Dietary Guidelines and Food Guide Pyramid Incapacitate Consumers and Contribute to Distorted Eating Attitudes and Behaviors

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The Health At Every Size model (Figure 1) defines weight issues in a way they can be resolved. The model emphasizes achievable health behaviors—sustainable activity, competent eating, and physical self esteem—then allows weight to find its own level in response to those positive attitudes and habits.

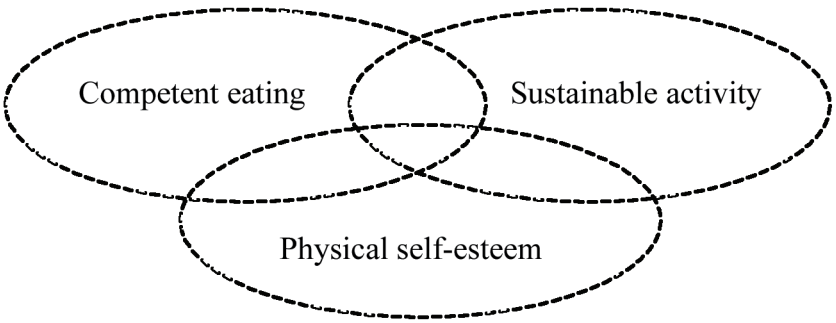
In an attempt to make healthful physical activity more achievable, research has systematically focused on defining minimum levels and types of activity consistent with metabolic fitness.[1] Similarly, interventions with physical self-esteem have focused on acceptance of size and shape rather than changing them. In contrast, the nutrition world continues to set rigid and ever-increasing standards for food selection, standards that have been demonstrated to be beyond the reach of consumers. Despite decades of emphasis in the Dietary Guidelines and Food Guide Pyramid, only a third of today's consumers score an average of 70 or above on the 100-point Healthy Eating Index, and only 20% of consumers are able to consume their five-a-day of fruits and vegetables.[2]

The trouble started back in 1977 when nutrition policy-makers added avoidance of degenerative disease (cardiovascular disease and cancer) to maintenance of nutritional adequacy as a basis for nutrition policy. In the earliest Dietary Guidelines and in all revisions since, policy makers extrapolated from the disease-proneness of certain individuals to recommend that everyone in the country put themselves on a modified fat, low-cholesterol, low sodium diet. The Food Guide Pyramid operationalized the Dietary Guidelines with its first publication in 1996.

Policy-makers continue to stress the evidence-based nature of their recommendations. However, the evidence was strongly criticized from the beginning

as being insufficient to form a basis for sweeping public health recommendations.[3,4] while epidemiological research questions the disease-avoiding efficacy of adherence.[5] Of primary concern to HAES adherents, guidelines stress the health risks of overweight and extreme dietary and activity modifications to achieve and maintain a "normal" BMI of 18.5 to 25. However, recent analyses of NHANES surveys of adult BMI replicated many large, well-conducted studies in finding that relative to "normal" BMI (BMI 18.5 to 25), "overweight" (BMI 25 to 30) was associated with a decrease in relative risk of mortality, while "obesity" (BMI 30 to 35) was associated with only a modest increase in mortality risk.[6] Weight loss for anyone whose BMI is over 25 continues to be key to nutrition policy, even though long-term efficacy of weight maintenance is poor.[7] On the other hand, research on the Health at Every Size movement shows clearly that health parameters can be improved by improving eating competence without weight loss.[8,9]

FIGURE 1. Health at Every Size



Similarly, consumers have been singularly unsuccessful in long-term dietary modification as a means of improving blood lipid profiles at the same time as they have become increasingly wary about food selection.[10] While improvement in population-wide blood lipid levels in recent decades is attributed at least in part to dietary changes,[11] the percentage of consumers who reported adhering to total fat and saturated fat recommendations was 6.3 and 5.0%, respectively.[12] Furthermore, observational studies show that consumers in health surveys tend to overestimate their positive health behaviors.

