

Individuals and families make food choices every day that unfortunately often lead to overeating with minimal daily exercise. In 2010, the USDA released new dietary guidelines in addition to a new visual tool to help Americans understand the components of good nutrition ("Personalizing MyPlate," 2012). MyPlate is a tool that can help individuals, families and communities make healthy eating choices regarding their diet and lifestyle. The MyPlate icon supports simple nutrition messages, and it has the ability to be utilized by any family, individual or food culture to remind people how to build a healthy plate. MyPlate helps to remind Americans to include healthier food choices in their diets such as vegetables, fruits, whole grains, low-fat dairy, and lean protein foods and how to incorporate each nutritional element onto their plate, or in a meal or snack. Specifically, ChooseMyPlate.gov provides individuals involved in schools, workplaces and other organizations with helpful tips and tools to promote healthy lifestyles among children and families.

Social marketing is a key component to why people use or fail to use health information. The basic concepts of the social marketing approach are incorporated into ChooseMyPlate.gov, by making health information available, seen as useful and new, and in a friendly format ("Social Marketing" ppt). The website successfully uses social marketing approaches by integrating social media as a way of grabbing attention, posting dietary advice on Twitter and by offering interactive tools that can help individuals to manage their weight and track exercise. The graphic for MyPlate is artistic and attractive compared to MyPyramid and can serve as a visual cue for individuals and even children to make informed decisions about their food choices.

The Social Cognitive Theory and the Ecological Model both focus attention on individual and social environmental factors as targets when developing effective nutrition interventions. ‘Reciprocal determinism’ or ‘reciprocal causation’ suggests a link between the individual and the environment, which are necessary factors to identify in order to reinforce a healthy behavior change (Campbell). ChooseMyPlate.gov offers both individual and community tips for eating healthy and maintaining a healthy weight through exercise.

ChooseMyPlace.gov can be viewed essentially as a representation of an ecological model, or the ‘umbrella term’, that encompasses intrapersonal factors, interpersonal relationships, organizational factors, community factors and public policy. Under the large entity of ChooseMyPlate.gov is an assortment of subsets or other models and theories of behavior intertwined in the materials such as the Health Belief Model, the Social Cognitive Theory, the Transtheoretical Model, and the Theory of Reasoned Action. All of the concepts and constructs from the models and theories are inversely woven into the broad categorization of ChooseMyPlate through the website elements.

There are several variables common to many behavior change models and theories such as threat, fear, barriers, benefits, and subjective norms. In addition, many behavior models include key elements such as attitudes, intentions, cues to action, and self-efficacy. The website uses these constructs in the materials which can aid in evoking a behavior change such as choosing healthy foods, which is one of the goals of ChooseMyPlate.gov.

ChooseMyPlate.gov can assist one in making healthier food choices by increasing their self-efficacy, providing positive reinforcements in addition to tools to facilitate observational learning and modeling (social cognitive theory) through the use of videos. The website provides individuals tools to identify current eating habits and compare them to current dietary recommendations. Healthy eating tips and physical activity recommendations are critical for individuals in any stage identified in the Transtheoretical Model. Whether one is ready to make a change (action) or just contemplating a change, this website can help an individual to understand their current habits and fundamentally help an individual make healthier choices later on and to reach a 'termination' point, which is ultimately having 100 percent efficacy to maintain a behavior.

Health education behavior models and theories attempt to classify and explain factors that influence human behavior. Concepts such as perceived barriers, perceived benefits, cues to action and reinforcement are constructs from several theories and models such as the Health Belief Model and the Theory of Planned Behavior. Individuals provided with benefits to healthy eating and exercise, along with easy tools to utilize in making healthy food choices and increasing physical activity such as daily food plans, a BMI calculator, and a calorie calculator, all help to evoke a behavior change of making healthier food choices.

Self-efficacy is a concept originally developed by Albert Bandura in the Social Cognitive Theory and is defined as an individual's perception of or confidence in their ability to perform a recommended response ("Theories of Behavior Change"). Self-efficacy is a concept incorporated into many theories of behavior change and can be

increased through encouragement or identifying barriers and threat. The website provides nutrition education tips such as how to add more vegetables to your day, how to build healthy meals and how to incorporate healthy grains into the diet. Providing individuals with strategies towards healthy eating through nutrition educational lessons, sample menus and recipes, and tips for dining out is an excellent way to provide a foundation while increasing one's confidence for beginning a new dietary change.

The SuperTracker is a tool on ChooseMyPlate.gov which encourages an individual to balance daily food intake and physical activity. This online resource provides a useful personalized planning system not only to target individual factors related to healthy eating, but also to community factors, which in turn helps one to overcome barriers present both intrapersonally, interpersonally and environmentally. This resource represents many constructs associated with learning and behavior change theory, by specifically isolating individual barriers, goals, and self-efficacy components in addition to providing benefits to making healthy food choices. By using the tracker, one can learn portion control, the use of nutrition fact labels and how to incorporate adequate nutrition onto their plate. Further incorporated into the tool are constructs of setting weekly goals (incentives), getting the family involved (social support) and the importance of identifying and overcoming barriers such as providing tips to access affordable food. The tool also outlines benefits (motivations) of physical activity such as increasing one's chances of living longer, improving sleep and maintaining or reaching a healthy weight.

ChooseMyPlate also provides professionals with tools to develop effective nutrition education materials and intervention plans aimed at any target group. Using the resources from this website such as *Let's Move!* Resources, dietary guidelines, and

sample menus and recipes, are all materials that can assist nutrition professionals to promote and educate individuals concerning healthy eating practices. This website provides information and tools that can compliment a nutrition education lesson by incorporating nationwide standards and visually appealing graphics.

