

Effect of the Anti-Aging Vitamins on Life Expectancy Today

Humans have potential to live healthy, youthful lives lasting thousands of years. Human life spans today are being dramatically shortened by a universal congenital deficiency of two previously unknown vitamins not found in nature at present: methylphosphinic acid (MePiA) and methylphosphonic acid (MePA).¹ We call this congenital deficiency disease "aging." MePiA and MePA are the remedy for aging. They are the anti-aging vitamins.

Aging is not a natural process for the human species. It is a disease process. Aging tracks the progression of MePiA and MePA deficiency disease. The more aged a person is, the more sick they are with this ultimately fatal disease.

At present, we live in a world which is full of people who are at various stages of sickness due to this disease. Disease progression is nearly zero in infants and nearly terminal in centenarians.

The aging disease is just now beginning to be driven back. Eventually, the disease will be eradicated from our planet. In the meantime, what extension of life span might aging-diseased individuals anticipate who have begun to take Dr. Aardsma's Anti-Aging Vitamins?

Method

There are no experimental data on this question at present, nor are there likely to be any experimental data on it any time soon. Experimental evidence for life-lengthening due to the anti-aging vitamins has only recently been obtained from pilot studies with mice and with fruit flies.² The mice pilot study took nearly three years to complete. Because humans live about 30 times longer than mice at present, experimental evidence for life lengthening in humans seems likely to be decades away. At present, to predict the probable effect of the antiaging vitamins on human life spans, it is necessary to rely on theory.

Fortunately, the scientific theory that must be relied on in this case appears to be sound. It has successfully explained and mathematically modeled the ancient biblical data recording multicentenarian life spans.³ It has given rise to substantial anecdotal testimonial evidence of health benefits realized by users of one or both of the anti-aging vitamins.⁴ And it has received its first direct experimental corroboration in the form of life lengthening in animal models via the pilot studies mentioned above. While theory is all we have to go on at present, there are good reasons to trust the requisite theory.

Life Expectancy

No one can say with certainty how long anybody will live, of course, but on average at present, in our aging-diseased population, we expect infants to enjoy a life span of something like 70 or 80 years and we expect 40-year-olds to live something like another 30 or 40 years. Because discrete individ-

¹Gerald E. Aardsma, *Aging: Cause and Cure* (Loda, IL: Aardsma Research and Publishing, 2017). www.BiblicalChronologist.org.; Gerald E. Aardsma, *Addendum to Aging: Cause and Cure* (Loda, IL: Aardsma Research and Publishing, July 26, 2019). www.BiblicalChronologist.org.

²Gerald E. Aardsma, *Addendum to Aging: Cause and Cure* (Loda, IL: Aardsma Research and Publishing, July 26, 2019). www.BiblicalChronologist.org.

³Gerald E. Aardsma, *Aging: Cause and Cure* (Loda, IL: Aardsma Research and Publishing, 2017). www.BiblicalChronologist.org.

⁴www.biblicalchronologist.org/products/vitamin_MePA _testimonials.php; agingcauseandcure.com/testimonials/

ual life spans cannot be predicted, it is necessary, for scientific purposes, to talk about the average life span of a group of individuals. The average life span remaining for a group of same-age individuals is called their "life expectancy." The life expectancy today for infants will be something like 70 or 80 years and the life expectancy for 40-yearolds will be something like 30 or 40 years.

Questions about life expectancy are routinely answered today using actuarial life tables. An actuarial life table shows the probability of dying within the year from one birthday to the next.

The Social Security Administration (SSA) publishes actuarial life tables for the United States population. The present article uses the most recent (2016) SSA actuarial life table in all that follows.⁵ Both the number of survivors and the life expectancy versus age are included in this table. Though the table is specific to 2016, these life tables tend to change little from year to year any more. In the present article, the 2016 table is treated as representative of what may be expected in any future year in the case of well-cared-for humans whose diets completely lack the anti-aging vitamins from birth on.