Rather than questioning the efficacy of current nutrition policy on the basis of unchanged nutritional behavior of consumers, the current Dietary Guidelines committee increased the stringency of nutritional recommendations. The 2005 Dietary Guidelines, for instance, raised the recommendation for fruits and vegetables from five to nine a day. That is 4 1⁄2 cups of virtually naked fruits and vegetables—with only the smallest amounts of salt, fat or sugar. The intent, of course, wasn't to satisfy nutritional requirements—four or five well-chosen vegetables and fruits a day and a similar number of breads and cereals is enough. The intent is to get us to fill up on relatively low-calorie food so we don't eat so much. Such tactics defeat consumers' best intentions Well and interestingly prepared fruits and vegetables are tasty and rewarding. However, as any experienced dieter knows, trying to fill up on them—particularly when they are unadorned—is quite another matter. I have worked with far too many recovering dieters who have tried to do just that, and after a while they say that they simply can't look at another pile of vegetables.

Although the Guidelines hedge the language by saying amounts of food groups to consumers are "suggested," the 2005 Food Guide Pyramid—MyPyramid—is essentially a low-sodium, modified-fat dietary prescription. It is medical nutrition therapy, and complicated therapy at that—low sodium, low total fat and saturated fat, relatively high monounsaturated and polyunsaturated fat. With its 12 different food intake patterns and "suggested" vegetable subgroupings, fat specifications and extremely low levels of "discretionary" calories, MyPyramid is virtually identical to the diets I used to teach over several sessions in my outpatient dietitian's practice to patients who were diagnosed with heart disease or diabetes. Unless I did follow-ups, most of my patients made mistakes with the diet and it didn't help them. Many also tended to take their adherence to extremes. Given the number of constraints on their food selection, such patients were at high risk of turning into dietary cripples—afraid of everything they ate, prone to dietary indiscretions, and all-too-ready to blame their eating behavior for every medical episode.

It gets worse. MyPyramid becomes a weight loss diet, with calorie levels intended to produce a negative calorie balance for the individual whose BMI is above the 25 cutoff. On the other hand, the recommendation for nine fruits and vegetables and 10 ounce-equivalents of breads and cereals for those at the 3000 and 3200 calorie level is an unrealistic recommendation, because very few people work hard enough to need that many calories.

Unrealistic Standards Distort Eating Attitudes and Behaviors

Why worry? Because consumers decode the Dietary Guidelines and MyPyramid as "don't eat so much; don't eat the foods you like." Such embedded messages and unrealistic standards create the very problems that the Health at Every Size movement addresses: Weight preoccupation and resultant conflict and anxiety about eating. In loading us up with nutritional shoulds, oughts, and threats of medical havoc for failing to comply, the Dietary Guidelines and Food Guide Pyramid Committees have failed to consider harm to eating attitudes and behaviors. To do a good job with eating and with feeding our families, we must feel good about it. We must be able to go to the table hungry, eat with pleasure and attention until we are satisfied, then stop, knowing that another meal or snack is coming and we can do it all over again. We must trust ourselves to eat as much as we are hungry for, to eat the foods that we like, and to feel comfortable with our enjoyment of food and eating.

Increasingly rigid food selection and portion size standards and emphasis on body weight that is medically, rather than biologically, determined exacerbates cultural preoccupation with thinness and promotes restrained eating. In 1999, 64% of men and 78% of women were trying to lose or maintain weight,[12] thus consigning themselves to physical and emotional symptoms of energy deficit—fatigue, lethargy, irritability and depression—as well as excessive eating in response to body processes that strive to correct the energy deficit: food preoccupation and proneness to overeat.[13] Any system of food management that emphasizes external processes at the expense of internal is inherently fragile and promotes periodic disinhibition—throwing away of all controls.

Restrained eating is so common in our culture that it is perceived as normal eating. It is not. Normal eating attends primarily to internal regulators of hunger and fullness to maintain energy balance, and to appetitive cues—the pursuit of aesthetics and pleasure—to guide food selection as well as food regulation. The concept of restrained eating applies to food selection as well as to food regulation. Appetite—the aesthetic and gustatory rewards from food—is a powerful motivator for food-seeking, and most people prioritize taste as a motivator for food selection.[14] In contrast, nutrition policy prioritizes food selection based on nutrition principles over selection of preferred foods—particularly preferred foods that are high in fat and/or sugar.[15]

