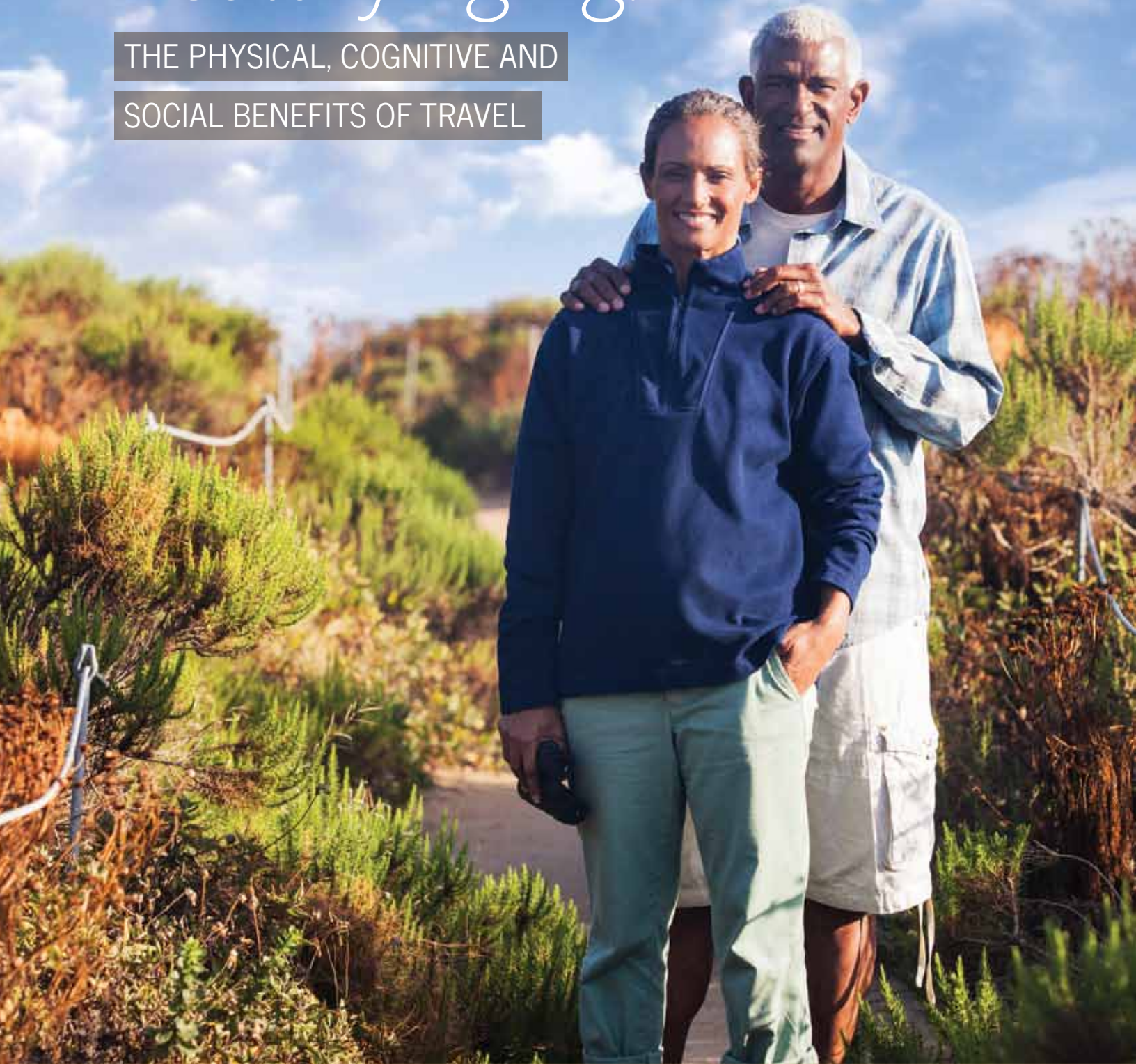


Destination Healthy Aging:

THE PHYSICAL, COGNITIVE AND
SOCIAL BENEFITS OF TRAVEL



Global Coalition on [Aging](#)

"TO TRAVEL IS TO LIVE." — HANS CHRISTIAN ANDERSEN



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Destination Healthy Aging:

THE PHYSICAL, COGNITIVE AND SOCIAL BENEFITS OF TRAVEL

IT IS BECOMING INCREASINGLY CLEAR THAT AS ONE TRAVELS, ONE WILL BE HEALTHIER, WHICH IS GOOD FOR THE INDIVIDUAL AS WELL AS SOCIETY.

