Baby Boomer Vegetarians

By Stephen F. Barnes, Ph.D.

According to some sources, vegetarianism is on a modest uptick or at least holding its own, with about 6.7 percent of the U.S. adult population (20 million) reporting they no longer eat meat, and 2.3 percent (7 million) claiming they never eat meat, fish or fowl—and, by definition, are true vegetarians. Still smaller, about 1.4 percent don’t eat, wear, or use much of anything caught, hatched, milked, or slaughtered (no meat, fish/seafood, poultry, dairy products/eggs) and are known as vegans (pronounced veeguins). Women are twice as likely to avoid eating meat than men, and roughly 10 percent of Baby Boomers are probably non-meat eaters by our non-scientific best estimate. Most of these numbers (see summary box below) are from a national survey conducted in 2009 for the Vegetarian Resource Group. And while the survey sample only consisted of 2,397 adults and used an on-line query technique, the Harris Poll research methodology was considered highly reliable (Stahler, 2009).

U.S. Dietary Habits of Adults 18 Years and Older

100% Total adults
6.7% Never eat meat
6.3% Never eat poultry
14.6% Never eat fish/seafood
7.6% Never eat dairy products
8.8% Never eat eggs
23.4% Never eat honey
2.3% Never eat meat, poultry, fish/seafood (vegetarian)
1.4% Never eat meat, poultry, fish/seafood, dairy products/eggs

(vegan, except for possibly honey)

Of course, there are lots of reasons why people do not eat certain foods. The list most certainly includes things like price, availability, and fear of becoming ill (e.g., perceived low quality, health hazards). For example, over the past two years 42 percent of Americans believed they became sick from something they ate; fresh meat reportedly was a greater health concern for most of us than either fresh fish or poultry. This offers a partial explanation why some people are eating less meat or steering clear of it altogether.

There also appear to be regional, cultural, education, and age differences in our eating habits—more non-meat eaters in the Northeast and West, fewer in the South, more Hispanic non-meat eaters and fewer whites, more college educated non-meat eaters, more 45-54 year old non-meat eaters and fewer 18-24 year olds.
Vegetarians come in all stripes, differing in both food behavior and ideology. Here is a list of the major vegetarian types on the basis of what they eat and avoid:

<table>
<thead>
<tr>
<th>Types of Vegetarians</th>
<th>Foods Consumed</th>
<th>Foods Not Consumed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetarian</td>
<td>Plant-based foods (i.e., grains, legumes, nuts, seeds, vegetables and fruits) with or without the use of dairy products (i.e., milk, cheese, yogurt) and eggs</td>
<td>Animal products (i.e., meat, poultry, game, fish, shellfish or crustacea, or slaughter by-products)</td>
</tr>
<tr>
<td>Lacto-Ovo Vegetarian</td>
<td>Plant-based foods, dairy products, eggs</td>
<td>Animal products</td>
</tr>
<tr>
<td>Flexitarian</td>
<td>Plant-based foods, dairy products, eggs with occasional meat consumption</td>
<td></td>
</tr>
<tr>
<td>Pescatarian</td>
<td>Plant-based foods, dairy products, eggs, fish</td>
<td>Animal products (except fish)</td>
</tr>
<tr>
<td>Lacto-Vegetarian</td>
<td>Plant-based foods, dairy products</td>
<td>Eggs, animal products</td>
</tr>
<tr>
<td>Ovo Vegetarian</td>
<td>Plant-based foods, eggs</td>
<td>Dairy products, animal products</td>
</tr>
<tr>
<td>Su Vegetarian</td>
<td>Most plant-based foods</td>
<td>Animal products and vegetables in alium family (with characteristic smell of onion, garlic, scallions, or leeks.)</td>
</tr>
<tr>
<td>Vegan</td>
<td>Plant-based foods</td>
<td>Animal products, foods processed with or containing animal products (e.g., sugar, gelatin, some wines), dairy products, eggs, honey; also avoid non-food animals products (i.e., leather fur, wool, down)</td>
</tr>
<tr>
<td>Raw Vegan</td>
<td>Unprocessed vegan foods that have not been heated above 115 degrees Fahrenheit (46 degrees Celsius)</td>
<td>Same as Vegan</td>
</tr>
<tr>
<td>Macrobiotic Vegetarian</td>
<td>Same as Raw Vegan with emphasis on Asian vegetables (e.g., daikon), seaweed, and occasional fish</td>
<td>Same as Vegan, highly processed foods (e.g., salt, sugar), refined oils, nightshade vegetables, alcohol, chocolate, coffee, hot spices, chemicals and preservatives</td>
</tr>
<tr>
<td>Fruitarian</td>
<td>Fruit, fruitlike vegetables (e.g., tomatoes, cucumbers), occasionally seeds and nuts</td>
<td>Animal products, dairy products, eggs, vegetables, grains</td>
</tr>
</tbody>
</table>
The illusion of an Ideal

