

## ***Small Steps to Health and Wealth™: Program Update and Research Insights***

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### **Abstract**

2014 marks the tenth anniversary of Cooperative Extension's *Small Steps to Health and Wealth™* (SSHW) program, which is being delivered in more than a dozen states. SSHW encourages people to make positive behavior changes that simultaneously improve their health and personal finances and focuses on small daily action steps that can achieve significant results over time. This article offers an overview of health and financial issues affecting Americans (e.g., being overweight or overextended on credit card accounts) and a description of studies about relationships between health and personal finances conducted within the past decade. The article concludes with a description of new SSHW program components available to Extension educators to teach recommended health and financial practices in an interdisciplinary manner.

### **Keywords**

Health, wealth, health and wealth, financial security

### **Introduction**

Many Americans have both health and personal finance "issues" in their lives. For example, they may be both overweight and overextended on credit card accounts. Yet, until recently, health and personal finances were generally treated as separate topic areas in educational programs, publications, and research (Vitt et al. 2002). 2014 marks the tenth anniversary of Cooperative Extension's Small Steps to Health and Wealth™ (SSHW) program.

Conceived at Rutgers University in 2004 to integrate health and personal finance education within a research-based behavioral framework, SSHW is now a signature NIFA-USDA national initiative that has been replicated in more than a dozen states. SSHW encourages people to make

positive behavior changes to simultaneously improve their health and personal finances and focuses on small daily action steps that can achieve significant results over time.

This article provides a ten-year SSHW program retrospective as a follow-up to an article about health and personal finance similarities by O'Neill (2004), where the SSHW program concept was first introduced. It begins by describing health and financial issues affecting Americans and studies about relationships between health and wealth that have been conducted within the past decade. It concludes by describing new SSHW program components including web site enhancements, podcasts and videos, workplace wellness newsletters, competitive on-line challenges, a second-edition workbook, and customized programs for youth and older adults.

### **Health issues**

Obesity is a major public health problem associated with serious maladies such as heart disease and type 2 diabetes (Nguyen et al. 2008). Thus, it is the focus of this literature review. Other consequences of obesity include gallbladder disease, chronic back pain, and some types of cancer (Guh et al. 2009). Overweight also impacts sleep habits (Punjabi 2008), the likelihood of having asthma (McHugh et al. 2009) and arthritis (Crowson et al. 2013), and one's personal mobility (Houston et al. 2009). It affects quality of life (Jia and Lubetkin 2010) and a person's life expectancy (Berrington de Gonzalez et al. 2010; Flegal et al. 2013). Even individuals who are highly motivated can have difficulty engaging in healthy eating practices and being active if their environments do not support or allow such behaviors (Institute of Medicine 2009).

Current high rates of overweight and obesity among U.S. youth and adults are primarily a result of individual behaviors and environmental factors that have led to excess calorie consumption and inadequate amounts of physical activity (USDHHS 2001, 2003). Reasons for excess calories include high sugar-sweetened beverage consumption (Duffey and Popkin 2007) and increased snacking (Duffey and Popkin 2011). Large portions of food at home and when eating out have led to a higher daily intake of calories consumed (Piernas and Popkin 2011; Kant and Graubard 2004, 2005, 2006). Unhealthy foods and beverages are marketed heavily to Americans (Powell et al. 2011) and value-sizing at fast food establishments promotes higher fat, salt, and sugar intake (French 2005).

Activity levels are lower than recommended amounts due to sedentary occupations and use of labor-saving equipment such as computers. An increase in television viewing and video games leads to less daily movement at home (Sallis and Glanz 2009). Limited access to safe, convenient recreation facilities and walking areas impacts activity during the workday for adults. For youth, the lack of daily physical education or recess in schools (Lee et al. 2007) results in fewer calories burned. According to the Centers for Disease Control, more than one-third of U.S. adults were

obese (Adult Obesity Facts 2013) and more than a third of children and adolescents were overweight or obese (Childhood Obesity Facts 2013).

Overweight children are more likely to be overweight or obese as adults (Freedman et al. 2005; Wang et al. 2008). Perhaps even more disturbing, today's youth may have a shorter life expectancy than their parents (Olshansky et al. 2005). Child obesity has substantial economic consequences and one study estimates \$11 billion in costs for children with private insurance and \$3 billion for children enrolled in Medicaid (Marder and Chang 2005). Health effects include poor quality of life and health (Tsiros et al. 2009), earlier onset of puberty (Kaplowitz 2008; Lee et al. 2010), and complications seen in adults.