Executive Summary

While it is true that global population aging is the seminal theme of our era – influencing individual lives, families, communities and all aspects of public policy – we have barely begun to understand its full impact on 21st-century life. Even so, no one can doubt that the holy grail of this demographic transformation is healthy aging. It is therefore even more remarkable that our understanding of the profound changes that will take place across our lives as we age is so limited.

Given these truths, one such arena needing further investigation is the effect of travel on the healthy aging process. Surely it is well appreciated that those who stay healthy as they age are able to sustain active lifestyles, including traveling into our 70, 80s and beyond. It is becoming increasingly clear, however, that the reverse is also true – as one travels, one will be healthier, which is good for the individual as well as for society. This insight is as simple as it is critical in helping to set the pathway for how we conduct our lives in the 21st century, which is characterized by an historically “old” population. With the global over-60 population reaching 1 billion by 2020, the relationship between travel and healthy aging is no small matter, as it will undoubtedly have huge positive consequences on society’s fiscal health as well.

Consider as just one indicator taken from a review of the longitudinal Framingham Heart Study. It found that those women who vacationed every six years or less had a significantly higher risk of developing a heart attack or coronary death compared to women who vacationed at least twice a year. Further, research around the promotion of brain health has found that regular participation in social or leisure activities, including travel, is associated with a lower risk of subsequent dementia. Who would have thought that we could get such positive and lasting results from something so enjoyable as a trip exploring America’s natural attractions, a river cruise or a vacation taking in the lights of the big city? Our analysis evaluates the current knowledge around health and travel and begins to chart the pathways – through physical activity, cognitive stimulation and social engagement – that can be achieved through travel. While more research and analysis must still be done, the existing data is powerful and provides a strong foundation upon which to build future studies and base further inquiries.

Introduction

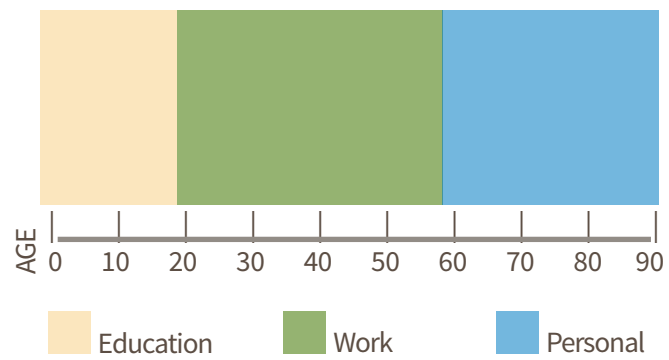
As the age-related demographic shift takes place across the globe, staying active and engaged will be essential to ensure the health and well-being of individuals and society as a whole. Globally, there will be 1 billion people over the age of 60 by 2020, and currently in the United States, there is already a higher proportion of people over 60 than under 15.¹ This rapid and dramatic shift associated with aging is a phenomenon the world has never seen before. Between 1950 and 2050, an astonishing 30 years will have been added to life.²



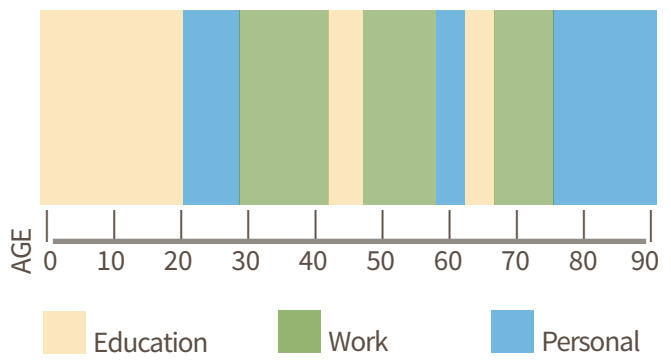


ACTIVITIES THAT CONTRIBUTE TO HEALTHY AGING SHOULD START WELL BEFORE ONE TURNS 60 – OR EVEN 50. IT REQUIRES HEALTHY DECISIONS ACROSS THE LIFE COURSE.