The American Dietetic Association (ADA) Survey of Dietary Habits, first conducted in 1991[16] and repeated every two years since, indicates that consumers have difficulty adhering to nutrition policy. In response to questions

about whether they were doing all they could to achieve balanced nutrition and a healthy diet, currently only a quarter of people fit into the "I am already doing it" category. For a third, the attitude is "I know I should but...," and the attitude of another third is "don't bother me."[17]

As with any other human endeavor, dissonance between shoulds and wants produces erratic and inconsistent behavior that delivers punishment on both ends. We feel guilty when we do what we want, deprived when we do what we should, and bounce back and forth from one to the other. It is the dietary version of neurosis—of unresolved inner conflict caused by rigid adherence to an idealized concept that is at variance with reality. Survey respondents first filled out a questionnaire indicating their nutrition standards, then a second time indicating the degree to which they lived up to those standards. For the "I know I should but..." group, the gap between standards and behavior was 34%, an indication of anxiety and ambivalence about food selection. In the "I am already doing it" group, the gap was 15% and in the "don't bother me" group the gap was only 9%.[18]

An ADA-commissioned survey showed ample evidence of nutrition neurosis and self-respecting rebellion against rigid constraints. Although Americans reported eating to be enjoyable, "when health was factored in, the fun was often taken out of eating and 36% said they feel guilty about eating food that they like."[19] In general, consumers say they don't want to give up the food they like and think a healthy diet takes too much time.[20] Forty percent of survey participants said they were tired of being told what to eat.[21]

Moreover, current dietary standards appear to be undermining basic principles of nutrition behavior. A 2003 survey by the Food Marketing Institute showed that the primary nutritional concern for half of respondents was dietary fat avoidance, with nutritional value of food assigned priority by only 12% and a "desire to be healthy and eat what's good for us" given priority by so few that numbers were not significant in the survey.[22]

Questions that give discomfiting answers to those who commission surveys tend not to be asked again. In the early ADA studies, questions about nutrition quality at each respondent level showed the "don't bother me" group to be doing about as well as each of the other two groups.[23]

What About Family Meals?

There is nothing in either the Dietary Guidelines or the Food Guide Pyramid stressing the importance of family meals. Perhaps it is just as well. Even without directly addressing family meals, nutrition policy has had a negative impact.

Meals have come to carry a moralistic stigma as the time and place when the nutrition rules must be obeyed. Between-meal eating, on the other, hand, offers an opportunity—deliberate or impulsive—to set aside controls and enjoy preferred foods. In short, meals are for duty, snacks are for fun.

While parents value family meals and strive to have them,[24] surveys show that a third of preadolescents and adolescents have two meals or less per week with their families.[25] High-calorie snacking and grazing is on the increase, with children and adolescents getting more daily energy and less nutrients during more snacking occasions.[26] Certainly, multiple social and economic factors contribute to these trends, but rigid and depriving nutrition standards have to be accountable for playing a role.

We all depend on meals to give us access to a wide variety of nutritious foods. Children absolutely depend on rewarding, regular, and reliable family meals in order to feel secure, to eat the amount they need to grow appropriately and to learn to like a variety of nutritious foods. As I stress in chapter 3, "Make family meals a priority," of *Your Child's Weight, Helping Without Harming*, studies show that children who have regular family meals do better emotionally, socially, academically, vocationally, and—yes—nutritionally. Time spent with families at meals is more related to the psychological and academic success of preadolescents and adolescents than time spent in school, studying, church, playing sports, or doing art activities.[27,28]

My long clinical practice has shown me that parents feed themselves and their children best and most reliably when they provide meals that they find richly rewarding to plan, shop for, prepare, provide, and eat. For children's emotional security, nutritional well-being, and weight management, even the most reprehensible family meal is far better than no meal at all. Even if moralistic and depriving adherence to nutrition rules about amount and types of food worked for adults, it certainly doesn't work for children. Children won't eat dreary food, even if it is good for them. Parents tire of foisting dreary food on their children or worse, engaging in such tactics to get them to eat certain foods that family meals become a struggle. But many parents keep up the pressure–they have been taught by the dietary experts that eating certain types and amounts of food is desperately important for their child's health and longevity. And, regardless of the intention of the new dietary guidelines, parents will feel defeated from the start by defining nutritional excellence as drab, unappealing meals planned on the basis of extreme nutrition prescriptions.