Overweight children are often bullied (Farhat et al. 2010), depressed (Boutelle et al. 2010), and have anxiety (Anderson et al. 2007), low self-esteem (McClure et al. 2010), and feelings of inferiority and worthlessness (BeLue et al. 2009) along with disordered eating and unhealthy weight loss behaviors (Neumark-Sztainer 2006). Poor academic performance (Bethell et al. 2010; Krukowski et al. 2009) and school absences are often apparent (Bethell et al. 2010; Geier et al. 2007).

### **Financial issues**

Four widely reported areas of personal finance where people are vulnerable include savings, outstanding debt, financial capability, and health insurance literacy. With respect to savings, U.S. savings rates continue to be low compared to earlier times: 4.6 percent (the personal savings rate, calculated as a ratio of personal savings to disposable personal income) in August 2013 versus 10 to 12 percent decades earlier (Personal Savings Rate 2013). The seventh annual America Saves Week national survey assessing household savings (7<sup>th</sup> Annual Savings Survey 2014) found that only one-third of Americans feel prepared for their long-term financial future. In addition, only 40 percent of a representative sample of 1,018 adults had a spending plan that included savings for financial goals.

Only 57 percent of U.S. workers are currently saving money for retirement and 60 percent have less than \$25,000 in savings and investments, excluding the value of their primary home and any defined benefit pensions. This includes 36 percent who say they have less than \$1,000 in savings (Helman, Adams, Copeland, and VanDerhei 2014). Fifty-eight percent of workers reported having a problem with their level of debt.

Outstanding debt is a financial handicap for many families. As debt increases, so does the risk of financial failure (Porter, p. 5). Almost a quarter (23.8 percent) of homeowners with mortgages were "under water" in June 2013 with mortgage balances larger than the value of their homes (Schmit 2013). Total student debt, including private loans, passed \$1 trillion in 2011 and is now

\$1.2 trillion (Weinberg 2013). Two-thirds of college students had loan debt averaging \$26,600 per borrower (State by State Data 2012). About 1.5 million families filed bankruptcy in 2010 (Porter 2012), and 30 million Americans are estimated by the Consumer Financial Protection Bureau to have debts in collection owing, on average, about \$1,500 (Blumenthal 2013). Excessive debt also has ties to fraud. According to FTC research, the single most salient predictor of vulnerability to fraud is not age, educational background, race, or gender. It is whether individuals have more debt than they can comfortably handle (Vladeck 2013).

Financial capability (or a lack thereof) is another area of concern. Financial capability is measured in terms of how well people make ends meet, plan ahead, choose and manage financial products, and possess skills and knowledge to make financial decisions such as those regarding saving and debt payment (Lusardi 2011). Recent studies have indicated both low financial knowledge and poor financial practices. The 2012 National Financial Capability Study (NFCS), sponsored by the FINRA Investor Education Foundation, found that 19 percent of a sample of more than 25,000 respondents reported that, over the previous year, their household spent more than their income and more than half (56 percent) did not have savings to cover three months' worth of expenses.

On a test of five basic financial literacy questions, the national average was 2.88 correct answers (FINRA Foundation 2013). Using data from the inaugural 2009 NFCS, Lusardi (2011) found that more than one in five Americans has used costly alternative borrowing methods (e.g., payday loans and pawn shops) and a majority lack basic numeracy and knowledge of fundamental economic principles such as inflation. The 2013 Consumer Financial Literacy Survey (2013) found 60 percent of U.S. adults do not have a budget and do not keep track of their spending, and 40 percent graded themselves a C or below on their personal finance knowledge.

An increasing area of concern, as the Affordable Care Act is implemented, is low health-insurance literacy. According to a recent survey of 1,008 adults, 51 percent could not correctly identify at least one of three common terms: premium, deductible, and co-payment (Half of U.S. Adults 2013). Another survey of young adults found that only 14 percent could correctly define four insurance terms: deductible, co-payment, co-insurance, and out-of-pocket maximum (Kliff 2013). Selecting health insurance is complicated with many "moving parts" including cost, quality of care, plan features, availability of desired service providers, and, in the case of health insurance exchanges, potential tax subsidies.

Not surprisingly, studies have found that many people are overwhelmed by health plan options and lack confidence in their ability to select a plan. A relatively new term and a subset of financial literacy, health insurance literacy, refers to a person's knowledge, ability, and

confidence to effectively choose and use health insurance. A key component is an understanding of basic insurance terms such as those listed above (Kim, Braun, and Andrews 2013).