Traditional Lifespan



Life Course Approach



Courtesy of Ken Dychtwald, Founder and CEO, Age Wave

Because of the health, social and economic shifts brought on by this new aging phenomenon, the traditional stereotypes of “old age” will no longer be sustainable and must no longer be assumed. Aging must be viewed as a process associated with health and vitality, and as such, it can lead to personal fulfillment and social contribution. Therefore, we must redefine the traditional notions of how we work and retire and form a new way of thinking about how we prepare for these extra years across which healthy aging is the goal.

This era of rapid aging can be viewed as a crisis or an opportunity. Through the lens of opportunity, we can uncover new paths to economic growth, social engagement and personal fulfillment. According to Dr. Margaret Chan, Director General of the World Health Organization, “If older people can remain

active participants in society, they can continue to contribute to our socioeconomic development.”³ These long-term benefits will only come with a new way of thinking and behaving. To that end, activities that contribute to healthy aging should start well before one turns 60 – or even 50. It requires healthy decisions across the life course, and travel is one of those healthy decisions, much like healthy diet and regular exercise.

To help inform health-related decisions about travel, this paper presents the existing scientific and survey evidence linking travel and healthy aging. It also further expands upon this limited body of knowledge by analyzing the supporting data around the health benefits of physical and mental activity, with a focus on the types of activities commonly associated with travel.



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TRAVEL AS A PATH TO HEALTHY AGING

One of the premier community-based longitudinal studies in the history of medicine has been the Framingham Heart Study. Beginning in 1948, researchers recruited 5,209 residents of Framingham, Massachusetts to identify risk factors for cardiovascular disease. Over time, the second and third generations of the original participants have also been enrolled and followed regularly.

The Framingham study is notable for the detail it gathers about the participants' lifestyles and behaviors. For example, in one of the study's questionnaires, female participants aged 45-64 were asked about how often they took vacations. In a 20-year follow up study, researchers examining the responses found that even after taking into account traditional risk factors such as blood pressure,

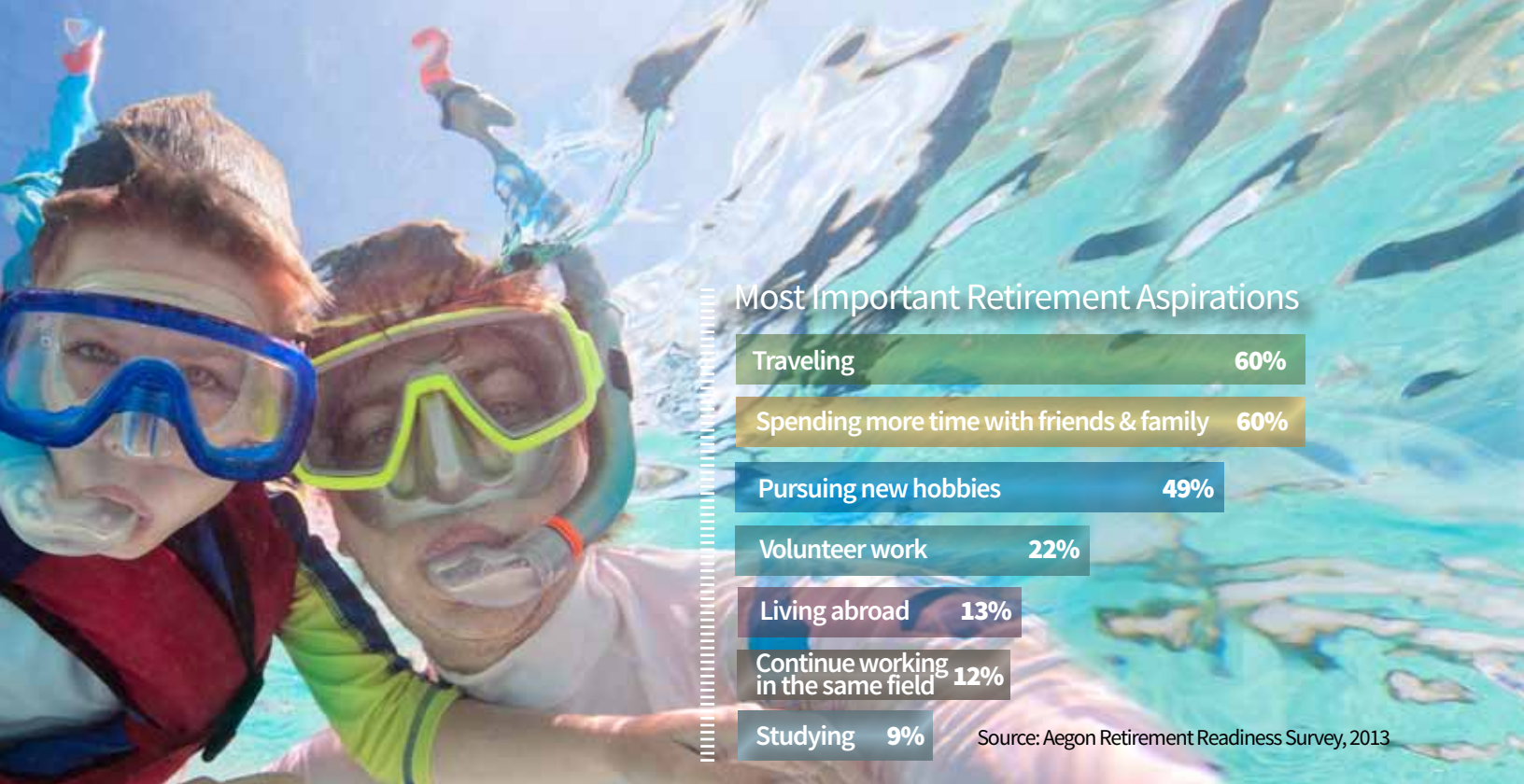
women who vacationed every six years or less had a significantly higher risk of developing a heart attack or coronary death compared to women who vacationed at least twice a year.⁴ Another study shows that women who do not take vaca-