Figure 1 shows the table's life expectancies versus age graphically. Life expectancies for males and females are graphed separately, reflecting their separation in the actuarial table. This graph shows



Figure 1: Life expectancy for modern U.S. males (blue) and females (red) not taking the anti-aging vitamins.

that newborn male babies have a life expectancy of 76 years, and newborn female babies have a life expectancy of 81 years; 40-year-old males have a life expectancy of 38.6 years, and females 42.5 years; and 80-year-old males have a life expectancy of 8.3 years, and females 9.7 years.

What happens to these life expectancies when an individual converts from a diet devoid of the anti-aging vitamins to a diet containing adequate anti-aging vitamins?

Computer Program

To answer this question quantitatively, it was necessary to write a computer program. The program calculates the new life expectancies for males and females first beginning to take the anti-aging vitamins at some age between 0 and 118 years.

Consider the example of a 40-year-old male beginning to take the vitamins. His chronological age (i.e., how many calendar years he has lived) and his physiological age (i.e., how sick his body is with anti-aging vitamins deficiency disease, a.k.a. $aging)^6$ start out both together at 40 years. After he has taken the vitamins for one year, his chronological age has increased 1 year making him 41 years old. Meanwhile, because of the vitamins, his body has begun to heal of his aging disease and has become a little more youthful. How much more youthful? The only data we have on this is from Noah.⁷ He became one physiological year more youthful for every twelve calendar years he was exposed to adequate levels of the anti-aging vitamins during the Spike following the Flood.⁸

The fact that there is only this one data point to go on for the rate of healing is a limitation in the present calculation. Specifically, it requires the assumption that the healing rate for aging will always be the same at all physiological ages and for both genders. This assumption does not seem unreasonable, but it would not be surprising to learn

 $^{^5 \}rm ssa.gov/oact/STATS/table4c6.html (accessed March 2, 2020).$

 ⁶Gerald E. Aardsma, Aging: Cause and Cure (Loda, 120 IL: Aardsma Research and Publishing, 2017), 103–105. www.BiblicalChronologist.org.

⁷Gerald E. Aardsma, *Aging: Cause and Cure* (Loda, IL: Aardsma Research and Publishing, 2017), 104. www.BiblicalChronologist.org.

⁸Gerald E. Aardsma, *Aging: Cause and Cure* (Loda, IL: Aardsma Research and Publishing, 2017), 104. www.BiblicalChronologist.org.

eventually that it requires some fine tuning. Fortunately, Noah's physiological age at the start of the Spike $(50 \text{ years})^9$ is near the middle of the physiological age range, helping to minimize any inaccuracy in the calculation resulting from this assumption.

The computer program applies Noah's rate of healing to all physiological ages for both males and females. It calculates a 40-year-old's physiological age after one year of adequate daily intake of the anti-aging vitamins as (40 - 1/12 =) 39.9 years.

Summarizing to this point, after 1 year of supplementation, the 40-year-old man has become 41 years old in calendar years and 39.9 years old physiologically. He has lived another year and become slightly more youthful in the process.

This neglects the possibility that he may not have lived to his 41st birthday, an oversight which will be corrected shortly. Assuming he has survived to age 41, it is easy to calculate what happens in his 42nd year. His calendar age advances to 42, and his physiological age reduces further, to 39.8 years.

The program carries on in this way (albeit at much higher computational precision and with much smaller time steps) year by year, advancing the man's chronological age and reducing his physiological age.

Now consider the possibility that the 40-yearold man may have died prior to his 41st birthday. The actuarial life table shows that a 40-year-old male has a probability of death in his 41st year of 0.00242. This means that out of 100,000 antiaging-vitamins-deficient men turning 40 years old, 242 die in their 41st year for one reason or another: heart attack, brain aneurysm rupture, car accident, violent crime, etc. The program uses this probability as part of its calculation of the new life expectancy. It starts with 100,000 men of age 40 and keeps a total of how many survive year by year of the calculation. When none remain, it stops the calculation and calculates the new life expectancy value for age 40 males.

