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Health Care Reform: *Prevention* is Essential
Executive Summary

To promote health and reduce health-care costs, health-reform legislation should include strong, specific prevention measures. This testimony focuses on employing five long-neglected, high-leverage, diet-related means of preventing chronic diseases; treating serious diseases in a more economical, yet still effective, manner; and levying taxes that would both promote health and generate revenues that could help fund expanded health-care coverage.

1. **Raise Taxes on Alcoholic Beverages**
   Because alcoholic beverages are a major cause of illness, addiction, death, injury, and psychosocial problems, Congress should raise alcohol excise taxes, tax all products equally on the basis of their alcohol content, and index tax rates for inflation. Boosting the tax on distilled spirits by 50 percent and equalizing the beer and wine rates would generate $12 billion in new revenues annually. Simply adjusting tax rates for the inflation that has eroded revenues since the last increase (in 1991) would raise $5 billion in new revenues per year. Higher taxes and prices would dampen alcohol consumption and lead to additional health-care and other cost savings to the federal government and to the economy generally.

   *Federal revenues generated - $5 billion to $12 billion/year*

2. **Tax Soft Drinks**
   Because soft drinks have been a major contributor to obesity in recent decades, and because obesity is a major cause of diabetes, hypertension, strokes, heart attacks, and cancer, Congress should impose a new excise tax on non-diet soft drinks, including both carbonated and non-carbonated beverages. A tax of one cent per 12-ounce can would raise about $1.5 billion per year; a tax of one cent per ounce would raise about $16 billion per year. The higher rates would reduce consumption and help slow the obesity epidemic. Each penny tax per can would lower soft drink consumption by about 1 percent.

   *Federal revenues generated - $1.5 billion to $16 billion/year*

3. **Get Artificial Trans Fat out of Foods**
   Because artificial trans fat (from partially hydrogenated oil) is a potent cause of heart disease, Congress should pass legislation to eliminate artificial trans fat from our food supply, thereby saving lives and health-care dollars. While much trans fat has already been eliminated, removing the remaining roughly one-third would save about 15,000 to 25,000 lives and $2 billion in direct medical costs annually.

   *Cost savings to the federal government - $2 billion/year*

4. **Reduce Sodium Levels in Packaged and Restaurant Foods**
Because it raises blood pressure and increases the risk of hypertension, strokes, heart attacks, and kidney disease, salt is arguably the most harmful ingredient in our food supply. Gradually reducing sodium levels in packaged and restaurant foods by half would ultimately save an estimated 150,000 lives and billions of dollars annually. Congress should pass legislation to require the Secretary of Health and Human Services to develop and implement a plan for a 50 percent reduction in the sodium content of the food supply over no more than 10 years.

Cost savings to the federal government – $9 billion/year in direct medical costs (for about an average 25% reduction in sodium levels over 10 years)

5. Reduce Medical Costs through Lifestyle Treatment of Heart Disease
The medical and surgical treatment of chronic diseases is a major cause of high health-care costs. In some cases, though, equally or better patient outcomes result from relatively inexpensive modification of lifestyle, particularly diet, exercise, and smoking, which could save several tens of billions of dollars annually. Studies have demonstrated that intensive lifestyle counseling of patients with heart disease can often substitute for costly angioplasties and coronary artery bypass procedures.

Cost savings to the federal government - $21 billion/year in direct medical costs

The proposed measures would generate total savings or income to the federal government of $38 billion to $61 billion per year.
Health Care Reform: Prevention is Essential

As Congress develops legislation to ensure that all Americans have access to quality health care, it is critical that Congress include a strong prevention title. Preventing illness is the best way to promote health and hold down costs. The preventive approach must become the default—from breastfeeding the young to physical activity among the old. Indeed, considering the soaring costs of medical care, funding expanded coverage (or even maintaining current levels of coverage) will be impossible without making a comprehensive effort to prevent illnesses and, in some cases, treat them more economically.

While “prevention” covers everything from immunizations to seat-belt usage, this memorandum focuses on neglected diet-related means of preventing chronic diseases; treating them in a more economical, yet still effective manner; and generating revenues that could help pay for prevention activities and expanded health-care coverage. The measures discussed are “high-leverage,” because they offer a significant health or revenue benefit at little or no net cost to government.