Travel provides the opportunity to alleviate stress, by offering a break from work or from other stressful and repetitive daily routines.

tions are more than twice as likely to suffer from depression as women who choose to take a vacation.⁵

The results are similar for men. In a nine-year study, men who did not take an annual vacation were shown to have a 20 percent higher risk of death and about a 30 percent greater risk of death from heart disease.⁶ Even when accounting for factors such as pre-existing poor health or affluence, the researchers concluded the same results – that vacationing is a restorative behavior with an independent positive effect on health.

Among the most important benefits of travel and vacations – and certainly the most intuitive – is the reduction of stress. Stress has increasingly been found to play a damaging role in health. It weakens the immune system and has been shown to increase one's chances of suffering from maladies such as adrenal dysfunction, headaches and irritable bowel syndrome.⁷ Data from the Mayo Clinic explains that not taking a break from everyday stressors can elevate the amount of the stress hormone cortisol in the body, which actually speeds up the aging process.⁸ Whether a two-week family vacation or a weekend getaway, travel can certainly provide this stress-relieving break for the body. In fact, a recent



Most Important Retirement Aspirations

Traveling	60%
Spending more time with friends & family	60%
Pursuing new hobbies	49%
Volunteer work	22%
Living abroad	13%
Continue working in the same field	12%
Studying	9%

Source: Aegon Retirement Readiness Survey, 2013

survey revealed that after being on vacation for only a day or two, 89 percent of people are able to leave the stressors of work behind and relax.⁹

