Health has been characterized as an enigma and caring for health tied to original manifestations of human existence globally (Gadamer, 1996). The concept of health has evolved from an understanding of being in harmony with nature or being safe, sound, and whole (Pender, Murdaugh, & Parsons, 2006). Mental health is not merely the absence of a mental disorder; it is defined by the World Health Organization (WHO; 2007) as “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community” (para. 2). Some estimate that up to 450 million people worldwide experience some form of mental or behavioral disorder (Harrington et al., 2009).

In a broad sense, there is understanding and agreement among health care professionals, along with the general population, that diet and nutrition are integral to health and quality of life across the life span. Diet has increasingly been implicated in a number of illnesses, particularly obesity, diabetes, cardiovascular syndromes, and depression (Campbell, 2004; Harrington et al., 2009). This being so, the question arises: How do food and nutrition affect mental health maintenance?

Nutritional choices nourish and not only affect the health of the body but are essential for a healthy mind,
soul, or psyche. Nutrition, as represented by whole food, is a necessary holistic foundation for health in every person. Whole food, as used in this article, refers to food in its natural form—not processed or tampered with by human technologies in the sense of changing its inherent properties (Campbell, 2004; Crocker, 2008; Low Dog, 2010; Weil, 2001). Since nutrition is foundational to all health, another issue arises. It is curious that diet and nutrition are relegated to discussions of alternative versus conventional therapies. Mainstream health care professionals, in their search to apply scientific and technological advances to health, may have forgotten the essentials of our very human existence—clean food and pure water. In this article, views supporting the return of real food as the cornerstone to holistic health are offered.

**HOLISTIC ECOLOGY AND HEALTH**

As a holistic nurse, I offer these thoughts about bringing the ecological concepts of sustainability, reclamation, and synergy to the food table. The concepts of pollution, energy, balance, and ecosystems might benefit from reframing to include the inputs and outputs of the human system. Currently, these environmental notions are components of the popular culture. School children in the United States learn about the ecosystems of the earth and the need for a clean, sustainable world. Not too many years ago, environmentalists were considered on the fringe. When I began my nursing career in the late 1970s, recycling was not embraced by mainstream U.S. society. Today, in some urban communities, recycling is legislated. We now connect the dots when it comes to the health of the environments that surround us. We need not miss the ecological patterns related to the chronic diseases that plague society.

In the discussion that follows, I seek to understand recurring human health problems using an ecological mindset. Since chemicals and waste are problems for the health of the earth’s waterways and atmosphere, let us consider these as culprits in the pollution of the human body. It is my long-time desire to discover holistic solutions for the perplexing issues of chronic illness states. It is also my desire to provide learning opportunities in the field of holistic health.
It is vital for all health professionals to work in an environment where research is linked to the practice setting so that knowledge development can continue. It is imperative to position ourselves as health professionals to influence education and policy making to advance the application of this health-related knowledge. Health as a paradigm for care and service must be championed. The health of the land relates to the health of the food (Berry, 1982). The propensities of our economic status quo to substitute processed and chemically laced products for food is a matter of human ecology. As health care professionals, it is time to make the connection. Eating is basic to our existence. Food—real food—matters for holistic health. An ear of corn is a whole food; meal ground from dried corn is a real food, while high fructose corn syrup is neither whole nor real food.

**HOLISTIC CHOICES AT THE TABLE: FOOD, NUTRIENTS, AND DEPRESSION**

Food, real whole food, as noted above, is a keystone of health. Food choices matter and affect the overall state of health, including well-being and mood, not merely physical health status. Mental health is influenced by a variety of factors, and food is among them. For the purposes of this article, depression has been chosen as a focal point because according to the National Institute of Mental Health (NIMH; 2008), depression is the leading cause of disability in the United States and the most widespread psychiatric condition worldwide. Considering that food choice and dietary patterns affect overall health, it is reasonable to suggest that diet may affect depressive symptoms as well.

**Food**

The food choices made by clients in all care settings, acute or community, are no different from those made by those who care for them. Consider this scene: A nurse is sitting in her workplace, and colleagues are eating. Perhaps she sees coffee, soda, candy bars, bags of snack food, doughnuts, fast food, or sandwiches made from highly processed breads and meat products. It might appear that health care professionals believe a steady diet of this “food simulators” has no effect on health and on mental health in particular. “Wait!” some might say, “I would never eat such a meal. I would choose fruit over a candy bar every time!” Consider the probability that fruit may have forgotten that food feeds the human body, nourishing food for health and well-being. Perhaps she sees coffee, soda, candy bars, bags of snack food, doughnuts, fast food, or sandwiches made from highly processed breads and meat products. It might appear that health care professionals believe a steady diet of such “food simulators” has no effect on health and on mental health in particular. “Wait!” some might say, “I would never eat such a meal. I would choose fruit over a candy bar every time!” Consider the probability that fruit may have not been the healthy choice. One should ponder what one really knows about what one is eating. No one would choose to eat a known poison such as petroleum products, agricultural herbicides, pesticides, or fertilizers, yet this may be exactly what one is consuming with that “healthy” fruit.

