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Fruits & Veggies—More Matters: Bringing New Life to an Old Nutrition Message

By Dina Aronson, MS, RD

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Step aside, 5-A-Day. A fresh initiative is here and primed to conquer Americans' inadequate fruit and vegetable consumption.

In March, the Produce for Better Health Foundation (PBH) and the Centers for Disease Control and Prevention (CDC) launched a new health initiative called Fruits & Veggies—More Matters™. The program has created waves on the Web and will soon find its way onto packaging and into stores—at least 21,000 supermarkets and 170 companies are already licensed to participate.¹

According to Elizabeth Pivonka, PhD, RD, president and CEO of PBH, the plan is for Fruits & Veggies—More Matters to eventually replace the familiar, 15-year-old 5-A-Day For Better Health Program, which will be phased out by the end of 2008. However, the mission remains the same: get Americans to eat more fruits and vegetables. The new Fruits & Veggies—More Matters brand was also developed to be consistent with the latest Dietary Guidelines for Americans, which recommends various numbers of servings of fruits and vegetables depending on an individual's calorie needs—ranging from four to 13 servings (or 2 to 6½ cups) per day.

The main catalyst for the transition was a growing collection of scientific data showing that for optimal health, five to nine servings of fruits and vegetables (the number recommended by the 5-A-Day initiative) is simply too few.²

5-A-Day: Lessons Learned

The 5-A-Day for Better Health Program, which began in 1991, is the nation's largest public-private nutrition education initiative. A collaborative effort of many groups, including government agencies, private companies, state coordinators, and educators, its main goal was to increase fruit and vegetable consumption to at least 5 servings per day for 75% of Americans by 2010. The program reached far and wide to improve public awareness. Media campaigns, community-level interventions, point-of-purchase programs, and industry partnerships worked to get the message out. How effective have these efforts been?

Despite available data on consumption patterns and knowledge surveys, it is difficult to evaluate whether the 5-A-Day Program—or any mass media-based nutrition campaign—has affected population-level dietary patterns. The reasons are that first, there are no groups unexposed to the 5-A-Day campaign that can be used as a comparison to those exposed; second, there are many other national and local programs to improve dietary patterns, a large proportion of which also include a focus on increasing vegetable and fruit consumption; and third, low-intensity, public health-oriented dietary intervention programs yield relatively small changes in dietary patterns that may take many years to detect.³

Even after spending roughly \$50 million (combined 5-A-Day partners in-kind) per year in marketing efforts to get people to “strive for five,” research revealed that fruit and vegetable consumption rates did not budge, according to Pivonka. But the efforts were not for naught. Fifty million dollars may seem like a lot of money and marketing, but not compared to the \$6.8 billion spent annually on commercial advertising efforts for food, candy, and beverages.⁴ Hopefully, Fruits & Veggies—More Matters can do more to battle this competitive force.

Studies evaluating Americans' fruit and vegetable consumption over the past two decades consistently show that most Americans fall short of the 5-A-Day goal (which is supposed to be the minimum number of servings per day; 5-A-Day is really 5-to-9-A-Day). A recent article in the *American Journal of Preventive Medicine* assessed adult trends in fruit and vegetable consumption between 1988 and 2002.⁵ Its findings were not encouraging: approximately 89% of Americans failed to meet the USDA's Dietary Guidelines during that time. Furthermore, there was no change in fruit consumption over these years, and vegetable intake actually decreased.

The authors offer three possible reasons for these findings. First, personal and cultural food preferences create a stubborn barrier to change. Second, environmental barriers such as easier accessibility to low-nutrient-density foods and cost issues deter people from eating more fruits and vegetables. David Katz, MD, MPH, FACPM, FACP, director of the Prevention Research Center at Yale University School of Medicine, explains this concept well: “Compared to many processed foods, fresh produce is less available, less convenient, less economical, and less reliable. Cheese doodles always taste the same, but peaches, for instance, do not.” Third, the authors cite possible confusion over how to put the recommendations into practice.

More Barriers to Consider

Many clients comprehend that more fruits and vegetables are better (and survey data back this up), and many can afford to eat what and how they want.^{6,7} So why aren't they opting for the side salad over the pasta or fresh fruit over cake? It seems that instant gratification often takes precedence over health concerns. Moreover, despite a plethora of undeniable evidence, perhaps the benefit is still unclear on a personal level, as illustrated by justifications such as, “My grandfather never touched a vegetable and lived to be 105,” or, “Something is going to get me anyway, so I might as well enjoy this pie now while I can.” These are glaring statements backed by powerful emotion. A successful public health initiative needs to address these conceptual barriers.

Another barrier, Katz says, may be the low-carb and low-glycemic diet trends, which have misled many people into thinking that eating fruit may actually be harmful. “Vegetables and fruits are, in fact, the most nutritious of all foods, and if more of us ate more of them, the public health benefits would be considerable. To get there from here will require a systematic effort to identify and dismantle every barrier. If we know and understand these barriers, then we can formulate counseling strategies to address them,” he says. Fruits & Veggies—More Matters seeks to address these challenges with its primary strategy of disseminating simple, positive, appealing messages.

