

Cooking with Maple Syrup · Money-Saving Tips

VOLUME XXVIII, NO 1

# VEGETARIAN

## JOURNAL

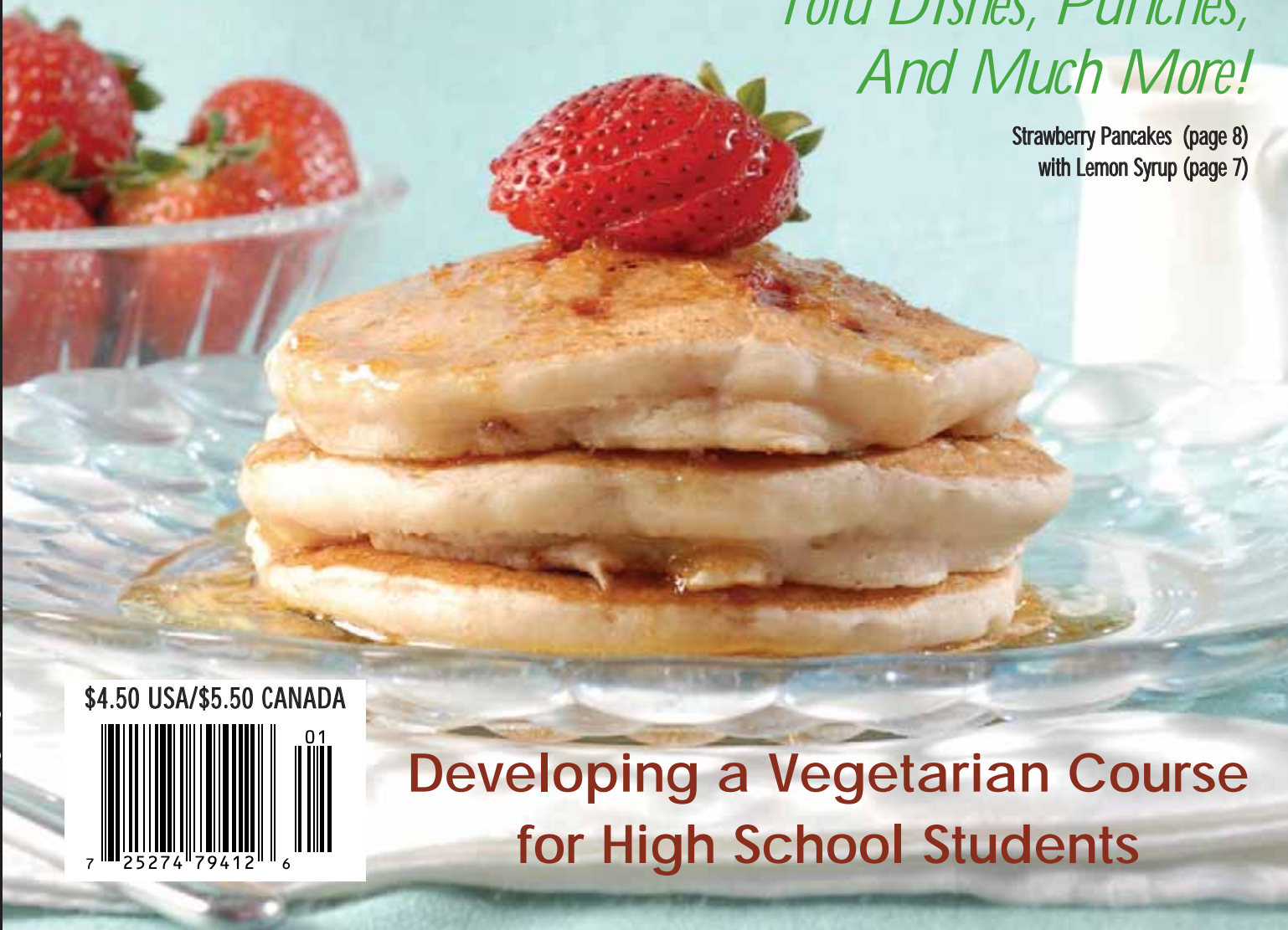
HEALTH ECOLOGY ETHICS

Vegetarian  
Solutions  
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# Weekend Brunch Ideas

*Pancakes, Breads, Grits,  
Tofu Dishes, Punches,  
And Much More!*

Strawberry Pancakes (page 8)  
with Lemon Syrup (page 7)



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# NUTRITION HOTLINE

REED MANGELS, PhD, RD



*This issue's Nutrition Hotline considers the differences between whole wheat and gluten-free flours and looks at whether foods supplemented with large amounts of iron can pose health risks.*

**QUESTION:** "How do the gluten-free flours compare nutritionally to whole wheat flours?" J.M., MD

**ANSWER:** Gluten-free flours can be used by people with celiac disease, a disorder that causes intestinal problems when products that contain gluten are eaten. Gluten is a protein in wheat, rye, and barley. Gluten-free flours are often made from other grains (rice, millet), nuts (almonds, hazelnuts), or dried beans (soy, fava, chickpea).

The level of nutrients in gluten-free flours varies, so you need to read their labels. Many flours, including whole wheat flour, have between 80 and 120 calories per quarter cup. Flours that are higher in calories include potato flour, brown rice flour, almond meal, and hazelnut meal.

In general, gluten-free flours have a similar amount of protein compared to whole wheat flour. Soy flour and fava bean flour are higher in protein than most other flours. Flours based on nuts, such as hazelnut meal and almond meal, are higher in fat than other flours, 17 and 14 grams of fat per quarter cup, respectively.

Gluten-free flours that are highest in fiber are coconut flour and fava bean flour. Rice flour, whether brown rice or white rice, has the least fiber.

Whole wheat flour is a reasonably good source of iron, zinc, and niacin. Most gluten-free flours are also good sources of these nutrients, with soy flour being especially high in iron. Potato flour and white rice flour are low in iron and zinc.

**QUESTION:** "Have you noticed the large amounts of iron added to many foods? Some breakfast cereals have 75 percent of the RDA of iron in one bowl. That means a 4-year-old would be getting way too much iron, if even he or she eats only one bowl per day?" R.L., via e-mail

**ANSWER:** If a cereal contains 75 percent of the Daily Value for iron, that would be 13.5 milligrams of iron (75 percent of 18 milligrams). The same committee that developed the Recommended Daily Allowances (RDAs) also developed a number called the Tolerable Upper Intake Level. This number is the highest average daily intake of a nutrient that is likely to pose no risk of adverse health effects. For iron, for a 4-year-old, the Tolerable Upper Intake Level is 40 milligrams, considerably above the amount of iron found in a bowl of cereal.

Of course, if children consume several bowls of highly fortified cereal along with iron supplements, they could get too much iron. Consuming higher amounts of iron, especially as an iron supplement on an empty stomach, may cause stomach upset.

Symptoms of iron toxicity (the kind of poisoning you sometimes hear about when children swallow a bottle of iron pills) occurs with a dose of between 20 and 60 milligrams per kilogram body weight or approximately 9 to 27 milligrams per pound. For a child weighing 35 pounds, this would be between 315 to 945 milligrams. It is unlikely that children would get these amounts from food.

MANAGING EDITOR: Debra Wasserman  
 SENIOR EDITOR: Keryl Cryer  
 EDITORS: Carole Hamlin,  
 Jane Michalek, Charles Stahler  
 NUTRITION EDITORS: Reed Mangels, PhD, RD,  
 Suzanne Havala Hobbs, DrPH, MS, RD  
 NUTRITIONAL ANALYSES: Suzanne Hengen  
 COVER PHOTO AND STYLING: Jane Belt, Linda Long  
 VRG VOLUNTEER COORDINATOR  
 AND CATALOG MANAGER: Jeannie McStay  
 WEB DEVELOPMENT/RESEARCH: John Cunningham  
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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 join VRG and receive *Vegetarian Journal* in the USA, send \$20 to The Vegetarian Resource Group, P.O. Box 1463, Baltimore, MD 21203.



## NOTE FROM THE COORDINATORS

# THE GLASS REMAINS HALF FULL ...



One of Charles' mother's favorite expressions was that the glass is half full rather than half empty. In this issue, Jeanne Yacoubou remains positive as she looks at a United Nations report about water pollution and animal agriculture titled *Livestock's Long Shadow*. We hope the world can understand the damage that excessive animal product consumption causes and take steps to ensure clean drinking water for generations to come.

In September 1982, five people met and started The Vegetarian Resource Group. One of those individuals was Ernie Kopstein, a vegan doctor. Though he was Assistant Professor of Otolaryngology at The Johns Hopkins Hospital and later Chairman of the Otolaryngology Department at Sinai Hospital, Ernie helped lug boxes for us at dozens of VRG outreach booths. We remember him letting us stuff literature into his car trunk and driving us to an exhibit at a physicians' conference at the Washington Convention Center. We also recall him shivering in the cold while we were doing a table outdoors at The Johns Hopkins University Spring Fair.

Recently, Ernie passed away. He was a man who certainly saw the glass as half full, making it completely full. Even while very sick in his hospital bed, Ernie kept his sense of humor, saying to the nurse who was turning him over, "What do you think I am, a pancake?" Though at a point where he was unable to swallow, he was still able to smile and say to us, "Will you bring me some vegan food, please?"

Ernie was a child Holocaust survivor. He wrote, "Before dawn on Kristallnacht in November of 1938, our apartment door was smashed with axes, and my father was arrested by men holding pistols ... I remember my mother screaming and literally tearing her hair out." In spring of 1939, Ernie was placed on a train and sent to a rescue society in France and moved again when German armies invaded. In 1941, 100 children were selected to be sent to America. Ernie landed in an orphanage in Cleveland. Though on his own, his inner drive pushed him forward to continue his education and eventually go to medical school.

Ernie's father was a furrier. Amazingly, with so many unimaginable horrors thrown at him by the Nazis and others, Ernie became an ardent vegan and a doctor helping others. What better way to show that the Nazi darkness didn't win?

We send our sympathy to Frada, his loving partner, who brought balance to so much prior loss in his life.

Finally, we greatly appreciate *Vegetarian Journal* Senior Editor Keryl Cryer for keeping this magazine on schedule and taking on other tasks in the VRG office while hurricanes were hitting her family's home in New Orleans, forcing them to flee. When some have not met publication deadlines (despite much less of an excuse), Keryl has always managed to keep this publication on track. Also, thanks to Cathy Conway, RD, and Christina Niklas, RD, for their assistance at our outreach booth during the American Dietetic Association annual meeting in Chicago.

**Debra Wasserman & Charles Stahler**

Handwritten signatures of Debra Wasserman and Charles Stahler in cursive script.

**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 vegetarian-friendly, 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.

### Memorials & Honorary Gifts

In memory of: \_\_\_\_\_

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*Make checks payable to The Vegetarian Resource Group and mail to P.O. Box 1463, Baltimore, MD 21203.*

Special thanks to Julie Bartholomae, Gretchen and Robert Chlebowski, Susan Lincke, and Lisa Martin for volunteering at our booth at Chicago Printers' Row Book Fair. Also, thanks to Jim Dunn for providing technical assistance long-distance for this event.

Donations were made by Sid and Diane Bravmann and Eileen Yoffe in memory of Dr. Ernest Kopstein.

## Library Program Coordinator Uses VRG Materials to Reach Young People

Dear Jeannie,

Yesterday, I received the box of pamphlets, magazines, etc., you sent for me to use in my presentation to teens at my "veg out" program later this month. I can't thank you enough—this material will be of great help to me for my program.

I really appreciate the attention you gave to my request!

Terri S., via e-mail

## Many Thanks for VJ Contributor Habeeb Salloum's Recipes

I found your website probably about three years ago. On it was a small essay written by Habeeb Salloum about how his family emigrated to Canada from Syria. He told of how the family survived the Depression well-nourished thanks to the recipes incorporating lentils, garbanzo beans, etc., from his home country, with fresh garden vegetables that they also raised at that time. I found a wonderful recipe (one of several he submitted) called Lentil and

Tomato Soup (available online at <[www.vrg.org/recipes/vjmesoup.htm](http://www.vrg.org/recipes/vjmesoup.htm)>). I have doubled and made this recipe at least once a month for the past three years. I freeze it in containers and have it practically every day for lunch.

I've always wanted to send a thank you to Habeeb Salloum, so please relay my message that it is a delicious, filling, nutritious meal. I have implemented some additions using kale or spinach and it's really good, but the original recipe stands alone as excellent.

Marian F., via e-mail

**Editors' Note:** *Habeeb Salloum wrote the "Cooking with Maple Syrup" recipe article that begins on page 18 of this issue.*

## Reader Wants Ideas For Making Vegan Bird Seed Blocks

I would love to have recipes for seed blocks that don't include gelatin, as the commercial varieties do. Do readers have 'recipes' to produce vegan bird seed blocks?

Anna, via e-mail

**Editors' Note:** *If you have any suggestions for this reader, please drop us a line at [vrg@vrg.org](mailto:vrg@vrg.org).*

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](mailto:vrg@vrg.org).

*Coming in the Next Issue:*

## RAW SOUTHWESTERN CUISINE

*Plus: All About Vitamin D, Savory Pancakes, Soft Vegan Foods to Eat Post-Surgery, and more!*

# A Relaxing Weekend Brunch

By Peggy Rynk

**B**RUNCH IS A CASUAL MEAL, usually composed of a variety of dishes that are easy to prepare, including ones that can be made ahead of time. This way, the host and/or hostess can relax and enjoy the meal as much as the guests do. The purpose of brunch is for family and friends to get together to delight in one another's company in a casual, unhurried atmosphere.

Some foods—such as bagels and rolls, vegan 'cream cheese,' and hummus—can be purchased at natural foods stores, specialty shops, bakeries, and well-stocked supermarkets. So can vegan waffles and 'sausages.' Still, there is plenty of room for creative cooks to come up with dishes and menus of their own.

Brunch can be served either buffet-style, with everyone helping themselves, or family-style, with the food placed on the dining table to be passed around as desired. Beverages, like foods, are usually kept simple—for example, tea, coffee, fruit juice, or combinations of these.

All the recipes included here are easy to prepare, and some do well if made ahead of time, further helping the host and hostess relax and enjoy their family and friends.