The path to eating little or no meat, to becoming a vegetarian or a vegan, can be complex and intensely personal. The rationale for forsaking certain foods in favor of a vegetarian diet often include religious, moral, and philosophical grounds. In 1994, philosopher William O. Stephens summarized the five classical arguments for vegetarianism. These, or variations on the themes, are often cited by individuals advocating a vegetarian lifestyle today. The five arguments are summarized below:

**Argument #1:** Converting grain and soy to meat through animal feed is a wasteful means of food production, and is perpetuated by wealthy nations at the expense of poorer ones (Distributive Justice);

**Argument #2:** Raising cattle and other animals for meat does significant harm to the environment (Environmental Harm);

**Argument #3:** Meat is a symbol of patriarchal oppression, domination, and violence perpetrated against both nonhuman animals and women (Sexual Politics);

**Argument #4:** Raising and slaughtering cattle, pigs, sheep, chickens, and turkeys violates their right to be treated respectfully, inflicts unnecessary suffering and pain, and is fundamentally unjust (Moral Consideration for Animals).

**Argument #5:** Since a balanced, meatless diet is healthier than a diet containing meat, there appear to be strong prudential reasons for becoming a vegetarian (Self-Interest).

The arguments, regardless of their actual truth or falsity, create the illusion that there is an ideal or better way to live. In this sense they accomplish their goal, to get one’s attention and stimulate thoughtful introspection. But as Boomers know so well the choice in human affairs is almost never black and white, between a diet of meat or no meat. There are many other reasonable and healthy alternatives in between, such as, health conscious non-vegetarian diets (e.g., eating less red meat and more fruits and vegetables coupled with vigorous exercise), eating less, eating only organic foods, cultivating your own victory garden, and so on.

No small number of important and famous people have lined up behind a vegetarian lifestyle, including Thomas Edison, Mark Twain, Milton, Charles Darwin, Franz Kafka, and Ralph Waldo Emerson. More recent converts include Hank Aaron, Bob Dylan, Paul McCartney, K D Lang, Dustin Hoffman, Gladys Knight, Woody Harrelson, Olivia Newton John, Grace Slick, and Jerry Seinfeld. Here are some comments attributed to famous people about their personal decision
to forego meat:

"Animals are my friends... and I don't eat my friends."

(George Bernard Shaw)

"I have no doubt that it is a part of the destiny of the human race, in its gradual improvement, to leave off eating animals, as surely as the savage tribes have left off eating each other when they came in contact with the more civilized."

(Henry David Thoreau)

"Our task must be to free ourselves... by widening our circle of compassion to embrace all living creatures and the whole of nature and its beauty. Nothing will benefit human health and increase chances of survival for life on earth as much as the evolution to a vegetarian diet."

(Albert Einstein)

You Are What You Eat…and Drink

In two previous papers we focused on the relationship between food and health (see You Are What You Eat…and Drink, Parts 1 & 2). Literally, we each are what we eat and drink. But the question here is whether there are any clear health advantages to vegetarianism. Just how healthy is a vegetarian diet, you ask?