### **Health and wealth relationships**

Sharpe (2007, p. 50), in a summary of previous studies, noted that the relationship between health status and economic resources is “significant, dynamic, and complex.” She also noted that socioeconomic status is more likely to be a determinant of health in early life and a result of health in mid- to later life. Related to this, a study by the Center for Retirement Research found that the “cost” of better health is the need for greater wealth. Although *current* health care costs of healthy retirees are lower than costs of unhealthy retirees, the healthier cohort will actually face higher total *lifetime* health care costs due to more years of out-of-pocket expenses and an increased likelihood of succumbing to a chronic disease or needing long-term care at an advanced age (Sun, Webb, and Zhivan 2010).

Another interesting counterintuitive finding is the impact of recessions on physical health. It has been well documented that healthy living habits improve during tough economic times as the cost of leisure time decreases. In other words, health improvement activities are time-intensive. When people work fewer hours, they have more time for sleep, physical activity, and to prepare healthy meals at home (Hernandez-Murillo and Martinek 2010). Ruhm (2005) found that a 1 percent rise in unemployment reduces the total death rate by 0.5 percent.

Researchers have explored the economic effects of poor health status and/or behaviors (e.g., obesity and smoking) on an individual level for some time. These costs include direct costs such as outpatient services and lab tests and indirect costs such as lost productivity and wages and higher insurance premiums (Economic Costs 2013). Lyons and Yilmazer (2005) used data from the Survey of Consumer Finances (SCF) and found that poor health significantly increases the probability of financial strain. However, there was little evidence that financial strain contributes to poor health. Their findings suggest that severe health conditions may result in larger financial burdens while large financial burdens are unlikely to accelerate a decline in health status.

Drenta and Lavrakas (2000), however, found that credit card debt and stress regarding debt were significantly associated with worse physical health and self-reported health. Impacts of finances on health were also found by Pollack et al. (2010) who studied health outcomes of homeowners with foreclosed properties. Conley and Glauber (2005) explored health status impacts on income and found a 1 percent increase in a woman’s body mass index results in a 0.6 percent decrease in family income and a decrease in occupational prestige. Men, however, experienced no negative effects of body mass on economic outcomes.

Similar results were found by Zagorsky (2005), who used data from a large longitudinal study to investigate obesity's relationship to individuals' wealth. There was a large negative association found between body mass index (BMI) and white females' net worth, a smaller negative association for black women and white males, and no relationship for black males. Those who lost small amounts of weight experienced little change in net worth, but those who lost large amounts of weight had a dramatically improved financial position, with whites showing larger changes than blacks. Zagorsky (2004) also studied the effects of smoking upon wealth and found a significant negative relationship between net worth and smoking. Using data from a sample of about 10,000, he concluded that smokers appear to pay for cigarettes out of income that is saved by non-smokers. The typical non-smokers' net worth is roughly 50 percent higher than light smokers and roughly twice the level of heavy smokers.

Studies have also explored the economic effects of *positive* health behaviors. For example, Kosteus (2012) found that engaging in regular exercise yields a 6 to 10 percent wage increase. In addition, while moderate exercise yields a positive earnings effect, frequent exercise generates an even larger impact. According to the U.S. Department of Health and Human Services (Preventing Obesity 2008), a sustained 10 percent weight loss will reduce an overweight person's lifetime medical costs by \$2,200 to \$5,300 by lowering costs associated with hypertension, type 2 diabetes, heart disease, stroke, and high cholesterol. Other positive economic effects of healthy behaviors are savings accumulated by reduced spending on unhealthy behaviors (e.g., by quitting smoking), reduced life and health insurance costs for non-smokers, and financial rewards received from incentivized workplace wellness programs. Sutherland, Christianson, and Leatherman (2008) summarized findings from studies of the use of financial incentives to encourage healthy behaviors, wellness activities, and use of preventive services. They concluded that financial incentives, even relatively small ones, can positively influence individuals' health-related behaviors.

### **New SSHW program components**

As noted above, SSHW integrates health and personal finance education. Below is a description of recent additions to the *Small Steps to Health and Wealth*<sup>TM</sup> program.

- **Second-edition workbook:** The second edition of the 132-page *Small Steps to Health and Wealth*<sup>TM</sup> (SSHW) workbook was published in 2013 (O'Neill and Ensle 2013). Individual chapters of the workbook are also available to download for free at <http://njaes.rutgers.edu/sshw>. First published in 2006, the SSHW workbook was updated to reflect recent changes such as the CARD Act (2009 credit card legislation) and the most current nutrition guidelines, including the switch from the MyPyramid graphic to MyPlate. Like the earlier edition, there are three introductory chapters about health and wealth connections followed by a brief discussion of each of the 25 SSHW

behavior change strategies. Each strategy has one or more worksheets for users to personalize a change strategy to their situation.

