberman

HE OLD ADAGE "CARROTS ARE GOOD FOR YOUR eyes" holds a lot of truth. Carrots are rich in beta carotene, which your body converts into vitamin A—a nutrient essential to the biochemical process in your retina that enables you to see. However, experts believe your retinas might be even better off if you ate not only carrots but a wide variety of fruits and vegetables as well.

Recent studies suggest that eating a diverse mix of colorful fruits and vegetables, which are good sources of antioxidants, may help protect against a vision-robbing retinal condition called age-related macular degeneration (AMD). In the United States and much of the Western world, AMD is the leading cause of legal blindness in individuals who are 55 years of age and older. Approximately 9 million Americans are affected by AMD, and that number is expected to double by 2020 because of the aging population.

AMD is characterized by the build-up of *drusen*, yellowish deposits comprised of fats and proteins, under the central region of the retina known as the macula. The accumulation of drusen can lead to the dry form of AMD. Though dry AMD can sometimes cause vision loss, the condition puts people at increased risk

for the wet form of AMD, which more frequently leads to rapid and severe loss of central vision. In wet AMD, unhealthy, leaky blood vessels grow under the macula, causing it to degenerate. Most current treatments for wet AMD involve injections into the eye to halt unhealthy blood vessel growth. There is no known cure for either form of AMD.

In an investigation called "A Dietary Antioxidant Index and Risk for Advanced Age-Related Macular Degeneration in the Age-Related Eye Disease Study" conducted by the National Eye Institute, researchers evaluated the antioxidant intake of more than 1,700 individuals who were between 60 and 80 years of age. Study subjects completed food frequency questionnaires and were assigned a value on an antioxidant index scale, based on the volume and diversity of their antioxidant intake. Subsequently, subjects were placed in one of five quintiles according to the value of their antioxidant index. Those individuals in the fifth quintile (those with highest antioxidant indexes) were approximately 40 percent less likely to have wet AMD, an advanced form of the disease, than people in the first quintile (those with lowest antioxidant indexes). The antioxidant nutrients that comprised



LEFT: A scene viewed with normal vision. **RIGHT:** The same scene as it might be viewed by a person with age-related macular degeneration.

Photos courtesy of the National Eye Institute, National Institutes of Health

the study index were lutein, zeaxanthin, alpha carotene, beta carotene, beta cryptoxanthin, lycopene, vitamins C and E, zinc, and selenium.

Julie Rosenthal, MD, who presented results of the study at The Association for Research in Vision in Ophthalmology (ARVO) Annual Meeting in May 2006, said, "The message that we hope people will take home is that the study strengthens the evidence that a diet high in nutrients with antioxidant properties is associated with a decreased risk of having advanced AMD."

Another study report, "Dietary Intake of Antioxidants and Risk of Age-Related Macular Degeneration," was published in the *Journal of the American Medical Association* (December 28, 2005). In the report, investigators said that dietary antioxidant intake significantly reduced the risk of all forms of AMD. More than 4,000 people from Rotterdam, The Netherlands, aged 55 years or older, participated in this investigation. A food frequency questionnaire was used to evaluate study participants' intake of a variety of antioxidants. The investigators concluded that "an above-median intake of the combination of vitamins C and E, beta carotene, and zinc was associated with a 35 percent lower risk of incident AMD."

A number of other studies have evaluated antioxidants and AMD risk, though most have investigated antioxidant intake through supplementation. Some have compared blood levels of antioxidants with retinal health.

A STRESSFUL WORLD FOR THE FRAGILE RETINA

The retina is a thin, delicate piece of tissue in the back of the eye that is comprised of a variety of different neuronal cells, including 125 million photoreceptors (rods and cones) that process light and enable you to see. Experts actually consider the retina to be an extension of the brain.

For many years, researchers have suspected that antioxidants might be beneficial to the health of the retina because it is subjected to so much oxidative and environmental stress; the retina processes a relatively large amount of oxygen and waste and is regularly bombarded by light. Furthermore, the antioxidants lutein and zeaxanthin are prevalent in the macula and are what give the center of the eye (behind the pupil) its dark pigment. Their role is thought to be protective.

The benefits of antioxidants in human health are not definitively understood—they can even be a topic of controversy. Still, many health experts believe that antioxidants are important in the diet because they protect the body's cells and tissue from the damage

that occurs as a result of normal, daily living and aging. Antioxidants also appear to protect our bodies from damage caused by ultraviolet light, X-rays, heat, cigarette smoke, alcohol, and pollutants.

MORE ON AMD RISK FACTORS

Though dietary antioxidants may reduce your chances of developing AMD, there are a number of other factors that affect overall AMD risk.

Recently, researchers found a strong genetic link to the disease; as many as 74 percent of AMD cases may have a genetic connection. Genes that control your immune system and inflammatory responses appear to be involved. Experts have also known for many years that AMD runs in families.

Smokers are more likely to develop AMD than non-smokers. In fact, smoking is the most significant modifiable risk factor for AMD.

Though the effects of light exposure on the retina are not completely understood, most retinal experts agree that you should protect your eyes with sunglasses when outside in bright light. Use glasses that filter out both UVA and UVB rays.

Many health experts believe that, in general, an overall healthy lifestyle can reduce your risk of AMD; they say that what is good for your heart is also good for your retina.

SEE YOUR OPHTHALMOLOGIST

Always visit an ophthalmologist if you notice changes in your vision. However, AMD can occur before noticeable changes. Only an ophthalmologist can diagnose the condition by conducting an exam of your retina.

The American Academy of Ophthalmology recommends that people between the ages of 40 and 64 visit an ophthalmologist every two to four years. People who are 65 and older should do so every one to two years.

Note: The AREDS formulation—an over-the-counter antioxidant supplement—is often prescribed to individuals who are at high risk of developing advanced AMD. The amounts of antioxidants in this formulation are higher than the amounts that can normally be obtained through diet. If your doctor has prescribed the AREDS formula for you, do not try to substitute fruit and vegetable consumption for the formulation. Always consult your physician if you have questions about your condition, diet, or supplementation.

Ben A. Shaberman is a writer and a frequent volunteer for VRG events throughout the Mid-Atlantic.

SCIENTIFIC UPDATE

By Reed Mangels, PhD, RD, FADA

A REVIEW OF RECENT SCIENTIFIC PAPERS RELATED TO VEGETARIANISM

Vegetarians Are More Likely to Produce Equol — A Substance that May Play a Role in Cancer Prevention

People differ in how they metabolize soy products. Between 20 and 35 percent of Western adults are able to produce a substance called equol when they consume soyfoods. Bacteria in the intestines produce equol. Equol production is higher in those living in Asian countries, where 50 to 55 percent of adults are equol producers. There may be health advantages to producing equol, although research in this area is preliminary. Equol may play a role in preventing some cancers and may function as an antioxidant.

Do vegetarians have an edge when it comes to equol production? Apparently, they do. A group of 41 adults, 29 of whom said they were vegetarian, was given a soymilk drink twice daily for three days. Equol production was measured. Vegetarians were more than four times as likely to produce equol compared to non-vegetarians. Close to 60 percent of vegetarians produced equol. Diets of study participants were not assessed, so we cannot know if dietary differences in carbohydrate, protein, or fat were associated with the results. Although the vegetarians were more likely to have used soy products before this study, other studies have found no link between long-term soy food use and the ability to produce equol.

Setchell KDR, Cole SJ. 2006. Method of defining equol-producer status and its frequency among vegetarians. *J Nutr* 136:2188-93.

Lowfat Vegan Diet for Type 2 Diabetes

Type 2 diabetes, formerly called adult-onset diabetes, is the most common form of diabetes, affecting at least 8 percent of adults. Researchers at George Washington University recently investigated the use of a lowfat vegan diet as a way of treating adults with type 2 diabetes. Subjects were randomly assigned to one of two

groups. One group, with 50 participants, was instructed about a standard diet for diabetics, the kind most doctors and dietitians recommend. This diet was low in saturated fat and promoted weight loss by reducing calories. The other group, with 49 participants, was instructed on a lowfat (10 percent calories) vegan diet. The vegan diet did not limit portion sizes or calories. Both groups reduced their intake of calories, fat, saturated fat, and cholesterol, but greater reductions in saturated fat and cholesterol were seen in those following the vegan diet. Participants on the vegan diet increased their carbohydrate intake. Both groups lost weight and had lower blood total and LDL cholesterol levels. Those following a vegan diet had a greater reduction in blood total and LDL cholesterol levels, possibly because of the lower saturated fat in their diet.

During the study period, 43 percent of vegan diet participants and 26 percent of the other participants reduced the amount of diabetes medication they used. This adjustment was done under a doctor's supervision. This study suggests that a lowfat vegan diet can be used to treat type 2 diabetes. However, people with diabetes should not attempt dietary or medication changes without medical supervision.

Barnard ND, Cohen J, Jenkins DJA, et al. 2006. A low-fat vegan diet improves glycemic control and cardiovascular risk factors in a randomized clinical trial in individuals with type 2 diabetes. *Diabetes Care* 29:1777-83.

A Bowl of Brown Rice A Day Keeps the Dentist Away?

One of the consequences of poor oral hygiene is gum disease that can lead to tooth loss. Some people may know that severe gum disease can also increase the risk of heart attacks, stroke, and having a premature baby. What they may not know is that their diet can play a role in reducing risk of gum disease. A recent study of more than 34,000 men found that those who ate the most whole grains (at least 3 servings a day) were 23 percent less likely to develop gum disease compared to men eating less than half a serving of whole

grains daily. So keep brushing and flossing and be sure to eat plenty of whole grains, including whole wheat breads, whole grain cereals and pasta, and brown rice.

Merchant AT, Pitiphat W, Franz M, Joshipura KJ. 2006. Whole-grain and fiber intakes and periodontitis risk in men. *Am J Clin Nutr* 83:1395-1400.

