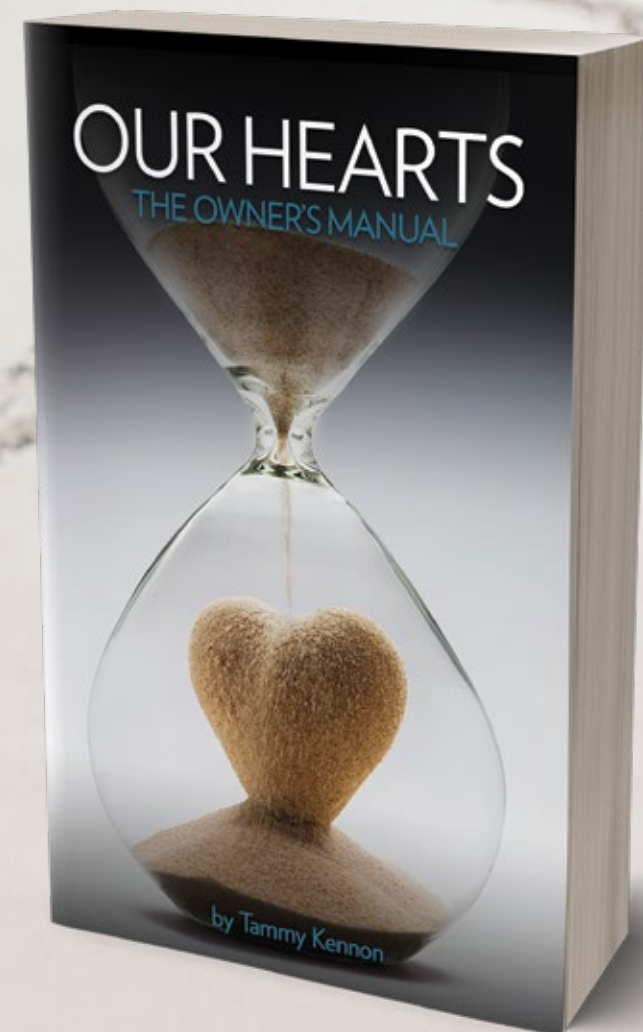


# OUR HEARTS

Well-being is so much more than a physical phenomenon.  
Now, science is showing us how our emotional connections  
help guard us against physical decline.

by Tammy Kennon

Writer, journalist, sailor and traveler





*“There isn’t time, so brief is life, for bickerings, apologies, heartburnings, callings to account. There is only time for loving, and but an instant, so to speak, for that.”*

— Mark Twain



We’ve entered a new frontier — we are the first generation to have a life expectancy of 65–79+ years. Technological and medical advances are largely responsible for this “Third Age,” and fortunately scientists have come along with us, continually finding actionable ways to extend our good health — and our good humor — in these newfound decades.

## HEART MATTERS



Harvard scientists have officially found the fountain of youth. In a quest to find the secret to living a longer and happier life, they spent a whopping eight decades studying the life trajectory of 268 Harvard sophomores.

Over those decades, the Harvard Study of Adult Development expanded to include the wives and now children of their initial subjects, eventually adding a control group of 456 inner-city Boston men. The researchers have conducted hours of interviews, hunted through piles of medical records, and documented the triumphs and tragedies of careers and marriages. It is science’s longest (and probably most quoted) study of adult development.

With 80 years of data, they have found

a single factor that contributes more than any other to health, happiness and longer lives. It isn’t diet, career success or fame, not exercise or access to healthcare.

“Good relationships keep us happier and healthier. Period,” says Robert Waldinger, director of the Harvard Study of Adult Development. “At 50, the men satisfied in their relationships were healthiest at 80.”

We have always known that close relationships provide a blanket of comfort and warmth, but this study shows that the same blanket serves as a shield. It protects us from the onslaught of discontent and guards us against physical decline. Healthy relationships are a better predictor of happiness and longevity than IQ, fame, social class, wealth or even genes.

Equally compelling, the same data shows that loneliness kills. Those who lived isolated lives were consistently less happy, experienced greater decline in mental and physical health, and — wait for it — didn’t live as long. (Waldinger et al., 2017)

While the Harvard study stands out as the most revelatory discovery in recent years, it is not unique in its findings. Countless studies have found that social support fights the ravages of stress, boosts coping skills, strengthens the immune system, and wards off depression.

Perhaps most compelling, those who engage in healthy social relationships have a lower incidence of heart disease.

The science is clear. Our physical hearts are inextricably tied to our emotional hearts.

## LET’S FALL IN LOVE



Is there really a happily ever after? Maybe. And “healthily” ever after as well?

Another study at Harvard Medical School looked at the health and happiness of almost 50 octogenarian couples and found that the happily married among them were more content with their lives, somewhat buffered from declining happiness. Happy couples were less susceptible to mood swings and had little fluctuation in the way they

perceived their health, an outcome that was not found in rockier relationships. Those in the unhappy relationships experienced more emotional and physical pain than their happier counterparts. (Waldinger and Schulz, 2010)

Assuming that romance includes sexual activity, late-life couples can reap cognitive benefits as well. Researchers at Coventry University in England collected data from almost 7,000 50- to 89-year-olds and found a significant

association between cognitive function and sexual activity. Sexually active participants scored higher on cognitive exercises, such as word-recall and numerical tasks, than their less active counterparts. (Wright and Jenks, 2016)

Senior sex has been shown to have physical health benefits, including better bladder control, decreased risk of prostate cancer, improved sleep, a boost in beneficial hormones, and lower blood pressure.



