

## **Chapter Nine**

### Let's Cut Costs By Improving Health

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## Let's Cut Costs by Improving Health

We would spend a lot less money of health care in this country if people were healthier. That is pure common sense. The cost of care is created by the need for care. If we didn't need care, we wouldn't need to spend our money getting and using care.

Those are very basic points to consider. They are simple truths that we too often overlook as we focus on how to make care better and more affordable.

When we think very deeply and seriously about how we could truly reduce the total costs of care in this country, sheer logic and basic arithmetic both tell us that we could reduce those care costs if we needed less care.

Is that possible to do? Is there anything we can actually do that has any significant likelihood of success in reducing our need for care?

The answer to that question -- to most people's surprise -- is yes.

When you look at the goal of cutting health care costs in this country from that specific perspective...when you look to see if and how we can actually reduce those costs by significantly improving people's health -- and when you then look in very practical ways for the functional approaches and achievable and actionable things we can do that will actually work in the real world to significantly improve people's health status -- yes is actually the answer to that question.

Why is yes the answer? Behaviors are the key to yes.

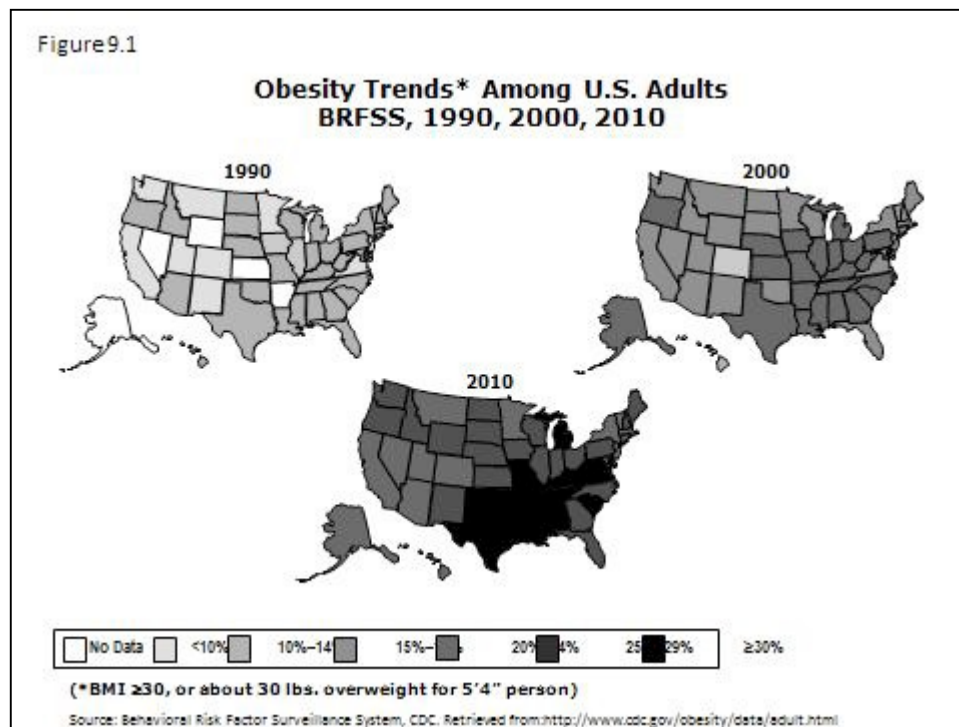
We know for an absolute fact that our behaviors create and trigger the chronic conditions that drive 75 percent of care costs in our country.<sup>301</sup> We also know for a fact that the two basic behaviors that trigger almost all of the chronic diseases are identical for all of those diseases that create all of those expenses. The two behaviors that trigger diabetes, heart disease, asthma, hypertension, and significantly increase the risk levels for a couple of key cancers are 1) unhealthy eating, 2) Inactivity.<sup>302</sup>

Those two very basic behaviors create, drive and exacerbate almost all of the chronic health problems that create more than 75 percent of health care cost in America.

## Two Behaviors Are the Key to Population Health

These two behaviors are the keys to population health. They are transformational. If we could somehow persuade people to practice healthy eating and if we could just get people to be physically active, we could cut the rate of those chronic conditions by half or more. That would have a massive and very real impact on the costs of care.

The problem is, of course, that behavior change can be very hard. Healthy eating has almost magical impacts on health -- but it has been very hard to get people to eat well and to eat at levels that do not trigger obesity. Obesity is an epidemic of its own at this point. The next chart shows the explosion of obesity in this country over the last two decades.



The obesity story is a sad and frustrating history of behavior change failure. We have been trying as a country to make obesity a higher visibility issue and encourage healthy eating. There are some good and well-meaning programs that are attempting to achieve those goals. Those programs have been almost entirely ineffective. We have made some progress in some areas, but we are losing the overall weight war

primarily because food intake triggers neurochemical rewards in people that make most weight control programs ineffective.

