

The Wellness Forum

July 3, 2010

The Honorable Kathleen Sebelius
Secretary of Health and Human Services
200 Independence Avenue, SW
Washington, D.C. 20201

The Honorable Thomas J. Vilsack
Secretary of Agriculture
1500 Independence Avenue, SW
Whitten Bldg, Room 200A
Washington, D.C. 20250

Dear Secretaries Sebelius and Vilsack:

Thank you very much for the opportunity to comment on the report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans, 2010. I appreciate the time and effort that has been invested in this very important project.

There are many things in the report upon which we are in agreement. I fully support the advice to consume more fruits, vegetables, whole grains and legumes. I also agree that it is important to develop guidelines that take into consideration the fact that most Americans are overweight, that the incidence of many degenerative diseases is going up, and that the health of our children must become a priority.

It is with these objectives in mind that I offer the following suggestions:

The guidelines should stress the superiority of a plant-based diet.

Although the report recommends eating more fruits, vegetables, whole grains, and legumes, it falls short of advising Americans of the superiority of a plant-based diet. The recommendations should clearly state that a well-structured plant-based diet is superior to other diets for weight loss, and for preventing, stopping the progression of, and even reversing degenerative diseases.

Nutrient needs are easily met on a plant-based diet, and studies have confirmed that this diet can be used as a primary treatment tool, even for very sick people with conditions like coronary artery disease, diabetes, and multiple sclerosis.^{1 2 3 4 5 6 7 8 9}

Calorie counting and portion control are ineffective tools for weight management.

It is true that most Americans are eating too many calories, and that in order to lose weight, calorie consumption must be reduced. The report advises Americans to “know their energy needs in order to avoid weight gain.” However, calorie counting and portion control are not effective methods for reducing calorie intake. I am well-trained health care professional and I can only guess at my own calorie needs, and they fluctuate daily.

Even if people try to measure their calorie intake, the level of accuracy needed in order to succeed is almost impossible to achieve. For example, if it takes 2000 calories per day for a person to maintain her current weight, she would consume 3,650,000 calories in a five-year period of time. Consuming 5% too many calories would result in weight gain of over 52 pounds, or obesity; consuming 5% too few calories would result in losing 52 pounds. If an individual starts at normal weight, the weight loss could be fatal.

Fortunately, humans have built-in mechanisms for figuring out exactly how much to eat without calorie or nutrient counting. These are stretch receptors in the stomach that detect when the stomach is filled with food, and nutrient receptors that detect the nutrient density of the foods consumed. The key to satiety is eating fiber-rich foods that fill the stomach from a volume standpoint, and that have enough calorie density to satisfy the nutrient receptors. Beans, rice and vegetables both fill the stomach, and with 400-500 calories, satisfy the nutrient receptors. These mechanisms do not work, however, when eating rich, calorie-dense foods. Eating chicken and cheese until satiety is achieved requires the consumption of over 3000 calories.

Consuming a well-structured plant-based diet resolves this issue because the fiber content of the diet is self limiting. A bowl of black bean soup and a salad have about 14 grams of fiber; a person cannot consume four servings of this meal.

Portion control is also ineffective. Research has shown that refined, calorie-dense and processed foods are addictive; they have the same effect on the dopamine receptors in the brain as drugs like heroin or cocaine.¹⁰ Asking anyone, particularly a child, to control their intake of these foods using willpower is a recipe for failure.

The report advises moderation as a tool for managing food intake. The problem with moderation is that it is too subjective and vague, and most often people practice moderation by eating and drinking numerous unhealthy foods and beverages daily in moderation; the totality of these poor choices, all consumed in moderation, comprises a significant percentage of their intake.

My company has a high success rate in helping people to convert to health-promoting diets and maintaining their new eating habits. One of the reasons is that our directions are very specific. There are good and bad foods, and our clients can eat as much of the foods on the “allowed” list as they want *without* calorie counting and portion control. The plan is easy to follow. I suggest that such specific and easy-to-follow directives should be recommended to the general public.

The guidelines need to discourage the consumption of junk foods.

The guidelines allow for daily consumption of junk foods, with encouragement to consume healthier versions of those junk foods. Whole grain muffins are still muffins, and should not be eaten instead of vegetables and rice. Treats should be reserved for special occasions, like birthday parties and Valentine’s Day. When people simply substitute health food store versions of the junk they eat daily, their grocery bill goes up and their health problems do not resolve.

Americans are suffering from diseases of excess, not deficiency.

