

WELLNESS—CV CONNECTION

A MESSAGE FROM THE CO-DIRECTORS

Someone once said that “autumn is the hush before winter”. The crisp cool air helps motivate people to exercise. Peruse our In Focus article on corporate wellness to see what motivates companies to continue their corporate wellness programs during a difficult economy. As cooler weather comes our way, the thought of including nuts in the diet is even more appealing, especially if they are roasted. This issue of our newsletter discusses the cardiovascular benefits of walnuts, almonds and other tree nuts. We also include a review of the World Health Organization’s newly released scientific update on their recommendations for reducing *trans* fatty acids in the world food supply. Autumn weather makes a spicy dish like Moroccan chicken seem even more appealing. Our chicken recipe turns up the heat with the nutritious spice turmeric in the What’s Cooking segment. We hope you enjoy our third issue of Wellness-CV Connection as much as you enjoy the cooler weather.

—Sharon Smalling, MPH, RD, and Carol Lapin, MS, RD, CSSD

IN THIS ISSUE

Message from the Co-Directors 1

In Focus

Corporate Wellness Trends During a Difficult Economy and Strategies to Keep Programs Thriving 2

Role of Tree Nuts in Promoting Cardiovascular Health 5

Eliminating *Trans* Fats: A Global Perspective 8

What’s Cooking

Moroccan Chicken Recipe 9

Be There ... Calendar of Events 10

Keeping Connected 10

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IN FOCUS ...

CORPORATE WELLNESS TRENDS



employee and their dependents. EHM may encompass health promotion and prevention, wellness, and identification of health risks and chronic conditions.

COMPANIES REACT TO THE CHANGING ECONOMY

Recently, companies have been driven to reduce overall operating costs due to the economic turndown. Many employers have shifted higher health insurance expenses to employees. Over 40% of firms surveyed report that they are “very likely or somewhat likely” to increase employee insurance contributions; co-pays; and deductibles in 2009.¹ Adopting policies to shift health insurance payments will not, in and of itself, be enough to offset rising health care costs.

Cost shifting does little to increase productivity. History shows that the ratio of health care spending to gross domestic product always increases during a recession. Health care inevitably becomes more of a burden to employers and the government during recessions.² A recent survey found that 48% of adult workers feel that the current economic uncertainty is causing them to be less productive on the job.³ At a time when employers must produce more with less resources, employees are, unfortunately, feeling less productive.

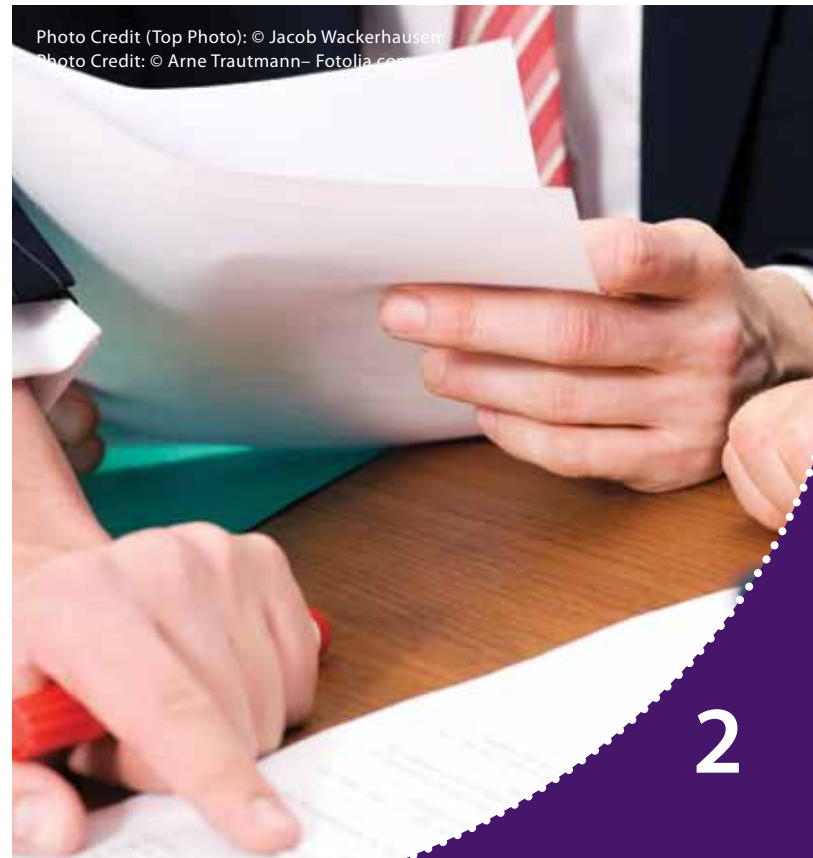


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CORPORATE WELLNESS TRENDS DURING A DIFFICULT ECONOMY AND STRATEGIES TO KEEP PROGRAMS THRIVING