I. Generating New Revenues to Fund Health Care

A. Raise Excise Taxes on Alcoholic Beverages

Congress has long considered it appropriate to tax alcoholic beverages, which are responsible for widespread and severe health problems: about 85,000 deaths and $185 billion in societal costs annually. For the first 120 years or so of our nation’s existence, taxes on alcoholic beverages were the major source of revenues. The federal government (and every state) still taxes alcoholic beverages, but now those revenues account for less than 0.4 percent of total revenues (down by half from the percentage in 1992). The federal government currently receives about $9 billion annually from alcohol excise taxes.

The tax rates on alcoholic beverages have been raised only twice since 1951, most recently in 1991. Since then, inflation has robbed the Treasury of more than one-third the value of the taxes—and, year by year, alcoholic beverages have become relatively cheaper.

To compensate society for the costs of alcohol abuse and alcoholism and to marginally reduce problem drinking, Congress should raise taxes on alcoholic beverages and tax the alcohol in all products equally. For instance, boosting the tax on distilled spirits by 50 percent to $20.25 per proof gallon and boosting the beer and wine rates to that level would generate $12 billion in new revenues annually. (Other scenarios would yield smaller revenues: adjusting for inflation since 1991 would generate about $5 billion; adding five cents per drink would generate about $6 billion; raising the liquor tax from $13.50 to $16 per proof gallon and equalizing beer and wine tax rates would generate about $7.5 billion.) Congress should include an annual inflation adjustment to prevent the inexorable erosion of tax revenues by inflation.

Raising alcohol taxes would marginally reduce alcohol consumption and problem drinking. The highest tax increase suggested above would reduce consumption by several percent. That would...
lead to less drinking, less harm associated with problem drinking, and cost savings for our health-care system.

Some parties (usually industry) express concern about the regressivity of alcohol taxes, but the actual problem is much exaggerated. In fact, compared to upper-income consumers, lower-income families buy much less alcoholic beverages. People in the lowest quintile of incomes consume only 8 percent of alcoholic beverages; those in the top quintile consume 38 percent.\textsuperscript{4} Overall, only 1 percent of Americans’ total expenditures are for alcohol, regardless of income.\textsuperscript{5}

Most people would be little affected by higher alcohol taxes. More than one-third of adults do not drink at all, and half of all drinkers drink sparingly.\textsuperscript{6} For instance, using the highest-increase scenario discussed above, half of all beer drinkers would pay less than $10 per year—under three cents a day—in new taxes.\textsuperscript{7} Because alcohol consumption is heavily concentrated among the top 20 percent of drinkers who consume 85 percent of all the alcohol, most of the tax increases would be paid by those who drink excessively.\textsuperscript{8} Using some of the revenues for alcoholism treatment, prevention, and public education would further reduce the toll of alcohol problems and would probably disproportionately benefit low-income problem drinkers. Opinion polls show that a strong majority of Americans supports alcohol tax increases, particularly when the revenue supports alcohol prevention and treatment programs.\textsuperscript{9}

Raising alcohol excise taxes is well-justified, painless for the vast majority of consumers, and good for public health.

\textbf{Recommendation:}

\begin{center}
\textbf{Congress should raise taxes on alcoholic beverages and tax the alcohol in all products equally. Boosting the tax on liquor by 50 percent (from $13.50 to $20.25 per proof gallon) and equalizing the beer and wine rates would increase revenues by $12 billion annually, or $120 billion over 10 years. The tax rates should be indexed for future inflation.}
\end{center}

\section*{B. Tax Soft Drinks}

More than two-thirds of Americans are overweight or obese.\textsuperscript{10} While many factors promote weight gain, soft drinks are the only food or beverage that has been shown to increase the risk of overweight and obesity, which, in turn, increase the risk of diabetes, stroke, and many other health problems.

Soft drinks are nutritionally worthless, but add a lot of calories to the diet. Several scientific studies have shown that soft drinks are directly related to weight gain, partly because beverages are more conducive to weight gain than solid foods.\textsuperscript{11,12,13} And countless studies have shown that excess weight is a prime risk factor for type 2 diabetes, heart attacks, strokes, cancer (colon, breast, and others), sleep apnea, and many other problems. Frequent consumption of soft drinks also contributes to osteoporosis, tooth decay, and dental erosion.\textsuperscript{14}

Americans spend $90 billion a year on medical expenditures related to obesity, of which half is paid with Medicare and Medicaid dollars.\textsuperscript{15} While obesity should be addressed through a wide
variety of actions, one action would be for governments to levy a tax on soft drinks to recoup some of those expenses. The revenues could help fund health care, but also should be used to support programs to promote healthy diets and exercise. Besides providing revenues, depending on the rate, a tax might marginally affect consumption and slow the obesity epidemic.