What to Do Instead?

Of course, it is easy to criticize, and a whole lot more difficult to write nutrition policy in the first place. If I had my way, what would I do about writing—or at the very least, coping with—nutrition policy?

- *Moderate nutrition policy*
  In the best of all worlds, dietary policy would go back to supporting nutritional adequacy, and leave medical nutrition therapy to the clinical dietitians. From the point of view of a professional who deals with dieting casualties, nutrition policy to prevent degenerative disease is the experiment that failed.

- *Recognize that health and nutrition policy are primarily political documents*
  In *Secrets of Feeding a Healthy Family*, I point out that the nutrition enthusiasts are in the ascendancy right now, the moderates in decline. Often based on the same studies, the enthusiasts maintain that eating a modified fat, low-sodium diet will help us live longer; the moderates say it will not. In the meantime, we clinicians can finesse the whole argument by concentrating on our constituencies of one person at a time, doing the least we can to get the desired results.

- *Act as advocates for our clients*
  Since policy retrenchment is virtually unheard of, we health professionals must join with our clients right where they are and support their realistic, rewarding, and sustainable efforts to feed themselves and their families. We must resist policy-makers' charge to implement guidelines: to inspire, motivate, coerce and badger our clients to follow the Food Guide Pyramid.

- *Emphasize providing, not depriving*
  In Secrets of Feeding a Healthy Family, my goal was to support positive eating attitudes and behaviors—to free my readers to enjoy their eating. As I said in Secrets, "when the joy goes out of eating, nutrition suffers." When eating and feeding are positive and reliable, people bring themselves along with respect to improving the nutritional quality of their diets.

- *Address encoded messages as well as intent*
  Restrained eating is such a part of our relationship with food that even the most benign messages can take on a negative and moralistic spin in the ears of the hearer. The word healthy, for example, has come to mean "don't eat so much; don't eat the foods you like." We must give up our cherished language or at least check it out with our clients to make sure that they aren't hearing criticism and restriction where none is intended. In Your Child's Weight: Helping Without Harming, I talked with parents about intent: "Are my food selection recommendations intended to make your child eat less and weigh less? I know they are not, but if you decode them that way, you need to modify my recommendations to fit you."

- *Emphasize and teach eating competence, not food restriction*
  Eating competence is made up of positive eating attitudes, the ability to regulate food intake based on internal cues of hunger, appetite, and satiety, a positive and receptive attitude toward unfamiliar foods and the ability to learn to like novel food, and the ability to manage food context—to plan, shop, prepare and present regular and reliable meals and snacks.[29]

- *Address components of eating competence*
  Based on assessment, offer education and intervention that addresses the components of eating competence. For individuals with eating disorders or failed chronic dieters, for instance, prioritize eating attitudes and food regulation.

Ellyn Satter is an author, lecturer, family therapist, and specialist in eating and feeding. For more about her appraisal of nutrition policy and alternative recommendations for consumers, see Secrets of Feeding a Healthy Family. *For more about Satter's emphasis on providing, not depriving as a humane and effective approach to a child overweight, see* Your Child's Weight: Helping Without Harming. *Both are available through* www.EllynSatter.com. *Satter can be reached at* feedback@EllynSatter.com.