Pollen (2008) argued that when individuals choose to eat from the industrial food system, they are in essence eating oil and spewing greenhouse gases. The organic and sustainable food movements are championed by consumers and journalists but not often by health professionals. The organic movement focuses on the benefits of eliminating toxins from all stages of food production. Sustainability relates to the notion that a particular practice can be ongoing without significant synthetic inputs from outside the system involved. Health professionals must study and understand environmental issues surrounding food production, recognizing these as vital health and wellness arenas. It is argued that the ecological versus industrial agricultural food systems and the organic, sustainable food movements (Berry, 1982; Crocker, 2008; Pollen, 2008) are integral to health. The more one looks into the realities of the modern industrial agriculture system, the human health implications become darker and more complex.

**Holism and Ecology**

Florence Nightingale, recognizing that healing environments are both internal and external, radically changed health outcomes by addressing clean water, nourishing foods, light, and fresh air. These understandings foreshadowed the foci of modern-day ecology—clean air, clean water, and clean food. Human beings need nourishing food for health and may have forgotten that food feeds both the body and mind and that food itself needs to be healthy.

Alternative health practitioners have long realized that the best ethical and environmental choices are also the best choices for human health. The typical Western diet, the product of modern agricultural practices, is devoid of many of the inherently natural, key aspects of real food that are critical for all systems involved in health. When choosing to eat a real free-range egg, without the toxic load found in industrial feed, a qualitative visual difference in the food can be noted. Seeing the deep yellow yolk makes apparent the hidden natural beneficial elements of this food. Choices such as this ensure the proper func-
tioning of systems, including those of the central nervous system.

An advocate for choosing to eat whole foods, Weil (2001) stressed that the knife and fork are powerful tools for health. As omnivores, it is argued that human beings can and should eat a wide variety of different things to be healthy—just about everything that nature has to offer. During most of history, human beings have done so without seeking expert opinion (Pollan, 2008; Price, 1939/2004). In an age of scientism, or what Pollen (2008) calls nutritionalism, society seeking nutritional health looks not at food in its natural state but at nutrients (i.e., invisible mineral and chemical compounds) that science “bad”; for example, eggs, once demonized as unhealthy, are currently “good.” Nutrient battles are ongoing over which of these invisible complexes have been “proven” to ensure health. In this new world, foods have been reduced to complex biochemical entities. There is more to a carrot’s health contribution than vitamin E (alpha-tocopherol) and vitamin A (beta carotene).

One may recall the controversies over dietary fat in the past 5 years. For example, egg yolk, an excellent source of omega-3 fatty acids, has been shown to reduce inflammation and protect against heart disease and certain cancers (Low Dog, 2010). Previous concerns over cholesterol has identified as important to human health. Real foods such as spinach, cow’s milk, and eggs have been deemed common, old fashioned, and not at all scientific. Real food sources of calcium include broccoli, green leafy vegetables, and dairy products. Yet in advertising and in academic and popular literature, one is led to believe that taking a calcium supplement is necessary and perhaps better than relying on natural food sources. Calcium, now commonly added to orange juice, is more bioavailable when consumed in its natural forms. Choosing a spinach salad or yogurt on the lunch menu offers a real food source of calcium.

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**Nutrients versus Food**

Nutrients have won out over food. Debates over nutrients, supplements, and nutraceuticals keep consumers and health professionals in a cycle of confusion. With each new biochemical study, the rules of the game change as the “good” becomes the caused many to deem it “unhealthy.” It is no wonder that in the face of such complexity, many individuals have just given up, eating what is quick, cheap, easy, or on the “good” list this week.

Food science, in an honest effort to improve the Western diet, has been embraced by the food industry as it seeks to use the latest “evidence” to sell more “nutritionally enhanced” and processed food (Nestle, 2002; Pollen, 2008). Consider the ethical, economic, and political ramifications of such an approach. It is unlikely that human beings are really better off eating what industry is selling today rather than what has been available in natural form from the beginning of human history. Food matters to human health. Processing and adding nutrients to food, despite claims to the contrary, has not improved human health overall, including our mental health (Campbell, 2004; Crocker, 2008; Nestle, 2002; Pollen, 2008; Weil, 2001). Below, an examination of real foods and traditional diets is presented as a way to look for alternatives and seek answers for mental health concerns.