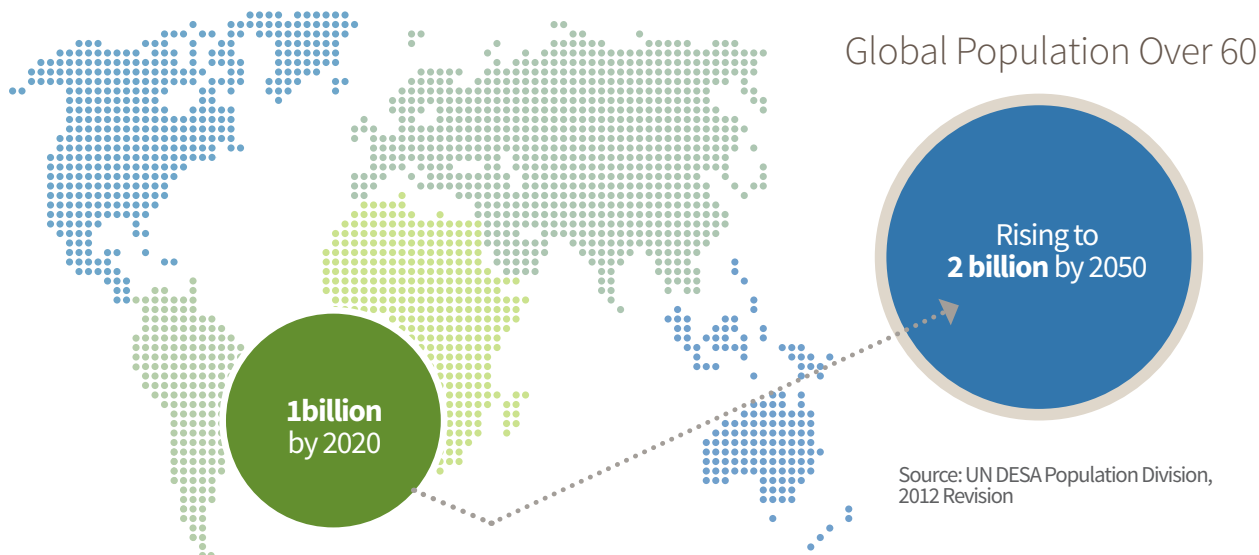
It should then come as no surprise that a recent survey of American travelers shows that 93 percent feel happier after a vacation, over three-quarters (77 percent) believe that their health improves after a vacation and roughly 80 percent believe that vacations and the activities undertaken on vacations result in greater productivity, energy and focus.¹⁰ In fact, those who engage in more leisure activities such as travel are generally healthier and report greater satisfaction in their lives than those who do not.¹¹

When asked about perceptions of their future retirement, respondents to Aegon's 2013 Retirement Readiness Survey (employees across 12 countries including the United States) ranked travel first among their aspirations, tied with spending time with friends and family.¹²

Another recent survey shows that American leisure travelers believe vacations are a necessary practice, and 82 percent believe they need a vacation as much or even more during tough economic times.¹³

Our recent survey research, in partnership with the Transamerica Center for Retirement Studies (TCRS) and conducted by the global research firm GfK, found that 25 percent of retirees surveyed – reflecting the views of approximately 10 million American retirees – regretted not saving more for travel in their later years.¹⁴ This data simply reinforces that travel, with or without its association with health, holds incredible value for individuals who are thinking about how they will invest their time and money across the longer lifespan. However, combined with its relationship to health benefits, this intuitive proclivity toward and positive associations with travel make it even more clear that travel is a necessity for the healthy aging process.

AMERICAN LEISURE TRAVELERS BELIEVE VACATIONS ARE A NECESSARY PRACTICE, AND 82% BELIEVE THEY NEED A VACATION AS MUCH OR EVEN MORE DURING TOUGH ECONOMIC TIMES.



THE HEALTH BENEFITS OF ACTIVITY FOR AN AGING POPULATION

While the data directly linking travel and health is certainly powerful, it is limited. By connecting health and the activities commonly associated with travel, we can learn even more about all of its benefits. Taking a vacation might seem like just a great way to de-stress, but activities like walking on the beach, hiking through national parks, museum hopping or navigating an unfamiliar subway system all have a positive impact on one's health. These activities are vehicles that reinforce activity – both physical and mental – and provide opportunities to learn, engage and interact with others. Our recent survey research with TCRS uncovered that those who travel are significantly more satisfied about their physical health and well-being than non-travelers.¹⁵ In this role, travel can be a game

changer in terms of how people approach the aging process and determine their paths to healthy aging, both across the life course as well as in later years and into retirement.