Does that mean that the situation is helpless?

No, not at all. We need to regroup, reassess and refocus our efforts. We need to shift our focus as a primary public health intervention from obesity to activity. Activity is the key. Improving activity levels actually can have a positive impact on health that exceeds the benefits of reducing obesity. People have not known that to be true until relatively lately. We know that we are dangerously inactive in this country. The number of dangerously inactive people exceeds the number of people who are obese.<sup>303</sup> The Lancet medical journal called inactivity levels the number one health risk for humans today.<sup>304</sup> They made their point convincingly, clearly, and well. The risk levels for inactive people exceeds the risk levels for obese people<sup>305</sup> -- and unhealthy eating and inactivity lead to a similar set of chronic conditions.<sup>306</sup> We can have a major impact on reducing each of those diseases if we can just get people to be physically active.

So if it is extremely difficult to successfully address obesity, is there any hope that we might deal successfully with inactivity?

The answer is, yes.

The key strategy is to get people to walk.

### [Walking Is a Therapeutic Activity](#)

Walking is a therapeutic activity.

Walking works amazingly well to restore, maintain and improve health.

Most people do not appreciate the incredible value of walking.

The human body is made to walk and the human body is much healthier when we walk.

The good news is, we now know from a rich array of new science that walking is the single most effective behavior that can be used by human beings to improve individual and collective health. The new science is robust and clear. The opportunities for using walking to improve health are becoming increasingly obvious to everyone who looks

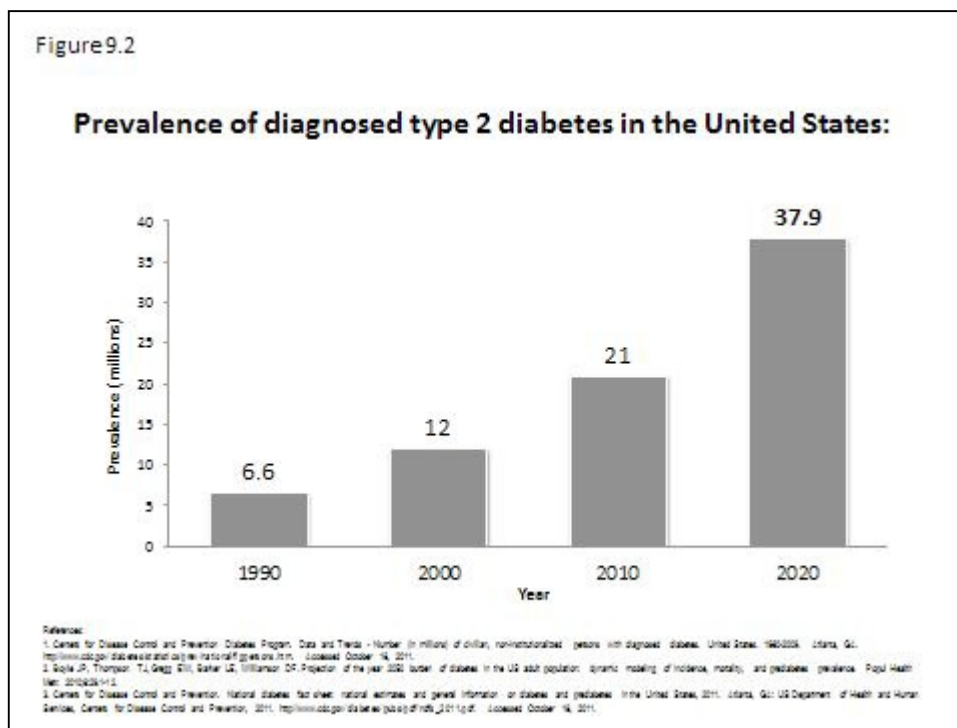
at population health issues. We are finally coming to understand that the human body really does need to walk to be healthy. Walking, alone, has huge benefits. People who walk are literally half as likely to become diabetic.<sup>307</sup> Walkers are also much less likely to have strokes or heart disease<sup>308</sup> -- and people who walk even have significantly lower levels of cancer.<sup>309</sup>

Walking is a high leverage, achievable, and very practical activity. Walking doesn't need to be just one component of a long-term, complex multilevel solution to health improvement. Walking works well all by itself. Walking can have almost immediate impact for most people. The new science of walking is almost unbelievable. Look at the statistics and the growing body of incredibly powerful research results. The appendix of this book lists several of studies. Our bodies clearly need to walk to be healthy.

### **Cutting the Number of New Diabetes by Half Is Possible**

When people walk just 30 minutes a day, five or more days per week, the number of new diabetics can be reduced by more than half.<sup>310</sup> Reducing the number of new diabetics by half is obviously a massive opportunity for both health improvement and cost reduction.

People with diabetes currently consume over 40 percent of the cost of care for Medicare.<sup>311</sup> Diabetes is the fastest growing disease for Americans.<sup>312</sup> Look at the next chart.