That explains most of what the computer program does. Only two further details need to be mentioned. First, notice that the probability of death for our example 40-year-old male in his 42nd year is *not* the value found in the table for a 41year-old male. Rather, it is the value one gets from the table for a 39.9-year-old male. (It is necessary to interpolate the table to get this value.) Because his body has become more youthful, his probability of death does not increase to the value shown in the table for a 41-year-old male (0.00253) but rather reduces to the value appropriate to a 39.9-year-old male (roughly 0.00241). It is the physiological age which must be used in the 2016 actuarial life table for the calculation, not the calendar age.

Second, things get slightly more complicated with the table down at the low age end. The minimum probability of death per year in the entire table is for 10-year-old males (0.000088). Therefore, this is the best estimate which can be made at present of the probability of death per year for mature individuals free of aging disease. For individuals beginning supplementation after calendar age 10, the program tracks their healing back to physiological age 10, then holds them there for all subsequent calendar years. (This has nothing to do with development, of course. Nobody moves backward developmentally, from adult to child. They move backward only physiologically, from more diseased with aging to less diseased with aging.) For individuals beginning supplementation before calendar age 10, the program assumes that their probability of death per year due to aging is negligible and that the probability of death per year shown in the table for these ages is due to other causes. It tracks their mortality due to these other causes forward to physiological age 10, using the probability of death per year values supplied by the table, then holds them there physiologically for all subsequent calendar years. (Developmentally, they go on to become mature adults, of course.)

Results

Figure 2 shows the results of the computer program calculation. The results are a bit staggering. Notice the y-axis scale. Let it sink in.

The results may seem ridiculous or unbelievable to some, but there is no foolery or sleight of hand going on here, only logic and science. Because the aging disease has been taking its toll on humans for thousands of years, we have grown up assuming

⁹Gerald E. Aardsma, *Aging: Cause and Cure* (Loda, IL: Aardsma Research and Publishing, 2017), 104–105. www.BiblicalChronologist.org.



Figure 2: Life expectancies for U.S. males (blue) and females (red) starting to take the anti-aging vitamins (dots) and not starting to take the anti-aging vitamins (lines).

that a 70 or 80 year life span is normal. But we are mistaken in this assumption. We have grown up in abnormal times with abnormally shortened human life spans relative to the totality of human history. Recall that earth's oldest written history, found in the biblical book of Genesis, records human life spans of nearly 1,000 years prior to Noah's Flood. These ancient observational data of long human life spans are as meaningful as our modern observational data of short human life spans, and they teach us that it is wrong to assume that our modern times are the norm.

To be perfectly clear, these results, though calculated from theory, are meaningful in the real world today, and they apply to ordinary people like me and you.

The world record oldest age for modern times is 122 years. Males beginning supplementation with Dr. Aardsma's Anti-Aging Vitamins before age 77 and females beginning supplementation before age 82 have life expectancies taking them beyond this record according to the computer program calculation. If you are in this category, then you can reasonably expect to beat this modern world record age.

Methuselah, who lived before the Flood, holds the world record oldest age for ancient times of 969 years.¹⁰ Males beginning supplementation with Dr. Aardsma's Anti-Aging Vitamins before age 65 and females beginning supplementation before age 72 have life expectancies taking them beyond this record, according to the computer program calculation. If you are in this category, then you can reasonably expect to live longer than Methuselah.

Males beginning supplementation before age 25 and females beginning supplementation before age 30 have life expectancies taking them beyond 10,000, years according to the computer program calculation. If you are in this category, then this is your calculated, real-world life expectancy.

What do 10,000-year-old people look like? Do 120 they look old? No. The "old" look is purely a consequence of the aging disease. They have no aging disease. They look like mature, youthful adults.

How do 10,000-year-old people die? They die from all the sorts of things not related to aging disease which kill normal mature youthful adults today: car accidents, homicides, suicides, lightning strikes, drownings, infections, natural catastrophes, wars, snake bites, etc.

