

## You Are What You Eat . . . and Drink

If it is true “you are what you eat (and drink),” then the health profile of America today reveals we are eating way too much of the wrong foods and exercising too little. Here are some worrisome exercise, food, and health facts you may not have seen.

- Only about one-third of adults are physically active in their leisure time. Perhaps more significantly, 39 percent of adults engage in no leisure time exercise.
- Half of Americans aged 55-64 have high blood pressure, a major risk factor for heart disease and stroke. [*Note: In fairness, age-adjusted rates for heart disease have been falling for men and women for decades, reflecting more than anything else advances in treating heart disease and more effective prevention efforts, including smoking cessation and a public emphasis on more active lifestyles.*]
- Forty percent of adults in the 55-64 age range are obese. Obesity is a well-established cause of heart disease, diabetes, high blood pressure and strokes.
- Approximately 127 million adults in the U.S. are overweight, 60 million obese, and 9 million severely obese.
- In California, specifically, 21 percent of adults are obese, twice the percentage reported in 1991.
- Over the past two decades, Americans have increased their daily calorie intake by 250 to 300 calories, with approximately half of the additional calories coming from sugar-sweetened beverages, which have almost no nutritional value.
- The prevalence of overweight and obese adults in the U.S. has increased steadily over the past three decades. According to researchers at Johns Hopkins Bloomberg School of Public Health, “If these trends continue, more than 86 percent of adults will be overweight or obese by 2030 with approximately 96 percent of non-Hispanic black women and 91 percent of Mexican-American men affected. This would result in 1 of every 6 health care dollars spent in total direct health care costs paying for overweight and obesity-related costs.”
- Cancer has now been linked directly to obesity. In a report recently released by the American Cancer Society excess body fat causes more than 100,000 cases of cancer each year. The precise numbers (or percentages) are: 49 percent of endometrial cancers are caused by excess body fat, followed by 35 percent of esophageal cancer cases, 28 percent of pancreatic cancer cases, 24 percent of kidney cancer cases, 21 percent of gallbladder cancer cases, 17 percent of breast cancer cases, and 9 percent of colorectal cancer cases. "This is the first time that we've put real, quantifiable case numbers on obesity-related cancers," said Glen Weldon, Director of Education for the American Institute for Cancer Research. "Obesity not only raises the risk for getting cancer," Weldon warns, "It also has a negative effect on survival and can

make treatment more difficult." [*Note: Cancer death rates have continued to decrease since the early 1990s because of prevention and improved treatment for many types of cancers.*]

- Although not directly involving Boomers--yet, one in four elderly (age 65 and older) in our communities is malnourished. Poor nutrition is associated with many adverse health events, of course, including increased risk for chronic disease, infection, disability, longer hospital stays and hospital readmission. We do know this: the diets of most Americans are relatively poor, and this is particularly true for older adults. An assessment of American diets by the USDA in 2002 found that 74 percent needed improvement, and the quality of Americans' diets does not appear to improve with age.

Pretty clear evidence many adults are not preparing intelligently for their later years. What about the things we routinely drink and eat?

### **What Boomers Drink**

**Coffee.** Worldwide, about 1.4 billion cups of coffee are consumed daily. The U.S. alone accounts for 45 percent of that volume (400 million cups a day!), and we are the single largest coffee consumer in the world. In 2009, 54 percent of adults consumed coffee on a daily basis, and most of it was brewed at home. However, on a per capita basis we are Number 22 on the worldwide list, meaning, individual Americans consume less coffee than their counterparts in Scandinavian countries, Switzerland, Canada, Germany, Italy, France, Brazil, Spain and many others. Are there any health benefits in coffee? After nearly 20,000 different studies on the subject, the results are still a bit mixed and confusing. "Overall, the research shows that coffee is far more healthful than it is harmful," says Tomas DePaulis, PhD, research scientist at Vanderbilt University's Institute for Coffee Studies. In addition to the caffeine, a stimulant, coffee is loaded with helpful antioxidants, more than typical servings of grape juice, blueberries, raspberries and oranges. An 18-year longitudinal study at Harvard revealed drinking more rather than less coffee (6 cups daily vs. 1 to 3 cups) significantly reduces the risk of Type 2 diabetes. Drinking coffee daily also seems to offer some protection against Parkinson's disease, colon cancer, gallstones, and liver cirrhosis, and is helpful in treating asthma and headaches. It may also reduce dental cavities. On the other hand, the caffeine in coffee can increase nervousness, hand trembling, and cause rapid heartbeat. Coffee may also raise cholesterol levels in some people. Pregnant women, heart patients, and those at risk for osteoporosis are still being advised to limit or avoid coffee.