The Role of Physical Activity

It should come as no surprise that the effects of physical inactivity are deleterious to health. Physical inactivity accounts for more than 3 million deaths per year, largely from non-communicable diseases (NCDs), such as coronary heart disease, type 2 diabetes and cancer¹⁶, which have higher prevalence in older populations. The World Health Organization's Global Recommendations on Physical Activity for Health aim to reduce the incidence of these NCDs through increased physical activity. There is strong evidence that compared to less active men and women, older adults who are physically active have lower rates of heart disease, high blood-pressure, stroke, diabetes, cancers, a lower risk of falling and better cognitive function.¹⁷

Physical activity has been globally recognized by the World Health Assembly (WHA) as an important driver for health. In 2004, the WHA adopted and endorsed a global strategy on diet, physical activity and health. Recognizing the opportunity for reducing deaths and diseases worldwide, the strategy called for increased physical activity to become a public health priority.¹⁸

A series of articles by *The Lancet*, the world's leading general medical journal, investigated the impact of





“REGULAR PHYSICAL ACTIVITY CAN HELP KEEP YOUR THINKING, LEARNING AND JUDGMENT SKILLS SHARP AS YOU AGE.” — CENTERS FOR DISEASE CONTROL AND PREVENTION

eliminating physical inactivity (i.e., staying active) and found that by doing so, one can increase lifespan by almost a year. For people over 40, the impact of eliminating physical inactivity could result in an increase in life expectancy roughly equal to that achieved by eliminating obesity in the United States and is nearly on par with the impact of eliminating smoking.¹⁹

As defined by the World Health Organization, physical activity can include everyday leisure time activity, such as household chores and walking or cycling. Further studies show that for older adults, the net health benefits are likely to be higher if the main focus is on moderate-

intensity activities²⁰, like those experienced while traveling.

In the United States, the commitment to physical activity is also clear through the launch of the National Physical Activity Plan in May 2010 and First Lady Michelle Obama’s Let’s Move! initiative to combat childhood obesity.

Another benefit to improving health as we age is containing personal and societal healthcare costs. With the total global population over the age of 60 set to surpass 1 billion by 2020, and expected to grow to 2 billion by 2050, healthcare costs for ailments such as



cardiovascular disease, diabetes and cancers – NCDs that are more prevalent among the older population – are expected to cost more than \$30 trillion over the next 20 years.²¹ The most devastating age-related health burden is Alzheimer’s disease, which on its own will account for an additional loss of \$16.1 trillion.²² A focus on active aging, therefore, is not only good for individual health, but essential for societies and governments looking to improve public health and cost savings.

The Role of Mental Activity and Cognitive Stimulation

Mental activity and cognitive stimulation, which can be achieved through various activities associated with

travel, have been linked to brain health. Novel and complex stimuli, such as new behaviors and new environments, promote brain health by building brain resilience at the cellular level, thus potentially delaying the

onset of degenerative disease. According to Dr. Paul D. Nussbaum, Ph.D., ABPP, a clinical neuropsychologist and Adjunct Professor of Neurological Surgery at the University of Pittsburgh School of Medicine, “Travel is good medicine. Because it challenges the brain with new and different experiences and environments, it is an important behavior that promotes brain health and builds brain resilience across the lifespan.”

This understanding has incredible potential in an era of aging when one in eight over 65 and one in two over 85 has a risk of Alzheimer’s disease.²³ A 2002 European longitudinal study showed that frequent participation in mental, social or productive activity is associated with a lower risk of dementia.²⁴ A more recent National Institute on Aging and National Institutes of Health report looked at the impact of ordinary activities like listening to the radio, reading newspapers, playing puzzle games and visiting museums. Over a four year period, those involved in the study that did these activities most often had a 47 percent lower risk of developing Alzheimer’s disease than those who did them least frequently.

Travel increases cognitive stimulation. For instance, many travelers visit museums and learn more about art, local history or science.

TRAVEL IS GOOD MEDICINE. BECAUSE IT CHALLENGES THE BRAIN WITH NEW AND DIFFERENT EXPERIENCES AND ENVIRONMENTS, IT IS AN IMPORTANT BEHAVIOR THAT PROMOTES BRAIN HEALTH AND BUILDS BRAIN RESILIENCE ACROSS THE LIFESPAN.”

