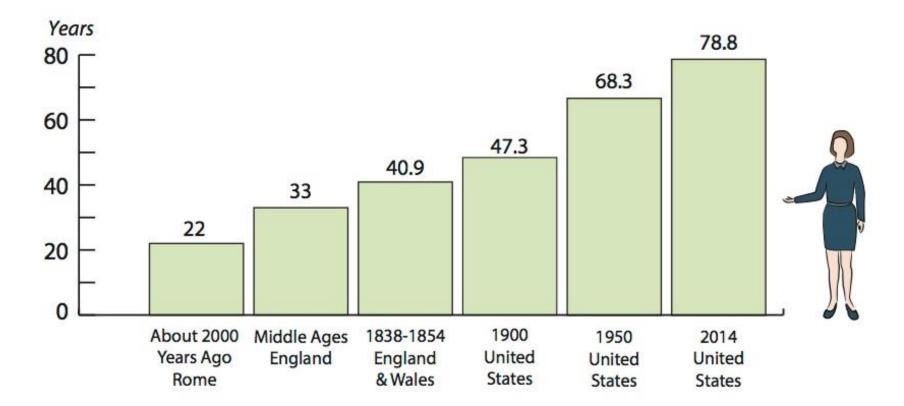


PLAN FOR THE 21st CENTURY RETIREMENT!

AAII Los Angeles Chapter Saturday November 17, 2018

Steve Vernon, FSA President, *Rest-of-Life* Communications Research Scholar. Stanford Center on Longevity

Longer Lives One of Humankind's Greatest Achievements!



Life expectancy at birth

Sources: Dublin, L.I., and Lotka, A.J. *Length of Life*, and National Center for Health Statistics. "Health, United States, 2015."

LONGEVITY IN THE NEWS

Special Communication

DISPARITIES

By S. Jay Olshansky, Toni Antonucci, Lisa Berkman, Robert H. Binstock, Axel Boersch-Supan, John T. Cacioppo, Bruce A. Carnes, Laura L. Carstensen, Linda P. Fried, Dana P. Goldman, James Jackson, Martin Kohli, John Rother, Yuhui Zheng, and John Rowe

Differences In Life Expectancy Due To Race And Educational **Differences Are Widening,** And Many May Not Catch Up

ABSTRACT It has long been known that despite well-documented improvements in longevity for most Americans, alarming disparities S. Jay Olshansky (sjayo@uic .edu) is a professor at the School of Public Health,

DOI: 10.1377/hlthaff.2011.0746

HEALTH AFFAIRS 31, NO. 8 (2012): 1803-1813 ©2012 Project HOPE-

Foundation, Inc.

The People-to-People Health

remains poorly understood.

in the United States, 2001-2014

OBJECTIVES To measure the level, between income and life expectan

DESIGN AND SETTING Income data deidentified tax records between 1 Social Security Administration deat ethnicity-adjusted life expectancy a and geographic area, and to evaluat

EXPOSURE Pretax household earni

MAIN OUTCOMES AND MEASURES life expectancy by income group; g income group; and factors associat

RESULTS The sample consisted of 14 to 76 years (mean age, 53.0 years; m per year). There were 4 114 380 deat 2 694 808 deaths among women (m First, higher income was associated v gap in life expectancy between the ri 14.4 to 14.8 years) for men and 10.1 y in life expectancy increased over tim years for men and 2.91 years for won years for men and 0.04 years for wom

LATER RETIREMENT, INEQUALITY IN OLD AGE, AND THE GROWING **GAP IN LONGEVITY BETWEEN**

RICH AND POOR

Barry Bosworth & Gary Burtless, The Brookings Institution

Kan Zhang, George Washington University

41.

University of Illinois at

Nicholas Turner, PhD; Augustin Bergeron, MA; David Cutler, PhD

IMPORTANCE The relationship between income and life expectancy is well established but

Raj Chetty, PhD; Michael Stepner, BA; Sarah Abraham, BA; Shelby Lin, MPhil; Benjamin Scuderi, BA;

The Association Between Income and Life Expectancy

Editorials Author Audio Interview at iama.com

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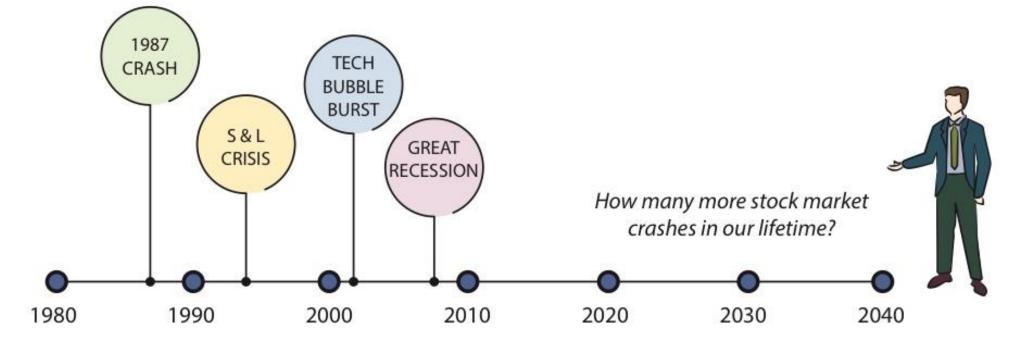
THE GROWING GAP IN LIFE EXPECTANCY BY INCOME

IMPLICATIONS FOR FEDERAL PROGRAMS AND POLICY RESPONSES

Committee on the Long-Run Macroeconomic Effects of the Aging U.S. Population-Phase II

Committee on Depulation

Build your retirement plan to last





"Help! I haven't saved enough for retirement!"

Your new retirement job!



Introducing ...

