SWS Fact Sheet 2010: Women and Nutrition

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This fact sheet presents research in three areas. First, we examine how factors that limit access to nutritious food affect women. Next, we describe feminist advocacy for a vegetarian diet and offer strategies for healthy vegetarian options throughout women's life cycles. Third, we investigate connections between body image, disordered eating and nutrition among women.

Women, Food Security and Nutrition

Low food security, a term that indicates difficulty in obtaining food sufficient to support an active and healthy lifestyle, is a pressing problem that has a disproportionate impact on women. In the United States between the mid-1990s and 2007, approximately 11-12% of households experienced low or very low food security at some point during any given year (Roberts and Feld 2007). In 2008, this rate increased to nearly 15% of households (Nord, Andrews, and Carlson 2009). The prevalence of food insecurity varies considerably among household types. Importantly, households with children headed by a single woman have rates of food insecurity that exceed 37% (Nord, Andrews and Carlson 2009).

Households that experience low or very low food security engage in “coping strategies” such as skipping meals, substituting less nutritious canned or processed ingredients for fresh ingredients, and seeking food from other family members or emergency food sources (Roberts and Feld 2007; Seefeldt and Castelli 2009). Not only hunger, but also poor nutrition and diet-related diseases such as obesity and diabetes are associated with low food security (Winne 2008).

Barriers to food access affecting women

Low food security is not the product of an inadequate food supply. Instead, problems in food security are the result of social and economic barriers, such as poverty and high prices, that restrict some peoples’ access to adequate food (Sen 1982).

Women in particular face these social and economic barriers. Feminist researchers who study the “feminization of poverty” have demonstrated that women – especially single mothers – are more likely than other demographic groups to experience low-income, irregular work and household poverty in many societies (Bianchi 1999; Brady and Kall 2008; Pearce 1978). Economic hardship is an important predictor of household food insecurity, especially if a household’s income is not sufficient to cover other necessities, such as rent and utility bills, in addition to food.

Feminist scholarship about families has also demonstrated that ideologies of gender place pressure on women to defer to their husbands’ or male domestic partners’ preferences in food preparation and consumption (DeVault 1991). This is in spite of the fact that women are usually responsible for household food provisioning and preparation. Deference may affect women’s food security and nutritional intake within the family by causing women to bear the brunt of food shortages. Women also reduce their own nutritional intake in order to provide adequate food for their children (Food and Agriculture Organization of the United Nations 2008).

Surprisingly, little research has directly examined within-household inequalities in food consumption and nutritional intake. This is partially because research about food security often treats the household as the primary unit of analysis. This approach assumes that households pursue strategies that maximize the welfare of all of the members (Hartmann 1981; Wolf 1997). Additional research is therefore needed about how low food security affects different members of households.

It is important to note that women may not always fare less well than men in situations of low food security. Some women may have improved coping strategies as a result of better shopping and cooking skills than men. For example, the USDA’s Overall Healthy Eating Scores are slightly higher among females than among males (Basiotis, Carlson, Gerrior, Juan and Lino 2002).

Food assistance programs

The U.S. Department of Agriculture’s Food and Nutrition Service (www.fns.usda.gov) operates 15 food assistance programs, several of which are important resources for limited income women and their
families. The Supplemental Nutrition Assistance Program (SNAP), which was formerly known as the food stamp program, provides supplemental income to households in need to assist with food purchases. Program participants access SNAP funds through electronic benefit transfer (EBT) cards, which they may use at most food retailers. In order to qualify for SNAP benefits, household members must document that they meet guidelines pertaining to work and income levels.

The state-operated Special Supplemental Nutrition Program for Women, Infants and Children (WIC) provides supplemental nutritious food, nutrition education and counseling and health services to low-income pregnant, breastfeeding and postpartum women, infants (prior to their first birthday) and children (prior to their fifth birthday). The WIC Farmers’ Market Nutrition Program provides funds to support the purchase of fresh fruits and vegetables at certain farmers’ markets in 45 states (USDA also funds a Senior Farmers’ Market Nutrition Program for senior citizens). WIC services are limited by the size of the federal block grants that fund the program.