Note that a life expectancy of 10,000 years does not mean that these people run out of time and perish around 10,000 years of age. Running out of time happens only today. It happens because aging disease progresses exponentially—you can absolutely count on the aging disease killing you, in the absence of the anti-aging vitamins, before you have lived even 125 years. And because aging disease progresses exponentially, you can absolutely count on most people dying today in their 70s or 80s. But once aging is removed, one does not run out of time. Rather, one eventually runs out of luck. For people with a 10,000 year life expectancy, about half will run out of luck sometime prior to 10,000 years and about half will run out of luck sometime after 10,000 years. When exactly they run out of luck will be randomly distributed, not all bunched close to 10,000 years.

Discussion

The Very Aged

While all of these results are very good news, there is also some good news which is not quite so *very* good news. In Figure 3, both the x-axis and the y-axis scales have been changed to zoom in on the results of the calculation for individuals hav-

 $^{^{10}}$ Genesis 5:27.

ing very advanced aging disease when they start supplementation of the anti-aging vitamins. While



Figure 3: Life expectancies for U.S. males (blue) and females (red) starting to take the anti-aging vitamins (dots) and not starting to take the anti-aging vitamins (lines).

life expectancies are increased throughout this age range for individuals starting to take the vitamins, the gains are no longer so spectacular as they were for younger ages. By age 100, the gain in life expectancy is very small, only 0.74 years for males and 1.01 years for females.

Gain in life expectancy is low for individuals starting to take the vitamins at these advanced ages because their aging disease is severe. This causes their probability of death per year to be high. Meanwhile, healing of aging is a slow process, as discussed above. Thus, these individuals have a high likelihood of being killed by aging disease before their disease can be significantly ameliorated.

What would I do were I 100 years old when first made aware of the anti-aging vitamins and faced with such relatively dismal prospects? Would I begin to take the vitamins, or would I abstain from taking the vitamins to shorten the time to the end, being "ready to go"? I would take the vitamins and hope for the best. In fact, I would probably take them at double or triple the usual recommended daily intake. I would do this for several reasons. First, the computer program calculation may be too pessimistic. It may be that healing is more rapid for individuals advanced in the aging disease than it was for Noah, whose body had reached only physiological age 50 when he was exposed to the vitamins in high doses. Second, individuals with advanced scurvy respond well to high doses of vitamin C. Perhaps this might be true with aging and the anti-aging vitamins as well. Third, research continues on the anti-aging vitamins and on aging in general, making it possible that further breakthroughs might brighten my prospects for the future. Fourth, taking the vitamins would likely improve my physical and mental health and hence my quality of life here and now, irrespective of prospects for future longevity.

Potential Life Spans

As discussed previously, life expectancy is not the same thing as actual individual life span. Life expectancy is the group average age reached by a same-age cohort of individuals. Some members of the cohort will die before the average and some will die after the average, of course. For example, the present calculation gives the life expectancy for nine-year-old males beginning to supplement their diets with the anti-aging vitamins as 11,400 years. I have previously calculated that a U.S. male starting to supplement with the anti-aging vitamins when nine years old, "will have about a 1 in 10 chance of living to 22,900 years of age, and a 1 in 100 chance of living to 45,800 years of age."¹¹

While a 10,000-year life expectancy is eyebrow raising, it is clearly not the life span limit. In fact, there is no life span limit according to the computer program. Rather, the life span limit which has been artificially imposed on humans by the aging disease has been removed.

Two Caveats

I mentioned two caveats with the previous calculation which are equally applicable to the present calculation:

1. "This calculation may fail in practice. The death rate I have chosen, one percent per hundred years, may be too optimistic. If hatred—ideological, political, personal—grows, its in-

¹¹Gerald E. Aardsma, *Aging: Cause and Cure* (Loda IL: Aardsma Research and Publishing, 2017), 99. www.BiblicalChronologist.org.

evitable harvest of violence will no doubt escalate the death rate, ruining the calculation."¹²

2. "The calculation also assumes that the human body encounters no novel disease state out beyond 1000 years of age. We have no way of knowing what health challenges lie beyond 1000 years of age because nobody, ancient or modern, has been there that we know of."¹³

How to Maximize Health and Longevity

With the results of the calculation now in hand, it is possible to chart a course for use of the antiaging vitamins to maximize personal health and longevity.