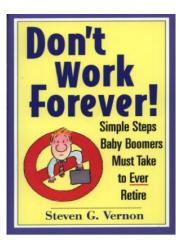
"... the single best collection of actionable advice I've read on retirement." —ALLAN ROTH, AARP Money contributor and author of How a Second Grader Beats Wall Street

RETIREMENT GAME-CHANGERS

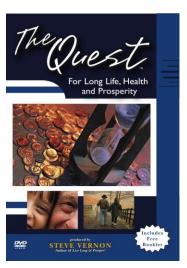
Strategies for a Healthy, Financially Secure, and Fulfilling Long Life

STEVE VERNON, FSA

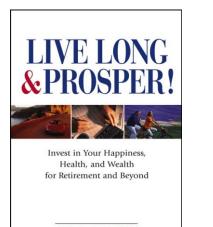
Author of *Money for Life*



1995



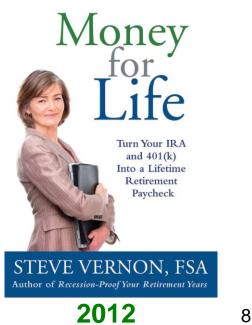
2007



STEVE VERNON

2005

Savvy guidance for some of the most crucial financial decisions you'll ever face. — JONATHAN PETERSON, author of Social Security for Dummies