There seems to be a great deal of concern in the report about nutrient deficiencies in the American diet. However, people who are overweight or who have degenerative diseases are suffering from excess, not deficiency. They are eating *too much* fat, *too much* protein, and *too many* calories. A well-structured plant-based diet provides all of the nutrients needed for optimal daily function, while resolving issues of excess.

Americans should not be encouraged to eat more dairy foods.

The report advises Americans to consume low-fat and fat-free dairy products as a source of “nutrient-dense carbohydrate” and for building bone health.

Studies show that as the consumption of dairy products increases in various countries, the incidence of fractures increases too.¹¹ Americans consume more dairy products per capita than people in most other countries, yet many studies show that this increased dairy consumption leads to increased fracture risk¹² and calcium excretion.¹³

The report says that when dietary calcium intake is too low, the body draws calcium from the bones. Calcium is actually released from the bones to neutralize the acidity

that results from consuming too much animal protein (which includes dairy products), fat, and processed foods. This is not a result of inadequate calcium intake, but the body's response to metabolic acidosis. Researchers from Yale University looked at data from 34 studies in 16 countries, published in 29 peer-reviewed journals and concluded that consuming animal protein increased calcium excretion and fracture risk.¹⁴

The consumption of cow's milk is linked to an increased risk of juvenile diabetes.^{15 16 17} In fact, studies have shown that the risk for a child consuming cow's milk of developing type 1 diabetes is higher than the risk of a smoker developing lung cancer.

Cow's milk is also linked to chronic infections,^{18 19} constipation, multiple sclerosis²⁰, and prostate cancer²¹. The protein in milk is the causative link. Consuming low-fat and fat-free cow's milk is even more risky for health since the protein is then more concentrated. The science is quite clear that *all* cow's milk products are best avoided, but low-fat or no-fat products are worse than full-fat milk products.

Americans should not be encouraged to consume more seafood.

Americans should be encouraged to consume a plant-based diet with an allowance for very small amounts of animal foods (10% or less of calories), since animal protein has been proven to be a powerful cancer promoter.²² Animal foods should be optional, since there is no evidence that consuming them is necessary for health. Seafood can be included in a well-structured, plant-based diet, as long as total consumption of animal foods remains very low. But seafood is high in protein and fat, and has been misrepresented as a healthier choice when it is not. Eating more seafood is associated with an increased risk of prostate cancer in Japanese men,²³ and the mercury content of most seafood is also a concern, not just for pregnant women but for the general population.²⁴

The report also expresses concern about EPA and DHA levels, and cites this concern as a reason for recommending seafood consumption. There are only two *essential* fatty acids, Omega-3 and -6. The body synthesizes other fatty acids from those essential fats. It is true that people consuming a poor diet have more difficulty with this process. But adding more high-protein and high-fat foods, such as seafood, compounds the problems of obesity and increases the risk of disease. Adopting a plant based diet resolves the issue for all but those with certain metabolic disorders by returning the body to health and proper function, including the ability to synthesize EPA and DHA.

The report encourages Americans to consult "local seafood advisories" when making decisions about eating fish. I am a well-trained nutrition professional and I am

unaware of any such advisories at either of my residences, one of which is in a resort where commercial fishing is a major industry. I think this advice sets up another barrier to improving both the diet and health of Americans.

Fat recommendations are too high, and oils should be eliminated from the diet.

While everyone supports reducing the consumption of saturated fat, replacing that fat with polyunsaturated and monounsaturated fat will not improve health. Oils are not health-promoting; they are fattening. One tablespoon of any type of oil contains 130 calories and 14 grams of fat. A normal weight, physically active person can gain 36 pounds in just one year by adding an oil-based salad dressing to the diet just once per day.

3 Tablespoons of olive oil once per day =
3600 extra calories every 10 days;
this results in weight gain of 3 pounds per month
or 36 pounds in a year!

Research has shown that oils are cancer promoting²⁵, and that polyunsaturated and monounsaturated oils are associated with increased risk of cardiovascular disease since they contribute to the development of atherosclerotic plaques just as much as saturated fat.^{26 27 28 29} Using the brachial artery tourniquet test, researchers have shown that consuming oils restricts blood flow due to damage to the endothelial tissue and reduced nitric oxide production.³⁰

The Longeril study of the Mediterranean diet is often cited as supporting a diet that includes monounsaturated fat, specifically olive oil.³¹ It is true that this study showed that those consuming a Mediterranean-style diet had lower rates of cardiovascular disease than those consuming the Standard American Diet. However, by the end of the study, 25% of those eating the Mediterranean diet had experienced an adverse cardiovascular event or died. This diet may have been better than the American diet, but was far from ideal.