Vegetarians Have Lower Levels of Dioxins and Furans

Dioxins and furans are among the most toxic substances known. They increase risk of cancer and other health problems. A major source of these toxic substances is waste-burning incinerators that release dioxins and furans into the atmosphere. They then accumulate in foods, especially in animal fats and fish. Vegetarians who do not eat animal fats or fish would be expected to have lower blood levels of dioxins and furans. A study of adults in Taiwan who lived near municipal waste incinerators for at least five years compared blood levels of dioxins and furans in 33 vegetarians and 1,675 nonvegetarians. Vegetarians had significantly lower levels of dioxins and furans. Results of this study are similar to other reports that found that fish, seafood, dairy products, pork, poultry, and beef were all significant sources of dioxins and furans.

Chen H-L, Su H-J, Lee C-C. 2006. Patterns of serum PCDD/Fs affected by vegetarian regime and consumption of local food for residents living near municipal waste incinerators from Taiwan. *Env Intern* 32:650-55.

Vegetables Reduce Risk of Non-Hodgkins Lymphomas

Non-Hodgkins lymphomas are cancers of the lymph nodes, spleen, and other components of the immune system. The incidence of non-Hodgkins lymphomas has increased over the past 25 years for unknown reasons. This type of cancer accounts for about 4 percent of all new cancer diagnoses and 3 percent of all cancer deaths in the United States. Dietary factors may be related to risk for non-Hodgkins lymphomas. A recent study matched 466 people who had non-Hodgkins lymphomas with 391 control subjects. Both groups were asked about their usual diet. Those who ate the most vegetables (more than 20 servings a week) had a markedly lower risk of non-Hodgkins lymphomas. This was especially true for those eating more green

leafy vegetables and more cruciferous vegetables, such as cabbage, broccoli, and kale. The most active and the most lean people were also less likely to develop non-Hodgkins lymphomas. This study adds to already strong evidence for eating generous amounts of vegetables.

Kelemen LE, Cerhan JR, Lim U, et al. 2006. Vegetables, fruit, and antioxidant-related nutrients and risk of non-Hodgkin lymphoma: a National Cancer Institute-Surveillance, Epidemiology, and End Results population-based case-control study. *Am J Clin Nutr* 83:1401-10.

Fruit and Vegetables for Healthy Bones

Vegetarian Journal readers know that there's much more to bone health than just calcium. An intriguing new study suggests that fruit and vegetable intakes, especially during adolescence, may be important for healthy bones. Researchers examined boys and girls aged 16 to 18 years and living in the United Kingdom. They also studied young women (aged 23 to 37 years) and older adults (aged 60 to 83 years). They asked subjects about their intake of fruits and vegetables and evaluated their bones. In adolescents, stronger and larger bones were found in those eating the largest amounts of fruits and vegetables. The amount of fruit eaten seemed to be more important for bone health than the amount of vegetables consumed. Similar results were seen in older women. There was little effect of fruit or vegetable consumption on bone health in young women or older men. Calcium intake did not determine bone health in any of the groups studied. The effects of fruits and vegetables on bone health may be due to the alkaline nature of these foods or to their vitamin C, beta-carotene, or vitamin K content. In the United States, costs associated with osteoporosis are close to 18 billion dollars each year. Simple measures like encouraging people, especially teens, to eat more fruits and vegetables may be important in reducing both the financial and human cost of osteoporosis.

Prynne CJ, Mishra GD, O'Connell MA, et al. 2006. Fruit and vegetable intakes and bone mineral status: a cross-sectional study in 5 age and sex cohorts. *Am J Clin Nutr* 83:1420-28.

Lanham-New SA. 2006. Fruit and vegetables: the unexpected natural answer to the question of osteoporosis prevention? *Am J Clin Nutr* 83:1254-55.

THICKENERS

Strategies, Tips, and Tricks for Using These Cooking Agents by Debra Daniels-Zeller

can be tricky. Questions frequently arise. What can I use instead of gelatin? Are arrowroot and cornstarch really interchangeable? How do I thicken a gravy if my guests can't eat wheat? And how does arrowroot, tapioca flour, or potato starch function in a muffin recipe? Each thickening ingredient has unique qualities, and each performs differently.

Over the years, I've used these thickening options in a variety of ways, but I wanted to experiment with all of them at the same time to answer my own questions. How was each different in a gravy, sauce, or fruit dessert? Before I started, I mentioned my idea to Devra Gartenstein, author of *The Accidental Vegan* and owner of the Patty Pan Grill, which serves healthy vegetarian fast food in Seattle. Devra asked, "Are you going to use rice flour?"

"How do you use it?" I asked.

"Sprinkle a little over the top of a simmering sauce and stir, and it thickens right up," Devra answered.

I love new cooking tips, so I went home and sprinkled rice flour over simmering mushroom stock. Like magic, it had the same amazing texture as my grandma's gravy, which was always thickened with a flour-fat roux with stock gradually added. But with rice flour, I didn't worry about lumps of roux in the gravy. Rice flour is now a staple thickener option in my pantry.

But I was still curious about agar, arrowroot, cornstarch, kuzu, potato starch, and tapioca flour. How did they perform with liquid? Was one equal to another? My experiment would reveal the answer. I measured a Tablespoon of each thickener into separate containers and added 8 ounces of cold water. One by one, I poured each mixture into a small pan. I stirred and simmered until the liquid thickened. The results revealed why, for example, my cobblers turn out differently if I substitute arrowroot or kuzu for cornstarch.

THICKENING OPTIONS Agar (also called agar-agar or kanten)

Agar is a vegetarian gelling agent made from red algae from the ocean. Agar is a perfect substitute for gelatin, which is derived from animal ligaments and cartilage. A staple ingredient in Japanese cuisine for centuries, agar is used to create gelatin-like desserts or aspics. Agar is available in flakes, powder, or bars that are called kanten. The powder is more processed than agar flakes, which are a staple in my pantry. Kanten is more difficult to find.

I cooked the agar-water experiment until the flakes dissolved, usually 4 to 10 minutes. (The time is determined by how hot and fast your stove simmers.) With practice, you'll find it is easy to see exactly when all the flakes dissolve. When done, my experiment was as thick as corn or maple syrup. I removed it from the heat and poured it into a gelatin mold. In 30 minutes, it had gelled. If you forget the liquid-to-agar ratio, there are directions on the back of the agar package.

Agar is available in Asian markets and in the international aisle of natural foods stores.

Arrowroot

A Caribbean dietary staple, arrowroot is derived from the roots of a tropical plant and has been cultivated for 7,000 years. Use arrowroot to thicken sauces, or add it to baked goods with gluten-free flours like buckwheat to help bind the flour. Arrowroot creates texture for muffins or cookies similar to wheat flour. It has a slightly gritty texture, but it's not as gritty as rice flour. Some cooks use arrowroot exclusively to replace the flour that many recipes require.

Arrowroot-based sauces are very similar to cornstarch-thickened mixtures. The hot liquid becomes clear as the mixture thickens, but if overstirred and heated too long, the mixture becomes thin again. I have used it hundreds of times and never had this happen, but perhaps this is why it is not very effective to thicken pie fillings. I suggest that you remove the arrowroot mixture from the heat after 10 to 12 minutes rather than letting it simmer for half an hour. When substituting arrowroot for cornstarch, use 1 Tablespoon arrowroot for every 2 teaspoons of cornstarch.

My arrowroot experiment was half as thick as the cornstarch-water combination when it was done. If you

need a thick pudding consistency, use more arrowroot or use the more dependable cornstarch.

Look for arrowroot in natural foods stores.

Cornstarch

Cornstarch was first manufactured in the 1840s. Made from a substance extracted from corn and processed into a white powder, cornstarch was originally used as a clothing starch. Food manufacturers soon discovered they could add it as a filler to processed foods. Cornstarch can be added to replace approximately a quarter of the flour in cake and cookie recipes for a finer grained, lighter product.

My cornstarch-water mixture thickened faster than my arrowroot one did. Like arrowroot, cornstarch is said to revert to a thin consistency if cooked too long or stirred too much. (This may be the reason some cooks have better luck using wheat flour to thicken berry pie filling.) My thickened experiment had more substance than the arrowroot-, kuzu-, or tapioca-water mixture. However, cornstarch is more dependable to use if you're aiming for a pudding-like consistency. My cornstarch experiment was clear when it was hot, but it turned opaque and was thicker when cool. It left a slightly chalky, unappealing aftertaste. If you have delicate flavors, it may be worthwhile to use arrowroot instead of cornstarch.

Cornstarch is available in the baking aisle of any grocery store.

Kuzu (also called kudzu)

Kuzu has been used as a cooking ingredient in Japan for more than 2,000 years. Some cooks prefer to use kuzu instead of arrowroot or cornstarch because kuzu is less processed.

In my experiment, I crushed the small hard kuzu lumps in a mortar with a pestle before measuring the kuzu powder into cold water. Always remember to do this before using it; otherwise, the lumps may remain intact. As my experiment heated, it was difficult to tell when the mixture had thickened because the texture was only slightly thicker than water after simmering for 10 minutes. I recommend using twice as much kuzu as cornstarch to thicken a sauce. When cooking, stir continuously or the kuzu will drift to the bottom of the pan, stick, and form a thick hard layer.

Find kuzu in Asian grocery stores and in the international aisle or the macrobiotic section of natural foods stores.

Potato Starch

Made from cooked, dried, ground potatoes, potato starch can thicken hot liquids and is used as a binder in processed gluten-free breads and cookies. The package I purchased indicated that potato starch can be substituted for wheat flour to thicken gravy, sauces, or soups. However, in my experiment, the simmering liquid suddenly bubbled up and became a soft-gelled mass—not exactly gravy texture. For a gravy or sauce, my recommendation is to use less than half as much potato starch as cornstarch in a recipe and expect thicker results.

Potato starch creates excellent texture when used as a binder in baked goods made with a gluten-free flour, such as rice, millet, or buckwheat flour. I use it almost exclusively to make my favorite buckwheat crackers. Use half as much potato starch as flour in a recipe.

Potato starch is available in natural foods stores and in specialty markets.

Rice Flour

Used in Japan for centuries, this gluten-free flour can be sprinkled directly into a hot sauce or soup to thicken the texture. And it's so easy to use that my gravy turned out perfectly with my first try. Start out with a Tablespoon of rice flour. Sprinkle over the simmering liquid. Add more as needed.