Beverage companies market more than 14 billion gallons of calorie-laden soft drinks annually.\textsuperscript{16} That is equivalent to about 506 12-oz. servings per year, or 1.4 servings per day, for every man, woman, and child. Those figures include non-diet carbonated sodas, energy drinks, sports drinks, fruit drinks, and ready-to-drink teas.

Many state governments have recognized that soft drinks do not deserve to be treated, for tax purposes, like ordinary foods. States as diverse as Arkansas and California, New York and West Virginia, along with others plus the City of Chicago, have imposed special excise or sales taxes on soft drinks to generate revenues. Those taxes are too small to reduce consumption, but collectively they generate over a billion dollars a year in revenues.

A federal excise tax on soft drinks would not prohibit people from buying sugary beverages. And people could avoid the tax by switching to diet sodas, tap or bottled water, seltzer, or low-fat milk, and benefiting their health in the process.

A federal tax of one cent per 12-ounces would raise about $1.5 billion annually. A tax of one cent per ounce, as suggested recently by New York City Health Commissioner Tom Frieden and Yale obesity expert Kelly Brownell, would raise about $16 billion per year.\textsuperscript{17}

Lower-income consumers would be especially affected by a soft-drink tax. However, they would be especially helped by any health-care or prevention programs funded by the taxes and by the health benefits from drinking less soda.

**Recommendation:**

**Congress should impose an excise tax on non-diet soft drinks, both carbonated and non-carbonated.** A tax of one cent per 12-ounces would raise about $1.5 billion annually; a tax of one cent per ounce would raise about $16 billion per year, reduce consumption, and slow rising rates of obesity. Each penny-per-12-ounces would reduce consumption by about 1 percent.

## II. Reducing Health-Care Costs by Preventing Cardiovascular Disease

### A. Get Artificial Trans Fat out of Foods

Artificial trans fat is a potent, and totally unnecessary, cause of heart disease and also appears to contribute to diabetes and obesity. Trans fat is produced when an oil is “partially hydrogenated” to make it more solid, like traditional margarine or shortening.
In 2006, Harvard School of Public Health researchers estimated that each year trans fat was causing 72,000 to 228,000 heart attacks,\textsuperscript{18} including roughly 50,000 fatal ones.\textsuperscript{19} Fortunately, because of several factors—food labeling, local and state (including California and New York City) laws phasing out artificial trans fat from restaurants, litigation, and massive publicity—the toll is probably two-thirds smaller today. The remaining trans fat may be causing “only” about 15,000 to 25,000 deaths annually.

The FDA rejected the Center for Science in the Public Interest’s 2004 petition to require restaurants to disclose the presence of trans fat in their foods and has not responded to a second 2004 petition asking that partially hydrogenated oils no longer be considered Generally Recognized As Safe (GRAS), but regulated as food additives and severely restricted in foods. Because of that inactivity, it is time for Congress to protect the public’s health.

**Recommendation:**

Congress should pass legislation to largely eliminate the partially hydrogenated oil – and artificial trans fat – from our food supply. That would save about 15,000 to 25,000 lives and $2 billion annually.

**B. Reduce Sodium Levels in Packaged and Restaurant Foods.**

Salt—sodium chloride—is arguably the most harmful ingredient in our food supply. While a small amount of sodium is necessary for health, the large amount in the typical diet is a major cause of high blood pressure (hypertension), heart attacks, and strokes.

Sodium reduction is especially important for the 65 million American adults who have high blood pressure\textsuperscript{20} and the 45 million who have pre-hypertension.\textsuperscript{21} Ultimately, about 90 percent of Americans develop hypertension.\textsuperscript{22} African Americans experience a 60 percent greater rate of hypertension and a 40 percent higher rate of stroke deaths than the general population.\textsuperscript{23}

The government’s Dietary Guidelines for Americans states that people with hypertension, people who are middle-aged or older, and African Americans should consume no more 1,500 milligrams (mg) of sodium daily.\textsuperscript{24} Those groups account for about 70 percent of the population.\textsuperscript{25} Other adults should consume no more than 2,300 mg of sodium (about a teaspoon of salt). Unfortunately, the average adult consumes about 4,000 mg per day, or twice the recommended level.\textsuperscript{26} Only about 10 percent of that comes from the salt shaker, and about the same percentage occurs naturally.\textsuperscript{27} Three-quarters of all sodium comes from the salt (and other sodium-containing additives) in processed and restaurant foods.