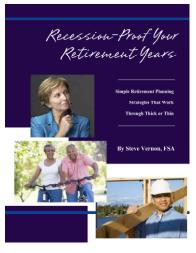




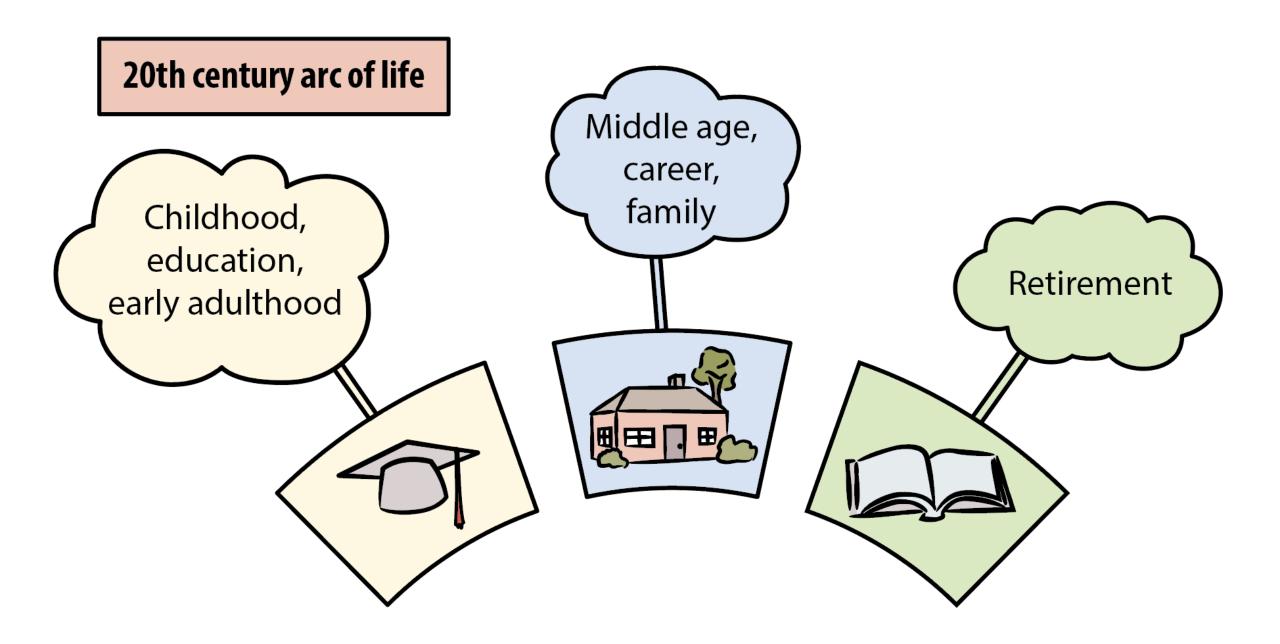
2013

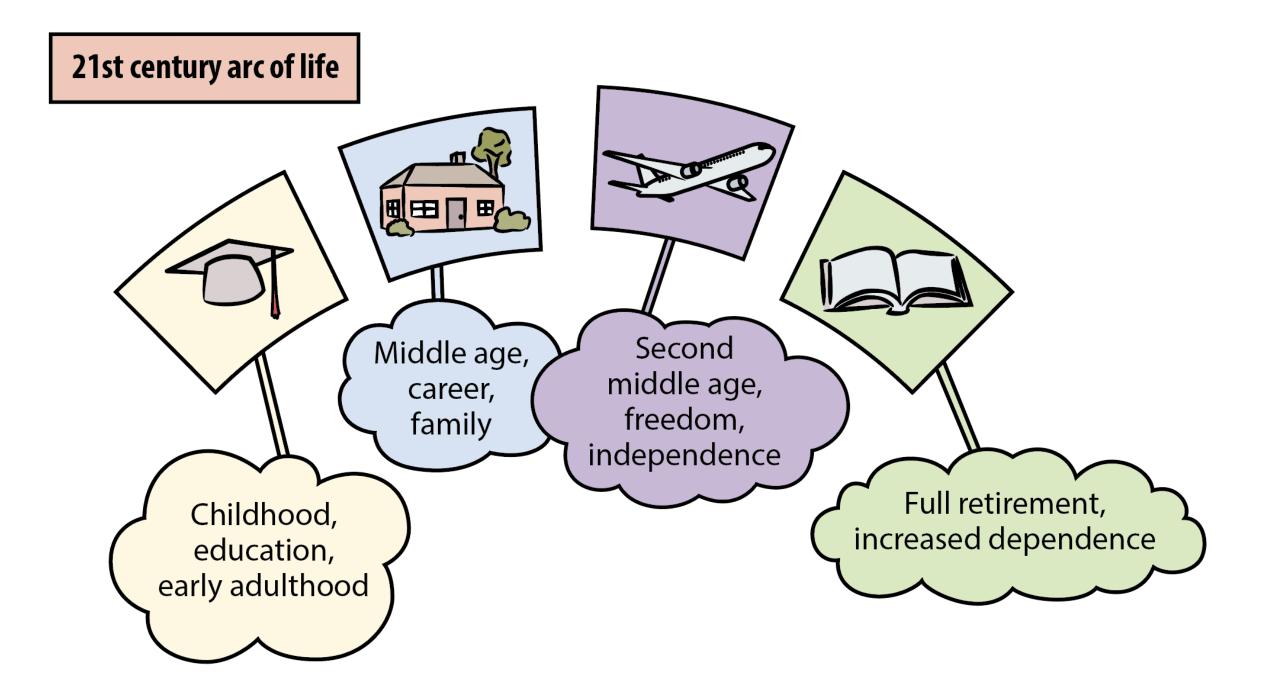


2010



2009-2014





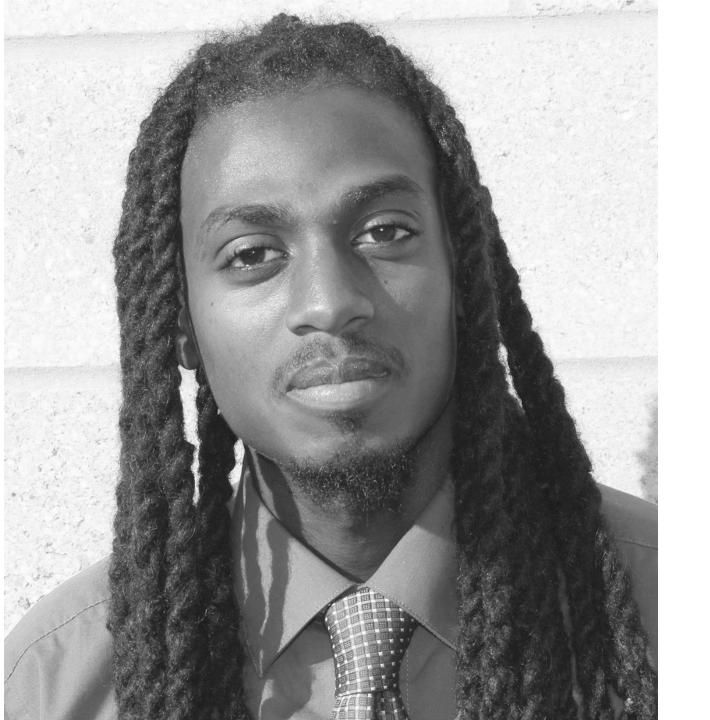
What's the Secret?







None of the men in my family lived past age 75.



My neighbor's 97-year-old aunt ran out of money and had to move in with them. She didn't think she'd live that long.



My mother died of cancer at age 54. Enjoy it while you can. You just never know how long you'll live. "For all but the most strongly determined genetic diseases ... MacArthur Studies show that the environment and lifestyle have a powerful impact on the likelihood of actually developing the disorder. This is wonderful news for individuals with strong family histories of some cancers, heart disease, hypertension, rheumatoid arthritis, and many other conditions. We now know that diet, exercise, and even medications may delay, or completely eliminate, the emergence of the disease."

 From Successful Aging, by John W. Rowe, MD and Robert L. Kahn, PhD

What's Your Life Expectancy?

Some good websites:

- www.longevityillustrator.org/
- www.livingto100.com
- <u>www.bluezones.com</u>

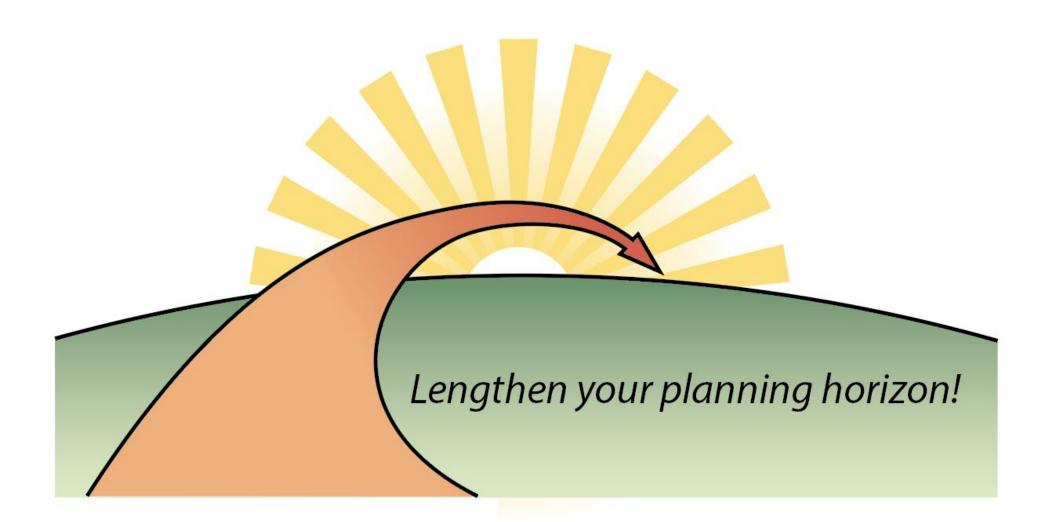




If I knew I would live this long, I would have planned better.



"If we take a late retirement and an early death, we'll just squeak by."



Most Important Financial Decisions The Top 5

- 1. When and how to retire
- 2. When to start Social Security
- 3. Build your retirement income portfolio with savings and pensions (if applicable)
- 4. Make smart choices for medical insurance and Medicare
- 5. Which living expenses to reduce

Most Important Financial Decisions

- 1. When and how to retire
- 2. When to start Social Security
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- 5. Which living expenses to reduce

- 6. Whether to deploy home equity
- 7. Protect against long-term care expenses
- 8. Protect against financial fraud and abuse
- 9. Provide for your spouse after you're gone
- **10. Plan your financial legacy**

Manage the magic formula





Retirement Planning Tip #1 From Your Dog

Retirees Tend to Fall Into Two Camps



"Hoard" savings with minimal withdrawals

 "Wing it" using savings like a checking account

Retirement Income Planning Tradeoffs

- Amount of income
- Accessible wealth (liquidity)
- Bequests
- Implementation simplicity and costs

Retirement Income Planning Tradeoffs (cont'd)

- Protection against common risks:
 - Longevity
 - Inflation
 - Investment
 - Death of spouse
 - Cognitive decline and mistakes
 - Fraud
 - Taxes
 - Political

The Challenge: Decision framework for deploying retirement savings to last a lifetime



The Answer: Apply Concepts from Modern Portfolio Theory

Accumulation period	Payout/retirement period
Asset classes	Retirement income classes
Asset allocation	Retirement income allocation
Asset accumulation	Amount of retirement income
Risk of investment	Risk of income losses

Collaboration Between Society of Actuaries and Stanford Center on Longevity



THE NEXT EVOLUTION IN DEFINED CONTRIBUTION RETIREMENT PLAN DESIGN A Guide For DC Plan Sponsors To Implementing Retirement Income Programs