The promotion of the health benefits of olive oil started in the 1950's when researcher Ansel Keys discovered that men living on the island of Crete had very low rates of heart disease and cancer and seemed to have longer life spans. He conducted a 15-year study in which heart disease and cancer rates were examined in Greece (Crete and Corfu), Finland, Japan, Italy, the Netherlands, the United States, and Yugoslavia. The study showed that in Crete and Japan, the rates of heart disease were lower than in the other five countries.³²

It was true that residents of Crete consumed olive oil – about three tablespoons per day. But they also practiced many other healthy habits – they consumed lots of fruits, vegetables and whole grains, and their physical activity levels were very high – the equivalent of nine miles of walking per day (most residents were engaged in some form of agriculture at that time). Their health status certainly could not be attributed to the consumption of olive oil alone, and one could argue that the other healthy habits practiced by these people helped to overcome what we now know are the detrimental effects of regularly consuming oils of any type. In my opinion, the conclusion that olive oil was responsible for the health status of these people is an error of attribution; a practice that is becoming more common in interpreting studies of nutrition and health.

One relatively recent study of people living on the island of Crete determined that patients *with* heart disease consumed more monounsaturated fat daily than patients *without* heart disease. The more olive oil consumed, the more heart disease they developed.³³

The report expresses concern about consuming enough Omega-3 fats. This concern has developed, I believe, from the excess consumption of Omega-6 fatty acids in recent years. This has resulted from increased consumption of land animals like eggs and pork, and consumption of processed foods which often contain polyunsaturated oils. The better option is to reduce consumption of these foods, rather than to increase the consumption of more high-fat foods, such as seafood.

Americans need to eat less fat, not more. Healthier populations, such as the rural Chinese, live on a diet that is significantly lower in fat, about 14.5% of calories³⁴, while Americans are consuming considerably more.

Protein needs are quite small and easily met with a plant-based diet.

For well over a century, myths about the importance of consuming more protein have prevailed, even though protein needs have been established at about 2.5% of calories for adults.³⁵ We can all agree that human breast milk is the best food for infants, and fuels very rapid growth, yet it is comprised of only 6% protein.³⁶ It is impossible to structure a diet with enough calories that does not include enough protein.

Myths have also been perpetuated about the superiority of animal protein over plant proteins. While it is true that most plant foods (quinoa and soy being exceptions) do not contain all of the essential amino acids, it is also true that a well-structured plant-

based diet does provides all of them. The protein content of plants compares well with the protein content of animal foods:³⁷

Black Beans	26%
Oatmeal	14.5%
Asparagus	51%
Spinach	57%
Broccoli	42%
Cheddar Cheese	25%
Hamburger	37%
Skim milk	37%
Egg	34%

The myth of needing to consume all of the essential amino acids through complementary protein combining was proven to be incorrect. Many health care professionals continue to erroneously advise people that they need to consume complementary proteins in order to practice vegetarianism safely. References to this issue should be taken out of the report.

There is no need to vary dietary recommendations for different ethnic and racial groups.

Research has shown that a plant-based diet prevents, stops the progression of, and even reverses disease in all populations. A well-structured plant-based diet will successfully address obesity in both children and the general population, hypertension in African Americans, diabetes in native Americans and Hispanics, and most other conditions currently affecting the general population and all ethnic and racial groups.

Additional barriers to change and proposed solutions.

The report lists several barriers to change, to which I add the following:

People are not being given accurate information about the consequences of their poor eating behaviors or the improvements they can expect to experience when they convert to a well-structured plant-based diet. We must give Americans accurate information so they can make informed choices.

Americans are encouraged to make changes in their diet that do not result in weight loss or improved health. Examples are substituting oils for saturated fat, lean meat for fattier meats, and eating fruit juice-sweetened cookies made from whole grains. When these changes do not result in improvement (and they generally do not), people then erroneously conclude that diet doesn't work for losing weight and improving health. This is not true; they have just not been taught how to structure a diet that affects their weight and health positively.

It is time to tell Americans the truth about the diet they need to adopt in order to lose weight and improve their health, and let them decide whether or not they want to make the necessary changes.

Concerns about follow-up research.

The committee has determined several areas in which more research is needed. However, I have concerns about study design for this research. Many of the studies cited to support the recommendations in the report show that certain foods or nutrients have short-term positive effects on biomarkers. But this is often meaningless in terms of long-term health outcomes. For example, The Atkins diet results in short-term weight loss, but is detrimental to health in the long-term.

It is very important to evaluate the long-term ramifications of dietary patterns. Several doctors, like Dr. Caldwell Esselstyn and the late Dr. Roy Swank, have conducted long-term research with their patients; Dr. Esselstyn followed his original patient group for 12 years and Dr. Swank followed his original patient group for 34 years. They proved that low-fat plant-based diets improved health in the short-term and long-term, even keeping even patients who were deemed terminal by their physicians alive for many years.