**Water.** The United States is the world's leading consumer of bottled water, with Americans drinking about 30 billion liters a year. Mexico has the second highest consumption. We drink more bottled water than milk, or coffee, or beer. Only carbonated soft drinks are more popular than bottled water, at 52.9 gallons per person annually. Everyone knows about the health benefits of water, that we are supposed to drink eight 8-ounce cups of water daily to avoid dehydration, muscle weakness, fatigue, dizziness, dry joints, diminished athletic performance, reduced kidney function and poor fat metabolism, and mental dullness. But why so much? Your lungs expel between two and four cups of water just through normal breathing, even more on a cold day. You also lose

water through perspiration (about two cups) and sweaty feet (another cup), and trips to the restroom (as much as six cups a day). Water out, water in.

**Alcohol.** Worldwide, the United States ranks sixth in terms of per capita consumption of spirits, eighth in consumption of beer, and eighteenth in consumption of wine. Regionally, about 51 percent of adults in the West in 2008 consumed of some kind of alcoholic beverage (at least 12 alcohol drinks in the last year). There are a lot of health claims about drinking in moderation, and it is clear more research is necessary to settle the point. The Mayo Clinic recommends avoiding all alcohol consumption if you have certain health conditions, and warns about dangerous drug/alcohol interactions (e.g., antibiotics, antidepressants, beta blockers, pain relievers). But they also report some health benefits, mostly for the heart, from moderate drinking, defined as two drinks a day for males 65 and younger, or one drink a day for female and males 66 and older. Moderate drinking *apparently can* reduce your risk of developing heart disease and peripheral vascular disease, reduce your risk of dying of a heart attack, possibly reduce your risk of strokes, lower your risk of gallstones, and possibly reduce your risk of diabetes. Heavy alcohol use is linked to cancer, pancreatitis, heart muscle damage, stroke, high blood pressure, miscarriage, and other bad stuff.

**Sugar Sweetened Drinks.** Ranging from soda to fruit juice, sugar sweetened drinks have become an increasingly significant source of caloric intake for all adults despite the fact they provide little nutritional benefit. These beverages are sometimes referred to as “liquid candy.” A 2009 study published in the *American Journal of Clinical Nutrition* by researchers at Johns Hopkins Bloomberg School of Public Health reported a dramatic increase in the past decade in sugar sweetened drink consumption among adults, primarily soda. While 72 percent of young adults consume sugar sweetened drinks daily, 57 percent of adults in the 45-64 age range do as well. About 60 percent of the source calories for both groups are from soda, with fruit drinks the second largest source, accounting for about one fourth of the calories. Most of these drinks are consumed at home, by the way. Consumption patterns of sugar sweetened drinks parallel the rising prevalence of adult obesity and Type 2 diabetes in the U.S.

### **What Boomers Eat**

Americans have a serious over-weight problem. This is hardly surprising since we are just eating more—of everything, all food groups. If they grow it, prepare it, and serve it, we’ll eat it. The total food intake per person increased a whopping 16 percent from 1,675 pounds in 1970 to 1,950 pounds in 2003. This has also pushed the adult daily caloric intake up, on average, from 2,234 calories per person per day in 1970 to 2,757 calories in 2003. Our consumption of fats and oils, grains, vegetables, and sugars/sweeteners account for most of the increase. For example, total per capita consumption of added fats and oils rose by 63 percent, grain consumption by 43 percent, vegetable consumption by 24 percent, and sugar/sweetener consumption by 19 percent. Annual corn sweetener consumption increased to 79 pounds in 2003, up 400 percent from 1970. This is largely due to the invention of high-fructose corn syrup, a low-cost substitute for processed cane sugar that now finds its way into many beverages, such as soft drinks and fruit drinks.

Adult eating patterns currently fall well below the recommended targets for daily fruit and vegetable intake. California is neither best nor worst in this respect, with only about 16 percent of us meeting or exceeding the national nutritional goal by consuming both 2 or more servings of fruit and 3 or more servings of vegetables on a daily basis, according to a 2009 report released by the Centers for Disease Control and Prevention. Government data from 2003 show 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 same standard.