By Rosie Gonzalez, MS, RD, LD and Susie Croes-Barone, RD, LD

If Corporate Wellness Programs are to survive in today’s economic environment, it is imperative that they demonstrate how workforce-based initiative health programs positively impact behaviors, health risks, and most importantly, the company’s bottom line. Employee health management (EHM), also called Corporate Wellness, is a broad term that refers to efforts that address the health and wellness of each

IN FOCUS ...

CORPORATE WELLNESS TRENDS CONTINUED

HEALTHY EMPLOYEES ARE MORE PRODUCTIVE

Research shows healthy employees are more productive.⁴ HealthFitness, a provider of integrated health and fitness management solutions, has observed that companies can contain health care costs and boost productivity by remaining committed to health and fitness management programs. Increasingly, companies are relying on data and scrutinizing outcome reports to ensure risk reduction is occurring. Employers that continue their commitment to EHM with unchanged operating budgets, are challenging managers to evaluate services, review all processes and plans, and find new ways of doing business to ensure optimal cost effectiveness.

It is critical to keep employers focused on proactive prevention, and this can be achieved by demonstrating the value that employers can expect from a corporate wellness program. Lower healthcare costs, greater productivity, less absenteeism, reduced rates of illness and injuries resulting from corporate wellness programs remain the most powerful positive demonstration of this message. To achieve maximum potential, an Employee Health Management program must be well designed and must drive positive outcomes.⁵



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KEY ELEMENTS TO SUCCESSFUL HEALTH MANAGEMENT PROGRAMS

The most successful programs have many of the key elements listed below:

- Full support and engagement of senior management
- A comprehensive, value-based, program design
- Clear, and consistent communication with senior management on available measurement driven data and wellness success stories
- Wellness champions within the company who are outspoken advocates for the program
- Continuing reinforcement of the positive benefits to a company's bottom-line derived from maintaining and improving employee health, regardless of the economy's health status
- Initiating or maintaining memberships in research based organizations, such as the National Business Group on Health and HERO—Health Enhancement Research Organization, in order to keep abreast of current employee health management trends.



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IN FOCUS ...

CORPORATE WELLNESS TRENDS CONTINUED



THE BOTTOM LINE

Managing the health of the workforce is more compelling today than ever before. Management should not send the wrong message to its employees by viewing wellness programs as “optional” simply based on availability of resources or economic trends. Quite simply, employee health plays a dominant role in the success of the company to be downsized. In today’s challenging economic environment, every extra dollar spent on health care and lost productivity translates directly to a reduced corporate bottom line.

THE GOVERNMENT TAKES ACTION

In April 2009, House and Senate lawmakers reintroduced the **Healthy Workforce Act**, which will provide a tax credit to employers who offer “effective and comprehensive wellness programs”.⁶ The introduction of this act demonstrates our government’s belief that preventive wellness programs in the workplace can make meaningful and significant contributions to the well being of both the employee and the company.