## CRANBERRY TEA PUNCH

(Makes approximately 6½ cups)

*This is a refreshing beverage that can be served hot or chilled over ice.*

5 regular-sized (not family-sized) tea bags  
2½ cups boiling water  
¼ teaspoon ground cinnamon  
¼ teaspoon ground nutmeg  
¾ cup sugar (Use your favorite vegan variety.)  
2 cups cranberry juice  
1½ cups water  
½ cup orange juice  
⅓ cup lemon juice

Place the tea bags in a teapot or saucepan and pour the boiling water over them. Let steep for approximately 10 minutes.

While the tea is steeping, mix together the cinnamon, nutmeg, and sugar and set aside.

Remove the tea bags and add the sugar mixture, stirring until sugar has dissolved. Stir in the cranberry juice, water, orange juice, and lemon juice. Serve hot, or chill and serve over ice.

Total calories per 1-cup serving: 133  
Fat: < 1 gram      Carbohydrates: 35 grams  
Protein: < 1 gram      Sodium: 5 milligrams  
Fiber: < 1 gram

## TOFU SCRAMBLED 'EGGS'

(Serves 3)

*This recipe is excellent for breakfast, weekend brunch, or a light lunch or dinner. Serve with oven-fried potatoes, whole grain toast, and fresh fruit, if desired.*

2 Tablespoons sesame oil  
1-1½ Tablespoons soy sauce or tamari  
½ teaspoon dried minced or granulated onions

½ teaspoon ground turmeric  
One 1-pound block firm tofu, rinsed, patted dry, and cut into ½- to ¾-inch squares  
2 Tablespoons vegan imitation bacon bits  
Additional water as needed, one Tablespoon at a time

In a 10" skillet, blend together the sesame oil, soy sauce or tamari, onions, and turmeric. Heat over medium heat until mixture bubbles rapidly. Add tofu, reduce heat to medium-low, and cook. As tofu cooks, mash with a potato masher or a serving fork until the tofu resembles scrambled eggs. The tofu should cook for approximately 10 minutes or until thoroughly heated and ingredients have blended.

Add imitation bacon bits and cook 3-4 minutes longer. If mixture begins to stick to the pan, add a little water, a Tablespoon at a time.

Total calories per serving: 245      Fat: 17 grams  
Carbohydrates: 5 grams      Protein: 17 grams  
Sodium: 426 milligrams      Fiber: < 1 gram

## SMOKY SCRAMBLED

## TOFU

(Serves 3)

*This recipe is an ideal part of a 'traditional' breakfast, with toast, juice, coffee, and vegan 'sausages,' if desired.*

½ teaspoon salt  
Dash black pepper  
Dash cayenne  
1 teaspoon instant minced onion



½ teaspoon ground turmeric  
 1 Tablespoon garlic-flavored olive oil  
 One 15-ounce block extra firm tofu,  
 rinsed and patted dry  
 ½ teaspoon liquid smoke

In a small cup, stir together the salt, pepper, cayenne, onions, and turmeric. Set aside.

In a 10" skillet, heat the oil. Crumble the tofu into it. Sprinkle with the seasoning mixture and stir in the liquid smoke.

Scramble, stirring with a fork to break up any large pieces, until tofu is hot and golden yellow in color.

**Note:** Liquid smoke is available at many grocery stores, usually in the condiment section near the ketchups and barbecue sauces.

Total calories per serving: 180 Fat: 12 grams  
 Carbohydrates: 2 grams Protein: 14 grams  
 Sodium: 403 milligrams Fiber: < 1 gram

## APPLE 'SAUSAGE' STIR-FRY WITH BEANS

(Serves 4)

*A wonderful blend of flavors and textures.*

1 Tablespoon canola oil  
 1 Tablespoon nonhydrogenated vegan margarine  
 4 vegan breakfast 'sausages' (either thinly sliced links or crumbled patties)  
 1½ cups peeled, cored apples that have been either chopped or thinly sliced lengthwise  
 2 Tablespoons brown sugar or granulated vegan sweetener  
 1 Tablespoon prepared mustard  
 One 1-pound can vegetarian baked beans

Heat the oil and the margarine in a small skillet, just until the margarine begins to melt. Add the

breakfast 'sausages' and apples and cook, turning or stirring often, for approximately 15 minutes until the 'sausages' are nicely browned and the apples are tender. Add the brown sugar, mustard, and beans. Simmer, uncovered and stirring frequently, until mixture becomes bubbly and flavors have blended, approximately 10-15 minutes.

**Note:** This is excellent served with hash browns or with *Tofu Scrambled 'Eggs.'*

Total calories per serving: 246 Fat: 9 grams  
 Carbohydrates: 37 grams Protein: 11 grams  
 Sodium: 797 milligrams Fiber: 8 grams

## GRITS ITALIANO

(Serves 3)

*An easy, out-of-the-ordinary version of a traditional Southern favorite. Also good as a side dish for dinner.*

1 generous cup uncooked grits  
 ½ teaspoon garlic powder  
 1 teaspoon salt  
 1 teaspoon commercial Italian or pizza seasoning blend  
 4 cups water

In a 2-quart saucepan, stir together the grits, garlic powder, salt, and seasonings. Blend in the water.

Cook over medium-low heat, allowing the grits to bubble gently

but stirring often, for 5-8 minutes or until grits are thick. Serve immediately.

**Note:** This recipe is especially delicious when served with vegan 'sausage' links or patties.

Total calories per serving: 193 Fat: 1 gram  
 Carbohydrates: 41 grams Protein: 5 grams  
 Sodium: 776 milligrams Fiber: 1 gram

## LEMON SYRUP

(Makes approximately 1 cup or eight 2-Tablespoon servings)

*\*Pictured on the cover. This syrup has an intense sweet-tart flavor. Store in the refrigerator.*

1 cup granulated vegan sweetener  
 6 Tablespoons fresh lemon juice  
 Approximately 2½ teaspoons lemon zest

Put all ingredients into a small saucepan. Heat to boiling, reduce to a simmer, and cook, stirring almost constantly, for approximately 5 minutes or until slightly thickened.

Remove from heat and cool. Pour into a small bottle or jar that has no aroma from any previous contents. Use warm or cold over waffles or pancakes.

Total calories per serving: 96 Fat: < 1 gram  
 Carbohydrates: 25 grams Protein: < 1 gram  
 Sodium: < 1 milligram Fiber: 1 gram



## OATMEAL PANCAKES

(Makes approximately 16 pancakes)

*A perfect option for weekend brunch or a weekday supper.*

2 cups rolled oats  
1 cup whole wheat flour  
½ teaspoon salt  
1 Tablespoon baking powder  
3 Tablespoons granulated vegan sweetener  
1½ cups soymilk  
2 Tablespoons canola oil  
Nonhydrogenated vegan margarine or additional canola oil to prepare griddle

In a medium-sized mixing bowl, blend together the dry ingredients. Make a well in the center and add the soymilk and oil. Stir until well-combined. Let batter sit for approximately 20 minutes before cooking. This will make the pancakes hold together well and make them easier to turn.

Melt the margarine or heat the additional oil on a griddle or in a large skillet. When griddle is hot enough that a few drops of water will dance on it, pour on the batter, using a scant quarter cup for each pancake. Cook on one side until golden brown. (Bubbles will form on the top.) Flip each pancake over carefully and cook on the other side until golden. Remove from griddle and repeat process with more margarine and batter until all of the batter has been used. Keep pancakes in a warm oven until all are finished.

**Note:** Best served with maple syrup and vegan ‘sausages.’ You may also want to try this recipe with *Apple ‘Sausage’ Stir-Fry with Beans* (page 7).

Total calories per pancake: 135 Fat: 3 grams  
Carbohydrates: 22 grams Protein: 5 grams  
Sodium: 153 milligrams Fiber: 1 gram

## STRAWBERRY PANCAKES

(Makes approximately 16 pancakes)

*\*Pictured on the cover. These tasty pancakes don’t even need syrup, but they are good with syrup, too.*

2 cups unbleached flour  
¼ cup cornstarch  
2 Tablespoons granulated vegan sweetener  
1 teaspoon salt  
1 Tablespoon baking powder  
¼ teaspoon ground cinnamon  
2 cups chopped fresh strawberries  
2½ cups soymilk  
2 Tablespoons canola oil  
Additional canola oil to prepare griddle

In a medium-sized mixing bowl, blend together the dry ingredients. Add the strawberries and stir until coated with the flour mixture.

Make a well in the center and add the soymilk and oil. Stir to blend well, but do not beat.

Brush a griddle lightly with additional oil. Heat the griddle to medium heat and ladle on the batter, using enough batter to make 4-inch pancakes. Cook over medium heat until lightly browned on the bottom. Flip each pancake over and cook on the other side until lightly browned as well. Remove from griddle and repeat process with more oil and batter until all of the batter has been used. Keep pancakes in a warm oven until all are finished.

Total calories per pancake: 107 Fat: 3 grams  
Carbohydrates: 18 grams Protein: 3 grams  
Sodium: 233 milligrams Fiber: 1 gram

## JAMAICAN GINGERBREAD

(Serves 20)

*The crystallized ginger adds wonderful flavor and texture. Serve with a cup of hot tea anytime.*

3 cups whole wheat flour  
⅓ cup arrowroot powder or cornstarch  
½ cup granulated vegan sweetener  
½ teaspoon salt  
1 Tablespoon baking powder  
1 teaspoon ground cinnamon  
½ teaspoon ground cloves  
1 Tablespoon ground ginger  
1 cup crystallized ginger in ¼-inch dice (optional but highly recommended)  
½ cup canola oil  
½ cup molasses  
1 cup soymilk  
2 teaspoons vanilla  
Vegetable oil spray to prepare pans

Preheat oven to 350 degrees.

In a large mixing bowl, blend together the flour, arrowroot or cornstarch, sweetener, salt, baking powder, cinnamon, cloves, and gingers. Make a well in the center. Add the oil, molasses, soymilk, and vanilla and stir just until blended. Do not beat.

Spray two 9" x 5" loaf pans with oil and spoon batter into pans. Bake for 30 minutes or until a toothpick inserted into the center just comes out clean. Invert pans on a wire rack, remove gingerbreads, and cool.

Total calories per serving: 188 Fat: 6 grams  
Carbohydrates: 32 grams Protein: 3 grams  
Sodium: 127 milligrams Fiber: 2 grams

## BREAKFAST BANANA CAKE

(Serves 10)

*This is a delicious breakfast alternative to waffles or pancakes, and it’s easier, too. Or, if you prefer, tuck some into lunch boxes for dessert.*

½ cup canola oil  
¼ cup strawberry preserves, jam, or jelly  
½ cup granulated vegan sweetener  
1 teaspoon vanilla  
1 teaspoon ground cinnamon



3/4 teaspoon salt  
 2 teaspoons baking powder  
 2 1/2 cups all-purpose flour  
 1 cup soymilk  
 3/4 cup mashed very ripe bananas  
 Vegetable oil spray to prepare pan

Preheat oven to 350 degrees.

In a medium-sized mixing bowl, stir together the oil, preserves, sweetener, and vanilla. Then, stir in the cinnamon, salt, and baking powder.

Blend in the flour, alternating with the soymilk, beginning and ending with the flour. Lastly, blend in the bananas.

Spray a 9" x 5" loaf pan and spoon batter into pan. Bake for approximately 40 minutes or until a toothpick inserted into the center

just comes out clean. Cake should pull away slightly from the sides of the pan. Serve warm.

Total calories per serving: 293 Fat: 12 grams  
 Carbohydrates: 43 grams Protein: 4 grams  
 Sodium: 263 milligrams Fiber: 1 gram

## STOVETOP RICE PUDDING (Serves 6)

*Delicious! The leftovers are great cold.*

2 cups uncooked brown rice  
 1/2 cup dark raisins  
 3/4 teaspoon salt  
 1 teaspoon ground cinnamon  
 1 cup granulated vegan sweetener  
 3 cups soymilk  
 Approximately 3 cups water

In a 3-quart saucepan, stir together the rice, raisins, salt, cinnamon, and sweetener. Then, blend in the soymilk and water.

Bring the mixture to a boil over medium-high heat, stirring often. Reduce heat to a simmer, and cook, stirring often, for approximately 30 minutes until rice is tender and the pudding is thick. Serve either warm or chilled.

Total calories per serving: 437 Fat: 4 grams  
 Carbohydrates: 93 grams Protein: 9 grams  
 Sodium: 357 milligrams Fiber: 3 grams

Peggy Rynk is a frequent contributor to *Vegetarian Journal*. Her most recent article was "The Rich Flavors of African Cuisine" for Issue 2, 2008.

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# veggie bits

## Talk About Smart Cookies!

Sam & Ruby's Vegan Goodies is a small company that offers 32-ounce tubes of vegan cookie dough, each of which produces three to four dozen of the confections that go right from the refrigerator to the oven. Their 'Regular' flavors are Chocolate Chip, Yummy Vegan Ginger, and Oatmeal Raisin Walnut, while 'Deluxe' varieties include Vegan Chocolate Chocolate Chip, Vegan Peanut Butter Banana, and the ultra-fancy Vegan Cranberry Lime Pistachio Shortbread.



For more information about Sam & Ruby's products or to order, visit <[www.samandrubys.com](http://www.samandrubys.com)>.

## Spectrum Brings New Options in Vegan DHA for Toddlers

Want your children to have the health benefits of DHA but don't want to give them fish oil? Spectrum has introduced a fish-free DHA supplement for toddlers one to three years old. This vegan liquid supplement has a neutral taste, so it can be mixed with food. It provides 125 milligrams of DHA per Tablespoon, an amount that is believed to meet the needs of children of this age. Spectrum also makes other non-fish DHA products; unfortunately, these are only available in gelatin (non-vegetarian) capsules. However, they are working to find an acceptable vegetarian capsule.

For more information, contact Spectrum Organic Products, LLC, 1105 Industrial Avenue, Petaluma, CA 94952. Their website is <[www.spectrumorganics.com](http://www.spectrumorganics.com)>.

*Reviewed by Reed Mangels, PhD, RD.*

## Quick-and-Easy Eggplant

For more than 25 years, Dominex has brought the best eggplant products to freezer cases nationwide. Among their tasty, microwaveable vegan items are Eggplant Cutlets, which are a great foundation for entrées and side dishes, and their Eggplant Burgers. Both items are available to eat at home and for food service.