Last year, the American Dietetic Association (ADA) (2009) released an updated position paper that stated:

It is the position of the American Dietetic Association that appropriately planned vegetarian diets, including total vegetarian or vegan diets, are healthful, nutritionally adequate, and may provide health benefits in the prevention and treatment of certain diseases. Well-planned vegetarian diets are appropriate for individuals during all stages of the lifecycle, including pregnancy, lactation, infancy, childhood, and adolescence, and for athletes.

Their position, based on published research, is crystal clear. Or is it? The controlling variable here is “well-planned vegetarian diets.” Surprisingly absent from their statement is any reference to regular, high-cardio exercise.

There is still a great deal we do not yet understand about human nutrition and
continuing research will be important to clarify the impacts of a vegetarian lifestyle in the 21st Century. One of the serious problems in generalizing about the health effects of a vegetarian diet, however, is the wide diversity among vegetarians (and those calling themselves vegetarians) and, more specifically, their different eating habits and food preferences. In several large dietary studies, in California and Great Britain, it was not clear what is actually being compared: a diet simply without meat, food intake patterns, or something else. Diets can differ significantly even when all lack meat. Definitional confusion continues to muddy the scientific waters, so to speak.

In terms of health benefits, vegetarian diets—diets devoid of meat, fish, fowl—have been associated with a number of health advantages, including lower blood cholesterol levels, lower risk of heart disease, lower blood pressure levels, and lower risk of hypertension and Type 2 diabetes. Understandably, some vegetarians tend to have a lower body mass index (BMI) and moderately lower overall cancer rates, although results for specific cancers, including colorectal cancer, are much less convincing and require further study. California Seventh-day Adventist vegetarians have lower total mortality and incidences of colon cancer than do Adventist nonvegetarians, but similar results have not been found in British vegetarians, at least when they are compared with health-conscious nonvegetarians in their own communities.

Vegetarian diets tend to be lower in saturated fat and cholesterol, and have higher levels of dietary fiber, magnesium and potassium, vitamins C and E, folate, carotenoids, flavonoids, and other phytochemicals. These nutritional differences may explain some of the health advantages to those following a varied, balanced vegetarian diet. The idea that higher consumption of fruit and vegetables is associated with reduced mortality has a long data trail. Several recent studies give continuing medical support to this relationship. Thus, it would be expected that vegetarians should benefit from these same effects because they generally eat more fruit and vegetables than others in their same communities. As Fraser (2009, p. 1609s) points out, “It is also true that to consider vegetables and fruit as single research categories is a broad brush and requires further understanding of the active phytochemical content of these plants. That all fruit and vegetables contribute equally, or at all, seems improbable.”

Finally, “unbalanced vegetarian diets” can lead to nutritional deficiencies, particularly in situations of high metabolic demand. Vegans and other types of specialized vegetarians frequently have lower intakes of vitamin B-12, calcium, vitamin D, zinc, and long-chain n-3 fatty acids, which is undesirable given our current knowledge of human nutrition.
Boomer Food and Nutritional Behaviors

America has eating and exercise issues which translate into over-weight problems, and these have increased steadily over the past 30 years. It is estimated that 127 million adults in the U.S. are overweight, 60 million obese, and 9 million severely obese. Forty percent of adults in the 55-64 age range, and these are all Boomers, are obese. Obesity is a well-established cause of heart disease, diabetes, high blood pressure and strokes, and a risk indicator for certain types of cancers.

In addition to what you eat or do not eat, eating patterns are also associated with obesity (even after controlling for total energy intake and physical activity), and here is what we know about adult eating behaviors:

**Eating Frequency.** Eating episodes are inversely associated with the risk of obesity. In comparison with those who reported three or fewer eating episodes per day, adults who reported four or more eating episodes per day experienced a significant 45 percent lower risk of obesity.