- **SSHW youth curriculum:** Dr. Jennifer Hunter at the University of Kentucky provided leadership for the development of *Building a Healthy, Wealthy Future* (BHWF), the SSHW curriculum for youth and their parents (Hunter and Huff 2012). The 74-page curriculum, which includes background information, learning activities, healthy snack breaks, and physical activity breaks, is available to download for free at <http://www2.ca.uky.edu/agc/pubs/fcs5/fcs5451/fcs5451.PDF>. BHWF was designed as a six-week series to promote youth financial literacy and the adoption of healthy lifestyle behaviors.
- **SSHW older adult curriculum:** Dr. Martie Gillen at the University of Florida is providing leadership for the development of a twelve-lesson SSHW curriculum for older adults. Program materials are available on the internal SSHW web site for Extension educators. The lessons were informed by focus group discussions with older adults about health and financial challenges and are currently being pilot-tested with consumer audiences. The SSHW older adult curriculum is designed to be delivered in short time frames such as a brief presentation at a senior congregate meal site.
- **Workplace wellness newsletters:** The *Small Steps to Health and Wealth*<sup>TM</sup> program is available in "bite-sized pieces" in a series of 26 colorful newsletters designed for workplace wellness programs. They are part of a larger workplace wellness program sponsored by the Family and Community Health Sciences department of Rutgers Cooperative Extension. The newsletter series includes an introductory newsletter and a newsletter for each of the 25 SSHW behavior change strategies. Each newsletter includes a synopsis of a SSHW behavior change strategy, inspirational quotes, a Deskercise (exercise at or near your desk) activity, one or more worksheets, and on-line resource links. The newsletters can be accessed at <http://njaes.rutgers.edu/sshw/newsletters.asp>.
- **SSHW videos:** Dr. Nancy Porter formerly at Colorado State University developed a series of 13 narrated videos that describe *Small Steps to Health and Wealth*<sup>TM</sup> behavior change strategies. The videos can be found at <http://www.ext.colostate.edu/smallsteps/>. In addition, an animated video that describes the content of the SSHW workbook and its framework of behavior change strategies can be found at <http://www.youtube.com/watch?v=PpYMxgZCtZ8&feature=youtu.be>. Nine additional SSHW videos can be found at <http://www.youtube.com/user/moneytalkBMO>.
- **On-line SSHW challenges:** The *SSHW Challenge* is based on the performance of ten recommended practices on a daily basis: five that involve health and nutrition and five

that involve financial management. Ten points are given for performing each one. On-line *SSHW Challenge* competitions began in 2010 with nine separate competitions held through 2013. Over 1,000 people participated to date with impressive aggregated impact. For example, two on-line SSHW challenges were held during 2012. A total of 442 persons participated versus 384 in 2011. More than half of the follow-up evaluation respondents in both challenges reported eating healthier foods and increased physical activity. One in five respondents in both challenges saved more than \$500.

- **SSHW web site:** The SSHW web site at <http://njaes.rutgers.edu/sshw/> houses a variety of program materials including SSHW workbook chapters, daily motivational messages from past on-line challenges, and summaries of SSHW research. Also included are archived monthly health and financial messages. An “internal” SSHW web site for Extension educators is also available.
- **Downloadable posters:** The University of Tennessee and *Tennessee Saves* developed a series of posters to illustrate the high dollar cost of unhealthy behaviors and how much money could be saved by discontinuing them. Licenses for the posters were purchased for use with SSHW, and these posters can be found at the SSHW web site noted above. The posters illustrate the savings possible by quitting smoking, skipping junk food, and reducing meals eaten away from home.
- **On-line quiz:** An on-line personal health and finance quiz is currently under development. Based on expert recommendations for daily health and financial behaviors, it will provide users with an assessment of their personal health and financial management practices and generate data for research to inform future educational efforts. The quiz can also be used by Extension agents as an evaluation tool by comparing users’ quiz scores before and after a SSHW educational program.

## Summary

The ten-year anniversary of the Cooperative Extension *Small Steps to Health and Wealth*<sup>™</sup> (SSHW) program is a good time to consider linkages between health and personal finances. This article examined health and financial concerns in people’s lives including overweight and obesity, low savings rates, and low levels of financial capability and health literacy. Summaries of research about health and wealth relationships were also provided. The article concluded with a description of SSHW materials for interdisciplinary public outreach programs. Extension educators are encouraged to use these program resources and to continue developing new ones to expand the SSHW program during its second decade.



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**References**

*Adult obesity facts*. 2013. Centers for Disease Control and Prevention. <http://www.cdc.gov/obesity/data/adult.html>.