To learn more, contact Dominex Eggplant at P.O. Box 5069, St. Augustine, FL 32085, or via phone at (904) 810-2132 ext. 302. Visit them online at <[www.dominexeggplant.com](http://www.dominexeggplant.com)>.

## Virtual Museum Documents Vegetarianism's History in U.S.

*Vegetarian America: A History* authors Karen and Michael Iacobbo have founded the Vegetarian Museum at <[www.vegetarianmuseum.com](http://www.vegetarianmuseum.com)>. This virtual gallery and archive is the only museum in the world dedicated to vegetarianism, on or off the Internet. The museum's 'rooms' feature articles, letters, journal entries, book excerpts, menus, illustrations, and photographs that reveal much of the story of vegetarianism in America from the 18<sup>th</sup> century to the present. In addition, the site encourages today's writers on the subject of vegetarianism, artists, and musicians to submit their work and become part of the site's living history.

## Getting Your Omega-3s Each Morning Just Got a Little Easier



Nutritious Living has created a new cereal called Omega-3 Harmony. This product is heavy on whole grain flakes, walnut pieces, dried cranberries, and those ground flaxseeds that serve as a great source of vegan omega-3 fatty acids. If the ingredients weren't reason enough to try this cereal, take the recommendation of the VRG staff, who scarfed it down by the handful.

Write to Nutritious Living's parent company, Organic Milling Corporation, at 505 W. Allen Avenue, San Dimas, CA 91773, or call them at (800) 638-8686. Visit them online at <[www.nutritious-living.com](http://www.nutritious-living.com)>.

## Pen Pal Program Encourages Vegetarians Behind Bars

It's often difficult for vegetarians who are incarcerated to get the vegetarian meals they request. That's where a non-profit organization called the Prison Vegetarian Project comes in. Besides advocating for veggie meals, this group requests that individuals serve as pen pals. Most pen pals use a P.O. Box and a 'pen name' to correspond with select individuals who wish to discuss their vegetarian ideas, difficulties, and philosophies.

For more information about becoming a pen pal, contact the Prison Vegetarian Project at Cooper Station #57, New York, NY 10276, or call (212) 777-0163. Their website is <[www.prisonvegetarianproject.org](http://www.prisonvegetarianproject.org)>.

# “Teach... Your Children Well...”

## A Vegetarian Lesson Plan for High School Students

By Philip Becker, Science Educator &  
VRG Life Member

**E**VERY SO OFTEN IN LIFE, AN AMAZING AND wonderful opportunity makes its way to fortunate educators like me. Although I have been a high school science teacher since 1996, I never have had the opportunity to teach a class to young people about the virtues and practice of becoming a vegan ... that is, until this year.

With all the publicity about various environmental issues of concern today—not the least of which is global warming—I decided to create and implement a new course at my school. The design of the academic schedule at the high school where I teach allocates a two-week period between the second and third trimester each year; this allows an educator to teach a condensed course on a topic about which he or she feels passionately for students of any grade level at the school. I decided to *carpe diem* and create my ‘minimester’ course, which became known as *Vegy 101: An Introduction to Living and Thriving on an Environmentally Sustainable Diet*.

Since I only had nine days available to me to teach this new course, I immediately sat down and compiled a list of topics that I believed were necessary to teach—but not so detailed that I would not engage the students who were brave enough to sign up for my class. After considerable deliberation, I created the course syllabus. See <[www.vrg.org/journal/vj2009issue1/vj2009issue1veg101.htm](http://www.vrg.org/journal/vj2009issue1/vj2009issue1veg101.htm)> for this and other materials I used for the class.

### Day 1

Despite the fact that my roster indicated 16 students had registered for *Vegy 101*, 18 students arrived in my classroom on the first day. Although I was initially short some chairs, I was ecstatic to see the class enrollment increase. We immediately got the class rolling by my having students introduce themselves and provide a brief statement of why they elected to take *Vegy 101*—especially when all the other teachers at my school

were offering wonderfully creative courses ranging from snowcamping to pinballing!

After the introductions, I had students create a namecard, on the back of which I asked them to write three questions that they wanted to have answered by the conclusion of *Vegy 101*. The list of questions students asked ranged from “What are extra nutrients you need to take in if you are a vegetarian?” to “What is your opinion of the beef recall?” to “Does making gelatin hurt or kill animals?” For the rest of the questions, see <[www.vrg.org/journal/vj2009issue1/vj2009issue1veg101.htm](http://www.vrg.org/journal/vj2009issue1/vj2009issue1veg101.htm)>.

The first topic we studied was the relationship between diet and disease. We examined the differences between epidemiological and clinical studies and discussed why both types of studies were important in

I decided to create and implement a new course at my school. It became known as Vegy 101.

understanding relationships between diet and disease. To give students some appreciation for the work done by epidemiologists, I created an activity involving a picnic where a disease outbreak occurred—for which students had to identify the food(s) at the picnic that made people attending our fictional gathering ill. After the students completed the activity, I had them use a whiteboard to elaborate about their investigation and present their findings to the rest of the class.

After that exercise, it was time for the daily vegan snack, which was pita, hummus, and raw vegetables on this day. For homework, students were to read and summarize Chapter 2, “The Evidence Is In,” of the course’s textbook, *Becoming Vegetarian: The Complete*



*Guide to Adopting a Healthy Vegetarian Diet* by Vesanto Melina, Brenda Davis, and Victoria Harrison.

## Day 2

Today's class was devoted to the introduction of basic nutrition principles, including descriptions and roles of dietary nutrients and requirements for sound health based on current scientific recommendations. Then, the class had its daily snack, meatless 'hot dogs' and fixings. During the snack period, I showed the *Get Yer Veggie Dogs Here!* video with Johanna McCloy (of *Star Trek* fame) from SoyHappy, which is an organization working to get meatless products into sports venues.

## Day 3

The purpose of today's class was to introduce students to vegetarianism, including proper nutrition for both vegetarians and vegans. First, we examined the statistics of how many vegetarian adults and youths there are in the United States. Next, we considered nutrient needs of vegetarians and vegans, with emphasis being placed on the importance of obtaining sufficient intake of calcium, iron, and vitamin B<sub>12</sub>. Today's snack was meatless 'burgers' and fixings. For homework, I directed students to make a list of foods they consumed in a typical week so they could create a nutrient profile and conduct a nutrient evaluation of foods typically consumed in the weekly diets of students.

## Days 4 and 5

On the fourth and fifth days of class, we began the formal assessment of the implications of various food choices on natural resources and on the environment in general. The emphasis of Day 4's class was on the physics of resource utilization in the process of converting natural resources into food. To reinforce the relevance of this topic, I created a "Food and Natural Resources" activity about resource availability and utilization in the global perspective. In brief, a group of three students formed a country, and the resource availability (arable land, water, and energy) and sustainability requirements of that country were determined by the roll of a die. (Quantitative values for water and energy availability, corresponding to each roll of a die, were obtained from Tables 17/18 of *A Vegetarian Sourcebook* by Keith Akers, while land data was obtained from the Vegetarian Society of the United Kingdom.)

By the conclusion of the activity, students quickly realized that not many countries had the resources to support the Standard American Diet (SAD)—and one country even invaded another country that was

undergoing starvation (due to only being able to grow sorghum, which is a challenge for maintaining nutritional adequacy unless you happen to be a ruminant!). As a teacher, I found it very interesting to watch the group dynamics and facial expressions of the students throughout the activity. Clearly, the students representing countries that had plenty of resources were smiling and relaxed throughout this activity, while those representing countries that lacked one or more vital resources looked to be stressed and even upset at times. At this activity's conclusion, it was not at all difficult for students to understand the global implications of food choices and their impact on other human populations. Today's daily snack—which the students especially appreciated after the "Food and Natural Resources Activity"—was whole grain cereals and plant-derived, non-dairy beverages.

The emphasis of Day 5's class was on the footprint that livestock agriculture leaves on the natural environment, including potable water depletion, topsoil erosion, desertification, displacement and elimination of wildlife, pesticide bioaccumulation in the food web,

Fifty percent of the students said they were "very likely" to modify their dietary habits.

waste water runoff, and global warming due to methane production by livestock, just to name a few. There was not a more appropriate time to show the class the DVD *Eating the Earth One Bite at a Time* by former fourth-generation rancher Howard Lyman!

After consuming the daily snack of vegan snacks and pastries, students were issued a copy of *Teen's Vegetarian Cookbook* by Judy Krizmanic to start thinking about what to prepare for the following week's class potluck feast. Also, students were issued the book *Six Arguments for a Greener Diet*, published by the Center for Science in the Public Interest, and assigned the reading of Argument Two: "Less Foodborne Illness" in preparation for the next class after the weekend.

## Day 6

In some sense, today's class was the most difficult for me to teach since it focused on the animals that are exploited for food production. As a teacher, I firmly believe that it is very important *not* to traumatize students, especially ones who already may be sensitive

and empathetic to the plight of animals. Thus, I made it very clear to students that they did not have to watch graphic videos of what happens in a slaughterhouse. At the same time, I made available plenty of still pictures and magazine photos of factory farms and slaughterhouses to those students who wanted to “bear witness” to what happens to animals in such places.

To maintain continuity with the weekend’s reading assignment about foodborne illness, I showed the class a fascinating (and prospectively frightening) DVD on *Emerging Infectious Diseases* by Dr. Michael Greger. Between the factory farming discussion and infectious disease DVD, it should not have been a surprise to me that very few students had an appetite for today’s daily snack—meatless lunch meat analogs. I ended up taking most of them home and will probably be eating them over the next month!

### Day 7

This day was devoted to discussion about the philosophy of animal rights and how to incorporate such an intricate belief into an individual’s lifestyle. Although I attempted to exclude the topic of animals used in medical research and indicated it was outside of the course’s purview, ultimately students raised the issue. I redirected them toward the scheduled topic of the day, veganism, and hinted at keeping an eye open for the minimester course I’d be considering for next year!

Since I wanted to help students make the transition toward preparing their own dishes, I provided the ‘base pizza’ (either Amy’s cheeseless pizza or Trader Joe’s roasted vegetable pizza) plus topping options, such as onions, mushrooms, broccoli, Yves meatless ‘pepperoni’ slices, and a variety of vegan cheeses (all of which actually did melt in the toaster oven!) and then watched students have fun creating their own unique vegan pizza pies. It was evident to me that today’s snack was the one most enjoyed by the class as a whole.

### Day 8

This second-to-last day of the course was devoted to the examination of myths about vegetarianism, the exploration of the availability of vegetarian and vegan foods, and special vegetarian diets—with emphasis on athletes and companion animals. Today’s class was well-received, as many of the students were involved with one or more sports at the school. Since athletes often need bursts of energy, today’s snack placed emphasis on high-energy density. Thus, I had students prepare my own ‘gorp-like’ recipe mix, which is a mixture of raisins, non-dairy chocolate or carob bits, and some

type of nuts (almonds/peanuts/pecans/walnuts) with the option of adding dried shredded coconut. To “practice what we preach” about increasing non-heme iron uptake, I provided a crate of mini-oranges to the class.

The other snack for the day was nut butters, including almond butter, cashew butter, and sunflower butter. This was a refreshing change for many students who consistently consume peanut butter as the nut butter of choice, due to convenience and not necessarily taste. It was evident to me that several students will be expanding their nut butter repertoire in the near future! Since students now had an abundance of snacks to consume, it was time to watch a movie.

Today’s class concluded with me assigning the students their homework, the task of perusing *Teen’s Vegetarian Cookbook* and finalizing the selections that they would be preparing for tomorrow’s potluck feast, which would immediately follow the course exam.

### Day 9

It is hard to believe it is the last day of the class already. Today’s class had three major objectives:

- 1) Obtain feedback from students about the course,
- 2) Evaluate students on what they learned in the class over the past eight days, and
- 3) Rejoice and enjoy the potluck celebration that was about to take place!

To maintain continuity, I will flip-flop the order of the three objectives above. The potluck was a wonderful experience. Students made a variety of foods—predominantly vegan, to my pleasant surprise—including casbah couscous salad, butternut squash and green beans in coconut curry sauce, bean dip delight, cold Szechuan noodles with vegetables, and a vegan apple pie that couldn’t have been tastier. The potluck attracted so much attention that other students, teachers, and people in the administrative wing of the school came to the classroom to sample some of the tasty vegetarian food in front of them. What an appropriate culminating activity for *Vegy 101*, as a good time was had by all in attendance at the potluck feast.

Based on the course evaluation form, 50 percent of students said they were “very likely” to modify their dietary habits, while 25 percent were “likely” and 25 percent gave a “maybe” answer. As I exchanged thank yous and goodbyes with the students, I awarded each of them with a VRG bumper sticker of their choice.

VRG Life Member Phil Becker lives in the San Francisco Bay area.

# Quick Cornmeal

By Chef Nancy Berkoff, RD, EdD, CCE

**C**ORNMEAL IS FLOUR GROUND FROM DRIED CORN until it becomes a fine, medium, or coarse powder. This common staple food is often found near the salt and flour in the grocery store, and it's great to have on hand if you're looking to make a hearty and semi-fast meal (fast to mix, a bit of time to bake). Depending on the type of corn used, cornmeal can be white or yellow; both varieties work equally well in most recipes. Once you've picked out and purchased your cornmeal, make sure to store it in an airtight container until ready to use.

**Cornmeal mush** is a thick cornmeal pudding or porridge that is often cut into flat squares or rectangles and then fried. Popular in the southeastern United States, this dish is fairly simple to make. All you'll need is 1 part cornmeal to 4 parts boiling water. You decide the 'part,' as in 1 cup cornmeal to 4 cups water, based on how much you wish to make. Bring the water to a boil. Place your cornmeal in a large bowl. As the water comes to a boil, take approximately 2-3 spoonfuls of the water from the pot and whisk it into the dry cornmeal until a paste is formed. Pour or spoon the paste slowly into the boiling water, whisking and stirring to prevent lumps. When you've got a nice smooth pot of cornmeal mush, cook it to the thickness you would like. You can let it simmer for approximately 5 minutes to make sure it is warm throughout.

If you would prefer using your microwave to the stovetop, you may want to make **cornmeal hot cereal**. The proportions for microwave cornmeal hot cereal are 1 part cornmeal to 4 parts water. For example, you could use 1/2 cup cornmeal and 2 cups cold water. Place the cornmeal and the water in a microwaveable bowl and cover. Cook on HIGH for two minutes. Uncover and stir. Cover again and microwave on HIGH for one more minute. Remove, stir, and either eat hot or allow to cool before digging in.