**Traditional Real Food Diets**

Health benefits of traditional diets were studied in the 1930s by an Ohio dentist whose work is not well known. Weston Price began to study diet when he personally witnessed in his own dental practice a significant change in dental problems in the early 1900s. The argument in the medical community was whether the cause was hygiene or diet. Price was convinced that changes in the modern diet were to blame. Closing his dental practice, he began an intensive and worldwide empirical study of the problem.

Price (1939/2004) searched for control groups in isolated populations not yet exposed to modern food. He found them in mountainous areas of Peru and Switzerland, lowland areas of Africa, the Australian bush, remote islands in the Hebrides, the Florida Everglades, northwestern Canada, Alaska, and the jungles of New Guinea and New Zealand. His data, painstaking and dense, were collected and recorded personally by hand after examining and photographing the teeth of multiple thousands of individual mouths worldwide. Price (1939/2004) learned that although there was no such thing as an ideal diet, no dentists were needed where people were eating their traditional diets. It did not matter what these foods were—a dairy-based diet in Switzerland, whale blubber in Alaska, seafood in Peru, or red meats in Africa. The teeth may not have been hygienic, but he found them to be healthy and virtually free of decay.

Price (1939/2004, p. 475) also found that when these populations did not consume the “displacing foods of modern commerce” (by which he meant refined flour, sugar, canned and preserved food, and vegetable oils) there was not only an absence of tooth decay but also of chronic diseases. He concluded that the common denominator of good health was a traditional diet
of fresh foods from animals and plants grown on native soils themselves rich in nutrients. He argued for rethinking the industrialization of agriculture that began in the 1930s and made a case for an ecological understanding of diet and health far ahead of his time. Interesting to this discussion, Price described anecdotally that these peoples were consistently emotionally sound, happy, and mentally fit as individuals and as groups. Real food mattered then as now. Whole food contains the essentials of health.

The traditional Mediterranean diet, noted more than 30 years ago to improve overall health, has now been shown to improve mental health in particular. A British study (Akbaraly et al., 2009) of 3,486 middle-age adults revealed that eating a whole foods diet of fruits, vegetables, and fish offers defense against the onset of depressive symptoms while a diet of processed meats, sweets, chocolate, and refined cereals increased susceptibility to depressive symptoms. This adds support to a longitudinal Spanish study where more than 10,000 healthy adults were also protected from major depressive disorder by following traditional Mediterranean dietary patterns (Sánchez-Villegas et al., 2009).

Mediterranean diets contain a wealth of plant foods, including fresh vegetables, fresh and dried fruits, whole grains, nuts and legumes, along with moderate amounts of red wine. Although high in fat, this dietary pattern uses olive oil rather than refined vegetable oils (de Lorgeril & Salen, 2006). Notably, this diet is low in refined and processed foods, with or without added nutrients. The above studies are examples of modern, 21st-century evidence suggesting that Price (1939/2004) was onto something.

**Depression**

Depression is a common but serious illness, it can be acute or chronic, and most who experience it need treatment to recover (NIMH, 2008). Depressive disorders interfere with daily life, normal functioning, and cause pain for both the person with the disorder and those who care about them (Harrington et al., 2009). The studies reviewed above (Akbaraly et al., 2009; de Lorgeril & Salen, 2006; Sánchez-Villegas et al., 2009) examined dietary protection from depressive symptoms related to a traditional diet consisting of real, naturally occurring food.

A study conducted in Ireland by Harrington et al. (2009) used data from the Survey of Lifestyle Attitudes and Nutrition conducted by the same investigators in 2007. A protective lifestyle behavior (PLB) score was constructed for a representative sample of 10,364 Irish men and women older than 18. The combination of four PLBs (being physically active, a nonsmoker, a moderate alcohol consumer, and having adequate fruit and vegetable intake) was investigated. Respondents with a lower PLB score were significantly more likely to have a depressive disorder ($p < 0.01$). Adoption of core protective lifestyle factors increased life expectancy and was associated with positive self-rated health, healthier weight, and better mental health. These lifestyles have the potential to add quality and quantity to life.