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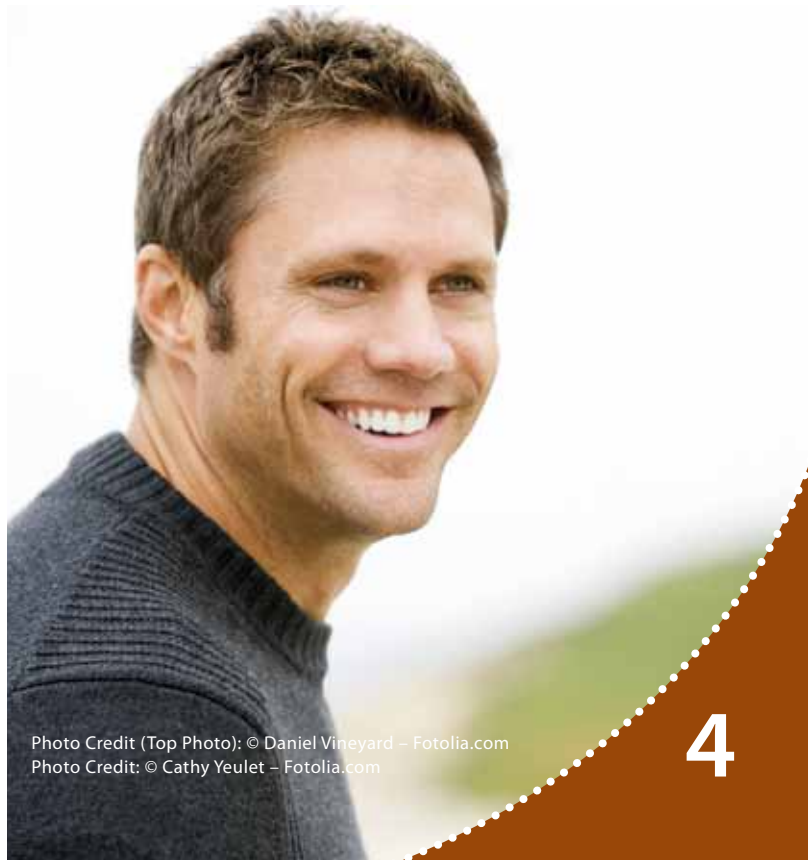


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IN FOCUS ...

TREE NUTS & CARDIOVASCULAR HEALTH

THE ROLE OF TREE NUTS IN PROMOTING CARDIOVASCULAR HEALTH

By Julie Upton, MS, RD, CSSD

Few foods have significant scientific evidence that they provide cardiovascular benefits as part of a healthy diet. Nuts are one of those foods. More than two decades worth of research has been conducted on the relationship between nut consumption and heart health. In the last five years alone, more than 100 papers have been published further substantiating the health benefits of tree nuts, including those related to cardiovascular disease. Today, most experts will agree there is a link between nut consumption and cardiovascular health.

Much of the research has been conducted on almonds and walnuts, but several recent studies point to other tree nuts, such as pistachios, also providing cardioprotective benefits. Registered dietitians often focus their recommendations on walnuts, for their omega-3 fatty acid content, and almonds, for vitamin E, but other tree nuts also have their own unique nutritional properties. This article will review some of the benefits of tree nuts in general and look at newer studies on nuts other than walnuts and almonds.

THE SCIENCE SUPPORTING TREE NUT AND HEART HEALTH BENEFITS

Nuts are minimally processed foods high in antioxidants, fiber and many other nutrients. They effectively blunt postprandial increases in glucose, triglycerides and inflammation. Both epidemiological and human clinical trials consistently show beneficial cardiovascular effects from eating nuts.

Epidemiologic studies conducted in the U.S. have reported a beneficial relationship between nut consumption and coronary heart disease (CHD) incidence, regardless of whether the endpoint was

fatal CHD, total CHD death, total CHD or nonfatal myocardial infarction. A pooled analysis of four U.S. studies showed that subjects in the highest intake group for nut consumption had an approximate 35 percent reduced risk of CHD incidence.¹

The clinical research also follows suit. In the past decade alone, there have been over 100 clinical studies about nuts and their cardiovascular benefits. Such studies have evaluated the effects of several different varieties of tree nuts on lipids, lipoproteins, and various CHD risk factors, including oxidation, inflammation and vascular reactivity. There are over 10 human clinical trials studying almonds and biomarkers related to vascular health. A 2009 meta-analysis of pooled data from 13 clinical studies with walnuts showed a significant LDL- and total cholesterol-lowering effect of the nut.² Most recently, researchers from McMaster University in Ontario, Canada, reviewed more than 140 randomized, controlled human clinical trials of foods thought to benefit heart health.³ They concluded that nuts were among the top four dietary factors associated with heart health, having greater influence than omega-3-rich seafood, whole grains, or diets rich in folate, beta-carotene or vitamin E.

Based on the combined scientific evidence, in 2003 the Food and Drug Administration (FDA) approved a qualified health claim for nuts, which states that eating 1.5 oz (42 g) of nuts per day may help reduce the risk of heart disease, when part of a diet low in saturated fat and cholesterol.



