

**How I Improved My Health  
by Changing My Eating, Exercise,  
and Stress Management Habits:  
An Annotated Reading List**

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For All FiRe 2011 Participants:

One of the many high points of this year's FiRe was a presentation on Fixing Healthcare: The Quantized Self, by Larry Smarr. Immediately at the end of the conference, Larry offered to create a short form describing his sources and methods for those inspired to embark on this empowering vision of personal healthcare. The results are contained below.

I will note that we have also agreed that Larry will create a longer Special Issue format letter on this same subject, but we all wanted to get this initial information out to participants wanting to go forward without delay.

Below we introduce this material with a brief bio, and a note from Larry to me:

Larry Smarr is the founding director of the California Institute for Telecommunications and Information Technology (Calit2), a.k.a. the FiRe Lab. For ten years Calit2 at both its two campus locations, UC San Diego and UC Irvine, have developed research programs to “live in the future” of a digitally transformed health care system. UCSD has created the Center for Wireless and Population Health Systems (<http://cwphs.ucsd.edu>), while at UCI there are the LifeChips (<http://lifechips.inrf.uci.edu/>) and eHealth Collaboratory (<http://conta.cc/kHmvqY>) programs.

In addition, director Smarr has become a living experiment in transforming his own body (<http://bit.ly/jyZ3qs>). At FiRe 2011 Larry described (<http://bit.ly/l3w9XG>) how by changing his food intake and increasing exercise, he was able to lose 25 lbs, much of his body fat, double his strength, and triple his daily steps (for his results see <http://bit.ly/k17TNB>).

-Mark Anderson

Mark-I know that a lot of FiRe 2011 attendees wanted to know where they can read about how to improve their health by changing their eating, exercise, and stress management habits. During my ten year quest to understand and improve my body I read over 50 books. The ones that have stuck with me and describe the path I have followed are reviewed below. I also give links to the digital devices I have been wearing for many months and which give me the biofeedback I need to stay on course. I will be writing up a longer SNS Special Letter on my medical testing and the new digitally enabled genomic health care regime soon.

If I had to summarize the lessons I have learned over the last decade (which are elaborated in the books below), I would say to those who are overweight (as I was):

- Modify what you eat:
  - Cut out all added sugar, refined flour, soft drinks, and other simple carbs that spike your insulin-glucose cycle.
  - Reduce the amount you eat-a good goal is to reduce by 50%.
  - Drink lots of water during the day and green tea for anti-oxidants
  - Increase your intake of complex carbohydrates like vegetables and fruits (eat, dont drink, your fruits and "eat your colors")
  - Make your fats omega-3 rich (olive oil, good nuts, salmon) and limit your fat calories to 1/3 of your total caloric intake. Take pharmaceutical-grade fish oil capsules as a supplement.
  - Protein should be lean, mostly wild fish, and some grass fed meat if you are not a vegetarian. If you are, be sure to balance your amino acids in the vegetable protein.
  - Balance every meal with protein, fat, and carbohydrates
  - Ideally prepare your meals from locally grown, organic foods. Buy most of it at local farmer's market. Avoid processed foods, particularly if the labels are full of unpronounceable chemicals. Particularly avoid high fructose corn syrup.
- Increase your aerobic, weight bearing, and balance exercise to several times per week. Use as a goal 5-10,000 steps per day.
- Try to get at least 8 hours of sleep most nights and dont work before bed time.
- Find ways to reduce the stress in your life and insert more low-stress recreational activities throughout your week.

The books below are some of the most influential one's that set me on my course. They give much more detail on the rules above and explain why the rules line up with your body's basic biochemistry. The first ones are the most accessible, but all of them will provide practical rules for healthy living.