Rice flour can be found in the baking aisle of many grocery stores and natural foods stores.

Tapioca Flour

Tapioca is a traditional ingredient in Brazilian foods, processed from the root of the South American cassava plant. Tapioca is available in granules, flakes, pellets, and flour, and it was the main ingredient to thicken pudding in the United States for decades until other ingredients replaced it.

In my experiment, tapioca thickened the water like cornstarch did but with thinner results. Tapioca performs more like arrowroot in sauces. Use twice the amount of tapioca as cornstarch in a recipe.

Tapioca flour shines as a binding ingredient in gluten-free bread, muffin, and cookie recipes. Use at least half a cup of tapioca flour for each cup of gluten-free flour.

Tapioca flour is available in natural foods stores and in the baking aisle of some grocery stores.

Wheat Flour

My grandmother depended on wheat flour to thicken gravies, stews, and hot fruit pie fillings. Typical gravy

ingredients are fat, flour, and stock. The fat and flour are blended together in equal amounts over medium heat to make a roux. The liquid is then stirred in gradually. For pie fillings, grandma knew what she was doing when she sprinkled flour over the fruit to help absorb the juices and make a thicker filling.

Wheat flour is available in the baking aisle of most grocery stores.

Summary

To gel anything or to replace gelatin in a recipe, select agar. It can also be used in frozen dessert recipes and to thicken puddings. Cornstarch is the thickener of choice for puddings, but if you prefer more healthful alternatives, use arrowroot or kuzu and add about twice as much of either one as you would cornstarch. Tapioca works much the same as cornstarch, but you must add more of it to thicken a sauce or gravy. Rice flour is an easy option to

thicken a sauce or gravy. Just sprinkle over the simmering liquid. Use wheat flour in pies and fruit desserts that must be cooked for long periods. Arrowroot, potato starch, and tapioca flour are excellent binding ingredients for glutenfree flour in baking recipes.

EASY SCRAMBLED TOFU (Serves 2)

Drain and discard the water in the tofu package before using. Arrowroot is sprinkled onto the tofu to create a soft, egg-like texture. Nutritional yeast adds a cheesy flavor.

1/2 teaspoon oil
1 small onion, chopped
2 cloves garlic, minced or pressed
1/4 cup chopped green or red bell peppers
1 cup sliced button, crimini, shiitake, or portobello mushrooms
8 ounces firm or extra firm tofu, drained
1 Tablespoon nutritional yeast
1 Tablespoon arrowroot

¼ teaspoon turmeric2 Tablespoons salsa½ teaspoon salt¼ cup chopped cilantro or parsley

Heat a heavy skillet over medium heat. Add oil and onions. Stir, then cover with a lid. Turn heat to low and sweat the onions for 10 minutes, stirring occasionally. Remove lid and add garlic, bell peppers, and mushrooms. Cover and cook until mushrooms are slightly soft and garlic is lightly browned.

Crumble tofu over the onions and mushrooms. Sprinkle the nutritional yeast, arrowroot, turmeric, and salsa over the tofu. Stir and cook over medium heat for approximately 7 minutes or until the tofu is heated through. Blend in the salt and serve garnished with chopped cilantro or parsley.

Total calories per serving: 166 Carbohydrates: 17 grams Sodium: 669 milligrams

Fat: 7 grams
Protein: 14 grams
Fiber: 4 grams

VEGAN THICKENING OPTIONS

*Prices reflect natural foods stores on the West Coast; actual prices in other areas may vary.

OPTION	AVAILABILITY	PRICE PER OZ.*	STOVE TOP	BAKING	BEST FOR
Agar	Natural Foods Stores/ Asian Markets	\$5.99	Gelling agent	No	Gelled desserts
Arrowroot	Natural Foods Stores	\$.57	Sauces, gravies, fruit desserts	Yes	Sauces, baking
Cornstarch — Organic	Grocery Stores	\$.09 \$.50	Sauces, gravies, fruit desserts, puddings	Yes	Sauces, puddings, fruit desserts
Kuzu	Natural Foods Stores/ Asian Markets	\$1.26	Sauces, soups	No	Sauces, soups
Potato Starch	Natural Foods Stores/ Grocery Stores	\$.13	N/A	Yes	Baking
Rice Flour	Natural Foods Stores/ Grocery Stores	\$.25	Sauces, gravies	Yes	Sauces
Tapioca Flour	Natural Foods Stores/ Grocery Stores	\$.13	Sauces, gravies, puddings	Yes	Baking, sauces
Wheat Flour	Grocery Stores	\$.03	Gravies, pies	Yes	Fruit pies

STIR-FRY VEGETABLES WITH HOISIN SAUCE

(Serves 4)

Hoisin sauce is available in the international aisle of many grocery stores or in Asian foods stores. You can use another sauce in this recipe, such as teriyaki, if you'd like to. Red pepper flakes can be found in most grocery stores in the spice aisle. If you can't find them, use freshly ground pepper. Arrowroot will work instead of cornstarch; however, if you decide to use kuzu instead, you will have to use up to 3 teaspoons.

Boiling water
2 cups broccoli florets, cut into bite-sized pieces
Ice water to stop the cooking process
1 large onion, cut in half and sliced
1½ teaspoons oil
1 cup sliced carrots
1 cup green beans, tips removed and cut into 1-inch lengths
½ cup water
3-4 Tablespoons hoisin sauce
Generous dash of crushed red pepper

In a large pot of boiling water, blanch broccoli florets for a few minutes. The florets will be forktender and bright green. Rinse in ice water to stop cooking.

1 teaspoon cornstarch

In a heavy skillet, sauté onions in oil. Stir and cook until lightly browned. Add carrots and green beans, stir, cover, and cook for a few minutes. In a small bowl, blend ½ cup water, hoisin sauce, and red pepper flakes. Add half to the cooking carrots and green beans. Cover and continue to cook until soft.

Blend cornstarch into the remaining hoisin sauce mixture, then stir the sauce into the

onions, carrots, and green beans, along with the broccoli. Continue to stir and cook until the sauce thickens and the broccoli is warm. Serve immediately.

Total calories per serving: 89 Carbohydrates: 17 grams Sodium: 216 milligrams Fat: 2 grams Protein: 3 grams Fiber: 4 grams

TORTILLA SOUP

(Serves 4)

Kuzu creates a delicately thickened soup. Use your favorite salsa, any variety. If you don't care for cilantro, use parsley or finely chopped spinach instead.

1 Tablespoon oil
1 onion, chopped
3 cups water
One 15-ounce can diced tomatoes
½ cup salsa, divided
One 15-ounce can red or pinto beans, drained and rinsed
3 Tablespoons kuzu
2 cups baked tortilla chips, crushed
1 large avocado, seeded, peeled, and chopped
1 cup chopped cilantro

Heat a soup pot over medium heat. Add oil and onions and sauté until soft and lightly browned. Add water, tomatoes, ¹/₄ cup salsa, and beans. Bring to a boil, then reduce heat and simmer for approximately 15 minutes. Stir kuzu into remaining salsa and blend into the soup. Cook until thickened, approximately 10 minutes. Place tortilla chips and avocado into four bowls and ladle soup over them. Sprinkle cilantro on top to finish and serve immediately.

Total calories per serving: 322 Carbohydrates: 47 grams Sodium: 600 milligrams

Fat: 13 grams
Protein: 10 grams
Fiber: 11 grams

WILD MUSHROOM GRAVY

(Makes eight 1/4-cup servings)

I like to use dried porcini mushrooms in this recipe, but you can use any variety of dried mushrooms that pleases your palate. Look for these delicacies in natural foods or specialty stores. If you can't find agave nectar or rice syrup, use a small amount of any mild-flavored sweetener, such as fruit sweetener, frozen apple juice concentrate, or maple syrup.

1½ cups boiling water
½ cup dried mushrooms
1 Tablespoon oil
1 small onion, chopped
1 cup sliced button mushrooms
½ teaspoon garlic powder
½ teaspoon thyme or sage
½ teaspoon salt
½ teaspoon pepper
½ cup soymilk
1½ teaspoons lemon juice
1 teaspoon agave nectar or rice syrup
2 Tablespoons rice flour

Pour boiling water over dried mushrooms and let them rehydrate for at least 30 minutes. While mushrooms soak, heat a heavy skillet over medium heat. Add oil and onions and sauté until onions are soft. Stir in button mushrooms and continue to cook until mushrooms give up their juices. Mix in garlic powder, thyme or sage, salt, and pepper. Cook for 1 minute. Blend in rehydrated mushrooms, soaking water, soymilk, lemon juice, and agave nectar. Simmer for a few minutes. Sprinkle rice flour over the gravy. Stir until thickened. Add more salt to taste, if desired.

Total calories per serving: 70 Carbohydrates: 9 grams Sodium: 44 milligrams

Fat: 2 grams Protein: 4 grams Fiber: 2 grams

BUCKWHEAT PEANUT BUTTER CRACKERS

(Makes approximately 150 to 200 1-inch crackers)

Looking for a gluten-free cracker? This is the perfect option. Freeze the dough for later use, or store it wrapped in plastic for up to a week in your refrigerator.

2 cups buckwheat flour 1½ cups potato starch ¼ teaspoon salt 1-1½ cups hot water ¾ cup peanut butter

Preheat oven to 350 degrees. Line a baking sheet with parchment paper. In a large bowl, combine flour, potato starch, and salt. Blend well. Combine hot water and peanut butter in a blender or in a separate steep-sided bowl with a hand blender. Add liquid mixture to dry ingredients and mix until a stiff dough is formed. You should be able to gather it up into a ball; if not, add more flour or water to achieve desired consistency.

Cut a section of the dough off and roll it out on a lightly floured surface to a ¹/₄-inch thickness. Cut into 1-inch squares. Gather the remainder up and roll it out again to cut more. Repeat until all of the dough has been used. Bake for 35 to 40 minutes or until hard. It is important to bake until hard, or the crackers may become rubbery.

Note: These crackers are very crisp. If you cut back the potato starch to 1 cup, the crackers will be less brittle.