Another concern is the need to address the totality of dietary patterns rather than individual foods and nutrients. Scientists have been trying to identify “magic bullet” foods and nutrients for a very long time, but those of us who are having success in changing the health status of our patients through diet are doing so with a comprehensive approach. Most of our patients have been trying minor modifications for a long time before they arrive in our offices, with little or no success.

Still another important issue is the way in which studies are structured that compare outcomes of subjects eating a vegetarian diet vs. those who eat a more meat-based diet. It is true that many of these studies in the past have shown few differences in health outcomes. The reason is that so many vegetarians are following the very advice contemplated in these proposed guidelines – they are eating low-fat dairy products, whole grain muffins, and consuming oils instead of saturated fat. Generally their health gets worse instead of better, and their risk factors do not change. The spectacular results reported by many of us who are using plant-based nutrition as an intervention tool in our practices is based on using a *well-structured* plant-based diet, an important distinction.

Suggestions for implementation.

The report suggests that the USDA and HHS should convene committees to design plans for implementation. While it is important to include a cross section of stakeholders and others in this process, it is also important to include those who have a successful track record in convincing people to adopt a health-promoting diet, teaching them how to do so, and helping them to maintain such a diet. I am willing to work on this issue and share the expertise that we have acquired during the last 14 years while working with tens of thousands of people all over the world in improving their health with diet.

I hope to have an opportunity to be of further service in helping to improve the diet and health of Americans.

Respectfully submitted,

Pamela A. Popper, Ph.D., N.D.

The Wellness Forum's

FOOD GUIDE PYRAMID

treats:
occasional

organic
animal foods
2-3 times per week
(optional)

higher-fat plant foods;
nuts, seeds, olives,
avocados, nut butters

bread, cereals
minimally processed grains

fruit

steamed vegetables,
raw vegetables, big salads,
green tea, sprouts

legumes, whole grains, potatoes, corn

64 ounces of filtered water

References

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- ¹ Esselstyn, CB Jr, et al "A Strategy to Arrest and Reverse Coronary Artery Disease: A 5 -Year Longitudinal Study of a Single Physician's Practice." *The Journal of Family Practice* 1995 December; 41(6): 560-68
- ² Anderson JW. "Dietary fiber in nutrition management of diabetes." *In: G. Vahouny, V and D Kritchevsky (eds), Dietary Fiber: Basic and Clinical Aspects.* Pp.343-360. New York: Plenum Press,1986.
- ³ Neal Barnard, M.D. et al, "A Low-Fat Vegan Diet Improves Glycemic Control and Cardiovascular Risk Factors in a Randomized Clinical Trial in Individuals With Type-2 Diabetes." *Diabetes Care* 29:1777-1783 1006 DOI: 10.2357/dc06-0606
- ⁴ Neal Barnard, M.D. et al, "Changes in Nutrient Intake and Dietary Quality Among Participants With Type 2 Diabetes Following a Low-Fat Vegan Diet or a Conventional Diet for 22 Weeks." *J Am Dietetic Assoc.* October 2008 vol 108 #10;1636-1645
- ⁵ Swank RL. "Effect of low saturated fat diet in early and late cases of multiple sclerosis." *Lancet* 336 (1990):37-39
- ⁶ Swank RL. "Effect of low saturated fat diet in early and late cases of multiple sclerosis." *Lancet* 336 (1990):37-39
- ⁷ Swank RL. "Treatment of multiple sclerosis with low fat diet." *A.M.A.Arch. Neurol. Psychiatry* 69 (1953):91-103
- ⁸ Swank RL, and Bourdillon RB. "Multiple sclerosis: assessment of treatment with modified low fat diet." *J. Nerv. Ment. Dis.* 131 (1960):468-488
- ⁹ Swank RL. "Multiple sclerosis: twenty years on low-fat diet." *Arch. Neurol.* 23 (1970):460-474
- ¹⁰ Drewnowski, A, Krahn, DD, Demitrack, MA et al. "Taste responses and preferences for sweet high-fat foods: evidence for opioid involvement." *Physiol Behav* 1992;51:371-9
- ¹¹ Hegsted DM "Calcium and Osteoporosis." *J Nutr* 116 (1986):2316-2319
- ¹² Feskanich, D, Willett W, Stampfer M, Colditz, G. "Milk, Dietary Calcium, and Bone Fractures in Women: a 12-Year Prospective Study." *Am J Publ Nutr* June 1997 vol 87, no 6:992-997
- ¹³ Recher, R. "The Effects of Milk Supplementation on Calcium Metabolism, Bone Metabolism and Calcium Balance." *Am J Clin Nutr* 1985:41:254
- ¹⁴ Abelow, BJ, Holford, TR, and Insogna KL. "Cross-cultural association between dietary animal protein and hip fracture: a hypothesis." *Calcif Tissue Int.* 50 (1992):14-18
- ¹⁵ Karjalainen J, Martin JM, Knip M et al, "A bovine albumin peptide as a possible trigger of insulin-dependent Diabetes Mellitus," *New Engl Journ Med.* 327 (1992):302-307