***The Program: The Brain-Smart Approach to the Healthiest You (2009)***

**by Kelly Traver and Betty Kelly Sargent**

[www.amazon.com/Program-Brain-Smart-Approach-Healthiest-Life-](http://www.amazon.com/Program-Brain-Smart-Approach-Healthiest-Life-Changing/dp/B0048ELEGS/ref=sr_1_1?ie=UTF8&s=books&qid=1306805975&sr=8-1)

[Changing/dp/B0048ELEGS/ref=sr\\_1\\_1?ie=UTF8&s=books&qid=1306805975&sr=8-1](http://www.amazon.com/Program-Brain-Smart-Approach-Healthiest-Life-Changing/dp/B0048ELEGS/ref=sr_1_1?ie=UTF8&s=books&qid=1306805975&sr=8-1)

Larry's comment: Kelly Traver, who serves on the Board of the Institute of the Future with me, distills her experience as a doctor into an easy-to-understand and follow 12 week program for

increasing your health. Her conclusions are similar to other books I review below: eat less, eat high quality real food, exercise regularly, get sufficient sleep, and manage stress. What makes her book different is the first section describing the results of the last few decades of brain research, which give us insights into how we can modify our behavior in a sustainable fashion. She then applies these neuroscience insights in her 12 week program. Note the focus is NOT on losing weight or dieting, but rather on becoming a healthier person. If you do that your body naturally adjusts itself to a weight, which is likely lower than your current weight, unless you are already following these suggestions. Kelly also describes how her Program, adopted by Stanford University and Google, can promote successful aging, while helping to prevent or reduce the impact of a wide range of chronic diseases. If you have been having problems following diet books, give this one a read (I read it on my Kindle while exercising on my elliptical)!

### ***In Defense of Food: An Eater's Manifesto***

**Michael Pollan**

[www.amazon.com/Defense-Food-Eaters-](http://www.amazon.com/Defense-Food-Eaters-Manifesto/dp/0143114964/ref=sr_1_3?s=books&ie=UTF8&qid=1306806245&sr=1-3)

[Manifesto/dp/0143114964/ref=sr\\_1\\_3?s=books&ie=UTF8&qid=1306806245&sr=1-3](http://Manifesto/dp/0143114964/ref=sr_1_3?s=books&ie=UTF8&qid=1306806245&sr=1-3)

Larry's comment: You should read everything Pollan writes, but this is a must read for deciding what to put in your mouth if you want to be healthy. His advice cant get any simpler: "Eat food. Not too much. Mostly plants." His analysis of how so much of today's prepared "food" is chemistry masquerading as food reveals one of the major reasons for the national obesity epidemic. Although I am not a vegetarian, I am a follower of what Thomas Jefferson once said: "I eat meat only as a condiment to the vegetables which constitute my principal diet" (and which he raised locally at Monticello).

### **Superhealth**

**by Steven Pratt, M.D.**

[www.amazon.com/SuperHealth-Simple-Steps-Longer-](http://www.amazon.com/SuperHealth-Simple-Steps-Longer-Healthier/dp/B003L1ZXIO/ref=sr_1_1?s=books&ie=UTF8&qid=1306807288&sr=1-1)

[Healthier/dp/B003L1ZXIO/ref=sr\\_1\\_1?s=books&ie=UTF8&qid=1306807288&sr=1-1](http://Healthier/dp/B003L1ZXIO/ref=sr_1_1?s=books&ie=UTF8&qid=1306807288&sr=1-1)

Larry's comment: A very practical follow-on to the must read SuperfoodsRx with doable exercises, food rules, stress reduction suggestions, and supplement guide. By reading and adopting into your life the information in these two books, you will become much healthier and likely avoid early onset of a wide range of chronic diseases which he discusses.

