

THE BIG IDEAS

Don't Blame Your Genes
Focus on playing your hand well.

The Paradox of Work
It's where the joy's at!

Work
It does a body good.

Use It
And grow it.

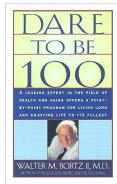
Believe in 100
The most important factor.

Stay in Touch
Love is super important.

Work with Stress
Here are some ideas on how to.

Exercise
The first line of defense.

Matters of Choice
No longer fate.



Dare to Be 100

A Leading Expert in the Field of Health and Aging Offers a Point-by-Point Program for Living Long and Enjoying Life to Its Fullest

BY WALTER M. BORTZ II, M.D. · FIRESIDE © 1996 · 272 PAGES

“Within this book I intend not only to defend the idea of living to 100, but also to propose the active strategies that will make it happen. As someone wise once noted, “If you are going to get old, you might as well get as old as you can get.” The title of this book is an acronym for the steps you need to take to reach 100: D for diet, A for attitude, R for Renewal (rest, recreation, retirement, resilience), E for exercise. Three of these components—D, R, and E—are the biological compass points for aiming for 100, but A—attitude—is the most important. Within attitude lie all the planning and decision making that facilitate the biological steps. It is possible to reach 100 by chance, but it’s not likely.”

~ Walter M. Bortz II, M.D. from *Dare to Be 100*

[Walter M. Bortz II](#), M.D. is a Professor at the Stanford University Medical School and is one of the world’s leading experts on the science of longevity.

He also embodies what he teaches—having completed 30 marathons over the course of his life while still running ten miles per week as an 80-year old whose writing his fifth book.

[John Robbins](#) references Dr. Bortz and *Dare to Be 100* a number of times in *Healthy at 100* (see Notes) so I figured I should check it out. I’m glad I did. With a scientifically-grounded, no-nonsense style, Bortz gives us all the tools we need to dare to be 100. :)

The book is packed with Big Ideas (literally 100 of them on how we can rock it), so let’s check out some of my favorites, shall we? :)

DON'T BLAME YOUR GENES!

“If I, and you, have heard it once, we have it heard it a thousand times. “If you want to live to a ripe old age, be sure to choose old grandparents.” Cute, but wrong. Heredity has little to do with how long you live. Many scientific studies, including those which study longevity records of twins, conclude that inheritance has only 15 to 20 percent to do with how long you will live. In other words, “It’s not the cards you’re dealt that matter most, it’s how you play your hand.””

Let’s get one thing out of the way right off the bat: Whether or not you make it to 100 has more to do with what YOU DO than the genes with which you were born.

Bortz tells us that, unless you were born with a rare genetic disorder, whether or not you get to 100 is pretty much up to you (with the obvious exceptions of getting struck by lightning or being in an accident, etc.).

So, quit blaming your genes and start playing your hand well! :)

THE PARADOX OF WORK

“Csikszentmihalyi found that we achieve flow when we are working at a challenging mental or physical task. In measured experiments, it’s been determined that flow occurs mostly at work,

“There is now a sufficient fund of data and experience to allow baby boomers—and, of course, younger generations—to plan their 100th birthday party with calm assurance, prepare the guest list, and muster enough respiratory reserve to blow out all those candles.”

~ Walter M. Bortz II, M.D.

"You need to ensure that each minute of your life is crowded with active participation. It is simply the way nature works, and you need the guts to reach for your natural capacity."

~ Walter M. Bortz II, M.D.

"Too much faith in the power of technology to cure has seduced us into unsound health practices."

~ Walter M. Bortz II, M.D.

"But where in nature is there another species in which those in late midlife retire to the treetop, coral ledge, or prairie bunker, tended by the young in reward for services rendered? Retirement, in nature's terms, is an unnatural act."

~ Walter M. Bortz II, M.D.

much less during leisure. These experiments show that 54 percent of work time is spent in some degree of flow, 16 percent in boredom. At leisure, however, the reverse is true. You are in flow only 18 percent of the time, while 50 percent is dull and apathetic. Despite this clear distinction, many judge the leisure part of their lives as pleasurable. This observation, repeatedly confirmed, is called the paradox of work, which is specific to humans."

The paradox of work.

It's such a weird thing. We feel best when we're fully engaged in a task. When our skills meet a challenge, we're in what Csikszentmihalyi calls "Flow." Yet, for some odd reason, we yearn to be in leisure where we feel way less fantastic.