Hot cornmeal cereal can be breakfast in a cup—just stir in your desired combination of maple syrup,

applesauce, dried fruit, chopped nuts, fruit preserves, and/or soy or rice milk. It can also be a fast, savory lunch. Stir in nutritional yeast, vegan shredded cheese or sour cream, salsa, leftover cooked veggies, leftover chopped cooked greens, or cooked beans. A school 'lunch lady' that we know says her vegan students enjoy peanut butter-and-jam hot cornmeal for breakfast and salsa-and-beans hot cornmeal for lunch. For a special dessert, she adds chocolate or carob chips, chopped dried apricots, and shredded coconut to hot cornmeal.

Here are some more ideas for items that can 'soup up' your hot cornmeal cereal:

- **Fresh:** Chopped onions, corn off the cob, chopped tomatoes, chopped bell peppers, chopped mangos, chopped fresh chilies
- **Canned:** Chilies, pimentos, corn, mixed veggies, sliced mushrooms, sliced olives, kidney beans, drained crushed pineapple, 1 Tablespoon of nutritional yeast, chopped walnuts or pecans, halved raisins, or dried apricots
- **Thawed frozen:** Peas, black-eyed peas, corn, mixed veggies, or chopped okra
- **Vegan 'dairy' and 'meat' alternatives:** Sour cream, shredded cheese, soy crumbles, vegan ground round, crumbled vegan sausage, chopped Tofurky™, or chopped seitan
- **Sweet:** Applesauce, chopped canned or dried fruit, mashed bananas, maple syrup, molasses, chopped nuts, peanut butter, carob chips, vegan fruit-flavored yogurt, or non-hydrogenated vegan margarine

If you allow yourself an occasional indulgence, prepare **hot-water cornbread**. Prepare one of the hot cornmeal recipes, omitting half the called-for liquid to create a stiff batter. Drop the cornbread batter by spoonfuls into hot vegetable oil and deep fry until golden and crispy. This is a traditional Southern dish.



A little less indulgent but almost as tasty is this **baked cornbread** recipe. Prepare one of the hot cornmeal cereal recipes above, omitting half the called-for liquid to create a stiff batter. Spread into a baking dish so that it is approximately three inches thick. Cover and refrigerate. When cool, you can gently slice the cornbread into thick strips or squares. Place them on a non-stick baking sheet, and bake in a 400-degree oven until crispy.

Here's another recipe for cornbread that will please many palates:

## WHEAT- AND SUGAR-FREE CORNBREAD

(Makes eight 2-inch squares)

- 1 cup cornmeal
- ½ teaspoon salt
- ½ teaspoon baking soda
- 1 cup plain, unsweetened soymilk
- 1 Tablespoon lemon juice
- 1½ teaspoons powdered egg replacer mixed with 2 Tablespoons water
- 1 Tablespoon nonhydrogenated vegan margarine

Preheat oven to 450 degrees.

Mix cornmeal, salt, and baking soda together in a large bowl and set aside.

Pour soymilk into a large cup and add lemon juice to 'sour.' Combine 'sour' soymilk with egg replacer. Add to cornmeal mixture and stir only to combine.

Use margarine to prepare a 9" x 13" baking dish, a 8" square baking dish, a cast-iron skillet, or muffin tins. Fill with cornbread mixture. Dot the top of the batter with margarine and bake until golden, approximately 20 minutes. This recipe doesn't rise very much, but it forms a nice crust.

### Notes:

- 1) To make this mix in advance, measure and combine cornmeal, salt, baking soda, and dry egg replacer. Store in an airtight container until ready to add liquid ingredients.
- 2) To microwave this recipe, place the prepared batter in a 1-quart microwaveable dish. Cover with a wet paper towel. Microwave on HIGH for 5 minutes. Remove towel and microwave on HIGH for 3 minutes or until knife inserted in center comes out clean.

Total calories per serving: 79

Carbohydrates: 13 grams

Sodium: 256 milligrams

Fat: 2 grams

Protein: 2 grams

Fiber: 1 gram

## NOTES FROM THE VRG SCIENTIFIC DEPARTMENT

### THE VEGETARIAN RESOURCE GROUP IN THE NEWS

VRG Nutrition Advisor Reed Mangels, PhD, RD, answered questions about vegetarian pregnancy for *WH*, a guide to women's health published by a large Bay Area medical center, and recently authored a chapter titled "Vegetarian Diets in Pregnancy" for a textbook titled *Handbook of Nutrition and Pregnancy* (Humana Press, 2008). In addition, she was interviewed for an article about nut butters for *Men's Health* magazine, for a story about non-dairy products in *My Family Doctor* magazine ([www.MyFamilyDoctorMag.com](http://www.MyFamilyDoctorMag.com)), and for a piece about vegetarian kids on Education.com. Furthermore, she submitted a 1,000-word entry about vegan diets for the *Encyclopedia of Lifestyle Medicine and Health*; it will be published in 2010.

### VRG OUTREACH

VRG Nutrition Advisor Suzanne Havala Hobbs, DrPH, RD, is a professor at the University of North Carolina at Chapel Hill, and she presented with Dr. T. Colin Campbell, an Emeritus Professor at Cornell University, at a session on "A New Paradigm for the Study and Practice of Nutrition" at the American Dietetic Association (ADA) Food and Nutrition Conference and Exhibition in Chicago in October. The session was organized by the ADA Vegetarian Nutrition Dietetic Practice Group.

The America Culinary Federation asked VRG Foodservice Advisor Nancy Berkoff, RD, EdD, to do an 8-hour pre-conference seminar for culinary educators. Nancy was also invited to give a 90-minute opening session at the regional conference of the National Association of College and University Food Services in Fargo, North Dakota.

# SCIENTIFIC UPDATE

By Reed Mangels,  
PhD, RD, FADA

## A REVIEW OF RECENT SCIENTIFIC PAPERS RELATED TO VEGETARIANISM

### Food Choices During the Teen Years May Influence Cancer Risk Later in Life

Breast cancer is the most common form of cancer in women (if you don't count non-melanoma skin cancers). One in eight women in the U.S. will develop breast cancer. New research suggests that dietary choices in adolescence may play a role in determining whether a woman will develop breast cancer. More than 40,000 women, ages 25 to 43 years, were asked about what they ate when they were in high school. Records were kept and the women were studied for the next seven years.

Those women who reported eating the most red meat (beef, pork, lamb, and processed meat like hot dogs) during high school had a 30 to 40 percent greater risk of developing breast cancer, compared to women who reported eating the least red meat during high school. The women in the high red meat group in high school averaged 2.6 servings of meat daily, while women in the lowest red meat group averaged 0.7 servings per day. Even when the results were adjusted for the women's red meat intake as adults, the increased risk seen with higher red meat intake as a teen persisted. There was an especially strong association between processed meat and hot dogs eaten as a teen and risk of breast cancer. These results may be caused by the cancer-causing chemicals created by cooking meat, to the hormone treatment of meat, or to some as-yet undetermined factor. In any case, these results raise questions about red meat's role in teenage girls' diets.

Linos E, Willett WC, Cho E, et al. 2008. Red meat consumption during adolescence among premenopausal women and risk of breast cancer. *Cancer Epidemiol Biomarkers Prev* 17:2146-51.

### Fish Not Necessary for DHA

DHA is an omega-3 fatty acid found mainly in oily fish. DHA plays a role in reducing the risk of heart disease and may be involved in other chronic diseases. Vegetarian and vegan diets contain little or no DHA unless fortified foods or supplements are used. Vegan

DHA supplements that are derived from microalgae have been developed. Are these supplements equivalent to fish in terms of their DHA? To address this question, researchers studied 32 men and women. Study subjects either ate 2 ounces of salmon (which provided 600 milligrams of DHA) or took capsules containing 600 milligrams of DHA from microalgae daily for two weeks. The subjects' blood DHA concentrations were measured. Both groups saw an increase in blood DHA levels, and the increase in DHA in both groups was similar. These results suggest that microalgae-derived DHA is as effective as fish in increasing blood DHA levels.

Arterburn LM, Oken HA, Hall EB, et al. 2008. Algal-oil capsules and cooked salmon: nutritionally equivalent sources of docosahexaenoic acid. *J Am Diet Assoc* 108:1204-1209.

### New Research on Raw Foods

Despite the interest in raw foods diets, little research has been conducted about them. A small German study examined blood levels of carotenoids in 198 strict raw foods diet followers. Carotenoids are found in fruits and vegetables and include substances associated with a lower risk of diseases like cancer, such as beta-carotene, alpha-carotene, and lycopene. Study subjects ate close to 95 percent by weight of their foods as raw foods and had followed this diet for at least two years.

Because of their high fruit and vegetable intake, people eating a raw foods diet would be expected to have high levels of these carotenoids in their blood. Most study subjects, especially those eating more than 3½ pounds of fruits and vegetables per day, had blood beta-carotene levels in the normal range. Surprisingly, however, blood lycopene levels were below the reference values in more than three-quarters of study subjects. This may be because the lycopene from raw foods was not well-absorbed. Cooking foods like tomatoes, which are a good source of lycopene, has been shown to increase lycopene absorption. Other factors that may have affected carotenoid absorption were the amount of fat in the subjects' diets and whether the high fat foods were eaten at the same meal as foods high in carotenoids. Dietary fat provided an average of 30

percent of calories; the main dietary sources of fat were nuts, seeds, and avocados. Dietary fats have been shown to increase the amount of carotenoids that are absorbed in a meal. Those subjects who ate the lowest amount of fat and oil also had the lowest blood levels of carotenoids. For those eating a raw foods diet to increase carotenoid absorption, especially absorption of the carotenoid lycopene, fat intake may need to be increased. Additionally, fat sources should be at the same meal as good sources of lycopene.

Garcia AL, Koebnick C, Dagnelie PC, et al. 2008.

Long-term strict raw food diet is associated with favourable plasma beta-carotene and low plasma lycopene concentrations in Germans. *Br J Nutr* 99:1293-1300.

## Diet Has a Significant Impact on Global Climate Change

One of the most important environmental issues is the increasing level of greenhouse gas production, which is leading to global climate change. Proposals for reducing fossil fuel consumption and CO<sub>2</sub> emissions frequently focus on choosing energy efficient vehicles and driving less. These are important steps, but perhaps just as important are our dietary choices.

In 2002, the food production systems accounted for 17 percent of all fossil fuel use in the United States. This number is expected to increase over the coming years. A recent analysis used the fossil fuel needs for irrigation energy, farm machinery, and labor and considered the production of non-CO<sub>2</sub> greenhouse gases methane and nitrous oxide resulting from animal waste in evaluating various diets' environmental impacts. Animal-based diets, whether based on red meat, fish, poultry, or dairy products and eggs, result in a higher greenhouse burden than do vegan diets. A person consuming the average American diet (72 percent of calories from plants, 15 percent from meat/fish/poultry, 11 percent from dairy products, and 1 percent from eggs) is responsible for the release of 1,485 more kilograms per year of CO<sub>2</sub> equivalents than a person choosing a vegan diet is. This difference represents more than 6 percent of total U.S. greenhouse gas emissions.

The researchers also compare dietary intake to driving various kinds of vehicles. The difference in greenhouse gas production between eating approximately 20 percent of calories from animal products (a lower level of animal product use than the typical American diet) and a vegan diet is roughly equivalent

to the difference between driving a Camry and a Prius. If one chooses a diet high in red meat and animal products (35 percent of calories from animal products), the difference in greenhouse gas production between this type of diet and a vegan diet is equivalent to the difference between driving an SUV and driving a Camry.

Eshel G, Martin PA. 2006. Diet, energy, and global warming. *Earth Interact* 10:1-17.

## Lifestyle Changes, Including a Plant-Based Diet, Improve Activity of a Useful Enzyme

Telomerase is an enzyme that helps to protect chromosomes, the structures that hold our genes. If chromosomes aren't adequately protected, the risk of getting certain cancers and of having the cancer progress more rapidly seems to be higher. Additionally, telomerase repairs the part of the chromosome, the telomeres, that controls longevity. We know that a healthy lifestyle can reduce risk of many chronic diseases, including cancer.

A recent small study suggests that lifestyle changes may improve the activity of the telomerase enzyme and that this could, at least partially, explain the relationship between diet and cancer risk. Dean Ornish, MD, Head of the Preventive Medicine Research Institute, studied 30 men with low-risk prostate cancer. These men did not receive surgery or radiation therapy because their prostate cancer did not appear to be progressing and was not causing symptoms. For three months, the men followed a program that required them to make significant lifestyle changes. They ate a lowfat, near-vegetarian diet (Subjects did use fish oil supplements.) rich in whole grains, fruits, vegetables, dried beans, and soy products. They exercised moderately and practiced techniques, such as yoga, to reduce stress.

Following this three-month period, the men's blood level of telomerase was 29 percent higher than at the start of the study. According to Ornish, this is the first study showing that lifestyle changes can increase telomerase. Since this enzyme may play an important role in reducing risk of cancer development and progression, larger studies will probably be conducted to confirm these potentially important results.

Ornish D, Lin J, Daubenmier J, et al. Nov 2008.

Increased telomerase activity and comprehensive lifestyle changes: a pilot study. *Lancet Oncol* 9(11):1048-57.



# Cooking with Maple Syrup

By Habeeb Salloum

**A**S I WALKED AWAY FROM THE ELMIRA MAPLE SUGAR Festival in Ontario, Canada, the words of the friendly saleswoman still echoed through my mind: “Enjoy our syrup. It’s Ontario’s liquid gold. It’s the best!” She could have been exaggerating, but the aura of the festival and the maple sweets with which I had stuffed myself made her words plausible.

The first time I stepped into a sugar maple forest—with sap dripping into buckets attached to almost every tree—I felt an air of excitement. I became intoxicated with the enticing odor coming from the steaming vats. All the time we stood by the smiling syrup-maker, he kept an eye on the boiling sap, or ‘liquid gold.’ As happens to gold ore in its raw stage, the maple sap was being collected and refined into a valuable commodity right before our eyes.

Ontario, Québec, and the northeastern United States have two advantages when it comes to producing maple syrup. First, these areas are home to the top seven species of sugar maple trees, *Acer saccharum* (the true maple sugar tree). In addition, the cold, harsh winters that plague this section of North America are followed by warm and sunny spring thaws. These ideal weather conditions produce the sweetest and most flavorful maple syrup to be found in any part of the world. Canada accounts for 70 percent of the world’s maple syrup production, with 90 percent of that yield produced in Québec.