Anderson, S. E., P. Cohen, E. N. Naumova, P. F. Jacques, and A. Mus. 2007. "Adolescent obesity and risk for subsequent major depressive disorder and anxiety disorder: prospective evidence." *Psychosomatic Medicine* 69: 740-747.

BeLue, R., L. A. Francis, and B. Colaco. 2009. "Mental health problems and overweight in a nationally representative sample of adolescents: effects of race and ethnicity." *Pediatrics* 123: 697-702.

Berrington de Gonzalez, A., P. Hartge, J. R. Cerhan, A. J. Flint, L. Hannan, R. MacInnis, S. C. Moore, G. S. Tobias, H. Anton-Culver, L. B. Freeman, W. L. Beeson, S. L. Clipp, D. R. English, A. R. Folsom, D. M. Freedman, G. Giles, N. Hakansson, K. D. Henderson, J. Hoffman-Bolton, J. A. Hoppin, K. L. Koenig, I. M. Lee, M. S. Linet, Y. Park, G. Pocobelli, A. Schatzkin, H. D. Sesso, E. Weiderpass, B. J. Willcox, A. Wolk, A. Zeleniuch-Jacquotte, W. C. Willett, and M. J. Thun. 2010. "Body-mass index and mortality among 1.46 million white adults." *New England Journal of Medicine* 363: 2211-2219.

Bethell, C., L. Simpson, S. Stumbo, A. C. Carle, and N. Gombojav. 2010. "National, state, and local disparities in childhood obesity." *Health Affairs* 29: 347-356.

Blumenthal, K. 2013. "When bill collectors knock." *The Wall Street Journal*. <http://online.wsj.com/article/SB10001424127887324906004578289914123326232.html>

Boutelle, K. N., P. Hannan, J. A. Fulkerson, S. J. Crow, and E. Stice. 2010. "Obesity as a prospective predictor of depression in adolescent females." *Health Psychology* 29: 293-298.

*Childhood obesity facts*. 2013. Centers for Disease Control and Prevention. <http://www.cdc.gov/healthyyouth/obesity/facts.htm>.

Conley, D., and R. Glauber. 2005. "Gender, body mass, and economic status." *National Bureau of Economic Research Working Paper No. 11343*. <http://www.nber.org/papers/w11343>.

Crowson, C. S., E. L. Matteson, J. M. Davis, and S. E. Gabriel. 2013. Contribution of obesity to the rise in incidence of rheumatoid arthritis. *Arthritis Care and Research* 65: 71-77.

Drentea, P., and P. J. Lavrakas. 2000. "Over the limit: The association among health, race, and debt." *Social Science and Medicine* 50: 517-529. <http://www.personalfinancefoundation.org/research/efd/The-Association-Among-Health-Race-and-Debt.pdf>.

Duffey, K. J., and B. M. Popkin. 2007. "Shifts in patterns and consumption of beverages between 1965 and 2002." *Obesity* 15: 2739-2747.

Duffey, K. J., and B. M. Popkin. 2011. "Energy density, portion size, and eating occasions: contributions to increased energy intake in the United States, 1977-2006." *PLoS Medicine*, 8: e1001050.

*Economic costs*. 2013. The Obesity Prevention Source. Harvard School of Public Health. <http://www.hsph.harvard.edu/obesity-prevention-source/obesity-consequences/economic/>.

Farhat, T., R.J. Iannotti, and B. G. Simons-Morton. 2010. "Overweight, obesity, youth, and health-risk behaviors." *American Journal of Preventive Medicine* 38: 258-267.

*FINRA foundation releases nation's state-by-state financial capability survey*. 2013. Washington DC: FINRA Investor Education Foundation. <http://www.usfinancialcapability.org/page.php?page=51a60731f2ee1.page>

Flegal, K. M., B. K. Kit, H. Orpana, and B. I. Graubard. 2013. "Association of all-cause mortality with overweight and obesity using standard body mass index categories: a systematic review and meta-analysis." *Journal of the American Medical Association* 309: 71-82.

Freedman, D. S., L. K. Khan, M. K. Serdula, W. H. Dietz, S. R. Srinivasan, and G. S. Berenson. 2005. "The relation of childhood BMI to adult adiposity: The Bogalusa Heart Study." *Pediatrics* 115: 22-27.

French, S. A. 2005. "Public health strategies for dietary change: schools and worksites." *Journal of Nutrition* 135: 910-912.

Geier, A. B., G. D. Foster, L. G. Womble, J. McLaughlin, K. E. Borradaile, J. Nachmani, S. Sherman, S., Kumanyika, and J. Shults, J. 2007. "The relationship between relative weight and school attendance among elementary schoolchildren." *Obesity* 15: 2157-2161.