In Csikszentmihalyi's words (see Notes on [Flow](#) for all the goods!): *"Thus we have a paradoxical situation: On the job people feel skillful and challenged, and therefore feel more happy, strong, creative, and satisfied. In their free time people feel that there is generally not much to do and their skills are not being used, and therefore they tend to feel more sad, weak, dull, and dissatisfied. Yet they would like to work less and spend more time in leisure."*

He continues: *"Because work is so universal, yet so varied, it makes a tremendous difference to one's overall contentment whether what one does for a living is enjoyable or not. Thomas Carlyle was not far wrong when he wrote, 'Blessed is he who has found his work; let him ask no other blessings.' Sigmund Freud amplified somewhat on this simple advice. When asked his recipe for happiness, he gave a very short but sensible answer: 'Work and love.'"*

Here's the deal: If we dare to be 100 (and if we want to enjoy our time regardless of how long we live!), we MUST (!!!) be fully engaged with life—seeking activities that inspire and challenge us.

Are you?

WORK: IT DOES A BODY GOOD

"Of all the longevity prescriptions offered by the centurians, work was number one.

... In general, centurians disregard advice to take it easy... As discussed earlier, work seems to be a biological necessity. Eighty-nine percent of centurians report having worked hard during their lives. Only 10 out of 1,200 had "easy lives." Only those who disregard the advice to slow down lived to 100. Seven percent worked over 90 years, 92 percent worked over 60 years. Only 3 1/2% retired at age 65."

Looking for the key to longevity?

Work.

Work? Yes, work.

Again, we've gotta be fully engaged with life if we expect to be around for a long time. That's just the way nature does it.

So, quit aiming for retirement at 65 and start aiming for meaningful ways to give your gifts to the world NOW.

And for a long, long time. :)

USE IT AND GROW IT

"A recent *New York Times* report on peak performance noted that world-class violinists practice twice as much as nationally acclaimed violinists, who practice twice as much as local violinists. Such a relationship holds for chess masters as well. Directed effort, planning, and practice makes the performance; the performance makes the person. In his book *The Mind's Sky*, Timothy Ferris of UC Berkeley has a chapter titled "Joe Montana's Prefrontal Cortex." Ferris estimates

"Most of the changes commonly associated with old people are really not dependent on the passage of time; they result mostly from disuse."

~ Walter M. Bortz II, M.D.

that the development of a portion of Joe's brain associated with throwing the fifteen-yard down-and-out pass is extraordinarily developed. In the days before the last of Bill's Super Bowl's I watched Steve Young throw sideline passes over and over to receiver Jerry Rice long after the others had gone to the dressing room. Similarly, Marian Diamond showed that the association and computation part of Einstein's brain was hypertrophied, like a weight lifter's biceps."

Use it or lose it.

This is another HUGE theme of Bortz' message. Only, he likes to say, "Use it and grow it."

We talk about these ideas of re-wiring our brains (and bodies) through diligent, patient, persistent action quite a bit. Check out the Notes on [Talent Is Overrated](#), [The Talent Code](#) and [Mindset](#) for more goodness on this subject.

For now, let's remember we've gotta use it or lose it. :)

BELIEVE IN 100

"William James wrote: "Be not afraid of life. Believe that life is worth living, and your belief will help create the fact. It is only by risking your person from one hour to another that you live at all. Your faith beforehand in an uncertified result will make the result come true."

~ Walter M. Bortz II, M.D.

"The most important step is the first. A journey of a hundred miles or years begins not with the first movement forward, but with the thought that precedes it. "The belief in 100" is so important because you are moldable, shapable like clay under a sculptor's hands—yours. The ultimate challenge of anyone's life is the opportunity to make the most of it that can be made. "To thine own self be true" becomes "to thine own best self be true." Who you get to be—how old, wise, competent, creative, sexy, fun you become—depends on how you plan. Decrepitude and loss are not predetermined. How you... set your course is highly predictive of the journey you will take."

Bortz goes off on 99 ways to get to 100.

This is the most important one. We've gotta BELIEVE in 100.

Fact is, if we don't think it's even a possibility to be vitally alive at 100 we won't do the planning and take the actions necessary to make it a reality.

There's SO much inertia and conditioning about what we can *expect* to have happen to us as we age. If we want to have a good chance of feeling saucy at 100, we'd BETTER believe we can do it.

Do YOU believe you can be healthy at 100?

STAY IN TOUCH

"Studies have shown that connected people have less than half the mortality rates as lonely people, and the closer the relationships, the more powerful the survival effect.

Living alone is bad for your heart, bad for your immunity, bad for your mind. The key to keeping laboratory rats alive is not nutritional nor medical care, but the simple availability of TLC. Old rats live substantially longer merely because they are caressed. It sounds good to me."