While the MyPlate icon and website offers Americans advice and tools to consume healthier foods, the government agency that creates and provides nutrition advice to the public is still heavily financially linked to the dairy, meat and other food industries. While still a proposed conflict of interest, nutritional advice may still be influenced by where government funding is directly coming from. Keeping in mind that nutritional information provided from this website is government sponsored, it is important as a professional to tailor nutrition education materials specifically to the target population or individual. There is constant influx of nutrition information provided to the public, and this website is yet another case where one must critically analyze and include and exclude certain materials dependent on the specific condition and population.

The article, *Dietary Guidelines and Food Guide Pyramid Incapacitate Consumers and Contribute to Distorted Eating Attitudes and Behaviors*, by Ellyn Satter, emphasizes achievable health behaviors, while criticizing the ‘rigid’ standards set by the USDA. The primary concern to HAES adherents are that guidelines stress the health risks of overweight and extreme dietary and activity modifications to achieve and maintain what is considered to be a normal BMI (Satter, 2005). Satter proposes that health can be refined by way of improving eating competence without weight loss.

Paying attention to internal signals of appetite, hunger and satiety one can avoid having to focus all of their energy on the specific food or a diet plan (Satter, 2005). Satter

proposes that eating should be pleasurable and food should be aesthetic and unrestrained. However, trusting ourselves to eat as much as we are hungry for, and to eat foods we like, while enjoying foods, is a concept for most that is easier said than done (Satter, 2005). Although our culture is preoccupied with thinness and dieting, the ability to eat normally and pay attention to internal cues is a skill that must be taught to most individuals. Furthermore, for those who don't have the access to gain the knowledge to this eating method, nutrition recommendations by the USDA may be their only option for some guidance to healthy eating.

Americans are often sent mixed messages regarding health and nutrition and simplicity is crucial for a society that is often overwhelmed with new health recommendations. The Eating Competence Model and MyPlate arrived during a time when the United States is tackling an obesity epidemic. The original four food groups were designed to help individuals get the nutrition they need, and over the years The Dietary Guidelines for Americans have become increasingly complex and heavily focused on disease prevention and weight control.

The Eating Competence Model and MyPlate can be used in conjunction with each other in nutrition education efforts. The model allows individuals to learn how to enjoy food, eat a wide variety of food, pay attention to internal signals, and enjoying eating with others (Satter, 2005). On the other hand, MyPlate and can be used to remind individuals to limit heavy foods and bulk up their plates with vegetables and fruits. Compared to The Food Guide Pyramid, MyPlate offers a visual representation of a healthy plate which the average American can view and easily understand what foods to incorporate during a meal. The pyramid was very complex and crowded with facts and

pictures, which sends a confusing message to individuals. MyPlate offers a simple message through the representation of what should be on a plate, while the model can compliment the use of the graphic by supporting healthy eating through actually celebrating food and not feeling guilty with unavoidable indulgences.

The availability of high fat foods and large portion sizes often creates urges, increased hunger and cravings. The tendency to overeat, or essentially to eat in a mindless way, can be related to emotional responses of boredom, sadness, or anxiety. Similar to behavior learning theories, to prevent mindless eating one must do everything possible to customize their food environment as well as recognizing limits after feeling satiety. Becoming aware and mindful of eating decisions to reach a sense of clarity and behavioral goals towards healthy eating is crucial to ultimately avoid overeating.

Emerging research indicates that a mindful eating approach could result in an individual being more aware of what they eat, how they eat, and how much they eat (Spoko, 2010). Personally, using the techniques of Susan Albers, I have already identified environmental and personal triggers to recognize in order to avoid mindless eating. Watching television, social situational pressures, or emotional reasons such as boredom or anxiety are triggers for my mindless eating habits. Currently, I understand how to better listen to my body cues in addition to ignoring the emotional relationship linked with foods and eating habits, to stay more present at mealtime or while snacking.

When an individual does not listen to their body or their intuition, they often eat mindlessly (Spoko, 2010). If mindless eating were a behavior change or model, key constructs could be identified similar to that of already well-known theories of behavior change. Providing an individual with skills or knowledge of mindful eating can aid in

identifying modifying factors, which include the personal and environmental restraints associated with healthy eating. Increasing knowledge will provide clarification and ongoing commitment, which in turn leads to goal setting, changing beliefs and attitudes, self-reevaluation and overall can be a conscious raising experience.

Acceptance of food and eating can be achieved through the approach by allowing one to identify internal cues of cravings, urges, and hunger, which can eliminate overeating. Mindfulness training provides behavior skills such as self-monitoring and stimulus control, that are critical constructs to behavior change. Also, the constructs of perceived control, individual beliefs and reinforcements are all intertwined in the mindful eating approach. Furthermore, goal setting is an important construct of mindful eating and allows an individual to identify cognitive delusions associated with weight and eating. Distinguishing personal factors, which can increase self-efficacy and identify cues to action can help one achieve personal goals, develop decision-making skills and ultimately lead to a new eating behavior.

While similar to many behavior learning theories and models, mindful eating and The Eating Competence Model incorporates personal factors and environmental triggers, while identifying behavioral components to overeating. Barriers arise when using theory based approaches, MyPlate, The Eating Competence Model, or the mindful eating techniques of Susan Albers. Nutrition education materials are not ever without limitation primarily because people are constantly adapting and changing with environmental shifts along with personal transformations. Behavioral approaches and materials would be most successful if used in conjunction with different theories, models and nutrition recommendations when developing an effective nutrition education program.

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