## WIDEN THE NET



© eclipse\_images

A number of studies have shown that Third Agers benefit from many types of relationships, not just the romantic kind — or even the human kind.

For instance, in the human category, an oft-cited study looked at the potential benefits of caring for grandchildren. Although previous research had looked at the detrimental effects of custodial grandparenting, this study focused on less comprehensive caregiving (formerly known as babysitting). Evaluating more than 500 70+ seniors, researchers found that those who provide care for grandchildren have a significantly lower risk of death than those who do not.

Caregiving activates the same neural and hormonal system that kicks in with parenting, positively impacting physical health and reducing mortality — in this study by 37 percent. (Hilbrand et al., 2017)

Friendships across generations can also be life-affirming. The Eisner Foundation conducted an expansive study of

programs that build connections between generations and found that older adult participants who spent time with children felt less lonely and dementia patients exhibited increased levels of engagement. Ninety-seven percent of the adult participants reported that the interactions made them feel young, happy, loved and needed. The children benefitted as well, exhibiting a greater sense of empathy and improved regulation of their own behavior. (Generations United and The Eisner Foundation, 2018)

In perhaps the oddest study about the favorable nature of intergenerational contact, biologists at University of Iowa conducted an experiment using fruit flies, which are apparently fairly social creatures. The scientists genetically decreased the lifespan of a group of fruit flies by editing in a genetic mutation linked to Alzheimer's in humans. This shortened their lives to two weeks, one-fourth of their natural lifespan. However,

when housed with more youthful fruit flies, the mutants not only became more physically fit, they lived for about 30 days, more than double their life expectancy. The authors say their results offer a convincing case that social interaction has a positive effect on lifespan. (Ruan and Wu, 2008)

And, pets count too. A plethora of studies have shown that owning a pet comes with a surprising assortment of healthy side effects, such as fewer doctor visits and lower blood pressure and cholesterol. Dog owners, in particular, are more likely to exercise and fraternize with other pet owners at the dog park.

Fish count too. One unusual study looked at the effect of fish tanks on Alzheimer's patients and found that the mere presence of an aquarium in the dining room improved the patients' eating habits, decreased agitation, positively impacted social behavior, and created a greater sense of community and belonging.

## NURTURE FRIENDSHIP



© MStudioImages

Late-life romance is beneficial but not critical. Friendship, on the other hand, is essential. As we age, many of us go through a natural process of narrowing and deepening our friendships, and this focus on quality rather than quantity has been shown to improve our health and lengthen our lives. Many studies have found that close friendships can have a moderating effect on concrete measures of health, such as obesity, inflammation

and high blood pressure, all of which can lead to heart disease, strokes and cancer.

However, as with romantic relationships, it pays to choose carefully. Contentment — and its opposite — has been scientifically proven to be contagious. One study used an innovative way to quantify how attitudes and moods spread through social networks much like disease. They found that each contact with a happy person “infects” your

own probability of happiness by .02% per year. Simple math would imply that interacting with a happy friend every day for a year would increase your probability of happiness by 7.6%. Perhaps not surprisingly, unhappiness is twice as infectious. Each contact with a malcontent drags you down by exactly twice that of a happy interaction. (Hill et al., 2010)

Attitude is contagious. Act accordingly. ♦

### Sources:

Generations United and The Eisner Foundation. (2018). *All In Together: Creating Places Where Young and Old Thrive.* Generations United. Retrieved June 11, 2018, [www.gu.org](http://www.gu.org).

Hilbrand, Sonja; Coall, David; Gerstorf, Denis; and Hertwig, Ralph. (2017). “Caregiving Within and Beyond the Family Is Associated With Lower Mortality for the Caregiver: A Prospective Study.” *Evolution & Human Behavior*. Retrieved June 11, 2018, from [www.ehbonline.org](http://www.ehbonline.org).

Hill, Alison; Rand, David; Nowak, Martin; and Christakis, Nicholas. (2010). “Emotions as Infectious Diseases in a Large Social Network: The SISa Model.” The Royal Society Publishing. Retrieved June 11, 2018, from [rspb.royalsocietypublishing.org](http://rspb.royalsocietypublishing.org).

Ruan, Hongyu and Wu, Chun-Fang. (2008). “Social Interaction-Mediated Lifespan Extension of *Drosophila* Cu/Zn Superoxide Dismutase Mutants.” *Proceedings of the National Academy of Sciences*. Retrieved June 11, 2018, from [www.pnas.org](http://www.pnas.org).

Waldinger, Robert, et al. (2017). *Harvard Study of Adult Development*. Harvard Second Generation Study. Retrieved June 11, 2018, from [www.adultdevelopmentstudy.org](http://www.adultdevelopmentstudy.org).

Waldinger, Robert and Schulz, Marc. (2010). “What’s Love Got to Do With It? Social Functioning, Perceived Health, and Daily Happiness in Married Octogenarians.” National Center for Biotechnology Information. Retrieved June 11, 2018, from [www.ncbi.nlm.nih.gov](http://www.ncbi.nlm.nih.gov).

Wright, Hayley, and Jenks, Rebecca. (2016). “Sex on the Brain! Associations Between Sexual Activity and Cognitive Function in Older Age.” National Center for Biotechnology Information. Retrieved June 11, 2018, from [www.ncbi.nlm.nih.gov](http://www.ncbi.nlm.nih.gov).