Being connected is HUGE.

Not just as a strategy to help us rock it to 100, but to enjoy all the moments between now and then.

We know that "Nurturing social relationships" is one of the primary, scientifically proven ways to boost our happiness (see the other 11 in our Notes on [The How of Happiness](#)). [Jonathan Haidt](#) also talks about the importance of relationships in his great book [The Happiness Hypothesis](#) (see those Notes, too) where he tells us: "If you want to predict how happy someone is, or how long she will live (and if you are not allowed to ask about her genes or personality), you should find out about her social relationships. Having strong social relationships strengthens the immune system, extends life (more than does quitting smoking), speeds recovery from surgery, and

"Is it right to read your last book at age 22 and then live eight more decades without any formal effort to rev up your brain?"

~ Walter M. Bortz II, M.D.

reduces the risks of depression and anxiety disorders. It's not just that extroverts are naturally happier and healthier; when introverts are forced to be more outgoing, they usually enjoy it and find that it boosts their mood. Even people who think they don't want a lot of social contact still benefit from it. And it's not just that "We all need somebody to lean on"; recent work on giving support shows that caring for others is often more beneficial than is receiving help. We need to interact and intertwine with others; we need to give and the take; we need to belong. An ideology of extreme personal freedom can be dangerous because it encourages people to leave homes, jobs, cities, and marriages in search of personal and professional fulfillment, thereby breaking the relationships that were probably their best hope for such fulfillment."

So, whether you're an introvert or an extrovert, get out there and hang out! :)

WORK WITH STRESS

"Any life of value will have bucketsful of potential stress producers; the secret to stress is to welcome it, work with it, and use its energy and challenges to make your life better..."

"It is not an exaggeration to assert that almost everything we have been taught about aging has been wrong."

~ Walter M. Bortz II, M.D.

The most central ingredient in building a familiarity with dealing with stress is perspective. If you view every miniature departure from the routine as a threat of major consequence, then you're in for tough going. Stress expert Dr. Robert Eliot advises two things: "First, don't sweat the little things, and second, everything is a little thing." It is always a kick to think back a year or so and identify the things that were keeping us awake at night. Almost invariably, they have melted into non-significance.

Other stress antidotes are good—strong health and a positive outlook counteract stress. It is important, too, to look stress in the eye. Pretending that a big bill, an overdue doctor's or dental visit, or a family conflict doesn't exist makes resolution very tough. Relaxation skills and a sense of humor help. Exercise is also a terrific stress reducer."

Stress.

It's at the heart of most of our ailments. As Bortz says: "The chart may read heart problems or stroke, but the real culprit is often stress."

How about a few great wisdom nuggets on dealing with stress?

In [How to Stop Worrying and Start Living](#) (see Notes), [Dale Carnegie](#) gives us all kinds of Ideas on how to deal with worry and tells us: "Seventy per cent of all patients who come to physicians could cure themselves if they got rid of their fears and worries."

"Of all your resources, your health is your most precious—more precious than your money, your house, your friends."

~ Walter M. Bortz II, M.D.

Check out the Note for some awesome Ideas. In the meantime, here's one of my favorites on the power of making a decision to deal with fear. Carnegie says: "Experience has proved to me, time after time, the enormous value of arriving at a decision. It is the failure to arrive at a fixed purpose, the inability to stop going around and round in maddening circles, that drives men to nervous breakdowns and living hells. I find that fifty per cent of my worries vanishes once I arrive at a clear, definite decision; and another forty per cent usually vanishes once I start to carry out that decision.

So, I banish about 90 per cent of my worries by taking these four steps:

1. Writing down precisely what I am worried about.
2. Writing down what I can do about it.
3. Deciding what to do.
4. Starting immediately to carry out that decision."

[David Schwartz](#) also talks about fear/stress in his great book [The Magic of Thinking Big](#) (see Notes) where he tells us: "Fear of all kinds and sizes is a form of psychological infection. We can cure a mental infection the same way we cure a body infection—with specific, proved

treatments... condition yourself with this fact: all confidence is acquired, developed. No one is born with confidence. Those people around you who radiate confidence, who have conquered worry, who are at ease everywhere and all the time, acquired their confidence, every bit of it.”

And, [Tony Robbins](#) (see Notes) echoes Bortz’ wisdom and tells us: “Ten years from now you’ll laugh at whatever’s stressing you out today. So why not laugh now?”

Back to you.

How are *you* dealing with your stress? What do you do that really works for you? Is it making decisions and taking action? Exercise? Meditation? Gaining perspective? All of the above?! :)

We want to get REALLY good at managing it as we dare to be 100!!