The National School Lunch Program provides discounted or free lunches in public and private schools and child care facilities. Families with children who participate in the school lunch program must document that their income does not exceed 130% of the federal poverty threshold (for free lunches) or 185% of the federal poverty threshold (for discounted lunches). USDA also operates a “farm-to-school” program that helps deliver fresh fruits and vegetables from small farms to local schools. Other similar programs include the School Breakfast Program and Summer Food Service Program. The Child and Adult Care Food Program subsidizes meals and snacks for children in day care facilities, emergency shelters and after school programs and for adults in day care facilities.

Definitions
The U.S. Department of Agriculture defines food secure households as those in which all members have access to adequate, nutritious food to support an active lifestyle. Households that experience low food security (formerly known as food insecurity) are those that face occasional or frequent difficulty providing adequate food for their members. Households in which food intake was reduced and normal eating patterns disrupted due to a lack of resources are described as experiencing very low food security (formerly known as food insecurity with hunger) (Nord, Andrews, and Carlson 2008).

Research about food security typically uses the household as the unit of analysis. A newer approach to research and activism considers community food security, which “focuses on the underlying social, economic and institutional factors within a community that affect the quantity, quality and affordability of food” (Kantor 2001:20). The focus on community food security has given rise to the concept of “food deserts,” which are neighborhoods that lack convenient access to food retailers that provide healthy and affordable food options.

Women, Vegetarianism, and Nutrition

What do vegetarians and vegans eat?
Vegetarians enjoy a wide variety of foods. However, this diet excludes meat, fish, and poultry and may limit of dairy products. Lacto-ovo vegetarians do not eat meat, fish, poultry, but do eat dairy products and eggs. Vegans do not eat any animal products, which include meat, fish, poultry, eggs, dairy products, honey, and gelatin and sometimes refined sugar.

Why to be a vegetarian or vegan: A Feminist critique
Feminists have long aligned themselves with the vegetarian and vegan lifestyle. Here are some of the reasons: Radical feminists might argue that women and animals are both oppressed through a patriarchal system. For example, female animals are the ones that produce milk, eggs, and offspring and thus experience enforced and frequent pregnancy throughout their lives. In a parallel way, women are treated as child bearers instead of as individuals and are made to feel guilty and inadequate if they do not fulfill this role (Adams 1994). Ecofeminists might note that a traditionally Western diet including meat and dairy requires up to triple the resources of a vegetarian diet (Singer and Mason 2006). Factory farming overuses natural resources like water and oil, creates top soil erosion, and causes deforestation and a high volume of greenhouse gas emissions. Ecofeminists connect the abuse of the earth to women’s subordination to men. Spiritual feminists claim a harmony with the environment or "Mother
“Nature” and argue that we are not entitled to torture and kill animals just because we have the ability to dominate them. Rather, we should foster a bond with animals. Socialist feminists explain that both women and meat are commodified. For example, in the advertising world, women are exploited for “sex appeal” and animals are exploited in terms of taste. We are asked to literally consume animals and figuratively consume the images of women. Socialist feminists also question whether the normalization of meat eating in the USDA food pyramid helps consumers make healthy choices or just sells a product (Adams 1994). It is important to note that feminists and environmentalists do not all agree about the merits of a vegetarian diet (for example, see Kieth 2009).

Health benefits and risks
A vegetarian diet may help regulate metabolism, burn body fat, lower total cholesterol and blood pressure, help protect against heart disease and cancer, and promote digestive health. However, a vegetarian or vegan diet may create a variety of risks (Taubes 2007; Daniel 2005). One of the major health risks that vegetarians (especially young women) face is Anemia, which is caused by a lack of iron. Vegetable sources of iron are not as easily absorbed as animal sources, but a good intake of vitamin C will enhance absorption of iron. Additionally, vegetarians and vegans should take vitamin B12 supplements, as this vitamin only occurs in animal products. Teenagers (especially those with eating disorders) may adopt a vegetarian or vegan as a way to restrict their eating (“Vegan Children”). Because of this, they must be encouraged to eat in a healthful way.