**Skipped Meals.** Skipping breakfast is associated with a significantly higher risk of obesity. Adults who regularly skipped breakfast had 4.5 times the risk of obesity as those who regularly consumed breakfast.

**Eating Out.** In comparison with adults who rarely ate breakfast away from home, those consuming breakfast out frequently had more than twice the risk of obesity, although no linear trend was observed. Likewise, adults eating dinner out frequently had an approximately twofold increased risk of obesity in comparison with those who rarely ate dinner away from home. In contrast, eating lunch away from home was associated with a reduced risk of obesity.

**Fruits and Vegetables.** Adult eating patterns currently fall well below the recommended levels for daily fruit and vegetable intake of 2 or more servings of fruit and 3 or more servings of vegetables. Government data from 2003 shows that the percentage of older Americans who eat five or more fruits and vegetables varies by race and ethnicity: 40 percent of Asian/Pacific Islander older adults meet the five-a-day recommendation, but only 31 percent of whites, 26 percent of Hispanics, 25 percent of African Americans, and 24 percent of Native Americans meet the five-a-day standard.

**Nutrient Levels.** Several nationwide surveys have revealed that a large proportion of older adults do not receive their daily recommended nutrient levels from food intake alone. Granted, while these levels are
only numerical benchmarks, they do provide a series of thresholds for analyzing the nutritional behaviors of older adults. For example, in a large national study that looked at adults 51 years of age and older, more than half failed to receive the recommended daily intake of Vitamin A, Folate, Vitamin E, and Magnesium from food sources alone, and more than 20 percent failed to receive the recommended daily intake of Vitamin B-6, Vitamin C, and Zinc. However, in the same study 37% of men and 47% of women consumed at least one type of supplement every day, the most prevalent being multivitamin-multimineral supplements. The use of supplements changed the daily intake averages in a positive direction for those who used them, resulting in revised shortfalls among supplement users (as opposed to non-supplement users) of about 5 percent for both men and women for Vitamin A, B-6, B-12, C, and Zinc, 10 percent for Vitamin E and Folate, and 25 percent for Magnesium. Thus, more than 85 percent of older adults taking regular supplements met their total daily intake for the nutrients studied, except for magnesium.

It was also determined supplements boosted total intakes of iron and zinc to the extent that a considerable proportion of older adults, particularly men, exceeded the tolerable upper intake level. Due to adverse effects associated with iron overload and its association with coronary heart disease, the Institute of Medicine has recommended that men and postmenopausal women avoid both iron supplements and highly fortified foods. In contrast, approximately 15% of men aged 51 to 70 years and 10% of men aged 71 years and older who are supplement users were exceeding the tolerable upper intake levels for zinc. Excess consumption of zinc has been associated with a risk of reduced copper status, impaired immune response, and lowered HDL cholesterol levels. Increased consumption of zinc appears to be needed by a sizable proportion of older men and women, but obviously should be undertaken with some care to avoid an overload problem. The tolerable upper intake level for vitamin A was exceeded by 9% of women aged 51 to 70 years and by 5% of women aged 71 years and older who took supplements. This finding is of concern because excessive long-term vitamin A intake has been associated with hip fractures in postmenopausal women.

**Healthier Boomer Diets**

Eating healthier foods, eating more intelligently in terms of timing and amounts, and consuming the right balance of foods is highly achievable by all adults with careful planning and a little common sense. You do not necessarily need to stop eating meat, but less of it, particularly red meat and meat by-products,
supplemented with more fish and fowl is a good start toward better health and vitality. The Food Pyramid, presented in an earlier paper (You Are What You Eat…and Drink, Part II) is a helpful guide to daily food intake and better food and nutritional balance.