So, let’s rock it!!!

EXERCISE: THE FIRST LINE OF DEFENSE

“Remember, you can’t move mountains if you can’t move yourself.”

~ Walter M. Bortz II, M.D.

“Major changes in brain chemistry accompany depression. This is where antidepressant medicines come in. The use of antidepressant medicine for the depressed person is like the use of insulin for a diabetic—it’s an effort to repair a chemical deficiency, and it works! But before quickly resorting to the prescription pad, I have always advocated physical exercise as the first line of defense—or maybe offense. As an antidepressant, exercise has sturdy credentials. Each bout of sweating is accompanied by a surge in the production of body molecules called catecholamines, commonly known as adrenalin. These same compounds are not found in abundance in the nervous system of depressed people.

Exercise, too, has been shown to raise the levels of the upper-compound endorphins, which accompany euphoria and immunize against pain. These endorphins are probably behind the acknowledged addictive quality of exercise.”

Good stuff!

First, a quick point on the comparison between the use of insulin for diabetics and antidepressants for depressed peeps.

Giving someone insulin injections for their diabetes and anti-depressant medication for their depression are REactive means of addressing the problem. They “work” at reducing the symptoms but don’t address the underlying problem.

I like to think of it as similar to dropping ice cubes into a pot of boiling water. Sure, that’ll make the water stop boiling for awhile. But if you want to stop the boiling permanently, you’ve gotta go to the cause and turn off the heat, eh?

So, the PROactive solutions to depression are things like exercise, developing an optimistic mindset and stuff like that. The proactive solution to diabetes? Quit eating the junk that’s making you so imbalanced!

Did you know doctors can EASILY get most adult onset diabetics off their insulin within a month? Yep. We’ll save that for a longer discussion (I’ll be working on a Note on [Dr. Neal Barnhard’s Program for Reversing Diabetes: The Scientifically Proven System for Reversing Diabetes without Drugs](#) and I’m excited to share!).

For now, a couple more Big Ideas on the power of exercise.

First, I’ve quoted the research from [Sonja Lyubomirsky’s *How of Happiness*](#) a million times where she tells us about research proving exercise to be as effective as Zoloft in reducing depression. And, I love how [Tal Ben-Shahar](#) describes NOT exercising as basically taking a depressant. :)

And, I just love this wisdom from [John Robbins’s *Healthy at 100*](#) (see Notes): “In the modern

“An adequate physical exercise program requires no more than 3 hours out of 168, only 2 percent of the week’s time. Three hours of life can be gained for every hour spent exercising—a good bargain, no?”

~ Walter M. Bortz II, M.D.

"In just such a way, natural life expectancy should conform to a bell-shaped curve, the extreme end of which is 120 years. If 120 is the far edge of the curve, where is the center? The answer is 100, meaning that 100 years of age is the median."

~ Walter M. Bortz II, M.D.

world, when people are feeling down they are often told to "take it easy," to simply lie in bed and relax. In both Vilcabamba and Abkhasia, however, people experiencing "the blues" typically respond by becoming active and involved with others. Rather than withdrawing and becoming sedentary, they will walk great distances for the joy of visiting one another. So great is the recognition of the healing power of walking to visit a friend that there is a saying in Vilcabamba that each of us has two "doctors"—the left and the right leg."

So...

Are YOU exercising? :)

P.S. Dr. Bortz also says this: "The tremendous value that physical exercise provides to your body is established beyond any reasonable doubt. Dr. Bob Butler said, "If there was a drug that provided all the benefits that exercise does, the whole world would be taking it." Of course, there is no such drug; the value of exercise must come from an activity program of your own devising and accomplishment. You cannot delegate exercise, and you can't get something for nothing."

MATTERS OF CHOICE

"Until recently, fate had decreed that you would die around age 70. Now, with the identity of elements that contribute and shape your whole life, you can track and control your biomarkers. Matters of fate have become matters of choice... Dare to be 100."

Love this: "*Matters of fate have become matters of choice.*"

Here's to DARING to be 100 and making matters of fate a matter of choice!

B

Brian Johnson,
Chief Philosopher

If you liked this Note,
you'll probably like...

[Healthy at 100](#)

[The China Study](#)

[Thrive](#)

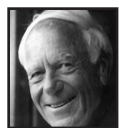
[Strength for Life](#)

[The How of Happiness](#)

[The Happiness Hypothesis](#)

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Brian Johnson loves helping people optimize their lives as he studies, embodies and teaches the fundamentals of optimal living—integrating ancient wisdom + modern science + common sense + virtue + mastery + fun. Learn more and optimize your life at brianjohnson.me.