Not surprisingly, with more than 575,000 outlets, Americans eat more fast food than any other country, and the food of choice is hamburgers (accounts for over half of all expenditures). A typical fast food meal provides all of the calories an adult needs in a typical day—the problem for most of us is that is not the only meal we will eat that day. Our per capita fast food expenditure was \$566 in 2005. On average, 37 percent of U.S. food expenditures for meals away from home are at various fast food outlets. In general both the probability of consuming fast food and the expenditure level increase with income and household size, but decrease with age and education.

### **Aging, Metabolism, and Nutrition**

The biology of aging has made remarkable advances in the past two decades, enough so that we can make some comments about eating and aging with reasonable certainty. As our bodies grow older, everything changes, including metabolism, nutrition and exercise requirements, strength, muscle mass, bone density, digestive processes, immune system efficiency, and cognitive functions. Here are the basic rules regarding aging, metabolism, and nutrition.

#### **Boomer Rule #1: As we age our metabolism slows down.**

Metabolism refers to our ability to convert the foods we eat—carbohydrates, protein, fat—into fuel. After age 30, adult metabolism slows by about 2% per decade, on average. This is primarily due to a decline in our ability to make the fuel conversion, and the loss of muscle mass. Less muscle mass coupled with the usual age-related decrease in vigorous physical activity means fewer calories burned, a decline in metabolic load. Menopause, in the case of women, often slows metabolism even further. We lose as much as 50% of our muscle mass between the ages of 20-90, and up to 10 percent per decade after age 45.

According to researchers at Johns Hopkins University, there are a number of simple things you can and should do to boost your sluggish metabolism. These include eating breakfast, eating more frequently rather than two or three large, daily meals, eating more and leaner protein (e.g., lean meat, poultry without the skin, beans, and nonfat dairy products), exercising frequently, including the addition of strength training to your routine, and getting enough sleep.

## **Boomer Rule #2: Eliminate the junk food from your diet**

Junk food comes in all shapes and varieties. Junk food refers to all processed and fried foods, you know, the ones that taste so good and are available everywhere—markets, drive-thru's, gas stations, speedy marts, sporting events, fairs, your refrigerator. Familiar examples include white flour pastries, burgers and fries, pizza, candy, gum, soda and other sugary drinks, ice cream, salty snacks, and any foods made with loads of sugar and trans fats. In addition to low nutrients, many of these foods contain preservatives, food coloring, pesticides, high fat or sugar content (or both), and are browned and contain toxins called advanced glycation end products (AGEs) that are implicated in a number of age-related diseases, such as, cardiovascular disease, diabetes, stroke, and Alzheimer's disease.

Before leaving Rule #2, a word or two about Wonder Bread is in order. Debuting as a national product in the 1940s with added nutrients and vitamins, Wonder Bread became a household name in the 1950s by sponsoring the iconic television programs, Howdy Doody and Buffalo Bob Smith. Boomers will clearly remember the product claim that Wonder Bread, "Builds bodies eight ways. Look for the red, yellow and blue balloons printed on the wrapper." In the 1960s, Continental Baking claimed further it, "Helps build strong bodies 12 ways." While the enriched bread did have extra additives with modest health benefits, the bleaching process stripped the wheat itself of its original nutrients and fiber, and allowed us to convert it very quickly into digestible carbohydrates (sugar). We now understand, but did not then, that plain white bread is digested almost as quickly as pure sugar and, therefore, fails to provide young children or aging adults with sustainable energy and nutrients like magnesium, selenium, potassium, and vitamin B.

## **Boomer Rule #3: Eat the right foods**

Determining what foods are healthy and desirable and in what amounts, particularly as we age, has been much more difficult in many ways than identifying what we should not be eating. Part of the confusion was perpetuated by the federal government itself when the U.S. Department of Agriculture released its food pyramid in 1992. This was intended as a dietary guide for all Americans. In 2004 the USDA added more detail to the pyramid by suggesting food-serving levels per day. The problem was that the government's pyramid was not based on good science. It pushed enriched flour, pasta, rice, potatoes, and warned of all fat intake. In the alternative, Harvard University's School of Public Health released its own pyramid which effectively inverted the USDA's food model, separated whole grain from wheat grain, differentiated unsaturated fat from saturated fat, and emphasized moderation, weight control, and exercise.