European settlers to Canada and the northeastern United States learned techniques for harvesting this natural sweet from the Native Americans. In the ensuing years, this practice became a basic part of the settlers’ lives. Until the 19<sup>th</sup> century, the major source of sugar consumed in these areas came from maple sugar trees.

Although maple syrup is now known primarily as a

breakfast delight, the European settlers added it to all kinds of dishes, such as maple-baked beans and maple desserts. Even today, when the sap flows, families and friends in Québec gather at the sugar hut, where tables are heavily laden with traditional maple syrup foods. After gorging on these gourmet delights, they gather outside for the usual hot maple taffy, served on a bed of fresh snow. For the true Québécois, a visit to the sugar shack in spring remains a type of pilgrimage.

Today, the production of maple syrup uses 21<sup>st</sup> century technology; however, making the syrup remains basically the same as it has for centuries. The sap is still collected in buckets, but now, a system of plastic tubing transports the sap from the trees to tanks where it is stored for distilling.

The sap’s sugar content usually ranges from 2 to 4 percent, so as much as 30-40 liters of sap must be boiled to produce one liter of syrup. The condensed product contains significant amounts of carbohydrates, potassium, and calcium as well as small amounts of iron and phosphorus. One Tablespoon contains approximately 50 calories. This pure syrup is filtered and ster-

ilized before being poured into containers. Then, it can be used to make maple sugar, maple butter, maple sugar candy, and many other delicious products.

There are many maple syrup production areas throughout Canada and the northeastern United States, and when the sugar sap is flowing, visitors are encouraged to drop by and see them. It is a time for everyone to have fun. Dancing, music, and merrymaking often enhance the hearty foods and friendly spirit that abound in these regions.

**Note:** For all the following recipes the maple syrup can be increased or decreased according to taste.



Maple Syrup Bread Pudding (page 21)

## MAPLE SYRUP SALAD DRESSING

(Serves 8)

*This tasty dressing, which keeps well in the refrigerator for up to a week, can be used with a wide variety of salads.*

- ¼ cup maple syrup
- ¼ cup olive oil
- ¼ cup vinegar
- 2 cloves crushed garlic
- 1 teaspoon fresh grated ginger
- ½ teaspoon prepared mustard
- ½ teaspoon pepper
- ¼ teaspoon salt
- ⅛ teaspoon cayenne

In a large bowl, thoroughly combine all ingredients. Then, pour over salads right before serving. Store leftover dressing in a closed container and refrigerate.

Total calories per serving: 88    Fat: 7 grams  
Carbohydrates: 7 grams    Protein: <1 gram  
Sodium: 78 milligrams    Fiber: <1 gram

## SWEET CABBAGE AND APPLE SALAD

(Serves 6)

*Different from ordinary salads, this dish is both succulent and satisfying.*

- 3 Tablespoons olive oil
- 1 medium onion, thinly sliced
- 1 large apple, cored and finely chopped
- 4 cups shredded cabbage
- ⅓ cup water
- 4 Tablespoons maple syrup
- 3 Tablespoons vinegar
- ½ teaspoon salt
- ½ teaspoon pepper
- ½ teaspoon ground ginger

Heat oil in a saucepan and then sauté onions and apples over

medium-low heat for 10 minutes. Stir in the remaining ingredients. Lower heat, cover, and simmer for 15 minutes, stirring a few times. Serve hot or cold as a salad or entrée.

Total calories per serving: 136    Fat: 7 grams  
Carbohydrates: 19 grams    Protein: 1 gram  
Sodium: 204 milligrams    Fiber: 2 grams

## BAKED BEANS WITH MAPLE SYRUP

(Serves 6)

*White beans cooked this way with vegetables, herbs, and spices are quite tasty.*

### THE NIGHT BEFORE

- ½ teaspoon baking soda
- ½ cups water to cover beans
- 1½ cups white beans

Dissolve baking soda in water. Add beans and allow to soak overnight.

### THE DAY YOU PREPARE THE BEANS

- 8 cups water
- 1 large onion, finely chopped

- 4 cloves garlic, crushed
- 2 large sweet red peppers, deseeded and chopped
- 2 cups chopped mushrooms
- 4 Tablespoons tomato paste, blended with ½ cup water
- ½ cup maple syrup
- 1 teaspoon salt
- 1 teaspoon dry mustard
- 1 teaspoon cumin
- 1 teaspoon coriander powder
- ½ teaspoon pepper
- ¼ teaspoon cayenne

Drain and rinse the beans. Place beans, along with the fresh water, in a saucepan and bring to a boil. Cover and cook over medium-low heat for 1 hour or until beans are half cooked (still semi-hard).

Preheat oven to 350 degrees. Transfer beans, with their water, to a casserole dish and then stir in the remaining ingredients. Cover and bake for 3-4 hours or until beans are well-cooked, checking occasionally and adding more water if necessary.

Total calories per serving: 280    Fat: 1 gram  
Carbohydrates: 58 grams    Protein: 14 grams  
Sodium: 513 milligrams    Fiber: 10 grams



Baked Beans with Maple Syrup

## LENTILS WITH MAPLE SYRUP

(Serves 8)

*Simple to prepare, this recipe can be served with cooked rice or mashed potatoes.*

- 1½ cups lentils
- 4 cups water
- 2 medium potatoes, diced into ½-inch cubes
- 2 medium carrots, finely chopped
- 1 medium onion, finely chopped
- 4 cloves garlic, crushed
- 4 Tablespoons tomato paste, blended with ½ cup water
- 6 Tablespoons maple syrup
- 2 Tablespoons soy sauce
- 2 Tablespoons olive oil
- 1 teaspoon ground ginger
- 1 teaspoon cumin
- 1 teaspoon dried marjoram
- ½ teaspoon salt
- ½ teaspoon pepper
- ¼ teaspoon cayenne

Preheat oven to 350 degrees.

Place all ingredients in a casserole dish and stir. Cover and bake for 1½ hours or until lentils are well-cooked, checking a few times and adding more water if necessary. Serve hot from the casserole dish.

Total calories per serving: 256    Fat: 4 grams  
Carbohydrates: 45 grams    Protein: 12 grams  
Sodium: 422 milligrams    Fiber: 13 grams

## MAPLE CARROTS

(Serves 4)

*This dish is popular in Morocco, but it is usually made with sugar or honey instead of maple syrup.*

- 4 Tablespoons maple syrup
- 2 Tablespoons orange juice
- ¼ teaspoon salt
- 1 pound carrots, sliced into ⅛-inch thick rounds
- Water to cover carrots
- ¼ teaspoon ground ginger
- ¼ teaspoon cumin

In a small non-reactive bowl, combine maple syrup, orange juice, and salt. Set aside.

Place carrots in a medium-sized saucepan, cover with water, and cook over medium heat for 20 minutes or until carrots are tender. Drain and stir in maple syrup mixture. Allow to simmer, uncovered, over low heat for 5 minutes, stirring occasionally.

Place carrots in a serving dish. Sprinkle with ginger and cumin before serving.

Total calories per serving: 105    Fat: <1 gram  
Carbohydrates: 26 grams    Protein: 1 gram  
Sodium: 187 milligrams    Fiber: 3 grams

## SQUASH BAKED IN MAPLE SYRUP

(Serves 6)

*Excellent when served with cooked rice or mashed potatoes.*

- 2 pounds peeled acorn squash, sliced into 1-inch slices
- ½ cup maple syrup
- ¼ cup water
- 2 Tablespoons vegetable oil
- 2 Tablespoons lemon juice
- 4 cloves garlic, crushed
- 1½ teaspoons salt
- 1 teaspoon oregano
- ½ teaspoon pepper
- ½ teaspoon ginger
- Pinch cayenne

Preheat oven to 350 degrees.

Place squash in a shallow casserole dish. In a small bowl, combine the remaining ingredients and then pour over the squash. Bake, uncovered, for 1 hour or until squash is well-cooked, turning the squash pieces over once during that time.

Serve hot from the casserole, along with a bit of the liquid.



Squash Baked in Maple Syrup



Total calories per serving: 175 Fat: 5 grams  
Carbohydrates: 35 grams Protein: 1 gram  
Sodium: 590 milligrams Fiber: <1 gram

## TOFU CREAM DESSERT

(Serves 5)

*This dish is simple to prepare and makes a healthy treat.*

1 pound soft tofu, drained  
½ cup maple syrup  
1 Tablespoon lemon juice  
1 teaspoon lemon rind  
2 teaspoons vanilla extract  
¼ teaspoon ground cloves

Place all ingredients in a blender and blend until creamy, approximately 5 minutes. Chill and serve with **Almond Sauce** below, if desired.

Total calories per serving: 149 Fat: 3 grams  
Carbohydrates: 24 grams Protein: 7 grams  
Sodium: 9 milligrams Fiber: <1 gram

## ALMOND SAUCE

(Makes approximately 2 cups or sixteen 2-Tablespoon servings)

*This sauce makes a fine replacement for whipping cream. Use it for pies, soy ice cream, and other treats.*

1½ cups blanched almonds  
1 cup water  
6 Tablespoons maple syrup  
½ teaspoon vanilla  
½ teaspoon almond extract  
¼ teaspoon cloves  
¼ teaspoon cinnamon

Place all ingredients in a blender and blend for 4 minutes or until very smooth, adding a little more water if necessary. Store in the refrigerator and then use as a topping for desserts, such as the **Tofu Cream Dessert**.

Total calories per serving: 100 Fat: 7 grams  
Carbohydrates: 8 grams Protein: 3 grams  
Sodium: 2 milligrams Fiber: 1 gram

## SWEET MAPLE SYRUP BALLS

(Makes approximately 3 dozen balls)

*This type of dessert is prepared in various ways throughout many different countries, especially in Asia.*

One 1¼-ounce package dry yeast  
1 teaspoon sugar (Use your favorite vegan variety.)  
2¼ cups warm water, divided  
2 cups flour  
4 Tablespoons cornstarch  
½ teaspoon salt  
1½ cups maple syrup, mixed with ½ cup water  
Approximately 2 cups cooking oil

In a small bowl, dissolve dry yeast and sugar in ¼ cup warm water. Allow to stand for 10 minutes.

Combine flour, cornstarch, and salt in a mixing bowl. Pour in yeast-water mixture and mix well. Add remaining water and then stir until mixture resembles the texture of pancake batter, adding more flour or water if necessary. Cover and set aside for 1 hour.

In a small saucepan, heat maple syrup until warm. Set aside, but keep warm.

Pour oil into a medium saucepan and heat. Drop batter, 1 Tablespoon at a time, into the hot oil to make several balls. Cook over medium heat until balls turn light brown. Remove balls with a slotted spoon and drop into the warm syrup. Repeat until all the batter has been used.

Remove balls from syrup with a slotted spoon, drain, and arrange them on a serving platter. The

balls are best served soon after frying.

**Note:** The fat content of this recipe will vary depending on the type of oil used, cooking temperature and time, and other factors.

Total calories per ball: 77 Fat: 1 gram  
Carbohydrates: 16 grams Protein: 1 gram  
Sodium: 34 milligrams Fiber: <1 gram

## MAPLE SYRUP BREAD PUDDING

(Serves 6)

*For a sweeter dish, drizzle additional maple syrup to taste on top of the cooked pudding.*

Nonhydrogenated vegan margarine to prepare casserole dish  
2 Tablespoons olive oil  
2 packed cups small bread cubes  
1½ cups soy milk  
1 cup maple syrup  
2 Tablespoons cornstarch, dissolved in 4 Tablespoons water  
1 teaspoon vanilla  
½ teaspoon nutmeg  
¼ teaspoon ground cloves  
½ cup raisins

Preheat oven to 350 degrees.

Lightly grease an 8-inch square casserole or baking dish. Then, combine all remaining ingredients in dish. Bake, uncovered, for approximately 50 minutes or until top lightly browns. Serve hot from the casserole dish.

Total calories per serving: 286 Fat: 6 grams  
Carbohydrates: 56 grams Protein: 3 grams  
Sodium: 100 milligrams Fiber: 2 grams

Habeeb Salloum is a regular contributor to *Vegetarian Journal* and the author of *Arab Cooking on a Saskatchewan Homestead: Recipes and Recollections*.

# The Vegetarian Solution to Water Pollution

Based on the United Nations Report  
“Livestock’s Long Shadow”

By VRG Research Director Jeanne Yacoubou, MS

**I**N 2006, THE UNITED NATIONS RELEASED A report assessing livestock raising and its impact on the environment. Henning Steinfeld, senior author of this report, announced, “Livestock are one of the most significant contributors to today’s most serious environmental problems. . . . Urgent action is required to remedy the situation.”

*Livestock’s Long Shadow: Environmental Issues and Options* represents a breakthrough in the literature on animal agriculture as it relates to environmental issues. This report directly establishes and quantifies cause-effect relationships between livestock production and environmental problems on a problem-by-problem basis on a global level. With *Livestock’s Long Shadow*, an international body clearly shows the connection between diet and major environmental problems.

“Livestock are one of the most significant contributors to today’s most serious environmental problems.... Urgent action is required to remedy the situation.”

In light of a projection that global meat production will more than double by 2050, *Livestock’s Long Shadow* warns, “The environmental costs per unit of livestock production must be cut by one half, just to avoid increasing the level of damage beyond its present level.” In June 2008, Yvo de Boer, head of the United

Nations Framework Convention on Climate Change (UNFCCC), summed up a way to solve this problem quickly. He said, “The best solution would be for us all to become vegetarians.”

In this *Vegetarian Journal* article, The Vegetarian Resource Group (VRG) examines the information covered in *Livestock’s Long Shadow*, Chapter Four, which is titled “Livestock’s Role in Water Depletion and Pollution.”

## WATER USAGE, FROM START TO FINISH, IN THE LIVES OF ANIMALS

The U.N. notes that most decision-makers work under the assumption that a very small estimate (<1 percent) of all freshwater is used by livestock (mostly for drinking). The report asserts that this is “a considerable underestimate” of the actual amounts that raising livestock, both directly and indirectly, uses over all stages of production. Besides water for drinking and servicing animals (e.g., cleaning and cooling facilities, washing animals, and flushing waste), there are many other ways that livestock production uses water. The major ones include slaughtering, meat and milk processing, and leather tanning, all of which “result in high water usage and consequently high wastewater generation.”