A healthy vegetarian and vegan diet throughout life:
• **Pregnancy:** When pregnant, women need extra energy and should try to have about 350-450 additional calories each day during the last two trimesters, especially foods with protein. In the first trimester, “morning sickness” may be made more manageable by eating frequent, small meals. This is because nausea may be triggered by hunger. Additionally, eating dry toast or fruit during the day will maintain blood sugar level. In the second trimester, cereals, nuts, seeds, and starchy vegetables may be eaten to provide extra calories. During the third trimester, the fetus takes up a lot of room and may push on the stomach and cause one to feel full more quickly. It is very important to stay hydrated during pregnancy. Anemia is a common problem for all pregnant women, so you may choose to take iron supplements. Pregnant women should ingest more Calcium and Vitamin D to ensure the baby’s bones develop properly, or simply take a high-quality, pre-natal multivitamin. Choline, a nutrient found in toasted wheat germ and egg yolks, and folic acid are also important for fetal brain growth. While it is common for women to experience cravings or aversions to foods, it is important to try to maintain a healthy, balanced diet (“Pregnancy”).
• **Infancy:** Breastfeeding is the recommended feeding method for infants although exclusively breastfed babies may need extra vitamin D. Vegan and vegetarian breast milk is nutritionally comparable to that of non-vegetarian mothers. Vegetarian moms need to make sure that they eat vitamin B12-fortified cereals and soymilk or use a vegetarian support formula, nutritional yeast, or a supplement while nursing. Solid foods should be started mid-way through the first year of life. Usually, young children will start to eat iron fortified infant cereals, then vegetables, fruits, and protein foods (“Pregnancy”).
• **Childhood:** Toddlers need more than 3 meals a day, and should be fed nutritious snacks like mashed beans, ground nuts, grains, fruits, and vegetables. However, they should be offered a variety of foods and not be forced to eat anything they are determined to resist, as this will create food aversions. Caretakers should also be alert to the potential for food allergies to exist. School-aged children may enjoy juices, vegetables, fruits, dairy free breads, and baked potatoes. Young children have small stomachs and high energy needs, so they should eat more frequently than adults. Calcium is important for bone growth. Vegan children should eat calcium-fortified juices, cereals, soy and rice beverages as well as low oxalate vegetables like collard greens and bok choy. They can also take chewable flavored supplements, which may be more appealing.
• **Teenagers and Young Women:** Adolescents may make poor diet choices like French fries or cookies, which have a high amount of fat. Maintaining family meals and avoiding tense situations around food is recommended. You can also try offering healthy desserts such as yogurt, soy puddings, and rice pudding. Menstruating women need more a considerable amount more of iron due to the loss of blood and may want to take a supplement (“Healthy Eating for Vegetarians”).
Middle-aged Women: Increasing the amount of soy in your diet has been found to reduce the levels of LDL cholesterol and increase the level of HDL cholesterol, or “the good cholesterol” and to reduce the risk of breast cancer. It is also important to take vitamin D supplements.

Post-menopausal Women: Diets high in animal protein cause the body to excrete more calcium. Conversely, a vegetarian diet has been found to reduce the loss of bone mineral, which may reduce the risk of osteoporosis. This is important because women are more at risk for osteoporosis because their skeletons are smaller than those of men and their bone loss is accelerated when menopause starts.

Nutrients needed for a healthy diet:
There are 5 categories of essential nutrients. According to the American Dietetic Association, all the nutrients that are in meat, fish, and poultry can be obtained through a vegetarian diet.

*Carbohydrates* are the main and most important source of energy. Luckily most of this nutrient is provided by plant foods. There are 3 types of carbohydrates: *sugars* (simple carbohydrates), *starches* (complex carbohydrates), and *fiber*. Sugars are found in fruit, milk, and table sugar. Refined sugar is best avoided because while it might provide a burst of energy, it has no fiber, vitamins, or minerals and causes tooth decay. Starches are found in cereals, grains and vegetables such as potatoes and parsnips. It is possible for a slimming diet can contain starches because these foods are very filling (“Basic Nutrition”). Fiber is found in wholegrain cereals, fruit, and vegetables. Eating fiber prevents digestive problems and can reduce blood cholesterol.