References

1. Blair, S.N., LaMonte, M.J., & Nichaman, M.Z. (2004). The evolution of physical activity recommendations: how much is enough? *American journal of clinical nutrition*. 79, 913S-920S.
2. USDA Center for Nutrition Policy and Promotion (2005). The healthy eating index. [On-line.] Available: *http://www.nal.usda.gov/fnic/HEI/HEI.html*.
3. Taubes, G. (1998). The (Political) science of salt. *Science*. 281, 899-907.
4. Taubes, G. (2001). The soft science of dietary fat. *Science*. 291, 2536-2545.
5. McCullough, M.L. , Feskanich, D., Stampfer M.J., et al. (2000). Adherence to the dietary guidelines for Americans and risk of major chronic disease in women. *American journal of clinical nutrition*. 72, 1214-1222.
6. Flegal, K.M., Graubard, B.I., Williamson, D.F., & Gail, M.H. (2005). Excess deaths associated with underweight, overweight, and obesity. *JAMA*. 293, 1861-1867.
7. Jeffery, R.W., Drewnowski, A., Epstein, L.H., et al. (2000). Long-term maintenance of weight loss: current status. *Health psychology*. 19 (1 Suppl), 5-16.
8. Bacon. L., Stern. J,S,, Van Loan, M.D., & Keim, N.L. (2005). Size acceptance and intuitive eating improve health for obese, female chronic dieters. *Journal of the American dietetic association,* 105, 929-36.
9. Hammond-Meyer, A. (2005). Stabilizing Eating and Weight Using a Nondieting Treatment As a Means to Improve Biomedical Health Parameters in an Overweight Population of Women: A Health at Any Size Perspective. Seattle Washington: Seattle Pacific University.
10. Luepker, R.V., Rastam, L., Hannam, P.J., et al. (1996). Community education for cardiovascular disease prevention: Morbidity and mortality results from the Minnesota Heart Health Program. *American journal of epidemiology*. 144, 1795-1801.
11. Gregg, E.W., Cheng, Y.J., Cadwell, B.L., et al. (2005). Secular trends in cardiovascular disease risk factors according to body mass index in U.S. adults. *JAMA*. 293, 1868-1874.
12. Serdula, M.K., Mokdad, A.H., Williamson, D.F., Galuska, D.A., Mendlein, J.M., & Heath, G.W. (1999). Prevalence of attempting weight loss and strategies for controlling weight. *JAMA*. 282, 1353-1358.
13. Keys, A., Brozek, J., Henschel, A., Mickelsen, O., & Taylor, H. (1950). The Biology of human starvation. Minneapolis: *University of Minnesota Press*.
14. Glanz, K., Basi,l M., Maibach, E., Goldberg, J., & Snyder. D. (1998). Why Americans eat what they do: taste, nutrition, cost, convenience, and weight control concerns as influences on food consumption. *Journal of the American dietetic association*. 98, 1118-1126.
15. U.S. Department of Health and Human Services, U.S. Department of Agriculture. (2005). Dietary guidelines for Americans. Washington, DC: Author.

16. American Dietetic Association. (1997). Survey of American dietary habits. Chicago: Author.
17. American Dietetic Association. (2002). Nutrition trends 2002: final report of findings. Chicago: Author.
18. ibid, ADA (1997).
19. Wellman, N. (1990). The good and the bad: how Americans are making food choices. *Nutrition news*. 53, 1-3.
20. ibid, ADA (1997).
21. Patterson, R.E., Satia, J.S., Kristal, A.R., Neuhouser, M.L., & Drewnowski, A. (2001). Is there a consumer backlash against the diet and health message? *Journal of the American dietetic association*. 101, 37-41.
22. FMI Research Department. (2003). Nature of concern about nutritional content, 1989-1998. Trends in the United States. consumer attitudes & the supermarket. Washington, DC: *Food Marketing Institute:* 72.
23. ibid, ADA (1997).
24. Hoban, T.J.; Americans speak up for dinnertime. (1995). MealWatch. Washington, DC: *Better Homes and Gardens and Food Marketing Institute:* 1, 4-5.
25. Eisenberg, M.E., Olson, R.E., Neumark-Sztainer, D., Story, M., & Bearinger, L.H. (2004). Correlations between family meals and psychosocial well-being among adolescents. *Archives of pediatric and adolescent medicine*. 158, 792-6.
26. Jahns, L., Siega-Riz, A.M., & Popkin, B.M. (2001). The increasing prevalence of snacking among U.S. children from 1977 to 1996. *Journal of pediatrics*. 138, 493-498.
27. Hofferth, S.L. (2001). How American children spend their time. *Journal of marriage and the family*. 63, 295-308.
28. Council of Economic Advisers to the President (CEAC). (2000). Teens and their parents in the 21st Century: an examination of trends in teen behavior and the role of parental involvement.
29. Satter, E.M. (in press). Defining and assessing adult eating competence. *Journal of nutrition education and behavior.*