By Danne Hannes (Fall Community Research Schultzer, Stathard Genter on Congressy Stochastic analysis by Dr. Mode Plan Prictices of Entermated Searce The American County Price Schultzer, Schultzer, Schultzer, Schultzer, Market Schultz, Schultzer, Schultzer, Schultz Belder & Name Sch Schultz Belder & Name Sch

longevity.stanford.edu/financial-security



Foundations in Research for Regulatory Guidelines on the Design & Operation of Retirement Income Solutions in DC Plans

By Steve Vernon, FSA Consulting Research Scholar Stanford Center on Longevity

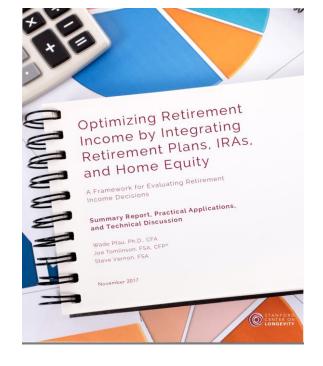
Prepared in colladoration with the Society of Actuaries' Commit on Plast Retirement Needs and Ris

STANFORD CENTER ON



Optimizing Retirement Income Solutions in Defined Contribution Retirement Plans

Dr. Wade Pfau Joe Tomlinson, FSA, CFP* Stave Vernen, FSA May 2016



2013

STANFORD CENTER ON LONGEVITY

2014

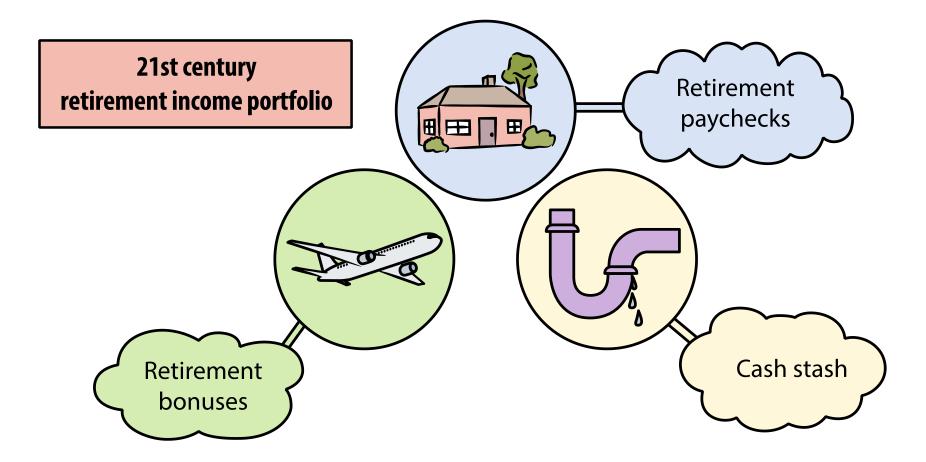
2016

2017

Generate Retirement Income from any IRA or 401(k) Plan

Introducing: "the Spend Safely in Retirement Strategy"

Build Your Retirement Income Portfolio



Build Your Retirement Income Portfolio Sources of /

Paychecks

- Social Security
- Pensions
- Annuities

Bonuses

- Withdraw from invested assets
- Work
- Income from other sources, such as rental income

The goal: develop reliable sources of lifetime income

Spend Safely in Retirement Strategy

- Step 1: Optimize Social Security
- Step 2: Invest in target date, balanced, or stock index fund, use IRS required minimum distribution to determine annual withdrawals

Step 1 Is it worthwhile to spend some time figuring out the best strategy for Social Security income?

By STEVE VERNON / MONEYWATCH / May 6, 2011, 7:45 AM

Social Security Strategies: How to Get \$90,000 More For Your Spouse

Comment / f Shares / J Tweets / Stumble / Email More +



Married couples seeking to maximize their Social Security income will need to pull off an intricate foxtrot through a thicket of bewildering rules. Here are few strategies to help you successfully complete this dance. By STEVE VERNON / MONEYWATCH / May 5, 2011, 10:05 AM

Boost Your Social Security Payout By \$100,000

Comment / f Shares / J Tweets / D Stumble / @ Email

More +



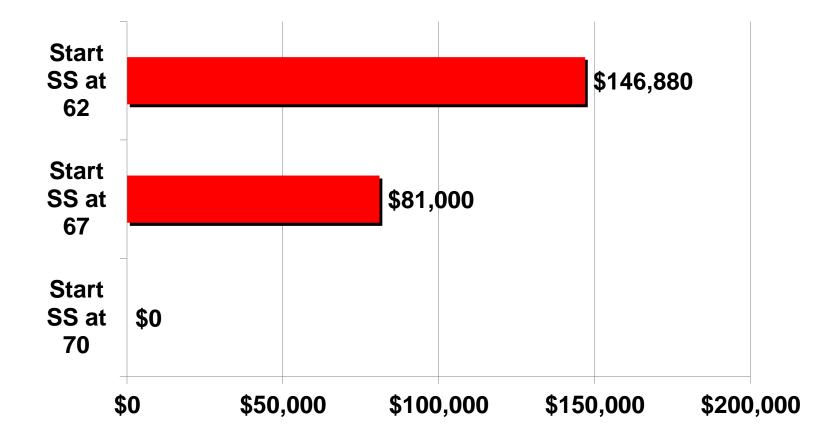
The most important decision you'll make regarding your Social Security income is when to start receiving benefits. You can start getting them as early as age 62, but your income is increased significantly, for each year that you delay starting benefits until age 70. There's no increase for starting benefits any time after your 70th birthday.

Your Lifetime Social Security Income Depends on When You Start and How Long You Live

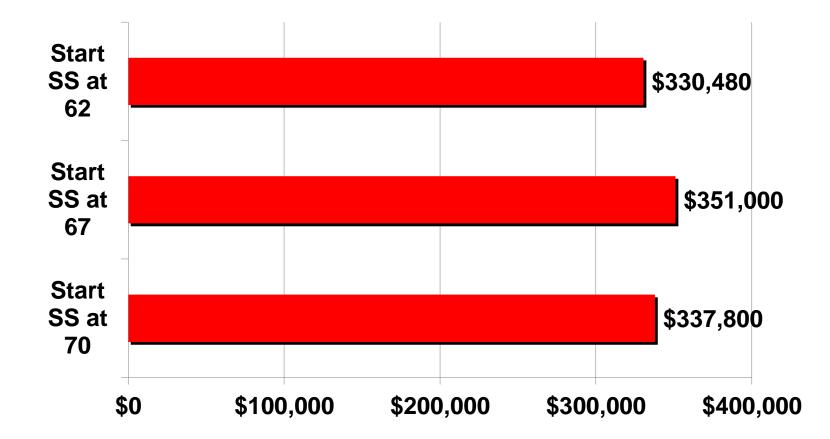
	62		70
Start Social Security at:	(earliest)	67 (FRA)	(latest)
Initial annual income:	\$18,360	\$27,000	\$33,780

Worker earning \$75,000/year in 2018, born 1960.