The graphs show increased life expectancies for individuals beginning to supplement with the antiaging vitamins at any age. The gains achieved in life expectancy grow relatively smaller, however, at higher ages, as Figure 2 has shown.

This observation leads immediately to a most important point of strategy for personal use of the vitamins. I will call this point of strategy Rule 1.

Rule 1: Whatever your age, begin taking the vitamins without delay.

The only exception to this rule would be nursing infants, who are expected to be furnished naturally with the vitamins through their mother's breast milk. It is the mother, not the nursing child, who should apply Rule 1. If you are concerned about possible interactions of the anti-aging vitamins with medications you are presently taking (none currently known), get your health professional involved to help you be able to follow Rule 1 safely and without anxiety.

The health and longevity cost of breaking this rule can be very large. Consider, for example, a 20-year-old male who feels he will live forever (as youth is prone to do) and has no need of any antiaging vitamins. He neglects to supplement his diet. When he reaches age 45, he wakes up to the fact of his very real mortality: his eyesight has declined, he can no longer keep up in sports, his hair has thinned and is just beginning to gray, it takes him three weeks to "bounce" back from the flu, he is experiencing some difficulty with urination due to prostate gland enlargement, and so on. He finally decides to start taking the anti-aging vitamins.

Had he started taking the anti-aging vitamins at age 20, his life expectancy would have been 10,800 years. At age 45, it has declined to 6,040 years. He has managed to squander 4,760 years of life expectancy in 25 years.

It might be supposed that, nonetheless, this is not too bad—he still has 6,040 years of life expectancy remaining. But this is wrong-headed entirely. He now has a 45-year-old body to contend with. If he had begun taking the vitamins 25 years ago, he would now have an 18-year-old body. It will now take him 324 years to get back to an 18year-old body. He will live with declined eyesight, prostate gland enlargement, etc., for who knows how long.

But, of course, he may never make it even another 324 years, or even another 24 years. The incidence of cancer is strongly correlated with physiological age. Imagine that his body had developed a cancerous cell in his 44th year which, had he begun taking the anti-aging vitamins at age 20, would not have arisen. Imagine that the cancerous cell has a doubling time of 1 year. Twenty years later, in his 64th year, this single cell has multiplied and become a pea-sized tumor. His body is now growing slowly younger year by year, but he is still in his forties physiologically, and his body has no natural defense against this particular cancer. His only hope is removal of the tumor. This, of course, requires that the tumor be somehow detected. The longer it goes undetected, the greater the probability that it will metastasize, at which point removal of the tumor will do little good.

How does this story end? It ends like this: who, in their right mind, would want to live this story, no matter how it ends?

The aging disease is not to be toyed with any more at age 20 than at age 70. I do not mean to be offensive, I only mean to be perfectly clear—based on everything which is known about the anti-aging vitamins at present, it is plain and simply stupid to disregard Rule 1.

There is only one other major point of strategy.

¹²Gerald E. Aardsma, *Aging: Cause and Cure* (Loda IL: Aardsma Research and Publishing, 2017), 99. www.BiblicalChronologist.org.

¹³Gerald E. Aardsma, *Aging: Cause and Cure* (Loda IL: Aardsma Research and Publishing, 2017), 100. www.BiblicalChronologist.org.

I will call it Rule 2.

Rule 2: Take the vitamins without fail every day.

This rule does not need much elaboration. It is pretty obvious. Would you knowingly eliminate any other vitamin from your diet?