Total calories per cracker: 17 Carbohydrates: 2 grams Sodium: 10 milligrams Fat: 1 gram
Protein: 1 gram
Fiber: <1 gram

WHEAT-FREE CORNBREAD

(Makes one 9-inch pan or 12 servings)

For baking, use an oiled cast iron skillet or line a 9-inch cake pan with parchment paper. The tapioca serves as part flour mixture and part binding ingredient.

1 cup cornmeal
1/2 cup tapioca flour or potato starch
1/2 cup barley flour
1 Tablespoon baking powder
1/2 teaspoon salt
1/2 cup silken tofu
1/3 cup sugar (Use your favorite vegan variety.)
3/4 cup soymilk
Vegetable oil spray if using a skillet

Preheat oven to 400 degrees. If using a cast iron skillet, place it into the oven and then combine the cornmeal, flours, baking powder, and salt in a mixing bowl and blend well. In a blender or with a hand blender, combine tofu, sugar, and soymilk. When well-blended, stir mixture into the dry ingredients.

Spray the skillet with oil or line a cake pan with parchment paper.

Pour in mixture and bake for approximately 25 minutes. The top will be lightly browned.

Total calories per serving: 97 Carbohydrates: 21 grams Sodium: 227 milligrams Fat: 1 gram Protein: 2 grams Fiber: 1 gram

SIMPLE ORANGE JELLED DESSERT

(Serves 6)

This is a basic recipe. You can easily change the fruit juice here or add pieces of chopped fresh fruit.

3 cups orange juice
1 Tablespoon finely chopped orange zest
1 Tablespoon agave nectar
1/4 teaspoon salt
3 Tablespoons agar

Place all ingredients in a saucepan. Bring to a boil, reduce to simmer, stir, and cook until agar is dissolved, approximately 3 or 4 minutes. Pour into a non-reactive mold or an 8" x 8" glass pan. It will set in approximately 30 minutes. Cut into squares and serve.

Total calories per serving: 68 Carbohydrates: 16 grams Sodium: 102 milligrams Fat: <1 gram
Protein: 1 gram
Fiber: <1 gram

WHIPPED COCONUT FRUIT SALAD

(Serves 6)

This is a fun, pudding-like dessert that can be made with any kind of fruit concentrate. My favorite is organic raspberry, and I use fresh berries for my seasonal fruit. Pouring a little coconut milk over the top makes it look pretty. I have also made this with apple juice concentrate and drizzled it with a little maple syrup before serving.

Is one vegan thickening ingredient equal to another? How does each perform with liquid? Each has unique qualities and performs differently.

3 Tablespoons agar flakes
1 cup frozen juice concentrate
3 cups plus ¼ cup water, divided
2 Tablespoons kuzu
½ cup lite coconut milk
1 cup small pieces of seasonal fruit
¼ cup shredded coconut
4-6 Tablespoons lite coconut milk
for topping (optional)

Combine agar, juice concentrate, and 3 cups water in a saucepan. Stir and simmer for 5 minutes or until agar dissolves.

In a small bowl, blend remaining water, kuzu, and coconut milk. Stir until kuzu dissolves, then add this mixture to the agar and juice in the saucepan. Cook until mixture thickens, approximately 5 minutes. Remove from heat. Pour into any size glass pan. Allow mixture to gel in the refrigerator for approximately 2 hours. Scrape the jell from the bowl and use a hand blender to whip. Use an ice cream scoop to transfer into

serving dishes. Garnish with fruit and sprinkle with coconut. Pour a little coconut milk over each serving to finish, if desired.

Total calories per serving: 135 Fat: 3 grams
Carbohydrates: 27 grams Protein: <1 gram
Sodium: 21 milligrams Fiber: 1 gram

MOCHA DATE-NUT BARS

(Makes one 8- or 9-inch square pan or 12 servings)

Toast raw buckwheat in a heavy skillet or buy kasha, the toasted variety of buckwheat. Hazelnut butter can be found in natural foods stores. You could easily use almond, cashew, or peanut butter instead of hazelnut butter.

Vegetable oil spray
1/2 cup arrowroot or tapioca flour
1 cup toasted buckwheat or kasha
1 teaspoon baking powder
3/4 cup hazelnut butter
1/2 cup maple syrup

6 Tablespoons brewed regular or decaffeinated coffee
1 ounce melted vegan dark chocolate
1½ teaspoons vanilla
½ heaping cup chopped dates

Preheat oven to 350 degree. Lightly oil baking pan. Mix arrowroot with buckwheat and baking powder. In another bowl, combine hazelnut butter, maple syrup, coffee, chocolate, and vanilla. Mix well. Combine with dry ingredients. Stir in the dates. Spread into prepared baking dish. Bake for 30 minutes. Run a knife around the edges and cut into bars while still warm.

Total calories per serving: 237 Carbohydrates: 34 grams Sodium: 46 milligrams

Fat: 11 grams Protein: 4 grams Fiber: 3 grams

Debra Daniels-Zeller is a freelance writer and a frequent contributor to *Vegetarian Journal*. She lives in Washington State.

Notes from the VRG Scientific Department

THE VEGETARIAN RESOURCE GROUP IN THE NEWS

VRG Nutrition Advisor Reed Mangels, PhD, RD, was interviewed for a story in *Vegetarian Times* magazine about vegetarianism in the life cycle and by the *New Haven Register* for the *My Vegetarian Kitchen* column on the topic of prostate cancer and diet.

VRG EXHIBITS AT THE AMERICAN DIETETIC ASSOCIATION'S ANNUAL MEETING IN 2006

VRG Co-Director Debra Wasserman (left) and VRG Advisor Cathy Conway, MS, RD, (right) staffed VRG's booth at the annual meeting of the American Dietetic Association (ADA), held in Honolulu, HI. Several thousand dietitians asked questions and took VRG handouts for their clients or their students. Thanks to VRG's Food Service Advisor Nancy Berkoff, EdD, RD, and Bill Conway, MD, for also staffing our busy booth.



Working with Food Banks

By Chef Nancy Berkoff, RD, EdD, CCE

World Food Day (previously known as World Hunger Day). Over the past few years, the Los Angeles Regional Food Bank has sponsored events as part of a citywide day of hunger awareness, and I have had the opportunity to coordinate an activity at a local inner city elementary school or child care center.

This past year, as part of a healthy eating program, I assisted a second grade class of 20 students in assembling snack boxes that included healthy granola (made with popcorn, whole wheat pretzels, sunflower seeds, raisins, and bran flakes), juice boxes, fresh apples, and fruit preserve sandwiches. Each child assembled four boxes, one for themselves and three to go to school programs unable to offer the participants any meals or snacks. The children and I created a 'lesson' of healthy meal planning and how to eat from the plant kingdom. I was also on the loading docks of the Food Bank as they gave away more than 15,000 pounds of fresh fruit and vegetables to community food programs.

As part of their continuing nutrition education program, the Food Bank has had some local nutritionists designing recipes that program participants can use. The recipes must:

- Contain no more than four ingredients,
- Preferably be vegetarian,
- Be simple to prepare with a minimum of equipment,
- Preferably be low in fat and salt, and
- Utilize ingredients available in the Food Bank.

It was quite a challenge!

Here are a few examples of the recipes that I have been creating. Try these dishes out the next time you're trying to put together a meal from what you already have on hand in your home.

FAST AND FLAVORFUL DINNER STEW (Serves 4)

One 16-ounce can lentils or white beans, drained, or 2 cups (approximately 1 pound) cooked, drained lentils or white beans

1½ cups prepared salsa (fresh or canned)
One 16-ounce can pinto beans, drained and rinsed, or 2 cups
(approximately 1 pound) cooked pinto beans

Place lentils or white beans and salsa in a medium-sized pot, mix, cover, and simmer until hot for approximately 8 minutes. Stir in pinto beans, cover, and cook for an additional 5 minutes. Serve hot over cooked pasta, rice, mashed or baked potatoes, or oven-toasted bread.

Note: This recipe can also be prepared in a microwave. Mix the lentils and salsa in a 2-quart microwave-safe bowl. Cover and microwave on HIGH for 3 minutes or until very hot. Stir in pintos, re-cover, and heat on HIGH for another minute or until ingredients are hot.

Total calories per serving: 256 Carbohydrates: 46 grams Sodium: 757 milligrams Fat: 2 grams Protein: 17 grams Fiber: 16 grams

HASH BROWNED POTATOES AND CARROTS (Serves 4)

Vegetable oil spray or 2 teaspoons cooking oil 4 peeled and finely chopped baking potatoes 2 cups thawed frozen carrots
Black pepper to taste

Spray a large frying pan with oil and heat. Add potatoes and cook, stirring frequently to ensure even cooking, for approximately 8 minutes. While the potatoes are cooking, chop the thawed carrots. When potatoes are soft, mix in the carrots. Cook until browned and hot. Add pepper to taste and serve hot.

Each recipe had to contain four or fewer ingredients and utilize items available in the Food Bank.

Total calories per serving: 190 Carbohydrates: 39 grams Sodium: 46 milligrams Fat: 3 grams Protein: 4 grams Fiber: 4 grams

BAKED PEACHES

(Serves 4)

This recipe can be served as part of a hot breakfast, as a side dish for a spicy entrée, or as a dessert. For a change of flavor, try this recipe with canned pears, pineapple rings, plums, or apricots.

8 canned peach halves, drained

- 3 Tablespoons (approximately 1/4 cup) nonhydrogenated vegan margarine
- 1 cup crushed corn flakes, vegan granola, or other cold vegan cereal

Preheat oven to 350 degrees. Place peach halves, with pit side facing up, in a casserole dish. Bake for 5 minutes or until peaches are warm.

While peaches are baking, place margarine in a small pot and melt. Stir in cereal or granola. Cook for 2 to 3 minutes, stirring, until cereal is well coated with margarine. Remove peaches from oven, place in a serving dish, and sprinkle with cereal mixture. Serve hot or warm.

<u>Note</u>: If desired, cereal and margarine can be melted and mixed in a microwave instead of on the stove.

Total calories per serving: 194 Carbohydrates: 30 grams Sodium: 24 milligrams Fat: 9 grams Protein: 2 grams Fiber: 3 grams

LOOKING FOR PASSOVER RECIPES?