The major *indirect* water use in livestock production is irrigation water, which is used to grow the feedcrops that support animal agriculture. Taking this indirect water use into consideration, the U.N. report cited estimates “that the livestock sector may account for some 45 percent of the global budget of water used in food production.”

## TYPES OF WATER POLLUTION THAT ANIMAL AGRICULTURE GENERATES

Most of the freshwater that the livestock industry uses goes back into the environment as manure and wastewater (pollution). Pollution is divided into two groups: 'point' and 'non-point' source pollution.

### Point Source Pollution

Point source pollution usually comes from a discharge pipe and goes directly into a waterway. *Livestock's Long Shadow* states that intensive animal production is becoming commonplace all over the world. Operations concentrate large numbers of animals into small areas that cannot support their cultivation. In developed countries such as the United States, where regulations may exist, "rules are often circumvented or violated." In developing countries where most intensive animal operations are close to cities, direct discharge of animal wastes into waterways is very common. If regulations are in place, they are often not enforced. As a result, the lack of data makes a global assessment of livestock-generated point source pollution impossible.

Livestock processing at slaughterhouses pollutes water locally through direct discharge of wastewater into waterways or through surface runoff. This is true especially in developing countries because slaughterhouses are usually located in populated areas without appropriate rendering and waste treatment facilities.

### Non-Point Source Pollution

Non-point source pollution is spread over a wide area (e.g., manure spreading on fields). The 'principal' non-point source water pollutant related to agriculture is soil erosion, such as through hoof and grazing impacts on pastures and rangelands. Each year, erosion sends 25 billion tons of sediments into waterways, and the sediments are not replaced easily or quickly. (Natural replacement takes hundreds of years.) Without rich or sufficient topsoil, farmers begin a cycle of adding chemical fertilizers to get what soil they do have to produce high grain yields. In the process, they end up destroying the land even further.

Nutrients and chemicals reach waterways by leaching, surface runoff, and soil erosion. Estimates of the costs needed to correct some of the problems (e.g., controlling erosion or removing nitrates from drinking water) range in the millions or even billions of dollars every year.

Both point source pollution and non-point source pollution contain large amounts of substances that were not initially present in the water before it was used for agricultural purposes. These substances include nutrients (especially nitrogen and phosphorus, which are chemicals often found in fertilizers), disease-causing agents (such as bacteria), drug residues, and heavy metals (e.g., lead).

Water may be contaminated with large amounts of nitrogen and phosphorus when fertilizer is applied to fields. In addition, the U.N. report points out that approximately 75 percent of the nitrogen and phosphorus that farm animals eat they eventually excrete as waste. The report estimates that, each year, grazing cattle add millions of tons of nitrogen and phosphorus to the environment through their manure. This value is "greatly underestimated" because it represents only "pure" grazing systems, not systems where livestock spend part of the year on feedlots.

Both fertilizer and animal waste introduce a huge surplus of these nutrients into an environment that cannot easily handle them. These excesses degrade surface water (e.g., streams and lakes) as well as groundwater (e.g., wells). Fresh waterways become damaged or die because too much algae form on their surfaces. In addition, high levels of nitrogen in water, in the form of nitrates, are known public health hazards. In the United States, 4.5 million people drink well water containing nitrates above the accepted standards. Other public health hazards include large numbers of bacteria (e.g., *Salmonella* and *E. coli*), viruses, and parasites.

Drug residues, especially antibiotics and hormones found in manure and wastewater, also contaminate freshwater. *Livestock's Long Shadow* states that at least half of all antibiotics produced in the United States is used on animals and that 80 percent of antibiotics used in the livestock industry is administered for disease prevention and growth promotion. The animals who drink the contaminated fresh water and even the humans who consume resulting meat products can develop a bacterial resistance. This renders antibiotics ineffective when sick animals or people really need them. Furthermore, hormones, which are commonly released into the environment through manure and wastewater, have negative effects in wildlife, including sex reversals in fish, and contribute to higher rates of certain cancers in both wildlife and humans.



## LIVESTOCK'S USE OF LAND IMPACTS THE WATER CYCLE

There are two major ways by which animal agriculture influences the water cycle (i.e., the never-ending movement of water on, above, and below the earth as vapor, rain/snow, or liquid water):

- Extensive grazing is responsible for degrading 70 percent of rangelands throughout the world. The degradation occurs when the animals repeatedly trample the earth and lowers the amount of water available throughout the region. Grazing also negatively influences the natural vegetation, reducing the number of plant types as well as their quantity.
- Land conversion heavily influences the water cycle. The livestock sector is responsible for converting large areas of pasture into land used to grow feedcrops and for clear-cutting forests to make way for feedcrops. This has happened in the Amazon basin in South America. Global rainfall patterns are likewise affected.

## POSSIBLE WAYS TO REDUCE WATER POLLUTION CAUSED BY LIVESTOCK

The U.N. report describes several approaches that could result in reducing water pollution caused by livestock production. Some of these include the following:

- Improving irrigation efficiency (i.e., less irrigation water is wasted)
- Boosting water productivity (e.g., increasing crop yield)
- Improving waste management through technological options (e.g., using readily absorbable feed ingredients that aren't excreted or enzyme/vitamin supplementation)
- Improving manure collection processes (e.g., better animal housing design, manure storage, and manure processing improvements)
- Improving manure utilization practices (e.g., timely manure dosing on farmland done in accordance with crop requirements)
- Properly controlling grazing season

Chapter 4 of *Livestock's Long Shadow* concludes by pointing out that these technical options are not widely applied. Since they are long-term solutions, they are not viewed by the livestock industry as "cost effective." The report calls for a policy framework of environmental standards by which the listed strategies could be effective.

In Chapter 6, titled "Policy Challenges and Options," the report suggests better ways of using water, such as introducing full-cost pricing for water

## Analyzing Hidden Costs of Confined Animal Feeding Operations

In April 2008, the Union of Concerned Scientists (UCS) published a comprehensive report on confined animal feeding operations (CAFOs) titled *CAFOs Uncovered: The Untold Costs of Confined Animal Feeding Operations*. It examined ways of reducing the impact of animal agriculture on water. The Pew Commission on Industrial Farm Animal Production, funded by the Pew Charitable Trusts, published a similar document titled *Putting Meat on the Table: Industrial Farm Animal Production (IFAP) in America* in May 2008. Both of these documents generally followed *Livestock's Long Shadow* in scope but analyzed the problem on a national level rather than on a global scale.

All three of the reports are alike in that animal agriculture is identified as a major source of water

pollution and depletion. They differ with regard to the amount of importance placed (1) on various ways of reducing water pollution most effectively and maintaining a clean water supply most sustainably, and (2) on reasons given as to why animal agriculture has become such an intensive business. For instance, the UCS report shows that the confinement system is "driven ... by the market power held by large processors" and "deliberate government policies that cost taxpayers billions every year." On the other hand, the Pew report "firmly believes that many of the problems associated with IFAP are unintentional." Because of differing premises, the two U.S. reports reach somewhat different conclusions.

(i.e., no free or reduced-cost water, especially to the agricultural industry) and taxes to discourage large-scale livestock concentration close to cities. It also advises the removal of “perverse” subsidies that devalue water, the development of legal water rights, and the development of an economic water market. Included among the proposals for better water pollution control are the establishment of water quality standards and enforced control measures, as well as the decentralized industrial production of livestock (i.e., fewer large operations).

#### PROBABLE CONSEQUENCES DISCUSSED IN *LIVESTOCK'S LONG SHADOW*

The U.N. report shows that livestock's contribution to water scarcity and pollution is “on a massive scale”; it, as well as all major environmental issues, “needs to be addressed with urgency.” However, the report asserts that the damage that livestock production does to water, and to all of our natural resources, can be only “partially offset” by scientific knowledge and technological capability.

The report states that “ultimately environmental issues are social issues.” It discusses how future generations and even the survival of the planet as a whole depend on how countries negotiate and allocate “common” resources, such as water that runs through two or more countries and thereby serves as grounds for political and legal conflicts, especially in times of water scarcity and pollution. The Food and Agriculture Organization (FAO) predicts that two-thirds of the global population will face water shortages by 2025. That's more than today's 1.2 billion people who live in areas with insufficient and/or polluted water.

#### HOW INDIVIDUALS CAN REDUCE THEIR ENVIRONMENTAL IMPACT THROUGH THEIR DIET AS SUGGESTED IN THE U.N. REPORT

*Livestock's Long Shadow* discusses the marked increase in meat and milk consumption, often as fast food, among people with rising incomes, and these consumption patterns have been observed throughout the world. Increasing urbanization has led to more industrial production of animals, has placed larger demands on natural resources in more concentrated areas, and has created waste disposal issues on a grand scale.

This discussion leads the report's authors to make direct and indirect references to vegetarianism as an answer to the escalating environmental problems that animal agriculture has created. Even the “Introduction” to the report states that consumers are “increasingly influenced by growing concerns about health, the

environment, ethical, animal welfare, and development issues. ... A class of ‘concerned consumers’ has emerged who tend to reduce their consumption of livestock food products. ... The growing trend towards vegetarianism ... is another manifestation of this trend.”

The authors elaborate further on this point in Chapter 6. In that chapter's last paragraph, they state, “A different pathway to addressing the environmental impact of feedcrop production is to reduce demand.”

Nevertheless, the report, rather than developing the idea that an increase in plant-based diets would reduce demand for livestock production and the crops used to feed livestock, discusses feed efficiency technologies and trade barriers. Absent is a discussion of how much these proposed remedies will cost or who should pay for them. However, it should be noted that the FAO Director-General, Jacques Diouf, has recently called for a minimum of \$30 billion per year for “global agricultural restructuring.”

The FAO predicts that two-thirds  
of the global population will face  
water shortages by 2025.

The final chapter of *Livestock's Long Shadow*, titled “Summary and Conclusions,” clearly advocates the “reduction in demand.” It states, “While not being addressed by this assessment, it may well be argued that environmental damage by livestock may be significantly reduced by lowering excessive consumption of livestock products among wealthy people. International and national public institutions (e.g., the World Health Organization) have consistently recommended lower intakes of animal fat and red meat in most developed countries.”

The last chapter also asserts a conclusion often discussed by those who argue for vegetarianism based on world hunger concerns: “Livestock actually detract more from total food supply than they provide. Livestock now consume more human edible protein than they produce. ... As the livestock sector moves away from using feed ... that has no alternative value towards using crops and other high value inputs, it enters into competition with food ... it raises overall demand and prices for crops and agricultural inputs.”

In addition, the report directly and positively refers to vegetarianism as a solution to the environmental problems propagated by animal agriculture. It suggests that vegetarianism and eco-labeling are “reasons for

optimism that the conflicting demands for animal products and environmental services can be reconciled. ... The relatively affluent, middle- to high-level income class, which is no longer confined to industrialized countries ... is probably ready to use its growing voice to exert pressure for change and may be willing to absorb the inevitable price increases. The development of markets for organic products and other forms of eco-labeling are precursors of this trend, as are the tendency towards vegetarianism within developed countries and the trend towards healthier diets.”

*Livestock's Long Shadow* is not telling everyone to be vegan. However, in light of the report's conclusions,

some who advocate vegetarianism may call for the *elimination* of most or all animal food products as a way to solve our environmental problems. These people would agree with Rajendra Pachauri, the Chairman of the Nobel Prize-winning Intergovernmental Panel on Climate Change (IPCC). In September 2007, he was asked, “What do you personally do for climate protection?” He responded, “I have become a vegetarian.”

Jeanne Yacoubou is Research Director for The Vegetarian Resource Group. She holds master's degrees in philosophy, chemistry, and education.

## Calculating Water Footprints

David Pimentel, Ph.D., is professor of ecology and agricultural science at Cornell University. In 2008, he and his wife Marcia, a lecturer in nutrition at Cornell, published the third edition of *Food, Energy, and Society*, a book considered by many to be one of the best for information linking overpopulation, energy requirements, and food production.

Pimentel states that, in the U.S. every year, 253 million tons of grain are fed to livestock, requiring a total of  $250 \times 10^{12}$  (250 trillion) liters of water. This would be like filling up 100 million Olympic-

sized swimming pools. (Global figures are three times higher for both grain and water.)

“The amount of grain fed to U.S. livestock [annually] is sufficient to feed 840 million people who are plant-based vegetarians,” Pimentel states. The U.S. population is currently approximately 301 million people.

The table below, based on Pimentel's work, contains other estimated amounts of water required to produce crops and livestock.

Table 1 — Water (L/kg) Used to Produce Crops and Livestock

CROP OR LIVESTOCK	WATER USED (L/KG)	CROP OR LIVESTOCK	WATER USED (L/KG)
Millet	272	Broiler chicken	3,500
Corn	650	Pig	6,000
Wheat	900	Beef (feedlot)	43,000
Rice	1,600	Beef (rangeland)	120,000-200,000
Soybeans	2,000	Milk	990 L/L milk

Note: One kilogram (kg) is approximately equivalent to 2.2 pounds. One liter (L) is approximately equivalent to 1.06 quarts.



## Table 2 — Major Findings of the United Nations Food and Agriculture (FAO) Report

- The livestock sector produces more greenhouse gases (18 percent), as measured in carbon dioxide equivalents, than all cars, trucks, and SUVs combined.
- The livestock sector is one of the top contributors to water pollution and land degradation.
- The livestock sector uses
  - 30 percent of the earth's entire land surface for grazing.
  - 70 percent of the earth's agricultural land to produce feed.
  - 8 percent of freshwater.
  - 37 percent of all pesticides used in the United States.
  - 50 percent of all antibiotics used in the United States.
- The livestock sector produces:
  - 65 percent of human-induced nitrous oxide, a greenhouse gas that is almost 300 times more powerful than carbon dioxide in heating up the globe.
  - 37 percent of methane, a greenhouse gas that is 23 times more powerful than carbon dioxide in heating up the globe.
  - 68 percent of human-induced ammonia, contributing significantly to acid rain.
- The livestock sector causes
  - deforestation in Latin America, responsible for 70 percent of forests cleared for grazing in the Amazon.
  - 20-70 percent of pasture degradation, resulting in overgrazing, soil loss, soil compaction, and desertification (i.e., when pasture or agricultural land becomes infertile desert).
  - 55 percent of soil erosion in the United States (global figures unavailable).