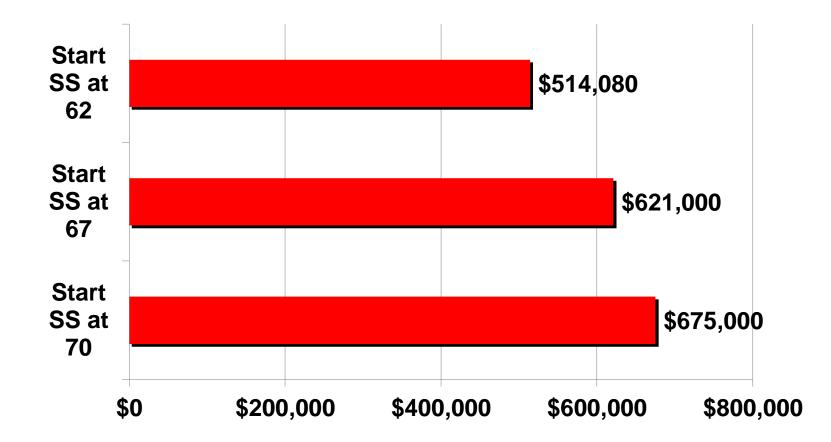
Lifetime Social Security Payout If Live to Age 70



Lifetime Social Security Payout If Live to Age 80



Lifetime Social Security Payout If Live to Age 90



Be Aware of Loss Aversion and Framing!

- Scenario 1:
 - If you decide to delay Social Security until age 70 and die at age 70, you've lost \$146,880 compared to starting at age 62.
- Scenario 2:
 - If you decide to start Social Security at age 62 and live until age 90, you've lost \$160,920 compared to starting at age 70.

Be Aware of Loss Aversion and Framing!

- Which is more likely: dying at age 70 or living to age 90?
- Which outcome is worse?:
 - Scenario 1: Dying and regretting from heaven that you should have started Social Security at age 62.
 - Scenario 2: Being alive and poor at age 90 because you started Social Security at age 62.

Could Social Security go bankrupt? Not Likely

/ f Shares / 🕑 Tweets / 💿 Stumble / @ Email

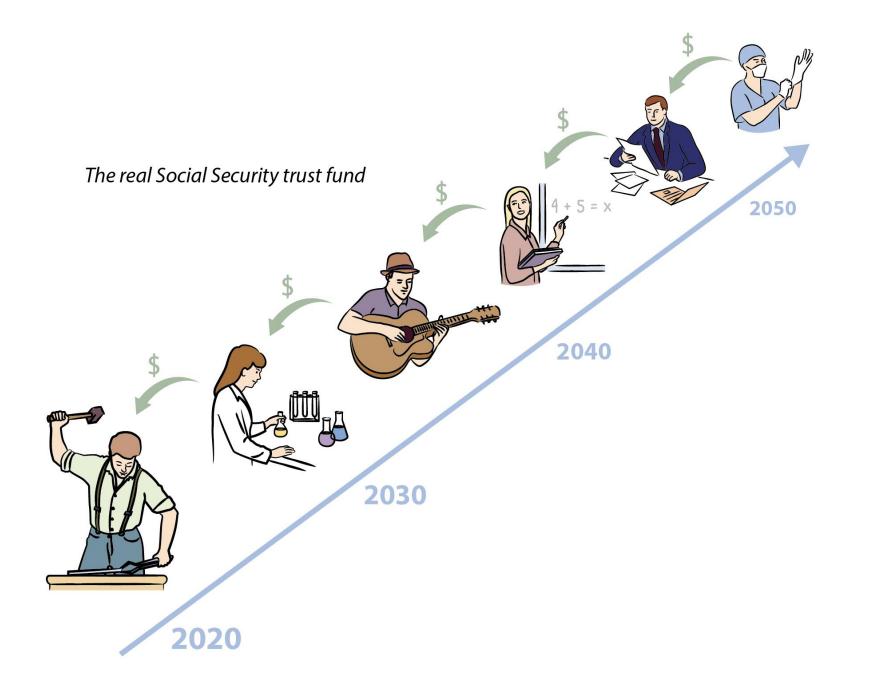
More +

"I'll never get a cent from Social Security."

That thinking couldn't be more wrong. Social Security is one of the most popular government programs around, as our political leaders well understand -- Social Security will be around as long as democracy reigns, in other words.

By STEVE VERNON / MONEYWATCH / November 4, 2013, 2:51 PM

Will Social Security run out of money?

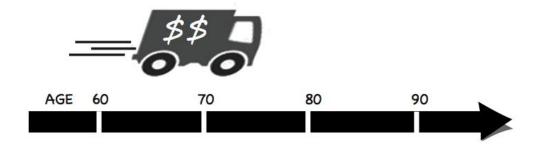


Step 2 of Spend Safely in Retirement Strategy Withdraw from IRA/401(k)/Retirement Savings

Three types of retirement income generators (RIGs):

- **1.** Invest and withdraw only interest and dividends, keep principal intact
- 2. Buy an annuity from a well-rated insurance company
- 3. Invest and withdraw principal cautiously to avoid running out of money (systematic withdrawals)