The extraordinary importance of lowering sodium consumption was highlighted in a 2004 paper coauthored by the Director of the National Heart, Lung, and Blood Institute (NHLBI) and two colleagues.\textsuperscript{28} They estimated that reducing the sodium content of packaged and restaurant foods by 50 percent would prevent about 150,000 deaths due to cardiovascular disease per year.

Reducing sodium consumption also would save billions of dollars in medical costs. A preliminary RAND Corp. study estimates that reducing sodium consumption by 1,100 mg per
day (about one-fourth of average intake) would reduce medical costs by $18 billion per year. A reduction of 1,900 mg per day was estimated to reduce costs by $26 billion per year. About half of those savings would accrue to the federal government.

Consuming less sodium is one of the single most important—and feasible—ways to prevent cardiovascular disease. Indeed, the United Kingdom has made salt reduction a top priority and is both educating consumers about excessive salt intake and pressuring the food and restaurant industries to lower sodium levels to specified targets. The first interim survey found about a 9 percent reduction in sodium intake (the five-year goal is 33 percent). The U.S. government should be at least as aggressive in protecting the public’s health as the U.K. government.

**Recommendation:**

Congress should pass legislation to require the Secretary of Health and Human Services to develop and implement a plan to reduce the sodium content of the American diet over the next 10 years to the levels, and by means of strategies, recommended by the Institute of Medicine and other authorities.

### III. Reducing Medical Costs through Lifestyle Treatment of Heart Disease

The medical and surgical treatment of chronic diseases is a major cause of high health-care costs. In some cases, though, equal or better patient outcomes result from relatively inexpensive modification of lifestyle, particularly diet and exercise. Much greater use of lifestyle treatments would save the federal government several tens of billions of dollars annually.

According to the American Heart Association, each year more than one million angioplasties are performed at an average cost of about $50,000 each, and almost half a million coronary artery bypass grafts are performed at an average cost of about $100,000 each. The total annual cost of just those two procedures is about $100 billion—much of which is avoidable.

Studies have demonstrated that intensive diet-lifestyle counseling of patients with heart disease can often alleviate the need for costly angioplasties and coronary artery bypass procedures. From the heart patient’s perspective, lifestyle therapy is far more benign than bypass surgery: nutritious meals and invigorating walks substitute for general anesthesia, major invasive surgery, possible brain damage from the heart-lung machine, and a two percent chance of dying on the operating table. Surgery provides relief from chest pain (angina), but little, if any, increase in life expectancy. In contrast to angioplasties and bypasses, a diet-lifestyle approach reverses the underlying atherosclerosis in the entire circulatory system—without side effects and at low cost.

Lifestyle interventions provide tremendous savings to the health-care system. One study with health-insurance providers found that the average savings in the mid-1990s from lifestyle intervention was $29,500, or $49,000 when adjusted to 2009 dollars. Because of such proven savings, Medicare now provides reimbursement for lifestyle interventions. The same
diet-lifestyle approach can also often treat hypertension and diabetes, two other costly medical conditions that predispose to cardiovascular disease and premature death.

Inadequate reimbursement is a major barrier to wider use of intensive lifestyle treatment. The Centers for Medicare & Medicaid Services (CMS) (as well as a few private insurers) offers reimbursement for lifestyle interventions, but the rates (on the order of $30 per hour or less\textsuperscript{33}) are far too low to encourage doctors to prescribe and hospitals to encourage such interventions. Surgical and medical approaches are simply far more remunerative to the medical system.

Another barrier is that many doctors are not sufficiently familiar with lifestyle interventions to discuss them with patients. Medical schools and residency programs have simply failed to teach that fundamental part of human medicine, and probably won’t without legislative action to normalize lifestyle interventions.

To overcome one of those barriers, Washington State is sponsoring a demonstration project to encourage patients to make “genuinely informed, preference-based treatment decisions.”\textsuperscript{34} An alternative approach proposed in a bill in the California Assembly would require physicians to inform their patients of the option of intensive lifestyle therapy for heart disease or diabetes, “including a description of the potential risks, consequences, and benefits of this treatment relative to other medical treatment options.”\textsuperscript{35}

We estimate that if only half of the patients scheduled for surgery opted instead for (but did not always succeed with) lifestyle treatment, the savings would amount to $43 billion per year. About half of those savings, or $21 billion, would accrue to the federal government. Substantial savings also could be obtained from using lifestyle interventions to treat diabetes, hypertension, and other conditions. Private insurers and their policyholders also would benefit from offering patients treatment through relatively inexpensive, but effective, lifestyle changes.