Guh, D. P., W. Zhang, N. Bansback, Z. Amarsi, C. L. Birmingham, and A. H. Anis. 2009. "The incidence of co-morbidities related to obesity and overweight: a systematic review and meta-analysis." *BioMed Central Public Health* 9: 88.

*Half of U.S. adults fail 'health insurance 101,' misidentify common terms in plans.* 2013. New York: American Institute of CPAs. <http://www.aicpa.org/press/pressreleases/2013/pages/us-adults-fail-health-insurance-101-aicpa-survey.aspx>.

Helman, R., N. Adams, C. Copeland, and J. VanDerhei, J. 2014. The 2014 retirement confidence survey: Confidence rebounds – for those with retirement plans. *EBRI Issue Brief Number 397*. Washington DC: Employee Benefit Research Institute. [http://www.ebri.org/pdf/surveys/rcs/2014/EBRI\\_IB\\_397\\_Mar14.RCS.pdf](http://www.ebri.org/pdf/surveys/rcs/2014/EBRI_IB_397_Mar14.RCS.pdf).

Hernandez-Murillo, R. and C. J. Martinek. 2010, October. "In some cases, a sick economy can be a prescription for good health." *The Regional Economist*. Federal Reserve Bank of St. Louis. <http://www.stlouisfed.org/publications/re/articles/?id=2018>.

Houston, D. K., J. Ding, B. J. Nicklas, T. B. Harris, J. S. Lee, M. C. Nevitt, S. M. Rubin, F. A. Tylavsky, and S. B. Kritchevsky. 2009. "Overweight and obesity over the adult life course and incident mobility limitation in older adults: the health, aging and body composition study." *American Journal of Epidemiology* 169: 927-936.

Hunter, J. L., and N. L. Huff. 2012. "Building a healthy wealthy future: Design, implementation, and evaluation." *Proceedings of the Association for Financial Counseling and Planning Education*, 28. [http://6aa7f5c4a9901a3e1a1682793cd11f5a6b732d29.gripelements.com/documents/conferences/2012\\_afcpe\\_proceedings\\_final.pdf](http://6aa7f5c4a9901a3e1a1682793cd11f5a6b732d29.gripelements.com/documents/conferences/2012_afcpe_proceedings_final.pdf).

Institute of Medicine. 2009. *Local Government Actions to Prevent Childhood Obesity*, Institute of Medicine, Washington, DC: The National Academies Press. <http://www.iom.edu/Reports/2009/Local-Government-Actions-to-Prevent-Childhood-Obesity.aspx>

Jia, H., and E. I. Lubetkin. 2010. "Obesity-related quality-adjusted life years lost in the U.S. from 1993 to 2008." *American Journal of Preventive Medicine* 39: 220-227.

Kant, A. K., and B. I. Graubard. 2004. "Eating out in America, 1987–2000: trends and nutritional correlates." *Preventive Medicine* 38: 243-249.

- Kant, A. K., and B. I. Graubard. 2005. "Energy density of diets reported by American adults: association with food group intake, nutrient intake, and body weight." *International Journal of Obesity* 29: 950-956.
- Kant, A. K., and B. I. Graubard. 2006. "Secular trends in patterns of self-reported food consumption of adult Americans: NHANES 1971-1975 to NHANES 1999-2002." *American Journal of Clinical Nutrition* 84: 1215-1223.
- Kaplowitz, P. B. 2008. "Link between body fat and the timing of puberty." *Pediatrics* 121(Supplement 3): S208-S217.
- Kim, J., B. Braun, and A. D. Williams. 2013. "Understanding health insurance literacy: A literature review." *Family and Consumer Sciences Research Journal* 42: 3-13.
- Kliff, S. 2013. "Do you understand health insurance? Most people don't." *The Washington Post*. <http://www.washingtonpost.com/blogs/wonkblog/wp/2013/08/08/do-you-understand-health-insurance-most-people-dont/>.
- Kosteas, V. D. 2012. "The effect of exercise on earnings: Evidence from the NLSY." *Journal of Labor Research* 33: 225-250. <http://link.springer.com/article/10.1007/s12122-011-9129-2#page-1>.
- Krukowski, R. A., D. Smith West, A. Philyaw Perez, Z. Bursac, M. M. Phillips, and J. M. Raczynski. 2009. "Overweight children, weight-based teasing and academic performance." *International Journal of Pediatric Obesity* 4: 274-280.
- Lee, S. M., C. R. Burgeson, J. E. Fulton, and C. G. Spain. 2007. "Physical education and physical activity: results from the School Health Policies and Programs Study 2006." *Journal of School Health* 77: 435-463.
- Lee, J. M., N. Kaciroti, D. Appugliese, R. F. Corwyn, R. H., Bradley, and J. C. Lumeng. 2010. "Body mass index and timing of pubertal initiation in boys." *Archives of Pediatrics and Adolescent Medicine* 164: 139-144.
- Lusardi, A. 2011. *Americans' financial capability*. Cambridge, MA: National Bureau of Economic Research. <http://www.nber.org/papers/w17103>
- Lyons, A. C., and T. Yilmazer. 2005. "Financial Strain and Health: Evidence from the Survey of Consumer Finances." *Southern Economic Journal* 71: 873-890.