The Vegetarian Resource Group offers a 48-page booklet called *Vegan Passover Recipes* by Nancy Berkoff, RD. It gives instructions for more than 35 creative dairy- and egg-free recipes, including soups, salads, side dishes, sauces, entrées, desserts, and even several microwave recipes, including Pizza Casserole and Spinach/Mushroom Kugel. All recipes follow Ashkenazi Jewish traditions and are pareve. To order a copy of *Vegan Passover Recipes*, send \$10 (includes postage and handling) to VRG, P.O. Box 1463, Baltimore, MD 21203, or call (410) 366-8343. Here's just one example of the delicious recipes within the book's pages:



CARROT PANCAKES (Serves 4)

This entrée is colorful, tasty, and good for you.

1½ pounds coarsely grated carrots
¼ cup coarsely grated onion
2 Tablespoons carrot juice or finely grated carrots
½ teaspoon white pepper
½ teaspoon chopped fresh parsley
4 Tablespoons matzah meal
Vegetable oil spray

In a large bowl, mix together the carrots, onions, carrot juice, pepper, and parsley. Add matzah meal slowly, mixing well. If mixture is

not stiff (think lumpy cookie dough), add a bit more of the matzah meal.

Spray a large frying pan liberally with oil. Drop about 2 Tablespoons of the carrot mixture at a time into the pan. Flatten and allow the pancakes to cook over medium heat until golden, about 3 minutes. Turn and allow other side to become golden.

Remove pancakes from the pan and place on a plate or tray that is lined with paper towels (to absorb oil). Serve immediately or place on an oil-sprayed baking sheet and hold in a 275-degree oven for 15 to 20 minutes.

Questions and Answers about Omega-3 Fatty Acids for Vegans

By Reed Mangels, PhD, RD

MEGA-3 FATTY ACIDS ARE SHOWING UP IN ALL sorts of products. I took a quick trip down the aisles of a grocery store and a natural foods store and found cereals, soymilk, pasta, snack bars, and even peanut butter proudly proclaiming "contains omega-3 fatty acids." Labels and ads trumpet, "Omega-3 DHA is an important brain nutrient," and "Omega-3s may reduce the risk of heart disease." Are these claims real or are they hype? Should vegans be concerned about omega-3 fatty acids? We'll look at these questions and more.

WHAT ARE OMEGA-3 FATTY ACIDS?

Omega-3 fatty acids are polyunsaturated fatty acids—building blocks of fats. They differ from other fatty acids because of the number of carbons that they contain and where double bonds are located. The omega-3 fatty acids that are most important nutritionally are alpha-linolenic acid, docosahexaenoic acid, and eicosapentaenoic acid (DHA and EPA for short).

WHY ARE OMEGA-3 FATTY ACIDS IMPORTANT?

Our bodies cannot make alpha-linolenic acid, so it is essential for us to get it from our diet. We can make DHA and EPA from alpha-linolenic acid, although there are some questions about how efficient this process is. Some have suggested that DHA should be considered an essential fatty acid.¹ Recent research on omega-3 fatty acids has centered on the following areas:

Pregnancy and Breastfeeding

A higher intake of omega-3 fatty acids in pregnancy may slightly reduce the risk of having a premature baby.² In addition, DHA is essential for normal brain development³ and appears to play a role in the development of the infant's vision. The amount of DHA in a woman's diet determines the amount of DHA that appears in her breastmilk.

Heart Disease

A number of studies have found that risk of death from heart disease is lower in people with higher intakes of omega-3 fatty acids. Omega-3 fatty acids may also reduce risk of stroke and reduce elevated blood pressure.⁴ (For more information on omega-3 fatty acids and heart disease, see the *Nutrition Hotline* column in Issue 1, 2005, of *Vegetarian Journal*, which is available at <www.vrg.org/journal/vj2005issue1/vj2005issue1hotline.htm>.

Depression

People with clinical depression tend to have lower blood concentrations of omega-3 fatty acids than non-depressed controls. In some studies, one gram of EPA (either with or without DHA) has been used, along with antidepressants, to treat people with depression.⁵

Other Conditions

EPA and DHA appear to have some benefits for those with rheumatoid arthritis, including reduction of morning stiffness and pain relief. They may be beneficial in other conditions like Crohn's disease, Alzheimer's disease, and asthma, but there is not yet enough research in these areas to make recommendations. ^{6,7}

WHICH FOODS CONTAIN DHA AND EPA?

Vegetarian diets contain low levels of EPA and DHA, mainly from dairy products and eggs; vegan diets do not normally contain EPA or DHA. The only plant sources of EPA and DHA are microalgae and sea vegetables. Sea vegetables are not a concentrated source of these omega-3 fatty acids and do not provide significant amounts of omega-3 fatty acids for most people. Fish, especially fatty fish, do have DHA and EPA. This is not because the fish produce these fatty acids but because the fish eat microalgae containing DHA and EPA. A vegan DHA made from microalgae has

been developed and is being added to some foods and used to make supplements.

MUST WE GET DHA AND EPA FROM FOOD, OR CAN OUR BODIES PRODUCE THESE OMEGA-3 FATTY ACIDS? DO VEGANS GET ENOUGH DHA AND EPA?

Our bodies are able to produce some DHA and EPA from alpha-linolenic acid, but we are not very efficient at this production. The rate of conversion is low in women and very low in men.³ Vegans who do not use DHA supplements or eat DHA-fortified foods must rely on conversion of alpha-linolenic acid to DHA and EPA. Some studies have found that blood levels of EPA and DHA are lower in vegans and vegetarians than in meat-eaters.^{8,9} Whether or not these lower levels have health consequences is not known. The concentration of DHA in breastmilk from vegan women is lower than that in lacto-ovo vegetarians or non-vegetarians.^{10,11} Milk EPA concentration can be increased if dietary alpha-linolenic acid intake increases, but milk DHA content remains unchanged.¹²

HOW CAN VEGANS MAXIMIZE DHA AND EPA PRODUCTION?

- Include sources of alpha-linolenic acid in your diet on a regular basis. Major sources include ground flaxseed, flaxseed oil, canola oil, soy products, hemp products, and walnuts. Green leafy vegetables, sea vegetables, and pecans also provide smaller amounts of alpha-linolenic acid. (See Table 1, right.)
- Whole flasseeds are not well digested, so the alphalinolenic acid that they contain is not available to us. If you are using flasseeds as a source of alphalinolenic acid, be sure to use ground or milled flasseeds or flasseed oil.
- Avoid trans fats since they interfere with EPA and DHA production. Trans fats are found in foods containing hydrogenated fat, like margarine and commercial cookies and crackers.
- Use less sunflower, safflower, corn, and sesame oil and more canola and olive oil to promote DHA and EPA production. Sunflower, safflower, corn, and sesame oil are high in linoleic acid, an omega-6 fatty acid that can interfere with DHA and EPA production.

TABLE 1: Alpha-Linolenic Acid in Foods

FOOD, SERVING SIZE	ALPHA- LINOLENIC ACID (Milligrams/Serving)
Avocado, ½	125
Breakfast cereal containing flax and/ or hemp, 1 serving*	400-1,000
Broccoli, cooked, 1 cup	190
Cabbage, cooked, 1 co	up 165
Canola oil, 1 teaspoor	400
Collards, cooked, 1 cu	p 180
Flaxseed oil, 1 teaspoo	on 2,400
Flaxseed, ground, 1 te	aspoon* 570
Hot cereal containing to 1 serving*	flax, 450
Kale, cooked, 1 cup	130
Pasta containing flax, 1 serving*	600
Peanut butter containing flaxseed oil, 2 Tablesp	•
Pecans, ¼ cup	240
Snack bar containing f and/or hemp, 1 bar*	lax 400-2,100
Soybean oil, 1 teaspoo	on 300
Soybeans, cooked, ½	cup 320-510
Soymilk, 1 cup	210
Soy nuts, 1/4 cup	725
Tempeh, 3 ounces	120
Tofu, ½ cup	400
Walnuts, ¼ cup	2,270-2,700
Walnut oil, 1 teaspoor	470

^{*}Flaxseed should be ground or milled; otherwise little or no alpha-linolenic acid will be absorbed.

Sources: Composition of Foods. USDA Nutrient Data Base for Standard Reference, Release 18, 2005, and manufacturers' information.

Vegan DHA and DHA + EPA Supplements

- O-Mega-Zen 3 300 mg DHA/capsule www.nutru.com
- Dr. Fuhrman's DHA Purity 175 mg DHA/0.5 ml — www.drfuhrman.com/ shop/DHA.aspx
- Vegan Omega-3 DHA 200 mg DHA/ capsule — www.devanutrition.com
- V-Pure Omega-3 135 mg DHA + 37.5 mg EPA/capsule — www.water4.net/products.htm

WHAT ABOUT SUPPLEMENTS OF OMEGA-3 FATTY ACIDS?

Alpha-linolenic acid supplements produce a small increase in blood EPA concentrations but do not increase concentrations of DHA in the blood. ¹³ These results have led some researchers to recommend direct supplementation with DHA for some groups with

increased needs for EPA and DHA (pregnant and breastfeeding women) or with a risk for low conversion of alpha-linolenic acid to EPA and DHA (people with diabetes, premature infants).^{8,14} DHA supplements can increase blood concentrations of both DHA and EPA.

Supplements with both EPA and DHA also are effective in increasing blood levels of EPA and DHA. 15

WHAT AMOUNT OF OMEGA-3 FATTY ACIDS DO WE NEED?

There is limited storage of omega-3 fatty acids in our bodies, so these fatty acids should be a regular part of the diet. ¹⁵ When you are thinking about the amount of omega-3 fatty acids that you should be getting, one key question is whether you are relying on alpha-linolenic acid being converted to EPA and DHA or taking a direct source of DHA.