### ***The Anti-Aging Zone***

**by Barry Sears**

[www.amazon.com/Anti-Aging-Zone-Barry-](http://www.amazon.com/Anti-Aging-Zone-Barry-Sears/dp/0060392436/ref=sr_1_13?ie=UTF8&qid=1306805603&sr=8-13)

[Sears/dp/0060392436/ref=sr\\_1\\_13?ie=UTF8&qid=1306805603&sr=8-13](http://Sears/dp/0060392436/ref=sr_1_13?ie=UTF8&qid=1306805603&sr=8-13)

Larry's comment: This is Sears's, a Ph.D. biochemist, most detailed book on the body's biochemistry and how the food you eat can either make you healthy or chronically ill. I continue to go back to this book to brush up on our body's biochemical cycles behind nutrition, inflammation, hormones, and stress management. After reading 30 or 40 "diet books" in the early 2000s, I settled on the Zone (similar to South Beach) because it was based on giving your

body what it's basic biochemical pathways need in order to function well. A valuable companion paperback to keep in your kitchen is Sear's *The Top 100 Zone Foods*.

### **Fantastic Voyage: Live Long Enough to Live Forever**

**by Ray Kurzweil and Terry Grossman**

[www.amazon.com/Fantastic-Voyage-Live-Enough-](http://www.amazon.com/Fantastic-Voyage-Live-Enough-Forever/dp/B000HT2OXA/ref=sr_1_5?s=books&ie=UTF8&qid=1306806734&sr=1-5)

[Forever/dp/B000HT2OXA/ref=sr\\_1\\_5?s=books&ie=UTF8&qid=1306806734&sr=1-5](http://www.amazon.com/Fantastic-Voyage-Live-Enough-Forever/dp/B000HT2OXA/ref=sr_1_5?s=books&ie=UTF8&qid=1306806734&sr=1-5)

Larry's comment: I know both Ray and Terry and respect them immensely. Think of this book as a graduate text book compared to the one's above. Whether you buy into Ray's contention that many of us alive today will live forever, note that there are currently 14 million people living in the UK who will live to be over 100. That may not be forever, but it means we want to age in a healthy manner. I don't take 200 pills/day as Ray does, but I have learned a lot from him about the value of certain supplements.

### **Health monitoring devices:**

**Weight:** The most important monitoring device is an accurate weight scale that you stand on naked every morning (or at least once a week) and then record your weight. By tracking your weight over time you can see if your personalized program is working (assuming you are overweight) or you are staying on course (if you are already at a good weight).

**Caloric burn:** I use the BodyMedia arm band ([www.bodymedia.com](http://www.bodymedia.com)) for detailed recording of my steps, physical activity, caloric burn, and sleep efficiency. However, 90% of the goodness can be had by getting an accurate pedometer like the Omron digital pedometer ([www.amazon.com/000-Steps-Your-Optimal-Weight/dp/1566252873/ref=sr\\_1\\_1?ie=UTF8&s=books&qid=1306808355&sr=1-1](http://www.amazon.com/000-Steps-Your-Optimal-Weight/dp/1566252873/ref=sr_1_1?ie=UTF8&s=books&qid=1306808355&sr=1-1)). They key is get your daily steps up towards 10,000, which is roughly 5 miles. It is amazing what just walking can do for your health!

**Sleep:** The fact that most people have no idea of what goes on while they are asleep (roughly 1/3 of your life!) is puzzling. Fortunately, consumer devices like the Zeo ([www.myzeo.com](http://www.myzeo.com)) can teach you a great deal about your current sleep pattern and how to improve it. Possibly the one thing we can all do that would most improve our long term health (other than giving up sugar) is to sleep longer and more effectively. The Zeo will teach you a lot about yourself you never knew...

**Stress Reduction:** This is probably the most challenging of the four key areas (nutrition, exercise, sleep, stress management) that are critical to a healthy lifestyle. Of course, meditation, yoga, and other eastern arts are very helpful. I am just beginning to use a new software program for the PC called "EM Wave Desktop PC" by Heartmath ([www.heartmathstore.com](http://www.heartmathstore.com)). This program graphs your heart rate variation and by biofeedback teaches you how to relax. Our body has two nervous systems, the sympathetic and parasympathetic which balance each other. But over achievers tend to train themselves to only use the sympathetic side and this results in a buildup of deadly stress. This software lets you learn how to rebalance yourself. Try it out!