Spend Safely in Retirement Strategy uses RIG #3 with IRS RMD



Comparing Retirement Scenarios

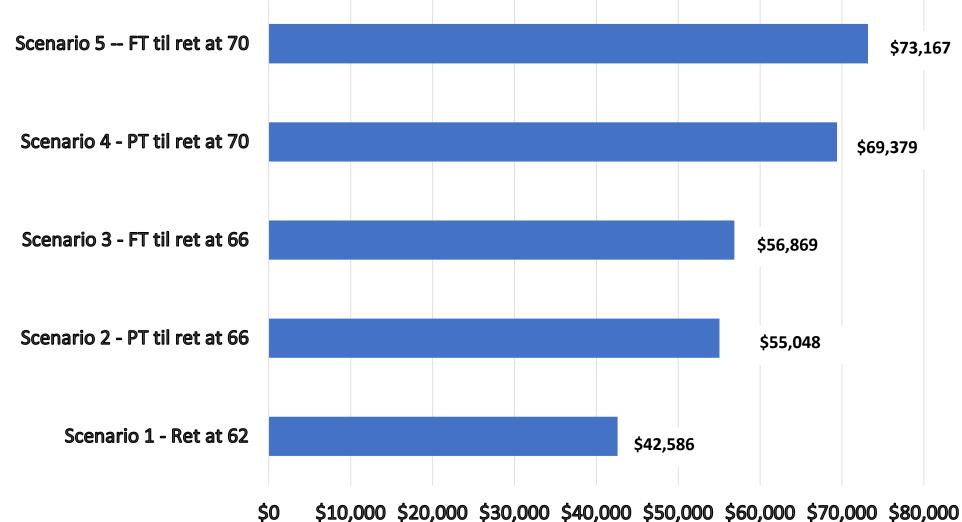
Married couple both age 62

- \$350,000 savings
- \$100,000 household income

Possible scenarios

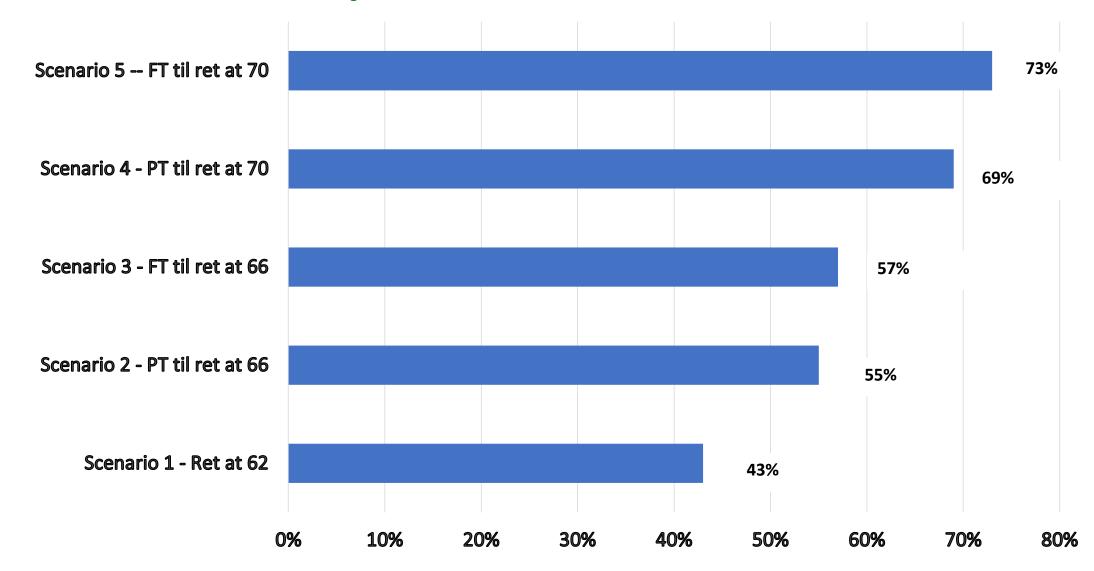
- 1. Retire age 62, immediately start SS and drawdown
- 2. Work part-time to age 66, then start SS and drawdown
- 3. Work full-time to age 66, then start SS and drawdown
- 4. Work part-time to age 70, then start SS and drawdown
- 5. Work full-time to age 70, then start SS and drawdown