If you are a vegan relying only on alpha-linolenic acid as the source of omega-3 fatty acids, approximately 1-2 percent of calories should come from alpha-linolenic acid. For the typical adult man, this would be 2,200-5,300 milligrams (2.2-5.3 grams) of alpha-linolenic acid; for the typical adult woman, 1,800-4,400 milligrams (1.8-4.4 grams). Very active and heavier people

Sample Menu That Provides At Least 4,400 Milligrams of Alpha-Linolenic Acid Daily — DAY 1

BREAKFAST:

- 1 bagel with jelly
- 1 medium orange
- 1 cup cold cereal
- 1 cup enriched soymilk

LUNCH:

- Hummus sandwich made with:
 - Hummus (³/₄ cup chickpeas and 2 teaspoons tahini)
 - 3 slices of tomato
 - 2 slices of whole wheat bread
- 1 medium apple

DINNER:

- 1 cup of cooked pasta with
 - ¼ cup marinara sauce
 - 1/3 cup carrot sticks
 - 1 cup cooked broccoli sautéed in 1 teaspoon canola oil
- 1 whole wheat roll
- A juice pop made with 1 cup frozen grape juice

SNACK:

- ½ cup trail mix (mix of dates, raisins, and at least 3 Tablespoons of walnuts)
- 1 cup enriched soymilk

Sample Menu That Provides At Least 4,400 Milligrams of Alpha-Linolenic Acid Daily — DAY 2

BREAKFAST:

- 1 serving hot cereal containing milled flaxseed with:
 - 3 Tablespoons wheat germ
 - 1/4 cup raisins or dates
 - 1 ounce chopped walnuts
 - 1 cup diced cantaloupe
- 1 cup enriched soymilk

LUNCH:

- Burrito made with:
 - 1 whole wheat tortilla
 - 1/2 cup black beans
 - 1 Tablespoon salsa
- 1 ounce lowfat tortilla chips with:
 - ½ cup salsa

DINNER:

- Stir-fry made with:
 - 1/2 cup diced tofu
 - 1 cup vegetables
 - 2 Tablespoons soy sauce
 - 11/2 cups cooked quick brown rice
 - 1 teaspoon canola oil
- 3 graham crackers
- 6 ounces calcium-fortified vegetable juice

SNACK:

- 3 cups popped popcorn with:
 - 1 Tablespoon Vegetarian Support Formula nutritional yeast
- 1 cup enriched soymilk

as well as pregnant and lactating women should strive for the higher end of the range; smaller and more sedentary people should aim towards the lower end.

If you are using a supplement or foods that contain DHA or EPA on a daily basis, strive for the adequate intake for alpha-linolenic acid established by the Institute of Medicine of 1.6 grams per day for men and 1.1 grams per day for women.³

There is no Recommended Daily Allowance (RDA) for EPA or DHA, but the American Heart Association recommends 500-1,800 milligrams (0.5-1.8 grams) per day of DHA and/or EPA to significantly reduce the risk of death from heart disease. ¹⁷ This level seems appropriate for people with a family history of heart disease, although there have been no studies examining whether DHA supplements further reduce the risk of death from heart disease in vegans.

Because of DHA's role in infant development, several groups^{2,18} have suggested that pregnant and lactating women get 200-300 milligrams (0.2-0.3 grams) of DHA daily from fortified food or supplements.

CAN SOMEONE GET TOO MUCH OF THE OMEGA-3 FATTY ACIDS?

There is not enough information available to set a safe upper limit for omega-3 fatty acids. The Food and Drug Administration (FDA) says up to 3 grams (3,000 milligrams) per day of EPA + DHA is generally recognized as safe. ¹⁹ DHA and EPA may have negative effects on the immune system and may inhibit blood clotting, so supplementation should only be done with caution. More is not necessarily better.

Men at risk for prostate cancer should not use high amounts of alpha-linolenic acid since one study found that those men whose diets were highest in alpha-linolenic acid had an increased risk of developing advanced prostate cancer.²⁰ The other omega-3 fatty acids, EPA and DHA, were associated with lower prostate cancer risk.

WHAT'S THE BOTTOM LINE?

The topic of omega-3 fatty acids, like many topics in nutrition, is fluid. Recommendations change as new studies provide more information. Based on what we know today, here's what you need to remember:

- Alpha-linolenic acid is an essential fatty acid; that
 means we need to obtain it from food or supplements. To prevent deficiency, vegan adults should
 have 1-2 percent of calories from alpha-linolenic
 acid—2,220-5,300 milligrams of alpha-linolenic
 acid for the typical adult man, 1,800-4,400 milligrams for the typical adult woman.
- Good sources of alpha-linolenic acid include ground flaxseed, flaxseed oil, canola oil, soy products, hemp products, and walnuts. Table 1 (on page 23) provides information about the amount of alphalinolenic acid in various foods.
- Vegan pregnant and breastfeeding women, people at risk for heart disease or high blood pressure, and people with diabetes are the groups most likely to benefit from supplements of DHA. Approximately 500-1,800 milligrams of DHA has been recommended to reduce the risk of heart disease¹⁷; 200-300 milligrams of DHA is suggested for pregnant and breastfeeding women.^{2,18}

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10 Ways to Improve Your Vegetarian Lifestyle By Mark Rifkin, RD

reduces the risk for several chronic diseases, far more goes into living healthfully than simply eschewing animal products. Vegetarians and vegans can develop some of the same poor dietary and lifestyle habits that their carnivorous counterparts often do, such as relying too heavily on convenience foods and passing over fruits and vegetables for those undeniably tempting vegan sweets. Being vegetarian is a great foundation to maintain a healthy lifestyle, but here are 10 tips that will enhance your efforts to stay sound and strong:

OPTIMIZE SODIUM INTAKE
The typical vegetarian adult in the U.S. consumes four to six times as much sodium as is needed, just a bit less than U.S. omnivores. 1,2,3 Most sodium comes from processed foods 3,3a like TV dinners and luncheon meats, as well as from salty vegetarian items such as pretzels, packaged soups, salted nuts, and prepared foods. And you may not be able to tell exactly how much sodium is in your next restaurant dinner, but you can be certain that the amount is probably not low. Needless to say, it all adds up.

What's so bad about consuming too much sodium? A diet high in salt is a major cause of heart disease and stroke. In addition, dietary sodium increases calcium loss,⁴ which vegans, who may have low calcium intakes, might be especially interested to know. Let's do the numbers. If your sodium intake is less than 1,500 milligrams a day^{4a} (or no more than 400 mg per meal, allowing some room for snacks), you'd be doing yourself a favor. For tips on curbing your sodium intake and a weeklong low-sodium vegan meal plan, see *One-Week Low-Sodium Vegan Menu* in *Vegetarian Journal*, Issue 4, 2005, page 28. This article is also available online at <www.vrg.org/journal/vj2005issue4/vj2005 issue4lowsodium.htm>.

LIMIT SUGAR INTAKE
"How much is that vegan cookie in the window?" Before you ask, remember that there is no requirement for added sugars! And if what's true for sodium is true for sugar, vegetarians may be

consuming almost as much as the average American, which is about 100 pounds per year. Much of this is high fructose corn syrup, commonly found in soda and 'juice drinks.' 5,6

Excess sugar's potential health impacts are definitely not sweet. Obesity can lead to diabetes, cancer, and heart disease. Plus, no one wants to spend more time in the dentist's chair coping with cavities. And high-sugar foods frequently displace from the diet those fruits and vegetables your mother bugged you about. The optimal intake of added sugars is as low as you can make it.

CHOOSE MOSTLY WHOLE GRAINS
That vegan cookie in the window has another problem—white flour. White flour is what remains after processing wheat and removing the bran and germ, the sources of most of the fiber, antioxidants, vitamins, and minerals in whole grain. Thus, foods such as white rice and white flour foods (pasta, bread, etc.) are pale, empty shadows of whole grain powerhouses. Choose more whole grain products. Ask for brown rice at your favorite Asian restaurants, and use more whole grain bread and pasta, barley, quinoa, amaranth, buckwheat, spelt, and kamut. When it comes to grains, make 'em whole, because brown is beautiful.

FOCUS ON THE RIGHT FATS, REDUCE OR ELIMINATE THE WRONG FATS

Although many vegetarians are proud of their reduced animal fat intake, their diet may still be high in saturated fat from dairy products and eggs, palm oil, and coconut oil and in trans fats from partially hydrogenated vegetable oils. Trans fats can be found in baked goods, margarines, and deep-fried foods. Saturated and trans fats markedly increase heart disease risk.³ The healthiest oils are olive, canola, and the oils from intact avocados, nuts, and seeds.

Vegetarians should also be aware of omega-3 fats (commonly found in fish). Omega-3 fats are associated with a reduced risk of heart disease. Vegan sources include ground flaxseeds, hemp seeds, flax oil, and

walnuts. Instead of deep-fried Indian samosas or greasy Chinese veggies, try whole wheat Indian bread and get steamed Chinese vegetables, sauce on the side. You may want to reconsider that vegan cookie, too.

CONTROL YOUR INTAKE

OF ALL PROCESSED FOODS
Processed foods are notorious for high sodium, sugars, and fat content and their low concentration of whole grains. Many vegetarians enjoy soy-based substitutes for common meat products, such as ground beef, deli slices, chicken, and bacon. Like most other processed foods, these items are not as nutritious as unprocessed whole foods and should not form the basis of anyone's diet. Try some less-processed soy products, such as tempeh, tofu, miso, shoyu, tamari, and soymilk.

EAT ADEQUATE AMOUNTS OF DGLV
The most potent food in the vegetable arsenal may be dark green leafy vegetables, so potent they deserve their own abbreviation: DGLV. This group includes spinach, collards, kale, mustard greens, turnip greens, beet greens, Swiss chard, and broccoli.

Most DGLV are high in anti-oxidant nutrients, minerals, and fiber and very low in calories, sugar, sodium, and fat. They're low in cost as well. DGLV consumption among vegetarians is only marginally better than that of non-vegetarians, approximately ¹/₄ cup daily.⁸ This is clearly inadequate, regardless of other dietary choices. Thus, vegetarians need to pay special attention to increasing their intake of DGLV.