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IN FOCUS ...

TREE NUTS & CARDIOVASCULAR HEALTH CONTINUED

BEYOND WALNUTS AND ALMONDS

The evidence for cardiovascular benefits received from nut consumption, as well as the FDA—qualified health claim is meant to include all nuts; however, almonds and walnuts have been the most extensively studied thus far. Recent research includes pistachios, pecans and hazelnuts.

A recent study confirmed that eating 10 percent of total energy (32 to 63 g/d) as pistachios (as little as one serving a day) significantly decreased total cholesterol, LDL cholesterol and non-HDL cholesterol, as well as several other markers of cardiovascular disease risk.⁴ Other clinical studies have also found that regular consumption of pistachios decreased oxidative stress and improved total cholesterol and HDL levels in healthy volunteers. Improved lipid profiles were seen in subjects with moderate hypercholesterolemia.^{5,6}

Pistachios, pecans and hazelnuts, like all nuts, contain a complex matrix of compounds believed to be responsible for their CHD benefits. These benefits included a favorable fatty acid profile, vegetable protein, fiber, potassium, calcium, the amino acid arginine, magnesium, tocopherols and phytochemicals such as phytosterols. The following are properties unique to each of these nuts, as compared to other tree nuts:

PISTACHIOS

- Contain 310 mg of potassium and 61 mg plant sterols per 30 g serving (about 1 ounce); this is significantly more than any other tree nut.
- Are the only nuts that provide lutein and zeaxanthin. A recent study showed that consuming pistachios (68 g/d) resulted in a 50 percent increase in serum levels of these antioxidants—an important finding because lutein may be protective

- against the development of atherosclerosis.⁷
- May aid with weight management because they are generally eaten in-shell. Preliminary studies have found that the shell helps provide a visual cue to help reduce calorie consumption by 50 percent, compared to eating shelled pistachios.⁸

PECANS

- Help reduce oxidative stress by over 7 percent when a diet contains 20 percent of energy from pecans.⁹
- Have the highest antioxidant capacity of popular tree nuts, with 17940 Trolox Equivalents/100 gram serving, according to the USDA ORAC database.

HAZELNUTS

- Have been shown in a clinical study to lower LDL and VLDL, while increasing HDL by 12 percent.¹⁰
- Contain more folate than any other nut, providing 8% of the Daily Value.



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IN FOCUS ...

TREE NUTS & CARDIOVASCULAR HEALTH CONTINUED

PUTTING SCIENCE INTO PRACTICE

There is an abundance of evidence indicating regular consumption of nuts can help prevent cardiovascular disease. While many healthcare professionals recognize the published literature around almonds and walnuts, several newer studies are showing that other nuts, such as pistachios, pecans and hazelnuts, offer similar cardiovascular benefits. The FDA has stated that consuming 1.5 ounces of tree nuts per day is beneficial to heart health. Studies show that consuming an even lesser amount, about one ounce per day, can be beneficial for weight management, blood sugar regulation and overall health and well-being. Only about one-third of Americans report eating nuts on any given day, and the amount eaten is generally much less than half of the 1.5 ounces recommended in the FDA health claim. Sixty percent of nuts that are eaten in the US are consumed as between-meal snacks. Americans may see an improvement in their cardiovascular health by being encouraged to consume nuts in place of snacks high in saturated fat.

RESOURCES

Below are some key web sites to visit for further information about nuts in general, and the unique health benefits of specific nuts:

- www.nuthealth.org
- www.walnuts.org
- www.almondsarein.com
- www.pistachiohealth.com
- www.ilovepecans.org

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IN FOCUS... ELIMINATING TRANS FATS

ELIMINATING TRANS FATS: A GLOBAL PERSPECTIVE

By Dana Angelo White, MS, RD

In the newly released World Health Organization (WHO) Scientific Update on *trans* fatty acids, WHO recommends significantly reducing or virtually eliminating industrially-produced *trans* fatty acids (TFAs) from the food supply.¹

The main source of artificial TFAs comes from partially hydrogenated vegetable oils (PHVO) found primarily in foods fried in partially hydrogenated oils, commercial baked goods, stick margarine and snack foods. Since detrimental health effects are associated with their consumption, the review group considered TFAs from PHVO as “industrial food additives” that should be avoided.