— DR. PAUL D. NUSSBAUM, PH.D., ABPP



Additional studies have shown that increasing the number and level of mentally stimulating activities strengthens brain cells and the connections between them and may also lead to the formation of new nerve cells.²⁵ For example, in a study of London taxi drivers, who are faced with highly complex and large-scale forms of navigational puzzles every day, researchers found increased volume in the hippocampus, which is the part of the brain responsible for memories and new learning.²⁶

Another way to achieve this mental stimulation is through increased social activity, which not only makes physical and mental activities more enjoyable but can actually reduce stress levels as well, helping to maintain healthy connections among brain cells.²⁷ According to the late Dr. Ruth L. Kirschstein, former director of the National Institutes of Health, “Social and cultural factors play a central role in preventing illness, maintaining good health and treating disease.” A person’s social ties and the quality of social relationships can “mediate the effect of stress on health.” To take Dr. Kirschstein’s point one step further, a recent study shows that main-

taining or initiating social participation in later life has positive benefits on the mental health of older adults and should be encouraged by governments and society to promote mental health and successful aging.²⁸

These points around social engagement and cognitive stimulation all support some of the earliest findings on the topic, which date back to 1995. Examining the benefits of travel specifically among other hobbies, household chores and odd jobs, Dr. Collette Fabrigoule found that regular participation in these social or leisure activities, including travel, is associated with a lower risk of subsequent dementia.²⁹

Travel also provides intergenerational social connections. It can link multiple generations and those of all ages and in that

Travel involves new experiences, which also increases cognitive stimulation. Navigating an unfamiliar city or town, for example, often involves reading maps to figure out how to drive from one place to another or which train or bus to take to get around town.

Travel increases social engagement by building new relationships and deepening understanding of the experiences of others.

way also contributes to mental health in healthy aging. A recent U.S. Travel Association study found that multigenerational travel benefits grandchildren as well as grandparents, who cite valuing the opportunity to travel with their grandchildren to help them feel and stay more youthful.³⁰

Our positive feelings and perceptions of ourselves when we travel may be short-term effects, but as this data shows, they can have lasting and consequential benefits.

CONCLUSION

Ponce de Leon visited Florida 500 years ago in search of the mythical Fountain of Youth. Though he did not find it, by traveling, he was on the right track. Travel and healthy aging, the process of remaining as vibrant as possible in body and mind, are in fact closely associated.

By keeping us active and engaged, travel certainly promotes well-being. Indeed, the levels of correlation between travel and certain areas of health are remarkably clear. Even more, the data presented in this paper reflect and underscore the common-sense view that travel broadens the mind, refreshes the spirit and contributes to good health – both physical and mental. We expect and call for further research to provide even greater support for this association between travel and healthy aging. As aging populations increase, doing so will help individuals make smarter decisions around how they maintain health and assist governments and businesses as they seek ways to best maximize the promise of 21st-century healthy aging. ♦

This white paper was commissioned by the U.S. Travel Association as part of its Travel Effect campaign.