BE AWARE OF GOOD SOURCES OF MINERALS LIKE CALCIUM, IRON, IODINE, AND ZINC

Minerals like calcium, iron, iodine, and zinc play important roles in our bodies. They help with building strong bones, preventing anemia, promoting thyroid function, supporting the immune system, and promoting growth and development. Minerals are found in many foods. Collards, kale, tofu made with calcium sulfate, calcium-fortified soymilk and juice, and soybeans are all good sources of non-dairy calcium. Beans, greens, and whole grains are the best sources of iron for vegetarians. Foods like oranges, tomatoes, and cantaloupe are high in vitamin C; if they are eaten along with foods containing iron, then iron absorption will increase. Some foods, such as tea, some spices, coffee, and dairy products, inhibit iron absorption. Iron supplementation may be necessary, especially for pregnant and pre-menopausal women.³

Reliable vegan food sources of iodine are limited to sea vegetables and iodized salt; sea salt and salt in processed foods usually do not contain notable amounts. Those who limit use of salt should ensure adequate iodine intake either with a supplement³ or with sea vegetables. For more information about iodine, see *Perchlorate Controversy Calls for Improving Iodine Nutrition* in *Vegetarian Journal*, Issue 2, 2006, page 26. This article is also available at <www.vrg.org/journal/vj2006issue2/vj2006issue2iodine.htm>.

Good sources of zinc include dried beans, oatmeal, wheat germ, spinach, nuts, and soy products, with adzuki beans and pumpkin seeds providing superior amounts of this vital nutrient. Vegans should strive for zinc intakes that are higher than the Recommended Dietary Allowance (RDA) to compensate for reduced zinc absorption from many foods that are frequently a part of vegan diets.

PROPERLY ADDRESS VITAMIN D
Vitamin D is a potent factor in bone formation, cancer prevention, and calcium absorption, especially at low calcium intakes. For Caucasians, adequate vitamin D can be synthesized from daily exposure of the hands and face to sunlight for 15 minutes. Seniors, people of color, and those whose skin is not exposed to sunlight on a regular basis will need other sources of vitamin D, such as vitamin D-fortified foods or vitamin D supplements. Without sufficient vitamin D, we risk 'deboning' ourselves!

Vitamin B₁₂ is an essential nutrient that is needed in only small amounts but can cause big problems if it is missing from your diet. It is especially important for infants, children, and pregnant or lactating women. Vitamin B₁₂ does not occur naturally in plant foods, so vegans in particular must make a concerted effort to include it in their diets. Reliable non-animal sources of vitamin B₁₂ include Red Star Vegetarian Support Formula nutritional yeast, vitamin B₁₂-fortified breakfast cereals or soymilk, and vitamin B₁₂ supplements.

EXERCISE
Although exercise is conclusively linked to reduced disease risk and improved health, vegetarians are about as likely as non-vegetarians to exercise. An exercise program is an important part of a healthy lifestyle. Exercise is directly associated

with bone density, which is important given the lower calcium intakes typical of vegetarians.³ Healthy individuals include all three types of exercise: weight-bearing (increases bone density and muscle mass), cardiovascular (strengthens the heart and reduces blood pressure) and stretching/flexibility (improves balance, reduces risk for falls).

You can increase the significant health benefits of a vegetarian diet with appropriate changes. Perhaps the best way to promote healthy vegetarian diets is to **BE** a healthy vegetarian who recognizes and addresses lifestyle habits that deserve additional attention or improvement. Consult a registered dietitian and/or licensed personal trainer as appropriate.

One way to assess the quality of your vegetarian diet is with VRG's bimonthly Call-A-Dietitian Day. After scheduling a free phone appointment, you have 15 minutes to discuss any nutrition questions you have with the author of this article, Mark Rifkin. Mark is a registered dietitian and a longtime VRG volunteer. Note that this is not personal medical advice, which should be obtained in person from your health professional.

Notices of upcoming Call-A-Dietitian Days are included in VRG-NEWS, VRG's e-mail newsletter. To subscribe, send an e-mail message to listserv.@ listserv.aol.com> with the following message: SUB VRG-NEWS {your first and last name}. Do not include the {} when you enter your name. The newsletter will be sent to the e-mail address from which you are subscribing.

Mark Rifkin, RD, holds a master's degree in Health Education and has a private practice focusing on health and disease prevention through plant-based diets.

Thank you to Reed Mangels, PhD, RD, for reviewing this article.

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Bequests

VRG depends on the generous contributions of our members and supporters to continue our educational projects. Though the world may not become vegetarian in our lifetimes, we realize that we are planning and working for future generations.

- Your will and life insurance policies enable you to protect your family and also to provide a way to give long-lasting support to causes in which you believe. Naming The Vegetarian Resource Group in your will or life insurance policy will enable us to increase our work for vegetarianism.
- One suggested form of bequest is: *I give and bequeath to The Vegetarian Resource Group, Baltimore, Maryland, the sum of ______ dollars (or if stock, property, or insurance policy, please describe).*
- To be sure your wishes are carried out, please speak with your attorney specifically about writing the correct information in your will.

veggie bits

Great-Tasting Mock Meats, Any Way You Slice Them!



Yves Veggie Cuisine has added three unique products to its line of delicious mock meats. The company has developed what it calls "the next generation of deli slices" with its Veggie Roast without the Beef, which has an authentic, sausage-like texture, and Veggie Cajun Chicken

slices with such serious kick they could be on the menu for any *fais do do*. In addition, their Veggie Ground Round now comes in a Turkey variety, making it easy to give casseroles and pasta dishes fantastic texture.

Contact Yves Veggie Cuisine at The Hain Celestial Group, 4600 Sleepytime Drive, Boulder, CO 80301, or call the company at (800) 434-4246. Their website is www.yvesveggie.com>.

Spice Up Your Next Meal with Naturally India Simmer Sauces

Naturally India is a vegan company that features a line of six wheat- and gluten-free Simmer Sauces, each of which yields delicious dinner entrées in as little as 8 minutes. These tasty timesavers can help you make mild, medium, or hot curries, *alu chole* (chickpeas with potatoes), *biryani* (rice with nuts and vegetables), and many other vegetarian delicacies with minimum effort yet with maximum freshness and taste.

Contact Naturally India's parent company, Fusion Foods Group, LLC, at P.O. Box: 11593, Newport Beach, CA 92658, or via phone at (949) 706-5678. More about their flavor combinations and an online order form are available at <www.naturallyindia.com>.

What Do Vegans Eat?

Now, Internet surfers can find out with a few simple mouse clicks. What Do Vegans Eat? is a blog that aims to suggest vegan foods that vegetarian and non-vegetarian readers alike may want to make at home, order in restaurants, or buy at local grocery stores. One of the blog's highlights is a collection of recipes and photographs that readers contribute to expand the site's ever-growing online library. If you would like to check out some appetizing recipes or post a few of your own, visit https://whatdoveganseat.blogspot.com/>.

British Cereals Done Better

Barbara's Bakery offers some terrific vegan cereals, and the company's Weetabix cereal varieties are no exception. Traditional British versions of this bran offer the whole grains that we all want, but their hard, melba toast-like texture would definitely turn many off. Luckily, Barbara's Bakery has transformed this breakfast staple from across the pond into tasty and crispy flakes for their Organic Weetabix Crispy Flakes and Organic Weetabix Crispy Flakes & Fiber cereals. Simply top with a sprinkling of raisins or berries and add a spot of tea, and your hearty English breakfast is served.



To learn more about Weetabix cereals, write to Barbara's Bakery at 3900 Cypress Drive, Petaluma, CA 94954, or call the company at (707) 765-2273. A list of retailers that carry these and the company's other products is available from its website at <www.barbaras bakery.com>.

For the Vegetarian Fashionista in Everyone! (Yes, Even Guys!)

Vegetarian Shoes and Bags offers some truly stylish, cruelty-free items, many of which are manufactured by companies that don't use leather anymore. Women have more than



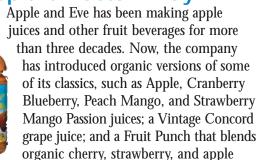
80 choices, including sandals, flats, pumps for work and play, a variety of boots, athletic shoes, and even evening slingbacks! Plus, accessorizing is easy with funky handbags, classic evening clutches and pouches, and metallic braided belts à la Beyonce.

And Vegetarian Shoes and Bags didn't forget the guys! You'd be hard put to find a bigger selection of cruelty-free men's shoes, including sandals, athletic shoes, work and casual boots, and an array of dress shoes in black, brown, and even navy for some styles.

Vegetarian Shoes and Bags takes orders only through its website at <www.vegetarianshoesandbags. com>. However, the company will gladly address customer service questions via phone at (818) 235-4709 or mail at 14101 Oxnard Street, Van Nuys, CA 91401.

<u>veggie bits</u>

Apple and Eve Continues to Keep the Doctor Away...



juices into a refreshing, tangy-tart beverage. These thirst quenchers come in 48-ounce recyclable plastic bottles, and some varieties are available in 200-milliliter juice boxes that tuck neatly into lunch boxes.

Contact Apple & Eve by writing to P.O. Box K, Roslyn, NY 11576, or by calling (800) 969-8018. The company's website is <www.appleandeve.com>.

Glory Foods Brings Healthier Versions of Southern-Style Favorites to Your Table

Glory Foods has introduced Sensibly Seasoned®, a savory new line of canned vegetables and beans that are lower in sodium and fat than many other Southerninspired products. Among their offerings are String Beans; Tomatoes & Okra; and Tomatoes, Okra & Corn. However, their Collard Greens, Mixed Greens, and Turnip Greens smell and taste as fresh as they did the day they were picked. Plus, their Blackeye Peas, Black Beans, Pinto Beans, and Red Beans are packed in sauces that are the perfect thickness. The best part of all is that these varieties retain their sumptuous, sub-Mason-Dixon flavor without any of the animal products.

Write to Glory Foods, Inc., at P.O. Box 328948, Columbus, OH 43232, or call the company at (614) 252-2042. More information about each of these products is available at <www.gloryfoods.com>.









Snuggle Up with SoySilk Pals!

It's time to make the acquaintance of SoySilk's family of stuffed animals. The South West Trading Company, which specializes in yarns and textiles made from environmentally friendly materials, has created these cruelty-free, huggable friends with fur so soft that you won't believe it isn't silk. How about stuffing someone's Easter basket with SOYnia Bunny? Or giving Tofu Bear or Little EDamame Bear for Valentine's Day or those upcoming graduations? Share some cuddly companions that your loved ones will treasure for years to come.

