

**Preventing disease and securing physical wellbeing was the core of our business at The Resilience Institute when it started 25 years ago. At the time, my colleagues called me a nut. Ten years later the same concepts became core practice in evidence-based medicine. Are we still ahead? Who are the “nuts” today that will grab leadership tomorrow? How do we direct good science into daily practice to secure integral wellbeing (Resilience) for self and community?**

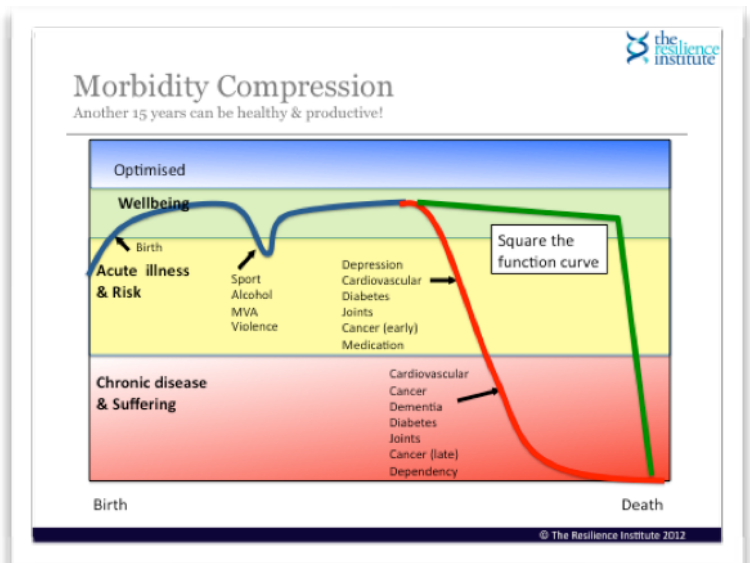
Alongside the sustainability risk to our planet, health is the most serious issue facing humanity. It is a complex topic that defines personal and global responsibility. We are already facing crushing economic pressure from the burden of preventable and chronic disease.

Decade by decade obesity, heart disease, mental illness, cancer, musculo-skeletal degeneration, diabetes and inflammatory disease push more of us into the trap of expensive illness. Multiplied by increasing lifespan every one of us must consider the consequences of living without physical wellbeing in the final stages of life.

First, what might it mean to mount a vigorous campaign to reduce the burden of disease and liberate the potential of our communities – family, business, city, nation and species? Second, let's refresh on individual efforts to secure vibrant good health in older age.

### Concept: Morbidity Compression

Over the past decade we have promoted the concept of Morbidity Compression. It is a robust, powerful concept. Through evolution species learn how to build and maintain health. Successful individuals thrive and procreate. Less successful individuals are selected out. Over generations species adapt to their environment and become resilient. Humanity has changed the rules of nature and evolution. In short and crudely, many people now live with expensive illness for many years. This is the red line on the diagram.



Health risk begins with grandma's behaviour. Lack of exercise, poor nutrition, distress and substance abuse change the expression of genes in mum's eggs before she is born. This epigenetic change – switching on and off of our genes – continues and is compounded (or reversed) by the lifestyles we choose throughout our own lives.

The risk for diabetes, cardiovascular disease, depression and many others lies in wait, manifesting only in the second half of life. Today we have obesity, depression, asthma and diabetes striking our teenagers at accelerating rates.

Genes cannot change that fast. This is environmental pressure on genes (epigenetics) and lifestyle induced illness. Therefore it is preventable.

Our challenge is to nudge our family, environment and behaviours in the direction of optimised health. The content of these nudges is well established. Appropriate exercise, relaxation, sleep, nutrition and social connection dramatically shifts your wellbeing curve from red (preventable disease) to green. We get added years, but more importantly, quality years of life – about 15 extra years in wellbeing or optimised. Square your

function curve.

The individual benefits are huge. Less clear are the massive increases in productivity, reduced healthcare and welfare costs, vibrant community life, and enhanced resilience and happiness. Bill Gates invests in health.

## The Healthcare Challenge

As a yoga master said: “we are all important – but not very.” The health of our community is however a very serious and challenging threat to all of us. Healthcare spending

has increased from 1% to over 10% or more of GDP in developed countries. As more people want sophisticated care for chronic disease and developing countries face both acute and chronic disease, we simply cannot fund the demand. In addition chronic illness reduces productivity through presenteeism (at work but distracted), absenteeism, premature retirement and health/welfare bureaucracy.

The reinforcing downward spiral of poverty and illness deepens the challenge. The healthy and wealthy thrive (mostly) while the poor and ill suffer increasingly embedded health and productivity barriers. This is bad for all of us. The “system” is very resistant to change. Many make money causing, building, servicing and financing healthcare (7<sup>th</sup> largest economy in the world). A revolution is required.

## Leadership Courage

To start the revolution we require two acts of leadership courage: first, to honestly face up to the reality of death spiralling health systems; and second, to build a vision for integral wellbeing.