The only reason Rule 2 needs to be explicitly stated and emphasized is that it is easy to get off track with the anti-aging vitamins. Healing of aging is slow. One is not likely to notice much happening, especially after initial gains in health have become the new norm. It is all too easy to fall prey to the feeling that the anti-aging vitamins aren't doing anything for you anymore and to stop taking them. One must not give way to such impulses. Seriously now, would you knowingly eliminate any other vitamin from your diet?

People who unwittingly eliminated vitamin C from their diets (mostly long-ago sailors on long voyages failing to get fresh fruits and vegetables) soon became diseased with what is called scurvy, suffering horribly from bone and muscle pain, easy bruising and bleeding, gum disease, depression, and anemia for weeks or months before succumbing to this ancient dread disease. Nobody ever intentionally eliminated vitamin C from their diet nobody wants scurvy.

People who unwittingly eliminated vitamin B_3 (niacin) from their diets (thousands of Southerners in the 1920s, eating inexpensive milled Midwestern corn so they could convert more of their land to cotton)¹⁴ soon became diseased with what is called pellagara, suffering horribly from dementia, diarrhea, and dermatitis for weeks or months before succumbing to this relatively modern dread disease. Nobody ever intentionally eliminated vitamin B_3 from their diet—nobody wants pellagra.

People who unwittingly eliminated vitamin B_1 (thiamine) from their diets (by eating mostly polished, white rice) soon became diseased with what is called beriberi, suffering horribly from loss of apetite, irritability, mental confusion, peripheral neuropathy, swollen hands and feet, and chest pains from a malfunctioning heart for weeks or months before succumbing to this ancient dread disease. Nobody ever intentionally eliminated vitamin B_1 from their diet—nobody wants beriberi.

Put your intellect, not your feelings, in charge. Aging is an insidious, deadly vitamin deficiency disease. Do not toy with it.

Many foods and drinks are fortified with the traditional vitamins today, making it difficult not to get an adequate daily intake of these vitamins. It is to be hoped that this will eventually be the case with the anti-aging vitamins as well—that governments will come up to speed with the anti-aging vitamins and put measures in place to make it difficult for citizens not to get an adequate daily intake of them. But do not hold your breath. History shows that governments generally have a pretty poor track record with this sort of thing. In the meantime, you must look after yourself. Follow Rule 2.

Conclusion

Inherently uncertain extrapolation is greater the further into the future the computer program calculates. This makes the quantitative forecast of life expectancies out beyond 1000 years the most precarious. But what comes across from the computer calculation loud and clear, should it be granted even just qualitative accuracy out at these great ages, is that the advent of the discovery of the anti-aging vitamins has opened a whole new era for the human species. The calculation says that the seemingly refractory "threescore years and ten; and if by reason of strength... fourscore years"¹⁵ time limit on life, which has dominated all of humanity for some four and a half thousand years, has been lifted at last.

Figure 2 displays, in graphical form, a world in transition. The transition is away from the dominance of the aging disease to a world free of it. Ultimately, life spans measured in thousands of years will be the normal experience of humanity. The ancient prophet, with poetic aptness, put it this way:¹⁶

- For the youth will die at the age of one hundred
- And the one who does not reach the age of one hundred

Shall be thought accursed. \diamond

¹⁵Psalm 90:10.

 $^{^{14}{\}rm eh.net/eha/wp-content/uploads/2016/08/ClayTroesken}$.pdf (accessed April 6, 2020).

¹⁶Isaiah 65:20b. [NASB, 1975]

The Biblical Chronologist is written and edited by Gerald E. Aardsma, a Ph.D. scientist (nuclear physics) with special background in radioisotopic dating methods such as radiocarbon. The Biblical Chronologist has a fourfold purpose:

- 1. to encourage, enrich, and strengthen the faith of conservative Christians through instruction in biblical chronology and its many implications,
- 2. to foster informed, up-to-date, scholarly research in this vital field,
- 3. to communicate current developments and discoveries stemming from biblical chronology in an easily understood manner, and
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