To order, visit the South West Trading Company online at <www.tofubear.com>. You may also write to the company at 918 South Park Lane, #102, Tempe, AZ 85281, or call (877) 298-2984.



Chomp Into This Chocolate!

Harb Chocolate Corporation's primary mission is to bring delicious, organic vegan chocolate candies to all! The company makes five incredible varieties, including a Caramel Pecan Cup, a Chocolate Peppermint Cream, a Coconut Pecan Joy, a Protein Cup, and their particularly popular Peanut Butter Cups. And if you can't decide which of these flavors to order, the company offers sample packs and cases that feature all five!

Harb Chocolate products are available from select natural foods retailers nationwide or via the company's website at <www.harbchocolate.com>. Write to the company at Harb Chocolate Corporation, 3716 Walker Boulevard, Knoxville, TN 37917, or give them a call at (865) 216-2559.

Join The VRG for a Sublime Brunch in Fort Lauderdale

You don't have to wait until Meatout in March to join fellow members of The Vegetarian Resource Group and the general public for a delectable vegan meal. Sublime Natural & Organic Restaurant and Bar, a serenely decorated, upscale vegan restaurant in Fort Lauderdale, Florida, will be the setting for a cordial afternoon brunch on Sunday, February 18. For more details about the event, call VRG at (410) 366-8343 or send an e-mail to <vrg@vrg.org>.

reviews

THE NEW SOUL VEGETARIAN COOKBOOK

From the Kitchens of Soul Vegetarian Restaurants



I've had the opportunity to dine at several Soul Vegetarian restaurant locations throughout the United States. The food served at these establishments is tasty and hearty. Readers can now enjoy the restaurants' cuisine through the recipes in this cookbook.

Among the dishes you'll find in this book are Zucchini Bread, Ground Nut Soup, Chickpea Loaf, Blackeyed Pea Patties, Alive Kale Salad, Sunflower Seed Spread, Apple Nut Cake, and Strawberry Shortcake. Nutritional analyses are not provided, and not all dishes are lowfat. Beautiful color photos can be found throughout the cookbook.

The New Soul Vegetarian Cookbook (ISBN 0-942683-13-7) is published by Publishing Associates, Inc. This 114-page book can be purchased from The Vegetarian Resource Group for \$25 (including postage and handling). Send your check to VRG, P.O. Box 1463, Baltimore, MD 21203. Reviewed by Debra Wasserman.

THE GAK'S SNACKS ALLERGY COOKBOOK By Jill Robbins



Most people know someo

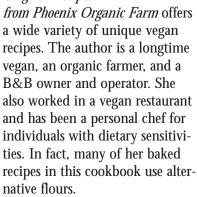
know someone with a food allergy, so *The Gak's Snacks Allergy Cookbook* is a great find. The book contains recipes for baked treats for all occasions. There are no peanuts, tree nuts, eggs, wheat, or dairy in any of the more than 100 vegan recipes. You'll find recipes for donuts, all types of muffins and breads, cobblers, pies, puddings, brownies and snack bars, cookies, frostings and sauces, cakes, cupcakes, and even vegan ice cream cakes.

The Gak's Snacks Allergy Cookbook (ISBN 0-9776836-0-5) is published by Family Matters Publishing. This 148-page book can be purchased online for \$17.95 plus shipping at < www.gakssnacks.com > or by calling (800) 552-7172. If you're unable to locate some of the ingredients needed to prepare the recipes, you can also purchase them from that same website. Reviewed by Debra Wasserman.

EXTRAVEGANZA

By Laura Matthias

Extra VeganZa— Original Recipes



I especially found her pâté recipes—including Shiitake Sake Pâté, Jerusalem Artichoke Hazelnut Pâté, and Pumpkin Seed Yam Pâté—to be quite creative. Readers will also enjoy the Curried Squash Pear Soup, Strawberry Jalapeño Dressing, Vegan Pad Thai, Lemon Lavender Blueberry Muffins, Spelt

Cinnamon Buns, Raspberry Mousse, Oatmeal Lemon Fig Cookies, and Vegan Baklava.

At the back of this wonderful book you'll find information on edible flowers and natural food dyes. The volume includes both black-and-white and color photos. Nutritional analyses are not provided; however, most recipes do not appear to be high in fat.

ExtraVeganZa (ISBN 0-86571-551-3) is published by New Society Publishers. This 288-page book retails for \$24.95 and can be found in your local bookstore. Reviewed by Debra Wasserman.

STUDENT'S GO VEGAN COOKBOOK

By Carole Raymond



Carole Raymond, the author of Student's Vegetarian Cookbook, has recently published Student's Go Vegan Cookbook. Readers will find tasty recipes in the breakfast chapter, such as Tofu Scramble Asian-Style and Hash in a Flash made with crumbled vegan sausage. Raymond also provides some quick bread recipes that busy students will enjoy, like Pumpkin Scones that can be prepared in less than 30 minutes. And, of course, you'll find some creative pastabased options and stove-top dishes, including Lickety-Split Burger Hash and Déjà vu Sloppy Joes. Finally, what student wouldn't enjoy those Ten-Minute Brownies?

Student's Go Vegan Cookbook (ISBN 0-307-33653-0) is published by Three Rivers Press. This 272-page book retails for \$13.95 and can be found in local bookstores. Reviewed by Debra Wasserman.

Vegetarian Action

Chas Chiodo and Three Decades of Vegetarian Activism

by Katherine Raffelt

G AINESVILLE, THE HOME OF THE UNIVERSITY OF Florida, may be best known for parties, football games, and tailgating. If you look beyond the cattle ranches and the barbeques, however, you may be surprised to find at least one grill that is not searing beef but instead roasting vegetables.

Vegan chef and activist Chas Chiodo has devoted the past 30 years to the vegetarian diet. Chas was moved when he read Peter Singer's book *Animal Liberation* in 1975 and thus began what would become a lifetime of animal activism, eliminating all animal products from his diet and traveling to vegetarian and animal rights conferences across the country.

When Chas began his work in the late 1970s, he struggled to find a real animal rights community, and he longed to feel more connected with this small but growing population. In 1984, he left Florida for Washington, D.C., a city he called "the hub of activism in America for animal rights." While in Washington, Chas worked for the then-young People for the Ethical Treatment of Animals (PETA) before forming his own group, Vegetarian Events, with the help of other likeminded activists in 1987. The group, a self-proclaimed "educational and activist organization to promote veganism, environmentalism, and animal liberation," was responsible for hosting the first VegFest later that same year. The lively event, which featured animal rights and vegetarian speakers, music, food sampling, and vegan concession stations on the Washington, D.C., mall, successfully engaged the community and brought vegan cuisine to the people of the nation's capital.

Two years after forming Vegetarian Events, Chas decided to try yet another approach to his outreach. He converted an old school bus into a traveling activist mobile, complete with a screening room, a kitchen, and a bed. He traveled the East Coast, teaching and giving demonstrations, until his mobile classroom broke down. Chas got on the road again later with a van before returning to Gainesville, where he now focuses his work.

Today, Chas Chiodo works with Animal Activists of Alachua, the animal rights group at the University of Florida, and does concessions, catering, and workshops in small towns across the Sunshine State. Chas' workshops typically include a video on vegan nutrition, tofu cooking demonstrations, and vegan food samples, including tofu-based pudding, baked casseroles, and the popular 'Tofu Italiano.' Chas says his biggest obstacle is that "many people who have never given veganism a chance are worried about the taste, worried that the food will be bland." Simply convincing people to try delicious vegetarian food can be quite an endeavor.

Fortunately, Chas is making a large impact on his small community. "These people in the rural areas are just dying (pun intended) for this information. Even if you have a small workshop in these little towns, the word spreads quickly since everyone talks and is close to each other," Chas says.

Almost every year since 2000, Vegetarian Events has hosted the Compassion for Animals Action Symposium in Gainesville. Chas coordinates this annual event, which is a forum for lectures on animal rights and activism. Says the man who remembers all too well searching for a community with similar sensibilities, "I try to make it a networking project. It's a great place for like-minded people to get together and hang out."

Chas Chiodo's work is still far from over. He is currently trying to establish a vegetarian radio program and hopes to one day own a vegan café. "I plan to do this for the rest of my life, doing some form of action for animals and promoting vegetarianism," he says.

What advice does this vegan chef and event organizer have for future activists? "No matter how down you feel, how much in the dumps you get that you're not accomplishing anything, keep at it as long as you can.... It does get you down, but what choice do we have once we have this information?"

Katherine Raffelt wrote this article during a college internship with The Vegetarian Resource Group.

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RASTAPOP

RastaPop makes spiced-up snacks that begin their (shelf) life with organic popcorn and are seasoned with herbs and spices for extra pizzazz. This line comes in four flavorful varieties — their savory but mild Mellow Herb, the zesty Spicy Garlic, a fiery Hot Curry, and delightful Sweet Ginger. One bite of RastaPop and you won't be able to stop!



Nature's Popcorn 1270 Caroline Street, Suite D120 Atlanta, GA 30307 (404) 688-1211

< WWW.RASTAPOP.COM >





ZENSOY'S SOY ON THE GO

ZenSoy has introduced a new line of Soy on the Go products. These shelf-stable, organic soy drinks come in 8.25-ounce cartons that easily complement snacks and neatly tuck into lunch boxes. And if the sound of their delicious Cappuccino, Chocolate, and Vanilla flavors doesn't entice you to pick up these products, the adorable panda on the packaging surely will!

7FNSOY

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AMY'S BAKED ZITI BOWL

Amy's Kitchen has developed a single-serving Baked Ziti Bowl that will surely sell out of many freezer sections. How could any vegan resist the dish's dairy-free mozzarella and ricotta cheeses or its rich sauce made from traditional Italian spices and organic tomatoes? Plus, the pasta is made from rice flour rather than wheat, so people looking for gluten-free cuisine are going to relish the chance to get their hands on this hearty and convenient meal.

AMY'S KITCHEN, INC.
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