Overview of Fruits & Veggies—More Matters

As most dietitians know, only approximately 10% of Americans consume the level of fruits and vegetables recommended by the Dietary Guidelines. The mission of Fruits & Veggies—More Matters is to change people's behavior over the long term and improve the health status of the nation. This, of course, was also the mission of 5-A-Day, but the new initiative seeks to address underlying weaknesses of 5-A-Day and redirect education efforts more effectively. Some key differences are that Fruits & Veggies—More Matters does the following:

- targets the mom, who is still the primary healthcare and food gatekeeper for the family;
- features a Web site that is more interactive, encouraging users to share information;
- offers practical and specific advice regarding meal planning, shopping, and tips;
- is less prescriptive and more descriptive;
- more clearly applies to a wider range of foods, such as those based on fruits or vegetables like tomato sauce and 100% fruit juice; and
- relays a message that is more emotionally based than fact-based.

According to Pivonka, Fruits & Veggies—More Matters was developed with moms in mind since they are still the primary healthcare and food gatekeepers for the family. Most moms already believe that eating more fruits and vegetables is important; they just need help turning this knowledge into behavior. Simple tips and suggestions are what they need. However, study surveys revealed that mothers didn't want to be preached to or scared into eating more fruits and vegetables, nor did they want to be made to feel guilty about what they did or did not do. So the Fruits & Veggies—More Matters message “serves as a gentle reminder that taps into mom's sense of responsibility to do her job as a mom,” explains Pivonka.

The attractive, interactive, and easy-to-navigate Fruits & Veggies—More Matters Web site—www.fruitsandveggiesmorematters.org—provides recipes, tips, serving ideas, and shopping advice. It includes a “mom2mom” area with polls, a message board, and an opportunity to submit a question to an expert. While the site was developed with Generation X moms (aged 29 to 41) as the primary target, the site is appropriate for all users. It features activities and tips for getting children involved (including downloads such as coloring sheets) and allows visitors to submit their own ideas, which may then be published on the site. Visitors can sign up for a free e-mail newsletter, which is a way to keep the message fresh for consumers, especially those who might forget to revisit the site.

Fruits & Veggies—More Matters’s Web site, as well as its programs and educational materials, focuses on practical and specific advice regarding meal planning, shopping, and tips. The goal is to help consumers turn health knowledge into healthy behaviors for themselves and their families. In addition to practical information on items like picking the best produce and meal planning guidelines, the program provides useful, specific messages designed to promote a higher consumption of fruits and vegetables. “Ask for more vegetable toppings (like mushrooms, peppers, and onions) and less cheese on your pizza” (an Eating Out tip) and “The prebagged salad greens have been carefully washed before packaging; it is safe to eat them out of the bag” (a Shopping tip) are targeted, helpful messages that appeal directly to the consumer.

While the 5-A-Day program tended to focus on numbers, the new initiative focuses on “more.” For years, the numbers 5 or 5-to-9 stuck in people’s heads, and the good intention may have backfired for people for whom this seemed like too much food. Also, the “how-to” factor may not have been prominent enough.

Fruits & Veggies—More Matters is less about quantity and more about how to incorporate fruits and vegetables in today’s busy lifestyles, shifting simple awareness to awareness plus utility. The initiative does not describe in terms of portions but in cups; this is not only consistent with the 2005 Dietary Guidelines but may also be an easier concept for people to grasp. The 5-A-Day program defined a portion or serving as one medium-sized fruit; 1/2 cup raw, cooked, frozen, or canned fruits (in 100% juice) or vegetables; 3/4 cup 100% fruit or vegetable juice; 1/2 cup cooked, canned, or frozen legumes (beans and peas); 1 cup raw, leafy vegetables; and 1/4 cup dried fruit. For Fruits & Veggies—More Matters, 1 cup of raw or cooked vegetables or 100% vegetable juice, or 2 cups of raw leafy greens can be considered 1 cup from the vegetable group. One cup of fruit or 100% fruit juice or 1/2 cup of dried fruit can be considered 1 cup from the fruit group.

The Web site and its education materials provide easy-to-understand, attractive visuals describing what constitutes a cup of each fruit and vegetable; for example, eight large strawberries equals 1 cup, as do five broccoli florets or one large banana. It is possible that implementing this change will increase understanding and compliance.

What about a goal number of cups per day? Translating this information will always be a challenge because needs differ according to gender, age, and activity level. And while the initiative focuses on fruits and vegetables, at some point we need to separate them to encourage variety. Fruits & Veggies—More Matters uses CDC guidelines and features simple charts that show goal numbers of cups for men, women, girls, and boys (each has a separate chart), with numbers differing by age and activity level. Cups of fruits and cups of vegetables are listed separately. For example, a moderately active 35-year-old woman should aim for 2 cups of fruits and 2 1/2 cups of vegetables per day, while a very active 7-year-old boy should strive for 1 1/2 cups of fruits and 2 cups of vegetables.⁸

Pivonka says that according to studies, 5-A-Day did promote foods like salsa and dried fruit, but the message did not get across clearly. Fruits & Veggies—More Matters emphasizes these foods clearly as examples of fruits and vegetables people should be consuming. This is why the phrase “all product forms count—fresh, frozen, dried, canned, and 100% juice” is a major part of the initiative. This component may, at least in part, address Katz’s point that people tend to prefer packaged food over fresh produce for its consistency and lower price tag.