Women need about 45g of *protein* a day. You can get protein through a variety of nuts, seeds, pulses (peas, beans, lentils, peanuts), grains and cereals, soy products (tofu, tempeh, veggie burgers, soy milk), dairy products, and eggs. Soy is an especially good source (“Protein”).

*Fats and oils:* They are necessary to keep our tissues in good repair. *Unsaturated fat* is better for your cholesterol level and is found in most plants. *Mono-unsaturated fats* such as olive oil or peanut oil are best (“Basic Nutrition”).

*Vitamin A* (beta carotene) is found in red, orange, and yellow vegetables like carrots and tomatoes; leafy green vegetables; and fruits like apricots and peaches. *B Vitamins* (except B12) are in yeasts, whole cereals, nuts, seeds, pulses, and green vegetables. *Vitamin C* is present in fruit, leafy green vegetables, and potatoes. *Vitamin D* is found in milk, cheese, and butter. *Vitamin E* is in vegetable oil, whole grains, and eggs. *Vitamin K* is found in vegetables and cereals (“Basic Nutrition”).

*Minerals: Calcium* is very important for healthy bones, teeth and blood pressure. It is present in dairy products, leafy green vegetables, bread, nuts, seeds, dried fruits, and cheese. *Iron* is needed to fortify red blood cells and is in leafy green vegetables, whole grains, molasses, eggs, dried and citrus fruits, lentils, and beans. *Zinc* is in green vegetables, cheese, sesame and pumpkin seeds, lentils, and wholegrain cereals. *Iodine* is in dairy products and vegetables (“Basic Nutrition”; “Calcium”; “Iron”; “Zinc”).

Eating disorders, body image, and dieting

Eating disorders and body image
Eating disorders are severe and chronic conditions that predominantly affect women, who make up 90% of individuals with eating disorders. The National Eating Disorders Association ([www.nationaleatingdisorders.org](http://www.nationaleatingdisorders.org)) estimates that there are ten million women and one million men living with eating disorders in the United States. A far greater number live with sub-clinical levels of disordered eating, problematic dieting, food restricting and overexercising. These disorders produce psychological, physical, financial, and interpersonal problems for victims and their friends and families.

Eating disorders are considered a form of mental illness and are often closely related to underlying mood disorders like depression, anxiety, or substance abuse disorders. However, it is important not to just focus on what is “wrong” or “abnormal” about an individual with an eating disorder. Though it is important to rule out the effect of underlying and comorbid mental illnesses in the development and maintenance of eating disorders, it is equally important to take a look at the sociocultural expectations of thinness and to encourage young girls and women to avoid buying into unrealistic body images that appear in the media (Bordo 2003).

The emphasis on thin bodies, as portrayed in magazines, on television, in movies, and in advertisements is far-reaching and contributes to women’s dissatisfaction with their bodies. On any given day, 45% of women and 25% of men report being on a diet (Smolak 1996). Among participants in a
survey of a college campus, 91% of women had attempted to control their weight through dieting and 22% dieted “often” or “always” (Kurth et al. 1995). Additionally, 42% of 1st-3rd grade girls want to be thinner (Collins 1991). Hesse-Biber (1989) found 59% of women in a college population were controlling their weight through fasting, vomiting, and laxative use. These numbers are far higher than the 1-3% of women who could be diagnosed with clinically significant levels of eating disorders.

While it was once believed that body dissatisfaction was a phenomenon among white, middle-class, adolescent girls, recent studies show this is changing. For example, one study revealed that 59% of Black women and 72% of White women who participated thought that they were overweight, while only 13% in both groups actually were overweight. Similar or greater figures are found in Asian, Hispanic, and Native American populations (Smith 2004).