## Table 3 — Water Use and Depletion Facts: United States and World Comparisons

- Americans use 300-400 L of water/person/day.
- Eighty-three other countries report an average below 100 L of water/person/day.
- In terms of all freshwater usage in the United States, including that for irrigation of feedcrops for livestock and other crops, 5,700 L of water is used per person per day.
- Worldwide, the average water usage (including that for irrigation of food eaten), is 1,970 L of water/person/day.
- Approximately 40 percent of U.S. freshwater is unfit for recreation or as drinking water because of water pollution. (A global figure for water pollution is unavailable.)

# Rising Food Prices

## What's a Vegan to Do?

By Gail Nelson, MPH, RD

IT'S NO SECRET THAT FOOD PRICES HAVE GONE UP, and all signs point to this trend continuing. Many factors are responsible for this increase, including the surging cost of transporting food. Some may wonder if it is possible to eat a healthy vegan diet and not spend an entire paycheck. The answer is yes! In this article, I will share some strategies that have worked for my family.

My husband, two small kids, and I comprise a family of four. For the past six months, we have cut our weekly food budget by approximately \$65 (a savings of around \$280 per month). Previously, we spent around \$200 per week on groceries. At the beginning of the year, I made a commitment to spend less on groceries, and we now spend approximately \$135 per week on a nutritious, tasty, and mostly organic vegan diet. Here's how we do it:

- 1) **We order in bulk.** We eat a vegan diet full of an array of whole grains, beans, lentils, nuts, seeds, fruits, and vegetables. I buy almost nothing processed; I make most everything from scratch. Many people think this takes a lot of time, but there are some time-saving tips that make it possible. (See sidebar.)

"Some may wonder if it is possible to eat a healthy vegan diet and not spend an entire paycheck. The answer is yes!"

We order all of our bulk grains, beans, nuts, seeds, oils, vinegars, and many other products from wholesalers for food-buying clubs, such as Azure Standard, <[www.azurestandard.com](http://www.azurestandard.com)>, in eastern Oregon. (See the sidebar on page 30 for information about food-buying clubs in other locations.) We order monthly, and they deliver to several 'drop points' around town. In my basement, I have 25-pound bags of spelt berries, oat groats, black beans, garbanzo beans, pinto beans, green split peas, and kamut berries. The foods form the basis of our meals; I even grind my own flours from the whole grains and make my own peanut butter. This is good for the environment as well—25-pound bags mean a lot less packaging and waste.

- 2) **We have a weekly, rather than monthly, food budget,** and we stick to it. For years, we had a monthly food budget that we tried to follow, but for some reason, it just never worked for us. Now, I keep a notebook and record every trip to the grocery store on the day that I shop. When I've reached our weekly limit of \$135, we're done, no matter what. Often, I have several more items on my list than I have money for; I then prioritize and put items back on the shelves.

Several times, we've been out of something I consider to be a staple, but I find that, rather than this being a burden, it's an opportunity for creativity to sneak in. Once, we were out of oatmeal and our next 25-pound bag wasn't due for a couple of weeks. I went to the basement to see what was on hand. Finding grains such as quinoa, millet, rye, oat groats, and spelt berries, we breakfasted on a delicious cereal blend of six whole grains, sesame seeds, and raisins as well as waffles made with

freshly ground kamut and buckwheat flour for a couple of weeks. Now, I'm looking forward to being out of oatmeal again!

- 3) When shopping, I really look at the prices and **don't buy things that just cost too much.** Organic asparagus at \$3.99 a pound? Not going to happen. Maple syrup at \$13 a bottle? Well, we love our maple syrup on our Sunday pancakes, but we've stopped using it in baking. And I might start diluting it with water. Also, we've been using homemade strawberry syrup from berries that we picked at a local farm. In the past, spending just \$7 on something we wanted but didn't really need didn't seem like a big deal. Now that it represents 1/20<sup>th</sup> of what I can spend that week, it is a big deal.
- 4) **We've prioritized what we buy organic.** We have a list of the fruits and vegetables that are highest and lowest in pesticides, and we will buy conventional for items that are least likely to have pesticide residues at times.

- 5) **We buy local and in-season.** Not only are prices often lower, the shorter transportation distance is better for the environment. This year, we joined a Community Supported Agriculture, or CSA, and for an up-front investment of \$350, we receive a box of fresh, local produce each week for 22 weeks. (That's \$16 per week.) We also shop at our local farmers' market for good deals grown close to home.
- 6) **We garden.** A small investment in seeds and other gardening supplies produces a bounty of delicious produce for the entire summer and, in some cases, years to come.
- 7) **We preserve fruits and vegetables.** I freeze, dehydrate, and make sauces and jams using local produce purchased when prices are low and with excess produce from our garden and CSA. Right now, I have approximately 80 pounds of blueberries in our extra freezer—all from a local farm where we paid \$1.25/pound for u-pick berries or \$2/pound for the ones that have been picked. I also

## Time Saving Tips

- ◆ Cook beans in large batches (4 or more cups dried) and freeze in 3-cup containers. I like to soak beans overnight and cook them early in the morning.
- ◆ Cook double or triple batches of soups. Then, have some for lunch or dinner the next day and freeze the rest.
- ◆ Cook double or triple batches (2-3 cups dry) of grains, such as rice, millet, quinoa, oat groats, and kamut, for a multitude of uses over the course of the next few days. Use them as a base for soups or a stir-fry; to mix with legumes, veggies, and sauce for a nutritious salad; and to create a delicious, wholesome dessert with cinnamon and a sweetener.
- ◆ Keep veggies prepped and ready to add to sandwiches and salads, to sprinkle on soup for added color and nutrition, or to mix with grains, legumes, and dressing for an easy salad. Ideas: shredded carrots and cabbage, washed and chopped greens, and sliced peppers.
- ◆ Keep sauces and dressings on hand to flavor legume, grain, and vegetable dishes. Make a really quick meal with already-cooked grains, legumes, veggies, and sauce.
- ◆ Make a big batch of trail mix each week—add raisins, cranberries, walnuts, almonds, cashews, and hazelnuts. Portion into reusable containers for on-the-go snacks.
- ◆ Begin dinner preparations in the morning. If you're using grains and/or legumes, measure, rinse and drain, add fresh water, and let soak all day, with the grains and legumes in separate bowls. When it's time to make dinner, drain, add new water, and cook. Cooking time will be lessened from all-day soaking. (Note: Some grains will require less water.) Also, get out all herbs and spices in the morning so they're ready to go.
- ◆ Use a Crock-Pot® slow cooker.



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Phone number: (541) 467-2210  
Service area: Washington, Oregon, Idaho, Montana, California, Nevada, Wyoming, Utah, Arizona, North Dakota, South Dakota, Minnesota, Iowa, Nebraska, Alaska, and Hawaii
- ◆ Neshaminy Valley  
Website: [www.nvorganic.com](http://www.nvorganic.com)  
Phone number: (215) 443-5545  
Service area: Massachusetts, Connecticut, southeastern New York, New Jersey, southeastern Pennsylvania, Maryland, Delaware, Washington, D.C., and northern Virginia (as far south as Richmond)
- ◆ United Buying Clubs  
Website: [www.unitedbuyingclubs.com](http://www.unitedbuyingclubs.com)  
Phone number: (800) 522-7633 x54243  
Service area: Northeast, Midwest, and mid-Atlantic states

have several bags of frozen strawberries and approximately 25 jars of strawberry freezer jam from berries we picked. Soon, I plan to freeze peaches, nectarines, plums, tomatoes, and tomato sauce.

Using our dehydrator, I made delicious fruit leathers from local blueberries and strawberries and from last year's frozen peaches. I also dehydrated several batches of kale and collards from our garden and will add these to soups this winter. A couple of friends have promised to teach me how to can tomatoes and peaches.

We could probably save even more by shopping at large grocery outlets and by using coupons; however, in addition to saving money, we are also committed to caring for the environment, supporting local growers,

and eating a nutritious, minimally processed whole foods diet. Besides, so far, we have not found many coupons for 25-pound bags of grains and fresh fruits and vegetables!

All this probably sounds like it takes time—and it does. But it saves money, and it feels like it's worth it. It also provides richness to our lives in terms of connection to the land, to the seasons, and even to other people who are trying to do the same thing by networking for ideas, advice, and assistance. It's about priorities—I may not have the cleanest house on the block, but I know that my kids are developing an appreciation for the value of a dollar, and an understanding of where their food comes from. And that is worth it!

**Gail Nelson, MPH, RD, lives, eats, and gardens in Portland, Oregon.**

## 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.

# Essay Contest Entry

## SHARKY

By SRS, 9 yrs  
Maryland

**F**OR AS LONG AS SHARKY could remember, he ate meat. Little did he know that was all about to change.

Let's start from the beginning. "Hi, Sealeo. Have a nice summer?" asked Sharky. "Yeah," said Sealeo. "Want to play after school?" "Sure," Sharky replied.

So, after school they went outside to play. Just as they started to have fun, Sharky's mom called, "SHARKY." "Coming," Sharky replied in an annoyed voice. "You too, Sealeo," came a sudden call from Sealeo's mom. "Mom, why did you come so early?" complained Sharky. "It's salmon season. The salmon are passing by during their migration," replied Sharky's mom. So Sharky went home.

When he got home his father said, "D' you want to go salmon hunting with me?" "Okay," said Sharky. Outside there was a swarm of salmon. The swarm was swimming so fast that you could die if you got hit. Sharky and his father were skilled and would not get hit. "There's a big one," said Sharky. Sharky swam up to catch it and then he bit. It started to cry. It was Sealeo. "I'm so sorry," said Sharky. Sealeo swam home crying. "I'm never hunting again," screamed Sharky.

After a couple of minutes, Sharky had decided to

become a vegetarian. The next day, when Sharky went to school, he told Sealeo that he was sorry. But Sealeo was too sad to talk.

At lunch Sharky decided to have a kelp (seaweed) sandwich. The other kids had fish sticks and electric eel lo mein. After school Sharky sadly walked over to Sealeo's house. Sealeo was really depressed and Sharky felt really bad. "If it makes you feel any better, I stopped eating meat," said Sharky.

"At lunch Sharky decided to have a kelp sandwich. The other kids had fish sticks and electric eel lo mein."

"Sealeo, will you forgive me for biting you?" Sharky apologetically asked. "Of course," replied Sealeo forgivingly (as they munched their kelp sandwiches).

*SRS is not an official participant in Vegetarian Journal's essay contest because of a conflict of interest. If you are interested in vegan fish recipes, see Nancy Berkoff's Vegan Seafood book in The VRG catalog (page 34) or visit <[www.vrg.org/catalog/veganseafood.htm](http://www.vrg.org/catalog/veganseafood.htm)>.*

## ANNUAL ESSAY CONTEST RULES

To enter VRG's annual essay contest, just write a 2-3 page essay on any aspect of vegetarianism or veganism. There are three entry categories: ages 14-18, ages 9-13, and age 8 and younger. Winners will each receive a \$50 savings bond.

All entries must be postmarked by May 1, 2009, for this year's contest. Entrants should base their entries on interviews, personal experience, research, and/or personal opinion. You need not be vegetarian to enter. All essays become property of The Vegetarian Resource Group. Only winners will be notified.

*Send entries to:*

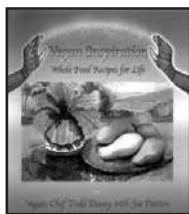
The Vegetarian Resource Group, P.O. Box 1463, Baltimore, MD 21203

Please make sure to include your name, age, address, phone number, school, and teacher's name.

# reviews

## VEGAN INSPIRATION

By Chef Todd Dacey  
with Jia Patton



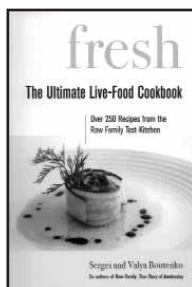
*Vegan Inspiration* is worth purchasing for its creative vegan recipes from many cultures. Try Tempeh Thai Vegetable Salad, Raw Avocado Soup, Spiced Kale, Curried Potato 'Fries,' Indian Pilaf, Quinoa Black Bean Enchiladas, Sesame Butternut Curry, Coconut Carrot Ginger Cookies, Pineapple Date Muffins, Mango Mousse Dream Pie, and so much more.

Throughout the book you'll find many interesting quotations. Please note that nutritional analyses are not provided, although most recipes do not appear to be high in fat.

*Vegan Inspiration* (ISBN 978-1-57733-216-9) is 200 pages and published by Blue Dolphin Publishing. The book retails for \$22.95 and can be ordered online or in your local bookstore. Reviewed by Debra Wasserman.

## FRESH: THE ULTIMATE LIVE-FOOD COOKBOOK

By Sergei and  
Valya Boutenko



*Fresh* features more than 250 dishes (most of which are vegan, except for a few that call for honey) prepared without heating or processing and preferably with organic produce. In general, the recipes contain few ingredients and can be prepared rather quickly.

Among the appetizers and finger foods you'll find interesting options such as Fresh Salad Rolls (tomatoes, onions, cashews, thyme, and olive oil wrapped in romaine lettuce leaves), Cranberry-Almond Carrot Salad (made with carrots, fresh basil, dried cranberries, crushed almonds, olive oil, and lemon juice), and Savoy Cabbage Salad (with savoy cabbage, Fuji apples, and raw cashews).

Entrées include Nori Rolls (made with walnuts, sunflower seeds, garlic, celery, olive oil, lemon juice, lemon grass, avocado, bell peppers, scallions, and nori) and Turkeyless Turkey (creatively prepared with almonds, walnuts, carrots, onions, raisins, caraway seeds, and coconut oil).

The desserts are incredible and range from Mango Pudding Pie (with a crust made from pistachios, dried mulberries, and lemon juice and a cream from blended mangos) to Valya's Secret Gooseberry Cheesecake (with a crust made from almond pulp, agave nectar, and gooseberries) to Piña Colada Bars (prepared with coconut flakes, macadamia nuts, dried pineapple, raisins, and vanilla). You'll also want to sample one of the many smoothie combinations offered.

There is a chapter on marinated and fermented foods with recipes for Kimchi, Pickled Zucchini and Eggplant, and Sauerkraut. In addition, there's another chapter that covers travel foods and wild edibles and provides terrific recipes for crackers, snack mixes, and more.