In 2009, Kuczynski et al. (2010) investigated the relationship between diet quality and reported symptoms of depression in a low-income urban population. Participants surveyed included 1,118 African American and Caucasian adults ages 34 to 64. Regression analyses were used to determine whether diet quality was related to depressive symptoms. In this sample, low diet quality was significantly associated with reported depressive symptoms. Quality is the key word here. Diet quality was calculated using the U.S. Department of Agriculture’s Healthy Eating Index (HEI)-2005, a revised version of the original HEI created by the Center for Nutrition Policy and Promotion in 1995. There are 12 components—total fruit; whole fruit; total vegetables; dark-green and orange vegetables and legumes; total grains; whole grains; milk; meat and beans; oils; saturated fat; sodium; and energy from solid fat, alcohol, and sugar. The higher each score, the more the diet corresponds with the U.S. Department of Health and Human Services’ 2005 Dietary Guidelines for Americans and the better the diet quality.

Hibbeln, Nieminen, Blashal, Riggs, and Lands (2006) conducted a population study on the effects of modern Western diets correlating omega-3 fatty acid consumption with several health conditions ranging from stroke to suicide. They asserted that large amounts omega-6 fatty acids, particularly those found in processed oils (e.g., soybean) and foods from grain-fed animals, lead to extensive systemic inflammation. The study suggests that these food practices could be viewed as a large uncontrolled experiment that could be contributing to ever-increasing societal
burdens of aggression, depression, and cardiovascular mortality. These results may be disturbing, yet such studies examining the effects of nutrition on depression confirm that real food matters to mental health.

Fatigue and depression plague many in society who have not been diagnosed with any mental health disorders. In an effort to better understand fatigue as a disability, rather than as just a symptom, a qualitative study of severe fatigue in women was conducted, revealing several transforming themes (Crocker, 2009). One theme, The Overwhelming Weight of Exhaustion, is marked by isolation and an experience of being silenced by others’ disbelief that anyone could be this tired. The women related that they no longer feel valuable. This aspect of fatigue brings inactivity, guilt, and deep depression. The following are the words of two of these fatigued women as they talked about their diets:

Woman #1: But I find it is in your diet—that my diet really helps me to overcome it. Staying away from the heavy carbohydrates, like the white breads and the pastas and the potatoes, anything heavy like that…. If I stay with…greener vegetables…. I need more protein… and then I find that I’m usually better if I eat every 2 hours a little bit, and maintain that sugar balance. And I went on [The] Zone diet years ago, and that was really helpful. And so the fatigue,… once I went on a diet that worked for me, and that really helped.

Woman #2: I do think it [fatigue] kind of started…because I lived a kind of unhealthy lifestyle. I worked… I was up all night and you know… working through the night…. and poor diet! I think for [a] couple years, all I drank was diet Pepsi®.

In these experiences of fatigue, mood alterations and discouragement transformed the health of these women. Mental health professionals must reconsider the foundations of health.

IMPLICATIONS AND CONCLUSION

Mental health remains a significant public health concern worldwide. Individuals with mental health disorders have been shown to have a higher incidence of chronic conditions, including obesity linked to heart disease and diabetes (Isenring, 2008). The concerns of mental health related to food and food health need significant investigation and clinical attention.

Health is the operative word for these pursuits, not the disease or illness paradigm currently driving services in the United States. The issues facing food choice, food production, and availability are widely recognized in the environmental community. Sustainability, defined above, as related to agriculture, means that the system functions well without artificial interventions—pesticides, fertilizers, and/or herbicides. This produces healthy land and whole, real food. From a human health perspective, real food produces holistic health (mind and body) without the need for significant synthetic inputs or chemicals, whether they are isolated nutrients or pharmaceutical. There is a synergy involved in human ecology found in the old adage “you are what you eat.” Reclaiming the use of real food is a cornerstone of healthy human ecosystems.

It is time for mental health professionals to step forward, educating themselves and their clients. The research and clinical implications are vast. There has been limited progress in nutrition and mental health studies worldwide during the past 20 years. Basic yet innovative links to food health could be integrated into mental health modalities. Knowledge, sustainable lifestyles, social support, and physical activity would link diet to actions that could be learned and continued as new lifestyle practices. These are vital components for overcoming the challenges of everyday life and reclaiming health for those living with many chronic illnesses and certainly those experiencing mood disorders.

Health professionals should consider the possibility that an overhaul of the food system and rethinking food choices may be the most valuable route for real and sustainable health care reform. Dietary patterns and nutrition must be returned as health foundations in mainstream thought and the practice of mental health care, research, and policy. Health professionals’ knowledge and understanding of the relationship between food and health must become a driving force in their efforts to advocate for population, community, and personal mental health initiatives. Real food matters, and it matters for everyone.
REFERENCES