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It is clear to all that our current passive stance to self-abuse and self-neglect is unsustainable. It does not work. Commercial interests are heavily invested in nudging the spiral down. Consider the combined impact of unhealthy food, gambling, alcohol, tobacco and fashion. Less obvious is the massive sickness industry that profits from our anxiety, pain and disability.

All of this activity is counted as GDP but is actually a measure of wellbeing failure. Should increased depression rates or stroke costs be cause for a leadership challenge? Is a new hospital or prison really something to

celebrate? We still reward greed and turn a blind eye to the cost and future liability.

Leaders and community must confront reality; admit that it is not working, and tax life destroying activity skilfully. At some point we will have to challenge the limits of freedom. Freedom is taken as an entitlement. Perhaps it could be better applied as a reward and a responsibility?

The second act is to build a vision for integral wellbeing (Resilience) in our communities. It is a primary goal for family, neighbourhood, public authority, business and national governments.

The destination is clear: not just the absence of disease but the presence of physical, emotional, cognitive and social wellbeing. To progress we need a measuring system well beyond GDP. We must rigorously track measures of resilience and wellbeing from hospital admission data all the way to indices of happiness and life satisfaction. As individuals we can get started and there are many options available. Study will define those that work best.

As communities we will be able to openly study what is building our resilience and what is undermining it. The basics of action are clear and

well laid out. There are many ways to engage and get started. Again, research will pick the winners.

Finally, leaders' rewards depend on how their communities progress. Bonuses would require evidence that the community is flourishing. The aid provided by wealthy communities could be more appropriately targeted to resilience gains. We have the information to be firm on those whose self-interest penalises their community. We can and should take courageous action.

Imagine a day when your annual tax bill rewards your family wellbeing gains but penalises you on the crime rate in your street?

### The Basics are Secure

The science supporting good practice is clearly established and practiced in Resilience:

1. Exercise daily – aerobic, strength, balance, flexibility & speedwork
2. Relax & be calm – recognise distress and counter the sympathetic system
3. Sleep well – regular, early to bed, early to rise and reduce electronic pollution after dark
4. Eat well – plenty veggies & fruit, fish & nuts
5. Enjoy nature and sunshine – natural light where possible & maintain vitamin D
6. Cultivate positive emotions and thoughts
7. Do work that you love – find flow

Build daily routines that make this possible. Sharing, adventure, sport and nature can all help but **self-discipline and willpower is the key**. The earlier you start the better. Design your home, commuting, work, recreation and friendship around making this easy.

### Healthy ageing....Seriously

The fastest growing medical specialty is Healthy Ageing Medicine – partly driven by our fear of

death and partly by good science. As Sports Medicine optimises athlete performance, we can optimise the second half of life. While spoiled by narcissism, there is a core that is worth exploring. As baby boomers rip into gyms, yoga, adventure sports and competition, it is abundantly clear that skilful training and practice can massively enhance our experience of life post 45.

The fundamentals are clear: inactivity, poor nutrition and stress accelerates ageing – reducing muscle mass, cell function, brain volume and function. The seven nudges above are strongly advocated in Healthy Ageing. Within six weeks the reversal of decline is easily measured and enjoyed. After a decade benefits are dramatic.

In addition to the seven nudges, the following practices show promise. They are demanding:

1. Build & maintain muscle mass – resistance and explosive training
2. Build calm focus – meditation & willpower
3. Radically reduce sugar and refined carbohydrate. Eat 9 plus servings of veggie/day
4. Vigorously strengthen spine, abdominals, shoulders & gluteals. Walk & sit tall.
5. Learn & practice yoga or Pilates
6. Minimise alcohol (kills hormone levels)
7. Protect yourself from electromagnetic radiation particularly at night

While demanding, small intense investments have huge returns. There is a lot to learn. Get started.

### Push the limits: risk & reward

Inevitably, some prefer easy, passive solutions – a hangover of pharmaceutical intervention. Many heavily marketed and mostly dubious solutions await the unwary. Consider the following:

Supplements: consensus is they do more harm

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than good. Good food works. Fish oil shows promise along with vitamin D (I prefer sunshine).

Caloric restriction: extremely low calorie diets appear to slow ageing in most species. Fasting causes cells to clean up cellular space. Exercise does the same.

Hormones: ageing specialists believe that health and vitality decline as our hormones decline. If your hormone levels are below recommended levels for age, supplementation makes a difference. However, many believe we should strive for optimal levels and order a range of tests to help lift levels to the top of the age range.

This is a complex dilemma for which you must get specialist input. For now, our advice is to master stress; use exercise, sleep and meditation skilfully, reduce carbs and consider cutting alcohol.

Like cosmetic surgery, hormone replacement and some of the DNA-based concepts are wide open to abuse and inappropriate use. They will become common choices. Keep an open mind, inform yourself and consider long-term implications.

Clearly, we can enjoy active, productive and optimised lives after 45 and probably into our eighties. Start finding your way to optimise!

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## References

World Health Organisation

Resilience Diagnostic (2012),  
[www.resiliencei.com](http://www.resiliencei.com)

Seligman, M (2011) Flourish

Bowden, J (2010) Live Longer

Life, J (2011) The Life Plan