TRANS FATS AND HEALTH

Review of the evidence from randomized controlled trials and observational studies has reinforced previous findings that dietary TFAs have adverse effects on lipoprotein profiles, causing an increase in LDL cholesterol and decrease in HDL cholesterol. TFAs also promote inflammation and endothelial dysfunction, creating an overall increased risk of CHD events. Other possible effects associated with TFA consumption include compromised coagulation, insulin resistance and displacement of essential fatty acids from membranes. Further studies are also needed to assess the possible effects on weight gain and diabetes incidence.

Removal of PHVO from the food supply would result in significant health benefits, including a decrease in CHD risk—although the magnitude of the predicted benefit varies. Replacing PHVO with unsaturated fat has the greatest benefit, and the affect is primarily accounted for by its impact on blood lipids, lipoproteins and C-reactive protein.

The review acknowledges that while natural sources of TFA (found primarily in dairy products and meats) cannot be removed from the diet entirely, they do not appear to pose a significant public health risk as their intake is low in most populations.

GLOBAL EFFORTS

Countries including Denmark, Canada, Argentina, India and the United States have begun efforts to reduce and eliminate TFA from the food supply. In order to facilitate this effort, these countries have put in place nutrition recommendations, public awareness programs, labeling laws and legislative programs to educate consumers. Incentive opportunities for food manufacturers have been effective in large cities like New York where they have begun to eliminate *trans* fats in restaurants, schools, hospitals and other institutions. A report on their progress is due out in the near future.

The Oil Replacement and Environmental Implications Findings Study indicates that using alternative fats and oils to replace PHVO would lower CHD risk by reducing TFA intake through mechanisms beyond changes in blood lipid levels. Currently there is not an adequate global supply of suitable substitute vegetable oils with zero or low TFA to meet the demands of replacing all PHVO in the global food supply. The WHO recommends that agricultural experts need to begin to plan and prepare for the increased demands.

Food manufacturers around the world recognize the fact that the demand for the elimination of TFA is inevitable and have begun to reformulate their products to make them healthier for consumers.

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WHAT'S... COOKING?

Recently the health benefits of the spice Curcumin, also known as turmeric have been spotlighted. Curcumin derived from dried rhizomes of the herb *Curcuma longa*, a member of the ginger family, is a polyphenol. An ASPEN review article in 2006 (Bengmark, 2006) touted the spice's significant preventive and/or curative effects in a number of conditions and disease states, including atherosclerosis, hyperhomocysteinemia, insulin resistance, liver disease (ethanol-induced steatosis), inflammatory intestinal disease, neurodegenerative disease (such as Alzheimer's), and fibrotic disease. It has also been suggested in some countries as chemopreventive, based on its antioxidant properties, however this is yet to be validated. Health benefits can be seen with its inclusion as an additive spice in the diet 3-4 times a week. I am thrilled to share with you a tasty recipe full of nutrient-dense foods that wowed the taste buds of my family. Bon Appetite!

NUTRIENT ANALYSIS FOR RECIPE

Nutrient Analysis per serving: 263 calories; 32 gm protein; 28 gm carbohydrate; 2.5 gm fat; 66 mg cholesterol; 0.5 gm saturated fat; 0.5 gm monounsaturated fat; 0.7 gm polyunsaturated fat; 0.03 gm *trans* fat; 6 gm dietary fiber; 631 mg sodium; 765 mg potassium 92 mg calcium

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By Brook Knox MEd, RD, CNSC, LD



Photo Credit: © Tracy Hebden – Fotolia.com

MOROCCAN CHICKEN

PREP TIME: 15 minutes **COOK TIME:** 30 minutes **SERVES:** 4

INGREDIENTS

1 lb chicken breast, cubed
1 onion, chopped
2 cloves garlic, chopped
2 carrots, sliced
2 stalks celery, sliced
1 tablespoon minced fresh ginger root
3/4 teaspoon ground cumin
1/4 teaspoon ground cayenne pepper
1/4 teaspoon ground turmeric
1 1/2 cups reduced sodium chicken broth
1 cup crushed tomatoes, canned
1 cup canned chickpeas, rinsed & drained
1 zucchini, sliced
1 tablespoon lemon juice

DIRECTIONS

- Brown cubed chicken in a large saucepan lightly coated with cooking spray or canola oil over medium heat, until almost cooked through. Remove chicken from pan and set aside.
- Sauté onion, garlic, carrots and celery in the same pan. When tender, add in the spices; stir-fry for about 1 minute, then mix in broth and tomatoes. Return chicken to the pan, reduce heat to low and simmer for about 10 minutes.
- Add chickpeas and zucchini to pan and bring to a simmer once again; cover pan and cook for about 15 minutes, or until zucchini is tender. Stir in lemon juice and serve.