According to Pivonka, the most important change has been creating a message with an “emotional” base. While 5-A-Day is rather factual or intellectual in nature, Fruits & Veggies—More Matters imparts a more emotional connection for people. Based on Pivonka’s research, an emotionally based message that focuses on a mother’s feelings of responsibility for taking care of her family is more likely to influence

her to include more fruits and vegetables in her family's meals and snacks. The Fruits & Veggies—More Matters health initiative is meant to do just that, not just in the form of the Fruits & Veggies—More Matters graphic, but in how photos are used on the Web site and education materials and in the words chosen (and not chosen) for key message points and simple tips. PBH is treating this new health initiative like a “brand” as opposed to simply a “logo,” and this brand, says Pivonka, “is passionate, vital, optimistic, and straight-talking.”

It is interesting to note that while the initiative was developed with moms as the core target, it was further tested with more than 1,000 consumers: men and women between the ages of 21 and 65, low and middle income, with oversampling for African Americans and Hispanics, and it tested very well with all of these groups.^{9,10}

Much has happened in the few months since the debut. It appears that marketing plans for the initiative are more pervasive. Already you'll find the attention-grabbing logo on Web sites such as General Mills (on the Green Giant page) and Stop and Shop (www.stopandshop.com). You will soon see the logo on food packages, in stores, and on nutrition education materials used by public and private programs. September's 5-A-Day Month will now be the Fruits & Veggies—More Matters Month, so get ready to help spread the message.

Considerations

Despite comprehensive testing of this program and its messages, only time will tell how effective this initiative will be for long-term behavior change. And it will not be maximally effective without the influence of health educators. It is the responsibility of dietitians to reinforce the message by disseminating factually correct, customized/client-specific information on increasing fruit and vegetable intake. Fortunately, the Fruits & Veggies—More Matters program provides health educators with myriad resources to assist in effective nutrition education (see accompanying resources).

Just providing our clients with handouts has never been, and never will be, enough. We can do our part not only by offering clear, consistent messages but also by explaining how the benefits apply to each of our clients and by addressing specific issues expressed by our clients. For example, the message about “all forms [of fruits and vegetables] are included” may lead a client to believe that grape juice is as good as broccoli for weight loss. We must explain the basis for this message and its application to personal health goals.

We are fortunate to have the high-quality information and materials available to us from the Fruits & Veggies—More Matters initiative (some free of charge and some for purchase). PBH encourages us to spread the new message far and wide, and these resources aid our efforts in helping people achieve optimal health.

— *Dina Aronson, MS, RD, is a nutrition consultant, a freelance writer, and a speaker specializing in dietetics-related technology and vegetarian nutrition.*

Resources

Brand guidelines for health educators using Fruits & Veggies—[More Matters](#)

[Fruit and vegetable consumption data and statistics.](#)

Fruits & Veggies—[More Matters Web site by the Produce for Better Health Foundation.](#)

Fruits & Veggies—[More Matters Web site by the CDC.](#)

[Informative series of research briefs on understanding food and vegetable choices.](#)

Tools for health professionals to spread the Fruit & Veggies—[More Matters message.](#)

References

1. Produce for Better Health Foundation. "Fruits & Veggies—More Matters, the Next Generation '5 A Day'." March 19, 2007. Available [here](#).
2. USDA, U.S. Department of Health and Human Services. 2005 Dietary Guidelines Advisory Committee Report — "Selected Food Groups." Available [here](#).
3. National Cancer Institute's Cancer Control and Population Sciences. "5 A Day for Better Health Program Evaluation Report: Message Environment." Available [here](#).
4. "50th Annual 100 Leading National Advertisers." Advertising Age. June 27, 2005. Available [here](#).
5. Casagrande SS, Wang Y, Anderson C, et al. Have Americans increased their fruit and vegetable intake? The trends between 1988 and 2002. *Am J Prev Med.* 2007;32(4):257-263.
6. Potter JD, Finnegan JR, Guinard J-X, et al. 5 A Day for Better Health Program Evaluation Report (NIH Publication No. 01-4904). Bethesda, Md.: National Institutes of Health, National Cancer Institute; 2000. Available [here](#).
7. Stables GD, Subar AF, Patterson BH, et al. Changes in vegetable and fruit consumption and awareness among U.S. adults: Results of the 1991 and 1997 5 A Day for Better Health Program surveys. *J Am Diet Assoc.* 2002;102(6):809-817.
8. Fruits & Veggies—More Matters. Available [here](#).
9. Pivonka E, Hoy K, Boyce B. Development of the Fruits & Veggies—More Matters brand: The next stage of increasing fruit and vegetable consumption. *FASEB J.* 2007;21:671.12.
10. Hoy K, Pivonka E, Boyce B. Fruits & Veggies—More Matters: Development of a relevant brand identity. *FASEB J.* 2007;21:671.13.