**Recommendation:**

**To reap the cost-savings from lifestyle interventions, health-reform legislation should include measures to overcome several existing obstacles:**

- Congress should set higher reimbursement rates. Even large increases would still save CMS substantial amounts of money per patient.

- Congress could require that (a) doctors seeking reimbursement through Medicare and Medicaid for treatment of heart disease and specified other illnesses provide patients with objective information about lifestyle interventions, and (b) hospitals at which heart surgeries are done frequently establish and promote programs for intensive lifestyle treatment.

- To hold down non-governmental medical costs, Congress should require all health insurers to provide adequate reimbursement for lifestyle-change programs and require physicians to provide patients with object information about that approach.
Endnotes

3 Congressional Budget Office, Historical Budget Data Charts, March 2009.
5 Ibid.
6 Weighted Statistics for Percentile Groups (in ounces of pure ethanol/day), National Epidemiologic Survey on Alcohol and Related Conditions (NESSARC), 2001-2002.
7 Calculation assumes that total daily ethanol values, and the distribution of consumption, reported in NESARC 2001-2002 data (see previous note) also reflect beer consumption rates.
8 Rogers JD, Greenfield TK. Who drinks most of the alcohol in the US.? The policy implications.” J Studies Alc. 1999:60(1).
17 Brownell KD, Frieden TR. Ounces of prevention--the public policy case for taxes on sugared beverages. N Engl J Med. 2009 Apr 30;360(18):1805-8. CSPI’s estimates of federal revenues are based on a price elasticity of -0.6. Using an elasticity of -1.2 would indicate a much greater reduction in consumption (and greater health benefit), but also reduce tax revenues to $12 billion per year.


Ornish D. Avoiding revascularization with lifestyle changes: the multi-center lifestyle demonstration project. Am J Cardiol. 1998;Nov 26:82(10B):72T-6T


RCW 41.05.033. http://apps.leg.wa.gov/rcw/default.aspx?cite=41.05.033.

In the fight against chronic disease, it is important to encourage annual check-ups, new drug R&D, and other clinic-based disease-management efforts. But it is even more important to prevent diseases in the first place.

Below are specific low-cost, effective, and even revenue-generating public policies that could help people avoid heart disease, hypertension, obesity, cancer, and other chronic conditions. Contact the Center for Science in the Public Interest to learn more.

**Sodium and Trans Fat Reductions Would Cut Federal Government’s Reimbursement for Direct Medical Costs**

- **Sodium:** Figures are based on a preliminary RAND Corp. study that estimated that reducing daily intake of sodium by 1,100 mg would save $18 billion annually; if reduced by 1,900 mg, $26 billion. (NHANES survey put daily consumption is 3,400 mg, but that underestimates actual intake by about 15%, with actual intake closer 4,000 mg per day.) CSPI assumes that half of medical costs for heart disease are borne by the federal government.

- **Trans fat:** Estimate is extrapolated by CSPI from Mozaffarian et al., 2006, and assumes that 2/3 of artificial trans fat has already been eliminated.
Taxes on Disease-promoting Products Would Generate Revenues to Support Health Programs (Billions $)

Alcohol: Raising liquor tax from $13.50 to $20.25 per proof gallon and equalizing the tax rates on beer and wine would raise $12 billion/year. (CSPI, 2009)

Soft Drinks: 1 cent per ounce tax on soft drinks would raise about $16 billion/year (smaller taxes proportionately less). (Frieden/Brownell, 2009; CSPI, 2009)

Regulatory Actions Would Save Lives

Sodium: Based on Havas, Lenfant, Roccella (AJPH, 2004).
Smoking: Assumes 400,000 deaths/year from tobacco (based on Mokdad, Marks, Stroup, et al. JAMA. 2004).
Trans fat: Assumes that artificial trans fat had been causing about 60,000 deaths per year (Mozaffarian, et al., 2006) and that 2/3 of trans has already been eliminated.
Lifestyle Treatment of Heart Disease Would Cut Medical Costs and Federal Expenditures

Costs of bypass operation from the American Heart Association.
Cost of lifestyle treatment of heart disease updated for inflation from Ornish, Am J Cardiol. 1998;82:72T-6T.
Savings to the federal government from fewer heart surgeries (angioplasties, bypass operations) assumes half of surgeries would be replaced by lifestyle treatment; savings based on AHA/NCHS’s numbers of surgeries in 2006, savings seen in Ornish study, and that the federal government pays half of costs involved.

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