Marder, W. D. and S. Chang. 2005. Childhood obesity: costs, treatment patterns, disparities in care, and prevalent medical conditions. *Thomson Medstat Research Brief*. Accessed June 4, 2009, [http://www.medstat.com/pdfs/childhood\\_obesity.pdf](http://www.medstat.com/pdfs/childhood_obesity.pdf).

McClure, A. C., S. E. Tanski, J. Kingsbury, M. Gerrard, and J. D. Sargent. 2010. "Characteristics associated with low self-esteem among U.S. adolescents." *Academic Pediatrics* 10: 238-244.

McHugh, M. K., E. Symanski, L. A. Pompeii, and G. L. Delclos. 2009. "Prevalence of asthma among adult females and males in the United States: results from the National Health and Nutrition Examination Survey (NHANES), 2001-2004." *Journal of Asthma* 46: 759-766.

Neumark-Sztainer, D., M. Story, P. J. Hannan, C. L. Perry, and L. M. Irving. 2002. "Weight-related concerns and behaviors among overweight and non-overweight adolescents: implications for preventing weight-related disorders." *Archives of Pediatric and Adolescent Medicine* 156: 171-178.

Nguyen, N. T., C. P. Magno, K. T. Lane, M. W. Hinojosa, and J. S. Lane. 2008. "Association of hypertension, diabetes, dyslipidemia, and metabolic syndrome with obesity: findings from the National Health and Nutrition Examination Survey, 1999 to 2004." *Journal of the American College of Surgeons* 207: 928-934.

Olshansky, S. J., D. J. Passaro, R. C. Hershov, J. Layden, B. A. Carnes, J. Brody, L. Hayflick, R. N. Butler, D. B. Allison, and D. S. Ludwig. (2005). "A potential decline in life expectancy in the United States in the 21st century." *New England Journal of Medicine* 352: 1138-1145.

O'Neill, B. 2004. Small steps to health and wealth. *Forum for Family and Consumer Issues*9(3). <http://ncsu.edu/ffci/publications/2004/v9-n3-2004-december/fa-1-small-steps.php>

O'Neill, B., and K. Ensle. 2013. *Small steps to health and wealth*. Ithaca, NY: PALS Publishing.

*Personal savings rate*, U.S. Department of Commerce, Bureau of Economic Analysis, last modified August 2013, <http://research.stlouisfed.org/fred2/data/PSAVERT.txt>.

Piernas, C., and B. M. Popkin. 2011. "Food portion patterns and trends among U.S. children and the relationship to total eating occasion size, 1977-2006." *Journal of Nutrition* 141: 1159-1164.

Pollack, C. E., J. Lynch, D. E. Alley, and C. C. Cannuscio. 2010. Foreclosure and health status. *LDI Issue Brief* 15(2). [http://ldi.upenn.edu/uploads/media\\_items/foreclosure-and-health-status.original.pdf](http://ldi.upenn.edu/uploads/media_items/foreclosure-and-health-status.original.pdf).

Porter, K. 2012. *Broke: How debt bankrupts the middle class*. Stanford, CA: Stanford University Press.

Powell, L. M., R. M. Schermbeck, G. Szczypka, F. J. Chaloupka, and C. L. Braunschweig. 2011. "Trends in the nutritional content of television food advertisements seen by children in the United States: analyses by age, food." *Archives of Pediatrics and Adolescent Medicine*, Epub ahead of print (August 1, 2011).

Preventing obesity and chronic diseases through good nutrition and physical activity. 2008. *Preventing Chronic Diseases: Investing Wisely in Health*. Washington DC: U.S. Department of Health and Human Services. <http://www.cdc.gov/nccdphp/publications/factsheets/prevention/pdf/obesity.pdf>.

*Preparing for retirement in America*. 2013. Washington, DC: Employee Benefit Research Institute. [http://www.ebri.org/files/Final-FS.RCS-13.FS\\_3.Saving.FINAL.pdf](http://www.ebri.org/files/Final-FS.RCS-13.FS_3.Saving.FINAL.pdf)

Punjabi, N. M. 2008. The epidemiology of adult obstructive sleep apnea. *Proceedings of the American Thoracic Society* 5(2): 136-143.