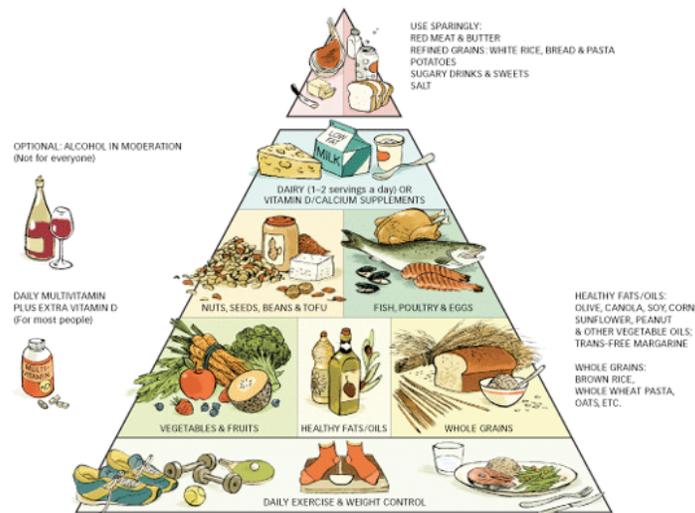
Then again in 2005 the USDA and Health and Human Services jointly released a set of Dietary Guidelines for Americans 2005 and a MyPyramid. While this effort corrected some of the government's errors and obvious food industry biases of the past, it added new ones. For example:

- The guidelines suggest you can consume half of your grains as refined starch--white bread, white rice, pasta all behave like sugar in our metabolic system. These add empty calories to our diets, have adverse metabolic effects, and increase the risks of heart disease and diabetes, as noted earlier.
- The guidelines continue to confuse proteins--red meat, poultry, fish, beans and soy products. They also judge these protein sources by their total fat content, and make distinctions between "lean, low-fat, or fat-free." This ignores clear evidence these foods have different types of fats, and the overwhelming health benefits of replacing red meat with fish, poultry, beans, and nuts.

Harvard University's answer is the Healthy Pyramid, presented below. It rests on a healthy foundation of daily exercise and weight control. It also emphasizes healthy grains (i.e., whole grains) for sustained energy, healthy oils and fats (i.e., unsaturated fats from olive, canola, soy, corn, sunflower, peanut, and other vegetable oils, and nuts, seeds, avocados, and fatty fish, such as, salmon), daily fruits and vegetables, plant foods (i.e., nuts, seeds, beans, tofu), fish-poultry-eggs, and 1-2 servings of dairy every day. It is also recommended we consume much more sparingly, red meat and butter, and refined flour products, rice, potatoes, sugary beverages, and salt.

## THE HEALTHY EATING PYRAMID

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For more information about the Healthy Eating Pyramid:

[WWW.THE NUTRITION SOURCE .ORG](http://WWW.THE NUTRITION SOURCE .ORG)

Eat, Drink, and Be Healthy  
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#### **Boomer Rule #4: Eat less.**

Tired of that full, dull feeling. Eat less. For most of us a diet of 1,500 calories per day, coupled with robust exercise will result in *real* weight loss. A daily diet of 2,000 calories results in weight maintenance. A daily intake of more than that---well, you get the idea.

#### **Boomer Rule #5: Get more exercise.**

It has been suggested by some experts that the greatest health challenges of our time may be over-indulgence and idleness. If you let them, this dangerous couple will make you older than you are, fatter than you should be, sicker than you need to be, and probably stupider. We have always valued exercise, of course, in its own right and for the health advantage it offers, but now we know we can barely afford to live without it—a lot of it. On its website, the Mayo Clinic suggests seven virtues. Exercise improves your mood. Exercise combats chronic disease. Exercise helps you manage your weight. Exercise boots your energy level. Exercise promotes better sleep. Exercise can put spark into your sex life. Exercise can be—gasp—fun!

According to Chris Crowley and Henry Lodge, co-authors of the national bestseller *Younger Next Year*, “The single best thing you can do to stay or reverse obesity is to be physically active... The point of exercise is not to ‘burn off’ calories, but rather to tell every part of your body to grow, to invest in building new tissue, and to run at the highest metabolic rate all day and all night long.”

#### **Boomer Rule #6: Don’t forget to feed your soul.**

To be well, to remain alert and alive, to stay engaged with life we also need to feed our souls with art, music, literature, understanding, kindness, creativity, solitude, friends and family, nature, hope, and love.

#### **Additional Reading**

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