Comparing Scenarios: When to Retire? Total Annual Retirement Income

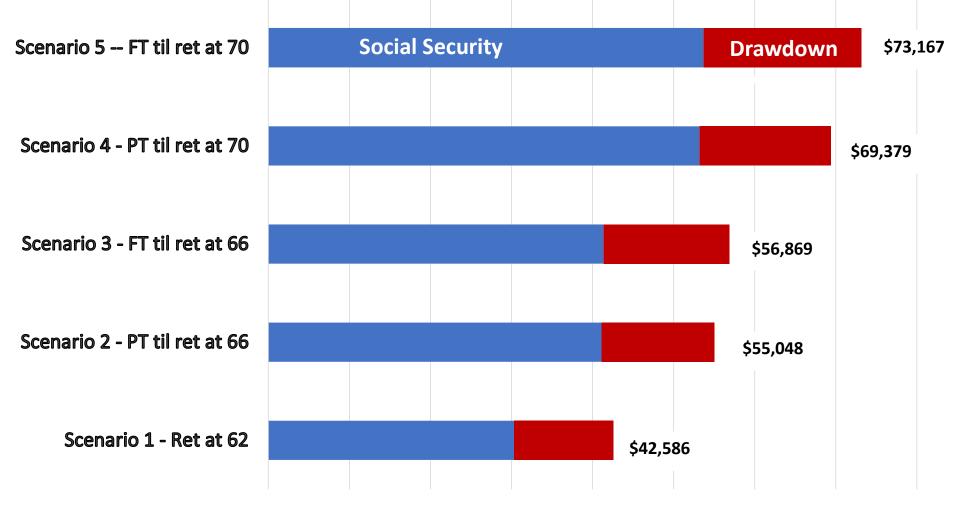


\$0

Work Longer or Reduce Standard of Living? Replacement Ratios

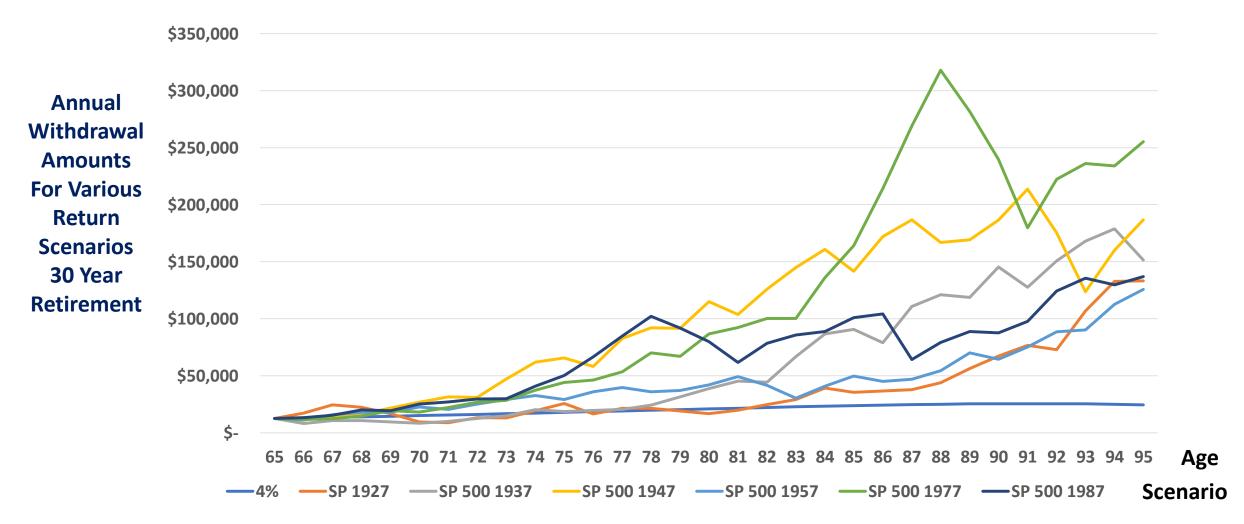


How Much Retirement Income Subject to Investment Risk?



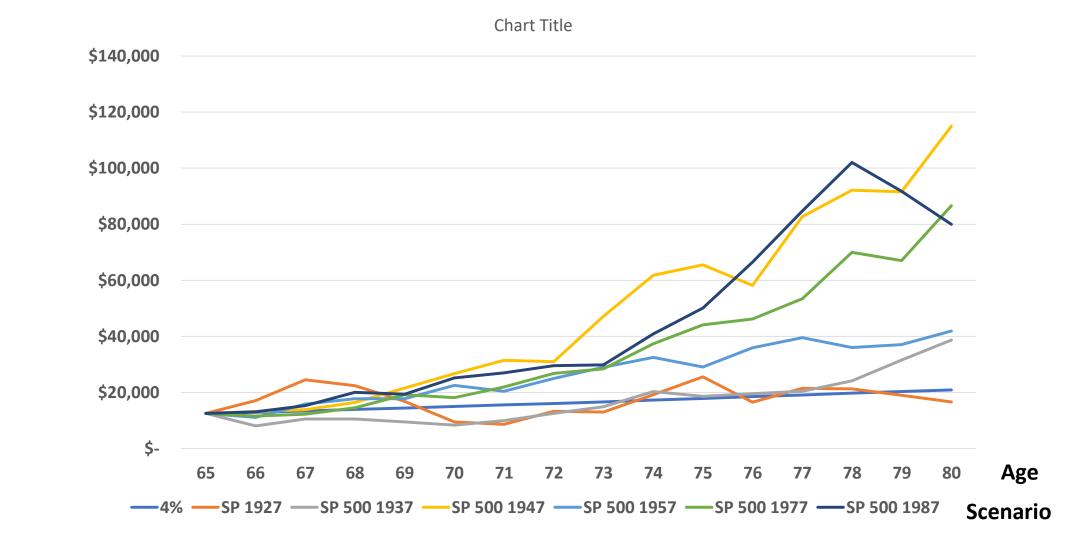
\$0 \$10,000 \$20,000 \$30,000 \$40,000 \$50,000 \$60,000 \$70,000 \$80,000

Stock Investments Offer Potential for Growth in Retirement Income But With Significant Risk



Start with \$400,000 at age 65, use IRS RMD to calculate annual withdrawal amount

Stock Investments Offer Potential for Growth in Retirement Income But With Significant Risk



Start with \$400,000 at age 65, use IRS RMD to calculate annual withdrawal amount

Annual Withdrawal Amounts For Various Return Scenarios 15 Year Retirement

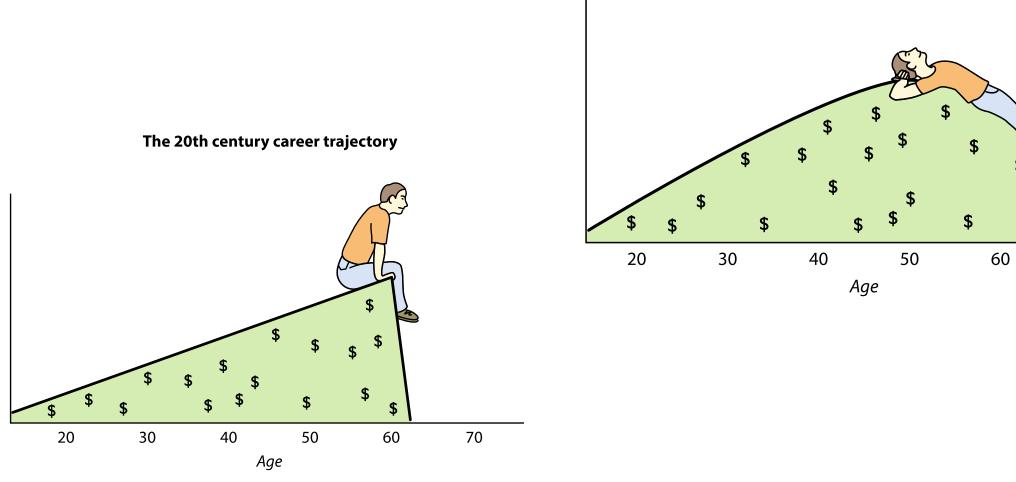
The 21st century career trajectory

\$

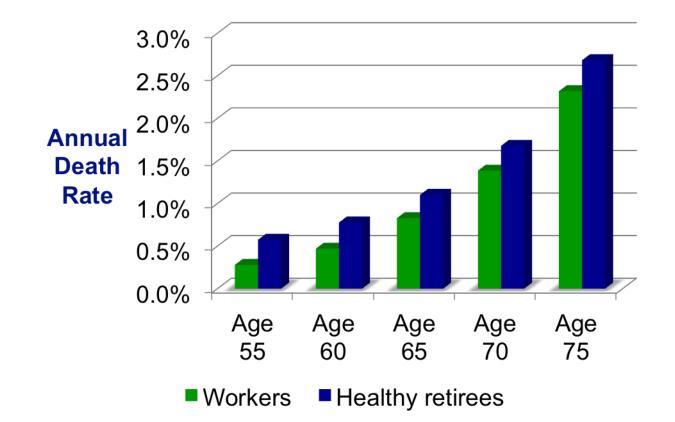
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\$