*Fresh* includes several color photos and a glossary. Nutritional analyses are not provided, and many of the dishes are not lowfat.

*Fresh* (ISBN 978-1-55643-708-3) is 216 pages and published by North Atlantic Books. Look for this book online or in your local bookstore. Reviewed by Debra Wasserman.

## VEGETARIAN LONDON 2008

By Alex Bourke



*Vegetarian London* is an essential purchase for any vegetarian or vegan planning to visit London. A few years ago, we used an earlier edition of this book to find a restaurant featuring vegan organic foods, a vegetarian fast food café, a fantastic falafel bar, and a very veg-friendly health foods shop.

Whether you're in London for a few days or for much longer, the sixth edition of *Vegetarian London* will help you decide which of the 145 vegetarian restaurants (25 of which are vegan) you'll patronize. The guide also includes 200 more veggie-friendly cafés and restaurants. Maps and cross-references (such as places that carry organically produced food and child-friendly restaurants) make this book extraordinarily useful.

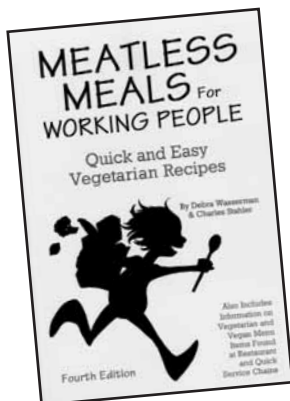
*Vegetarian London* also includes listings for natural foods stores, hotels and guest houses, vegetarian festivals, and shoe shopping. In short, this is a complete guide to vegetarian living in London.

*Vegetarian London 2008 (6th Edition)* (ISBN 978-1-902259-08-6) is published by Vegetarian Guides. It has 440 pages and retails for \$19.95. Visit <[www.vegetarianguides.co.uk/products/vegetarianlondon.shtml](http://www.vegetarianguides.co.uk/products/vegetarianlondon.shtml)> to learn how to purchase a copy. Reviewed by Reed Mangels, PhD, RD.

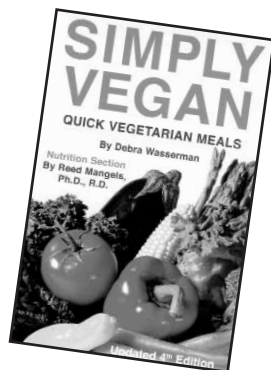


# VRG Catalog

## Books

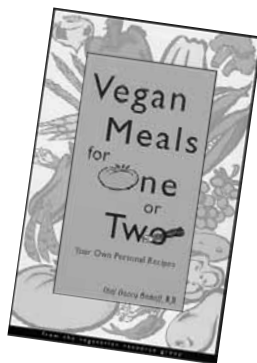


**Meatless Meals for Working People—Quick and Easy Vegetarian Recipes** (\$12) by Debra Wasserman. We recommend using whole grains and fresh vegetables. However, for the busy working person, this isn't always possible. This 192-page book contains over 100 fast and easy recipes and tells you how to be a vegetarian within your hectic schedule using common, convenient foods. Spice chart, low-cost meal plans, party ideas, information on fast food restaurants, soy dishes, and more. Over 90,000 copies in print.



**Simply Vegan** (\$14.95) by Debra Wasserman and Reed Mangels, PhD, RD. These 224 pages contain over 160 quick and easy vegan recipes, a complete vegan nutrition section, and a list of where to mail order vegan food, clothing, cosmetics, and household products. Vegan menus and meal plans. Over 85,000 copies sold.

**Conveniently Vegan** (\$15) by Debra Wasserman. Prepare meals with all the natural foods products found in stores today, including soymilk, tempeh, tofu, veggie hot dogs, ... You'll find 150 recipes using convenience foods (including canned beans) along with grains, fresh fruits, and vegetables. Menu ideas, product sources, and food definitions included. (208 pp.)



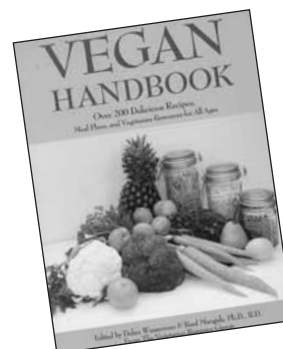
**Vegan Meals for One or Two—Your Own Personal Recipes** (\$15) by Nancy Berkoff, RD. Whether you live alone, are a couple, or are the only one in your household who is vegetarian, this 216-page book is for you. Each recipe is written to serve one or two people and is designed so that you can realistically use ingredients the way they come packaged from the store. Information on meal planning and shopping is included, as well as breakfast ideas, one-pot wonders, recipes that can be frozen for later use, grab-and-go suggestions, everyday and special occasion entrées, plus desserts and snacks. A glossary is also provided.

**Vegan in Volume** (\$20) by Nancy Berkoff, RD. This 272-page quantity cookbook is loaded with terrific recipes serving 25. Suitable for catered events, college food services, restaurants, parties in your own home, weddings, and much more.

**No Cholesterol Passover Recipes** (\$9) by Debra Wasserman. Includes 100 eggless and dairyless recipes. Seder plate ideas. (96 pp.)

**The Lowfat Jewish Vegetarian Cookbook—Healthy Traditions From Around the World** (\$15) by Debra Wasserman. Over 150 lowfat international vegan recipes with nutritional breakdowns, including Romanian Apricot Dumplings, Pumpernickel Bread, Russian Flat Bread, Potato Knishes, North African Barley Pudding, and much more. Menu suggestions and holiday recipes. (224 pp.)

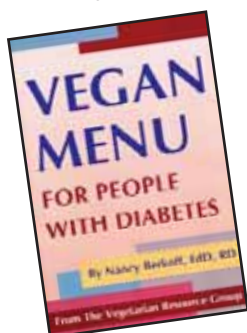
**Vegan Passover Recipes** (\$6) by Chef Nancy Berkoff, RD. This 48-page booklet features vegan soups and salads, side dishes and sauces, entrées, desserts, and dishes you can prepare in a microwave during Passover. All the recipes follow Ashkenazi Jewish traditions and are pareve.



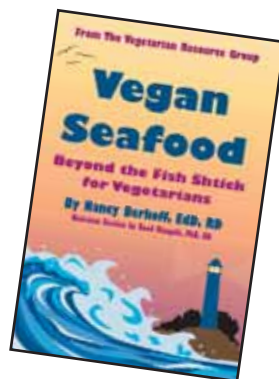
**Vegan Handbook** (\$20) edited by Debra Wasserman and Reed Mangels, PhD, RD. Over 200 vegan recipes and vegetarian resources. Includes sports nutrition, seniors' guide, feeding vegan children, recipes for egg-free cakes and vegan pancakes, Thanksgiving ideas, vegetarian history, menus, and more. (256 pp.)

**Vegan Microwave Cookbook** (\$16.95) by Chef Nancy Berkoff, RD. This 288-page cookbook contains 165 recipes, some of which take less than 10 minutes to cook. It also includes information for converting traditional recipes to the microwave, microwave baking and desserts, making breakfasts in a snap, and suggestions and recipes for holidays and parties.

*Vegetarian Journal's Guide to Natural Foods Restaurants in the U.S. and Canada* (\$18). Whether you're traveling on business or planning a much-needed vacation, this book is certain to make your dining experiences better. This fourth edition lists more than 2,200 restaurants, vacation spots, and local vegetarian groups to contact for more info about dining in their areas. (448 pp.)



*Vegan Menu for People with Diabetes* (\$10) by Nancy Berkoff, EdD, RD. This 96-page book gives people with (or at risk for) diabetes a four-week meal plan, exchange listings for meat substitutes and soy products, and recipes for enjoyable dishes, such as Creamy Carrot Soup, Tangy Tofu Salad, Baked Bean Quesadillas, and French Toast.



*Vegan Seafood: Beyond the Fish Shtick for Vegetarians* (\$12) by Nancy Berkoff, EdD, RD. Nancy Berkoff has created these unique and good-tasting vegan fish and seafood dishes. After using this book, you'll agree with millions of vegetarians who say: Sea Animals—Don't Eat Them! Inside these 96 pages you will find sections about cooking with vegan 'fish,' 'seafood' stocks and sauces, websites offering vegan 'seafood' products, and info about omega-3 fatty acids for vegans. Avoid fish but still enjoy the taste of the sea with 'Fish' Sticks, Ethiopian-Style 'Shrimp' and Sweet Potato Stew, 'Crab' Rangoon, 'Tuna' Salad, Gefilte 'Fish,' 'Spicy 'Fish' Cakes, and much more!

## For Children and Teens

*Leprechaun Cake and Other Tales* (\$5) by Vonnie Crist, recipes by Debra Wasserman. Vegan story/cookbook for children ages 8-11, with glossary of cooking terms. (128 pp.) Slightly damaged cover.

*The Soup to Nuts Natural Foods Coloring Book* (\$3) by Ellen Sue Spivak.

*The Teen's Vegetarian Cookbook* (\$9.99) by Judy Krizmanic. This book is packed with health info, easy recipes, college cuisine, glossary terms, and more. (186 pp.)

## Bumper Stickers

**Bumper Stickers** (\$1 each, 10 + \$ .50 each)  
 "Be Kind to Animals—Don't Eat Them"  
 "Vegetarians Are Sprouting Up All Over"

## Vegetarian Journal

*Vegetarian Journal* subscriptions are \$20 per year in the U.S., \$32 in Canada/Mexico, and \$42 in other countries.

## Reprints from *Vegetarian Journal*

Non-Leather Shoes, Belts, Bags, etc. (\$5)  
 Guide to Food Ingredients (\$6)

## Order Form

To order, mail to The Vegetarian Resource Group, P.O. Box 1463, Baltimore, MD 21203; place your order over the phone Mon-Fri 9 a.m. to 5 p.m. Eastern time at (410) 366-8343; fax your order form to (410) 366-8804; or order online at our website <[www.vrg.org](http://www.vrg.org)>.

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# Vegetarian Action

## Phil Becker By Bobby Allyn

**I**N 1985, PHIL BECKER RECEIVED A MAILING FROM TransSpecies Unlimited, inviting him to a vegetarian Summerfest in Allentown, Pennsylvania. Becker graduated from Penn State in 1983, but he never got involved with the campus animal rights group while he was an engineering student there. His decision to attend the North American Vegetarian Society Summerfest radically changed his world view. It was a precursor to a new life driven by a steadfast commitment to vegetarian activism. “I hadn’t made the connection between animals on the table and animals on the farm before the Summerfest,” he said, “but within two months of attending this conference, I started doing vegetarian outreach.”

Becker’s career path has not been guided in a single direction; his positions have ranged from engineering to serving as a letter carrier. However, his vegetarian activism helped him discover his perfectly matched future occupation. While pursuing a graduate degree in public health, Becker worked part-time as a mobile instructor with AnimalLearn (under the auspices of the American Anti-Vivisection Society). Due to the very positive response he received from schools that he visited, Becker changed his academic pursuits to secondary education and received his MEd from West Chester University in 1996.

Becker left Pennsylvania to teach physics and earth science at Bel Air High School in Maryland, where he started a pro-vegetarian, pro-animal organization called Students Against Animal Mistreatment (SAAM). “I tried to get involved in any groups I could to get the message out about how diet affects many areas, including the environment, health, and, of course, animals,” he said. After leaving Maryland, Becker taught for five years at The Harker School in San Jose, California. There, he started another student club called HEART that created a campus-wide recycling program, as well as sponsored events celebrating World Vegetarian Day and The Great American Meatout.

In 2005, Becker settled in Lafayette, California, and he now teaches at Bentley School. He introduced a mini-course called “Vegy 101” about sustainable diets, which later led to the formation of a new student group. (See pages 11-13.) “You can’t just lecture people, especially if you have any kind of regional or cultural bias,” Becker said. “One thing most people can relate to is bad health, so that was my starting place.”

Becker teaches his pupils to develop analytical skills that will help them make prudent diet and health choices. “I try to convey to my students that it’s important we understand the difference between good science and junk science,” he said. “Good science is good science irrespective of politics.”

Phil Becker is only one man, but activism is embodied in the power of one. “Individual activism can result in tremendous gain,” he said. “It’s about the ripple you start—it might not be right away, but it’ll eventually cause change.”

He had some wise words for every activist who has ever felt jaded or burned out. “A lot of activists feel the entire weight of the world on their shoulders,” he said. “They must spend every moment of their lives engaged with the cause. People get burned out quickly. It’s important to understand that you acquired an imperfect world. You want to move it forward, but you can’t right every wrong.”

Becker has accumulated the résumé of a definitive vegetarian activist all-star. In 1986-1988 he was on the Boards of the North American Vegetarian Society and the International Vegetarian Union. He’s an active Life Member of The VRG and the American Vegan Society. Phil spent years organizing and leading several local vegetarian groups and continues acting as an enthusiastic educator advocate. He quoted vegan doctor Michael Klaper, “There are millions and millions of vegetarians out there; they just don’t know it yet.”



Phil Becker with his dog Daisy  
(Photo by Dina Heruty)

Bobby Allyn is currently studying journalism and international relations at American University in Washington, D.C.



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# Soy milk in U.S. Schools



Until recently, children who were vegan, allergic to milk, or for any other reason unable to drink cow's milk had to have a note from a recognized medical authority supporting their need for an alternative beverage to have one served to them as part of the school lunch program. A recent change to United States Department of Agriculture (USDA) regulations, published in the *Federal Register* on September 12, 2008, allows schools to offer soy milk instead of cow's milk to children who bring a written statement from their parents or legal guardians identifying their special dietary need. This applies to both school lunch programs and school breakfast programs. While this change does make it simpler for parents to request soy milk, schools are not required to offer soy milk; they are simply allowed to offer it. Soy milks are required to meet certain guidelines for nutrient content to be allowed as substitutes. This rule may eliminate many soy milks. Try Pacific Natural Foods for a soy milk that schools, as well as WIC, can use. Individual school food service operations must pay for expenses related to soy milk substitution that exceed federal reimbursements.

For information, visit <<http://edocket.access.gpo.gov/2008/pdf/E8-21293.pdf>>.

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## Vote For Your Favorite Restaurant Chain with Vegetarian and Vegan Options!

Register your choices at <[www.vrg.org/vote/](http://www.vrg.org/vote/)>!