BE THERE ... CALENDAR OF EVENTS

THURSDAY NOV. 5–FRIDAY, NOV. 6

What: Conference on Food, Nutrition, Physical Activity and Cancer

Where: Washington D.C.

For Information: www.aicr.org/conference

KEEPING ... CONNECTED

Join our coast-to-coast connection! Whether you are brand new to SCAN or have been a member for years, please consider joining the Wellness/CV RDs subunit at no extra cost! Just log on to **www.scandpg.org**, log in, access your Member Profile, and check 'yes' to join. If you are already a member of our subunit, welcome to the beginning of our second year. There are many projects in the works that we hope will be beneficial to you. Lots of volunteer opportunities are available and we want to help find the right fit for you. If you are interested in volunteering, contact our coordinator Karen Collins at the following e-mail address: Karen@karencollinsnutrition.com.

Got an idea for this e-newsletter? Contact the editor-in-chief, Satya Jonnalagadda, PhD, RD, at satya.jonnalagadda@genmills.com or the assistant editor, Alisa Winters, MS, RD at alisa.winters@laureatemed.com

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SATURDAY, OCT. 17–TUESDAY, OCT. 20

What: ADA Food & Nutrition Conference & Expo (FNCE)

Where: Denver, Colorado

How to Register: www.eatright.org/fnce

Plan to attend these following SCAN events while at FNCE

SUNDAY, OCT. 18

What: SCAN Priority Session "Advanced Strategies for Consulting Athletes with Type I Diabetes."

Time: 11:30 a.m.

SUNDAY, OCT. 18

What: SCAN Reception sponsored by Promise

Time: 6:00-8:00 p.m.

This is a great opportunity to network with fellow RDs!

MONDAY, OCT. 19

What: DPG Showcase

Time: 10:30 a.m.–1:00 p.m.

Stop by and see what SCAN has been doing and hear about our plans for the upcoming year!

MONDAY, OCTOBER 19

What: Presentation—SCAN Past Chair "Aging, Exercise and Optimal Nutrition: A Generational Challenge"

Presenter: Hope Barkoukis, PhD RD, LD

Time: 3:00–4:00 p.m.

Big **FAT** truth

RDs know the truth, patients may not: Experts agree that we should limit our intake of both saturated AND trans fats in the diet.¹⁻⁴

Soft spreads have 70% less saturated fat than butter, no cholesterol and 0 grams of trans fat per serving.*



Soft spreads fit in a healthy diet because they are made with nutritious plant oils, including soybean and canola, and provide an important source of monounsaturated and essential polyunsaturated fats.

To help your clients and patients make the switch, find recipes and learn the truth about fat, go to:



*Promise, Country Crock, I Can't Believe It's Not Butter!, and Brummel & Brown soft spreads range from 0-8 grams of fat and 0-2 grams of saturated fat per serving. REFERENCES 1. American Dietetic Association. Position of the American Dietetic Association and Dietitians of Canada: Dietary Fatty Acids. JADA. 2007;107:1599- 1611. 2. National Cholesterol Education Program. Third Report of the National Cholesterol Education Program (NCEP) expert panel on detection, evaluation and treatment of high blood cholesterol in adults (Adult Treatment Panel III) Final Report.2002. Available at: <http://www.nhlbi.nih.gov/guidelines/cholesterol/index.htm>. Accessed on 11/16/2008. 3. U.S. Department of Health and Human Services and U.S. Department of Agriculture. The report of the dietary guidelines advisory committee on Dietary Guidelines for Americans, 2005. Washington, DC: U.S. Government Printing Office. 4. Lichtenstein AH, Appel LG, Brands M et al. Diet and lifestyle recommendations revision 2006: a scientific statement from the American Heart Association Nutrition Committee. Circulation. 2006;114:82-96.