70

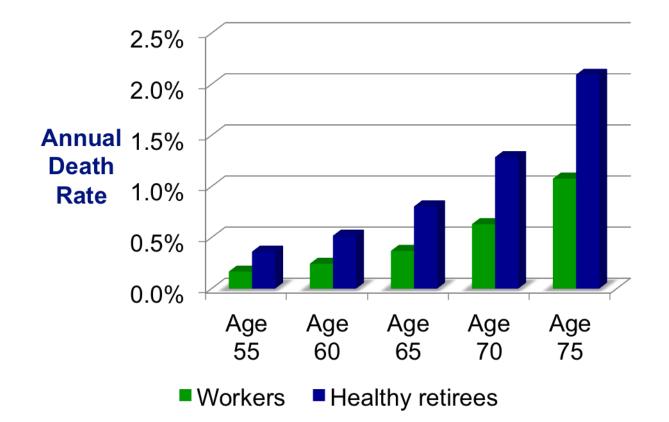


Workers have lower death rates than healthy retirees!



Source: RP-2014 mortality table for <u>males</u>

Workers have lower death rates than healthy retirees!



Source: RP-2014 mortality table for <u>females</u>

Able to Work With Less-Than-Excellent Health?

Excellent health

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 55-59 70-74 60-64 65-69 75-79 80-84 85+

Age

Source: Heterogeneity in Healthy Aging, Journal of Gerontology, June 2013 Lowsky, Olshansky, Bhattacharya, and Goldman

No work limitation



Retirement Planning Tip #2 From Your Dog

Sources of *E*

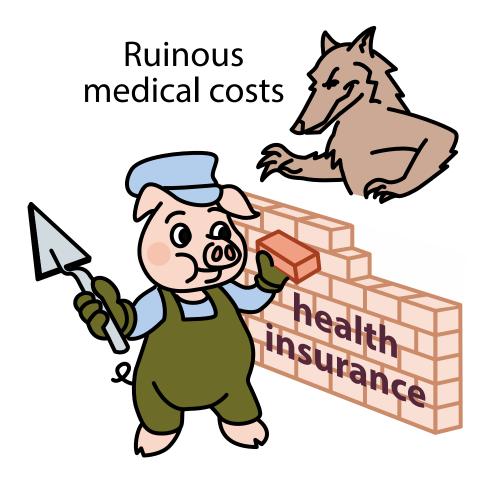
75% of average American's budget due to these sources (in order):

- Housing
- Transportation
- Food
- Health
- Entertainment

Buy "just enough" to meet your needs and what truly makes you happy

5 7

Another Important Financial Decision



Most Important Lifestyle Decisions

- General location to live
- Specific home/community
- Enhance your health
 - Nutrition
 - Exercise
 - Manage stress
 - Sufficient sleep
 - Reduce unhealthy habits

- Build your health care team
- Develop your health metrics
- Nurture your well-being
- Develop your social portfolio
- Work/volunteer
- Plan your nonfinancial legacy

Invest in Your Health



"Most deaths in the United States are preventable, and they are related to what we eat. Our diet is the number-one cause of premature death and the number-one cause of disability."

• Michael Greger, MD, in *How Not to Die: Discover the Food Scientifically Proven to Prevent and Reverse Disease*





"If exercise could be purchased in a pill, it would be the single most widely prescribed and beneficial medicine in the nation."

 Robert Butler, MD, founding director of the National Institute on Aging



Retirement Planning Tip #3 From Your Dog



Develop Your Health Metrics

"...many illnesses and disabilities, particularly the chronic diseases of old age, are preceded by signs of future problems. Among these leading warning signs are modest increases in systolic blood pressure, abdominal fat, and blood sugar, and decreases in lung, kidney, and immune function. A preventive orientation would involve periodic monitoring and action ..."

From Successful Aging, by John W. Rowe, MD and Robert L.
Kahn, PhD

ctor at a time and set reali OU CAN SUCCEED and you will o your risk. so give yourself Walking is a good start Walking is a good start ing up to more vigorous act with your health advisor icularly if you have health

OVERALL RISK

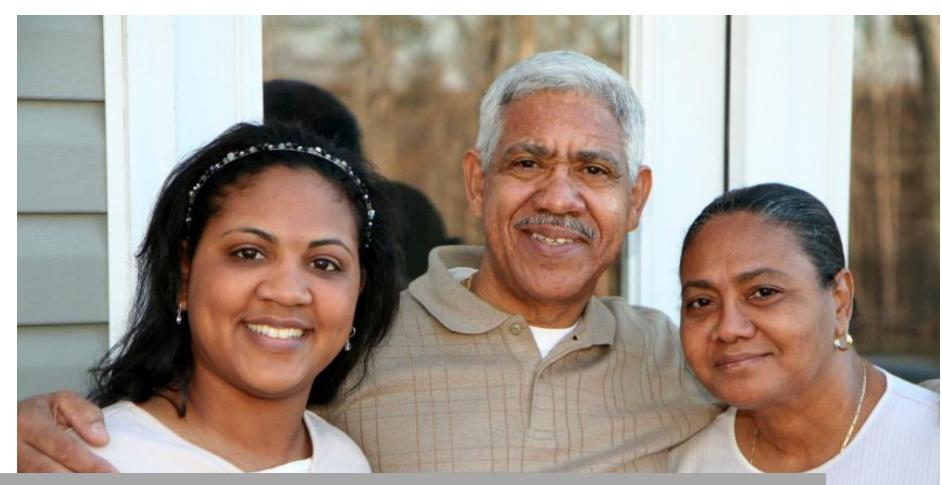
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g and healthy life if you do. The relaxation. GOOD HEALTH!

1. 2. 3. 5. 7 and 11 of the 'A Guide to a Healthy Lifestyle' health promotion workbo



"Build a social portfolio with the same attention and intention you gave to building your financial portfolio. This will help increase your health, life enjoyment, and financial security."

Amy Yotopolous, director of the Mind Division, Stanford Center on Longevity

Another Important Lifestyle Decision