The next logical step is in the direction of one of the healthier specialty diets, such as, Mediterranean, Asian, Latin American, the Mayo Clinic diet, or Harvard University’s Healthy Eating Pyramid. Each of these diets is helpful for daily food intake decisions and better food and nutritional balance. Here is an example of the Mediterranean diet that reflects the food culture of Southern Italy, Greece, and Crete, offering a delicious route to eating and drinking your way to better health. Basically, the diet consists of portion control and

- high consumption of fruits, vegetables, bread and other cereals, potatoes, beans, nuts and seeds;
- olive oil as an important source of monounsaturated fat;
- low to moderate consumption of dairy products, fish and poultry;
- very little consumption of red meat;
- eggs, consumed zero to four times a week; and
- wine consumed in low to moderate amounts.

Moving further away from meat of any kind, a healthy vegetarian diet consists primarily of plant-based foods, such as vegetables, whole grains, legumes, nuts and seeds, fruits, and for most, dairy products (e.g., milk, cheese, yogurt) and eggs. Because the emphasis is on nonmeat food sources, a vegetarian diet generally contains less fat and cholesterol and more fiber. Vegetarian diets are healthy and nutritious, and can be delicious and pleasing. Meatless substitutes, such as Portobello mushrooms, soy burgers, tofu dogs, and nut loaves, add additional variety and interest to a vegetarian lifestyle.
More restrictive vegetarian diets—vegan, raw vegan, macrobiotic, fruitarian—may not provide all the nutrients aging Baby Boomers need. According to the Mayo Clinic (2010), here are the nutrients that may be lacking in restrictive vegetarian diets and how they can be acquired from non-meat food sources:

- **Protein.** Protein is necessary for maintaining healthy skin, bones, muscles, and vital organs. Vegetarians who consume eggs or dairy products have reliable protein sources. Other sources include soy products, meat substitutes, legumes, lentils, nuts, seeds, and whole grains.

- **Calcium.** Calcium builds and maintains strong teeth and bones. It is easily obtained from low-fat dairy products and dark green vegetables, such as, spinach, turnip and collard greens, kale, and broccoli. Other options include Tofu enriched with calcium, fortified soy milk, and fruit juices.

- **Vitamin B-12.** Vitamin B-12 is involved in the production of red blood cells, DNA synthesis, and neurological functions, and is found almost exclusively in animal products, including milk, eggs and cheese. Vegans can get vitamin B-12 from some enriched cereals, fortified soy products, and by taking a supplement.

- **Iron.** Iron is an essential component of red blood cells and can be obtained from a wide variety of foods, including dried beans and peas, lentils, enriched cereals, whole-grain products, tofu, dark leafy green vegetables, and dried fruit. Absorption of iron from non-animal sources is boosted by foods rich in vitamin C that are eaten along with the above iron-containing foods, such as, strawberries, citrus fruits, tomatoes, cabbage, and broccoli.

- **Zinc.** Zinc is an essential trace element and a component of over 100 bodily enzymes, and has a role in the metabolism of DNA and RNA, neurological functions, and the human immune system. Red meats, especially beef, lamb, and liver, have some of the highest concentrations of zinc. In plants, zinc varies based on levels of the element in soil. Food plants containing the most zinc are wheat (germ and bran) and various seeds (sesame, poppy, alfalfa, celery, mustard). Zinc is also found in almonds, beans, whole grains, soy products, pumpkin seeds, sunflower seeds, and blackcurrant.

The Vegetarian Food Pyramid offers quick, specific guidance for dietary balance. In a blink, food intake proportion levels for broad food groups are represented. Due to their generic nature, however, food pyramids offer little help in selecting ingredients or preparing actual meals. For this, a wide array of books and websites are available, with and without a strong dose of vegetarian philosophy (see Additional Reading, below).
The Vegan Food Pyramid goes even further by removing from your diet all foods processed with or containing animal products (e.g., sugar, gelatin, some wines), eggs, honey, and all dairy products.

There are some things in adulthood beyond individual control, like death and taxes as the saying goes. Fortunately, diet is not one of them. Eat healthy, nutritious food, eat more frequently, eat smaller portions, live longer and prosper.

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Additional Reading


References


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