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- ¹⁶ Akerblom HK, Knip M. "Putative environmental factors and Type 1 diabetes." *Diabetes/Metabolism Revs* 14 (1998):31-67
- ¹⁷ Naik RG and Palmer JP. "Preservation of beta-cell function in Type-1 Diabetes." *Diabetes Rev.* 7 (1999):154-182
- ¹⁸ Bernstein JM. "The role of IgE-mediated hypersensitivity in the development of otitis media with effusion." *Otolaryngol Clin North Am.* 1992 Feb;25(1):197-211.
- ¹⁹ Juntti H, Tikkanen S, Kokkonen J, Alho OP, Niinimaki A. "Cow's milk allergy is associated with recurrent otitis media during childhood." *Acta Otolaryngol.* 1999;119(8):867-73.
- ²⁰ Malosse D, Perron H, Sasco A, et al. "Correlation Analysis between Bovine Populations, Other Farm Animals, House Pets, and Multiple Sclerosis Prevalence." *Neuroepidemiology* 12 (1993):15-27
- ²¹ Chan JM and Giovannucci EL. "Dairy products, calcium and vitamin D and risk of prostate cancer." *Epidemiol. Revs.* 23 (2001):87-92
- ²² Campbell, TCC *The China Study* Ben Bella Books 2004 pp51-67
- ²³ Allen, et al, "A prospective study of diet and prostate cancer in Japanese men," *Cancer Causes Control* 2004;15:911-20
- ²⁴ Virtanen, et al, "Mercury, fish oils and risk of acute coronary events and cardiovascular disease, coronary heart disease and all-cause mortality in men in eastern Finland," *Arterioscler Thromb Vasc Biol* 2005;25:228-33
- ²⁵ Kenneth K Carroll "Dietary Fats and Cancer." *Am J Clin Nutr* 1991;53:1064S-7S
- ²⁶ Blankenhorn, D.H. et al, "The Influence of Diet on the Appearance of New Lesions in Human Coronary Arteries." *JAMA* March 23, 1990. 263(12):1646-1652.
- ²⁷ Rudel, Lawrence L, et al "Compared with Dietary Monounsaturated and Saturated Fat, Polyunsaturated Fat Protects African Green Monkeys from Coronary Artery Arteriosclerosis." *Arteriosclerosis, Thrombosis, and Vascular Biology* December 1995
- ²⁸ Felton C. et al. "Dietary polyunsaturated fatty acids and composition of human aortic plaques" *Lancet*, 1994, 344:1195
- ²⁹ B Hennig and BA Watkins "Linoleic acid and linolenic acid: effect on permeability properties of cultured endothelial cell monolayers." *Am J Clin Nutr* 1989 49: 301-305
- ³⁰ Vogel, R. et al, "The Postprandial Effect of Components of the Mediterranean Diet on Endothelial Function." *J Am Coll Card* 2000
- ³¹ Lorigeril, et al, "Mediterranean Diet, Traditional Risk Factors, and the Rate of Cardiovascular Complications After Myocardial Infarction: Final Report of the Lyon Diet Heart Health Study," *Circulation* Feb 16, 1999

³² Keys A, Menotti A, Karvonen M, et al. The diet and 15-year death rate in the Seven Countries Study. *Am J Epidemiol.* 1986;124:903–915

³³ Vrentos, G, Papadakis J, Malliaraki N, et al. "Diet serum homocysteine levels and ischaemic heart disease in a Mediterranean population" *British Journal of Nutrition*, Volume 91, Issue 06, Jun 2004, pp 1013-1019 doi: 10.1079/BJN20041145 (About doi), Published online by Cambridge University Press 09 Mar 2007

³⁴ Campbell, TCC *The China Study* Ben Bella Books 2004 p 85

³⁵ Hegsted DM.. " Minimum protein requirements of adults." *Am J Clin Nutr.* 1968 May; 21(5): 352-7.

³⁶ Prentice A "Constituents of Human Milk" United Nations University Centre

³⁷ source nutritiondata.com accessed 11/26/2009