TRAVEL EFFECT

END NOTES

- ¹United Nations Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2012 Revision. http://esa.un.org/unpd/wpp/unpp/panel_indicators.htm
- ²Ibid.
- ³World Economic Forum. Global Population Ageing: Peril or Promise? (2012). <http://www.weforum.org/reports/global-population-ageing-peril-or-promise>
- ⁴Eaker, E. et al. "Myocardial Infarction and Coronary Death among Women: Psychosocial Predictors from a 20-Year Follow-up of Women in the Framingham Study." American Journal of Epidemiology. 135:8 (1992): 854-864. <http://aje.oxfordjournals.org/content/135/8/854.short>
- ⁵Chikani, V. et al. "Vacations Improve Mental Health Among Rural Women: The Wisconsin Rural Women's Health Study." Wisconsin Medical Journal. 104:6 (2005): 20-23. <http://www.ncbi.nlm.nih.gov/pubmed/16218311>
- ⁶Gump, B. et al. "Are Vacations Good for your Health? The 9-year Mortality Experience After the Multiple Risk Factor Intervention Trial." Psychosomatic Medicine. 62 (2005): 608-612. <http://www.ncbi.nlm.nih.gov/pubmed/11020089>
- ⁷Ibid.
- ⁸Mayo Foundation for Medical Education and Research. "Healthy Aging." (2011). <http://www.mayoclinic.com/health/healthy-aging/MY00374>
- ⁹Expedia Vacation Deprivation Study 2012. http://www.expedia.com/p/info-other/vacation_deprivation.htm
- ¹⁰Heart + Mind Strategies. "American Vacation Opinions: Report on Key Findings." (2012). <http://bit.ly/1hnhB5>
- ¹¹Pressman, SD. et al. "Association of Enjoyable Leisure Activities With Psychological and Physical Well-Being." Psychosomatic Medicine. 71:7 (2009): 725-732 <http://www.ncbi.nlm.nih.gov/pubmed/19592515>
- ¹²Aegon Retirement Readiness Survey 2013: The Changing Face of Retirement. <http://www.aegon.com/Documents/aegon-com/Insight/Retirement-readiness/Aegon-Retirement-Readiness-Survey-2013.pdf>
- ¹³Heart + Mind Strategies. "American Vacation Opinions: Report on Key Findings." (2012). <http://bit.ly/1hnhB5>
- ¹⁴Transamerica Center for Retirement Studies and Global Coalition on Aging, "Journey to Healthy Aging: Planning for Travel in Retirement," (2013). <http://www.transamericacenter.org/retirement-research/travel-survey>
- ¹⁵Ibid.
- ¹⁶Pratt, M. et al. "The Implications of megatrends in information and communication technology and transportation for changes in global physical activity." The Lancet. 380:9838 (2012) 282-293. <http://www.ncbi.nlm.nih.gov/pubmed/22818940>
- ¹⁷World Health Organization. Global Recommendations on Physical Activity for Health (2011) http://www.who.int/dietphysicalactivity/factsheet_recommendations/en/
- ¹⁸World Health Organization. Global NCD Action Plan 2013-2020 (2013) http://www.who.int/nmh/events/ncd_action_plan/en/
- ¹⁹Lee I-M, Shiroma EJ, et al. "Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy." The Lancet. (2012). <http://www.ncbi.nlm.nih.gov/pubmed/22818936>
- ²⁰World Health Organization. Global Recommendations on Physical Activity for Health (2011) http://www.who.int/dietphysicalactivity/factsheet_recommendations/en/
- ²¹World Health Organization. Global NCD Action Plan 2013-2020 (2013) http://www.who.int/nmh/events/ncd_action_plan/en/
- ²²Bloom, D.E. et al. "The Global Economic Burden of Noncommunicable Diseases" World Economic Forum and Harvard School of Public Health (2011) <http://www.weforum.org/reports/global-economic-burden-non-communicable-diseases>
- ²³Alzheimer's Association. "2012 Alzheimer's Disease Facts and Figures." Alzheimer's & Dementia. 8:2 (2012). www.alz.org/downloads/facts_figures_2012.pdf
- ²⁴Wang, H. "Late-life Engagement in Social and Leisure Activities Is Associated with a Decreased Risk of Dementia: A Longitudinal Study from the Kungsholmen Project." American Journal of Epidemiology. 155:12 (2012) 1081-1087. <http://www.ncbi.nlm.nih.gov/pubmed/12048221>
- ²⁵Harvard Health Publications. "Improving Memory: Understanding age-related memory loss." Harvard Medical School (2012). http://www.health.harvard.edu/special_health_reports/improving-memory
- ²⁶Maguire, E. "Navigation-related structural change in the hippocampi of taxi drivers." Proceedings of the National Academy of Sciences of the USA. 97:8 (1999) 4398-4403. <http://www.pnas.org/content/97/8/4398.full>
- ²⁷Harvard Health Publications. "Improving Memory: Understanding age-related memory loss." Harvard Medical School (2012). http://www.health.harvard.edu/special_health_reports/improving-memory
- ²⁸Chiao et al. "Social participation reduces depressive symptoms among older adults: An 18-year longitudinal study in Taiwan" BMC Public Health. 11:292 (2011). <http://www.biomedcentral.com/1471-2458/11/292/>
- ²⁹Fabrigoule, C. et al. "Social and leisure activities and risk of dementia: a prospective longitudinal study." Journal of the American Geriatrics Society (1995): 485-90. <http://www.ncbi.nlm.nih.gov/pubmed/7730528>
- ³⁰U.S. Travel Association. "Family Vacations Bring Multiple Generations Together." Travel Effect (2013). <http://traveffect.com/info/infographics/family-vacations-bring-multiple-generations-together>

WE EXPECT AND CALL FOR FURTHER RESEARCH TO PROVIDE EVEN
GREATER SUPPORT FOR THIS ASSOCIATION BETWEEN
TRAVEL AND HEALTHY AGING.





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