One particularly dangerous new development is the development of websites which encourage eating disorders. Pro-anorexia (termed pro-anna) and Pro-bulimia (pro-mia) websites have grown in popularity. Though website hosts may attempt to discourage the development of these online social networking sites, newer sites spring up in their place with more obscure code words. These sites are often a place for fellow anorexics or bulimics to post pictures of themselves at low weights for inspiration to others, offer advice on how to eat fewer calories, and share tips on purging strategies.

Since thinness is highly valued in the United States, many parents do not challenge the problematic behaviors of the young women in their lives and may even offer positive feedback for losing weight or praise for their ability to refuse food. Parents may consciously or unconsciously want their daughters to be thin and may avoid noticing, or attempting to intervene in, situations where a girl is engaging in unhealthy behaviors. Valuing girls and women for more than just their bodies and questioning our assumptions about body ideals is an important way to begin to change some of these destructive patterns. It is critical that girls be surrounded by women who are comfortable with their bodies and enjoy nourishing themselves with good food.

Clinical eating disorders from the DSM-IV-TR

- **Anorexia Nervosa**: Refusal to maintain body weight, intense fear of gaining weight or becoming fat, disturbance in the way in which one’s body weight or shape is experienced. Diagnosis occurs when weight is less than 85% of expected weight and, in women, amenorrhea is experienced for at least three consecutive cycles.
- **Bulimia Nervosa**: Recurrent episodes of binge eating followed by inappropriate compensatory behaviors to prevent weight gain such as self-induced vomiting, misuse of laxatives, diuretics, or medications, fasting, or excessive exercise. These episodes must occur at least twice a week for three months to be diagnosed. Self-evaluation is unduly influenced by body shape and weight.
- **Eating Disorder Not Otherwise Specified (EDNOS)**: Disordered eating patterns that do not meet the criteria for a specific eating disorder.
- **Binge Eating Disorder**: Binge Eating Disorder (BED) is a type of eating disorder not otherwise specified and is characterized by recurrent binge eating without the regular use of compensatory measures to counter the binge eating.

Disordered eating behaviors/ sub-clinical eating disturbances

- Anorexic behaviors in individuals who do not meet 85% weight requirement and/or amenorrhea
- Bulimic binge-purge cycles that occur less frequently than twice per week for three months
- Exercise bulimia: Using exercise as a compensatory behavior to physically dangerous extremes, usually over four hours per day
- Orthorexia: Obsession with healthy eating that may become all-consuming
- Diabulimia: Manipulation of insulin levels to manage weight
- Chew and Spit: Chewing food and spitting it out before swallowing it in an attempt to avoid caloric intake
- Drunkorexia: An emerging phenomenon where individuals avoid food to offset calories consumed through binge drinking
- Chronic restrictive dieting (also known as yo-yo dieting): May include irregular eating patterns, emotional eating, and adherence to fad diets. Cues of hunger and satiety are often ignored and a person’s worth is tied to their diet.
- Taking stimulant medication or diet pills, specifically containing ephedra
Suggestions for positive body image awareness activities:

- Avoid fashion magazines when possible
- When confronted with unrealistic body images in the media, be critical of what you are viewing and pay attention to how it makes you feel
- Surround yourself with images of healthy and realistic women
- Seek out friends who value you for who you are and de-emphasize dieting
- Avoid discussing diets, calories, exercise, weights, and sizes with friends
- Create a “no-diet” zone in your home where disparaging body comments are not allowed
- Support companies who strive to change the paradigm of unrealistic body images (e.g. Dove Real Beauty campaign)
- Strive to maintain a healthy lifestyle and attitude toward food
- Discuss these issues with people you care about and try to spread the word to young women

References


Roberts, Susan L. and Erin Feld. 2007. "Hunger in Iowa." Drake University Agricultural Law Center, Des Moines, IA.
Seefeldt, Kristin S. and Tedi Castelli. 2009. "Low Income Women's Experiences with Food Programs, Food Spending and Food-Related Hardships." United States Department of Agriculture, Washington, D.C.