Ruhm, C. J. 2005. Healthy living in hard times. *Journal of Health Economics*, 24(2), 341-363. [http://libres.uncg.edu/ir/uncg/f/C\\_Ruhm\\_Healthy\\_2005.pdf](http://libres.uncg.edu/ir/uncg/f/C_Ruhm_Healthy_2005.pdf).

Sallis, J. F., and K. Glanz. 2009. Physical activity and food environments: Solutions to the obesity epidemic. *Milbank Quarterly* 87: 123-154.

Schmit, J. 2013, August 30. More homeowners above water. *USA Today* [http://usatoday30.usatoday.com/money/usaedition/2013-08-30-rising-home-prices-lift-underwater-homeowners\\_st\\_u.htm](http://usatoday30.usatoday.com/money/usaedition/2013-08-30-rising-home-prices-lift-underwater-homeowners_st_u.htm).

*7<sup>th</sup> annual savings survey reveals persistence of financial challenges facing most Americans*. Washington, DC: Consumer Federation of America. <http://www.consumerfed.org/news/752>.

Sharpe, D. 2007. "Health and wealth connections." *Journal of Personal Finance* 6(4): 37-56. <http://www.iarfc.org/documents/issues/Vol.6Issue4.pdf>.

*State by state data*. 2012. The Project on Student Debt. [http://projectonstudentdebt.org/state\\_by\\_state-data.php](http://projectonstudentdebt.org/state_by_state-data.php).

Sun, W., A. Webb, and N. Zhivan. 2010. "Does staying healthy reduce your lifetime health care costs?" *Center for Retirement Research, Number 10-8*. [http://crr.bc.edu/wp-content/uploads/2010/05/IB\\_10-8.pdf](http://crr.bc.edu/wp-content/uploads/2010/05/IB_10-8.pdf).

Sutherland, K., J. B. Christianson, and S. Leatherman. 2008, December. "Impact of targeted financial incentives on personal health behavior: A review of literature." *Medical Care Research and Review* 65: 36S-78S. [http://mcr.sagepub.com/content/65/6\\_suppl/36S.short](http://mcr.sagepub.com/content/65/6_suppl/36S.short)

*The 2013 Consumer Financial Literacy Survey*. 2013. Rochester, NY: Harris Interactive, Inc. [http://www.nfcc.org/newsroom/FinancialLiteracy/files2013/NFCC\\_NBPCA\\_2013%20FinancialLiteracy\\_survey\\_datasheet\\_key%20findings\\_032913.pdf](http://www.nfcc.org/newsroom/FinancialLiteracy/files2013/NFCC_NBPCA_2013%20FinancialLiteracy_survey_datasheet_key%20findings_032913.pdf)

Tsiros, M. D., T. Olds, J. D. Buckley, P. Grimshaw, L. Brennan, J. Walkley, A. P. Hills, P. R. Howe, and A. M. Coates. 2009. "Health-related quality of life in obese children and adolescents." *International Journal of Obesity* 33: 387-400.

U.S. Department of Health and Human Services. 2001. *The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General.

U.S. Department of Health and Human Services. 2003. *Prevention makes common "cents"*. <http://aspe.hhs.gov/health/prevention>.

Vitt, L. A., J. K. Siegenthaler, L. Siegenthaler, D. M. Lyter, and J. Kent. 2002. "Consumer health care finances and education: Matters of values." *Issue Brief Number 241*. Washington DC: Employee Benefit Research Institute. <http://www.ebri.org/pdf/briefspdf/0102ib.pdf>

Vladeck, D. C. 2013. "Debt's dilemmas: ACCI's annual Colston Warne lecture." *Journal of Consumer Affairs* 47: 358-374.

Wang, L. Y., D. Chyen, S. Lee, and R. Lowry. 2008. "The association between body mass index in adolescence and obesity in adulthood." *Journal of Adolescent Health* 42: 512-518.

Weinberg, C. 2013, July 17. "Federal student-loan debt crosses \$1-trillion threshold." *The Chronicle of Higher Education*. <https://chronicle.com/article/Federal-Student-Loan-Debt/140427/>.

Zagorsky, J. L. 2004. "The wealth effects of not smoking." *Tobacco Control* 13: 370-374. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1747936/pdf/v013p00370.pdf>

Zagorsky, J. L. 2005, July. "Health and wealth: The late 20<sup>th</sup> century obesity epidemic in the U.S." *Economics and Human Biology* 3: 296-313 <http://www.sciencedirect.com/science/article/pii/S1570677X05000304>.