We are seeing an explosion in the number of people with diabetes in this country.

Cutting the number of new diabetics by half could be the single most powerful thing that could be done to cut Medicare costs for our government. That is not unachievable. That goal of reducing the number of new diabetes by half could be reached simply by increasing the activity level of our Medicare beneficiaries and getting seniors to walk. It would be a very good thing to have fewer people with diabetes in our population. Walking, all by itself massively reduces the number of people who become diabetic. We need people who are pre-diabetic to know that fact of medical reality.

If our caregivers, our communities, and our leadership in various settings all successfully encouraged walking for seniors, the impact on population health and on the health of the seniors who walk could be almost immediate and very effective.

### Walking Reduces Multiple Diseases -- Significantly

That's the good news. The even better news is that diabetes isn't the only chronic disease that can be impacted significantly and very quickly by walking.

Walking 30 minutes a day, five days a week also cuts the number of strokes and heart attacks by nearly 40 percent.<sup>313</sup> Hypertension levels improve for walkers.<sup>314</sup> Walking actually has a huge impact on the frequency and risk levels for multiple diseases. Walking cuts the rate of congestive heart failure by over 30 percent.<sup>315</sup> Walking lowers blood pressure, makes the blood vessels more supple, and helps lower cholesterol levels.<sup>316</sup> Walkers are significantly less likely to catch colds and walking reduces the recovery time for the people who do get colds by over 30 percent.<sup>317</sup>

Walking helps the body resist cancer. People who walk 30 minutes a day, five days a week, are 30 percent or more less likely to get colon cancer, prostate cancer, pancreatic cancer and breast cancer.<sup>318</sup>

Walking helps the body resist diseases and walking has an amazingly beneficial impact on helping people recover from diseases.

Breast cancer patients who walk regularly while under medical treatment actually have nearly a 60 percent lower mortality rate from that cancer compared to non-walking breast cancer patients.<sup>319</sup>

One amazing study looked at the brain deterioration of a group of patients who's DNA showed them to be at high risk of Alzheimer's disease. The high risk people who were inactive had high levels of brain plaque buildup over the course of the study. By contrast, there was absolutely no additional buildup in the brains of the high risk for Alzheimer's patients who walked. Zero buildup in the brains of the walkers.<sup>320</sup>

### The Science of Walking Is Highly Encouraging

All of these data points about the benefits of walking come from legitimate, controlled medical trials where the walkers and the non-walkers are appropriately matched for various other factors. Many studies

are being done. The studies are all coming up with very similar conclusions. The science of walking is becoming increasingly clear. Walking works. The human body clearly needs to walk and our bodies benefit significantly when walking is part of our lives.

Many of the studies that prove those points to be true are listed in the endnotes to this book. Physicians and medical researchers in multiple settings are beginning to understand the huge positive impact of walking. And the very real dangers of not walking. Those same researchers are also beginning to understand the frightening and debilitating health risks that result from being inactive and not walking at all. As noted above, The Lancet medical journal in Great Britain just did an eighty-page special report that called inactivity the biggest single health risk on the planet for humans today. A recent American study showed that being inactive cuts years off our lives.<sup>321</sup> The Lancet studies shared that conclusion and extended it to multiple countries.

### **Walking Has Physiological Benefits As Well**

Walking doesn't just improve physical health -- preventing diseases and helping people recover more quickly and more successfully from their diseases. Walking also has both psychological and emotional benefits. People who walk tend to experience significant mental health improvements as well.

The mental health benefits are even easier to understand than the physical disease-related benefits.

Walking usually creates positive neurochemicals in the brains of people who walk. Medical experts have known for decades that positive neurochemicals enhance people's emotional health. Walking generates those positive neurochemicals. Several studies have shown that walking can help prevent and alleviate and even help cure depression for some people.<sup>322</sup> People who walk regularly tend to feel good about walking. Positive neurochemicals are a very natural and effective way of dealing with stress, tension, and depression. In effect, walking is a powerful antidepressant and anti-anxiety medication. Walking 30 minutes a day,



five days a week actually outperformed the standard pharmaceutical treatments used for depression in several studies.

In addition, depressed people who took their medication and who also walked that same 30 minutes a day significantly increased the effectiveness of their antidepressant medications.<sup>323</sup> Walking has reversed depression in some people.

### **Walking Sometimes Reverses Early Stages of Diabetes As Well**

Walking has not only reversed depression in some people, but it has also been able to actually reverse early-stage diabetes in a number of patients.<sup>324</sup> That is another extremely important piece of information. Walking can not only help prevent diabetes -- it can also be used to help some people who have become diabetic actually reverse the disease and improve their health to the point where those people are no longer diabetic. That was startling information. Many people have believed that type two diabetes is irreversible. That turned out not to be true for some people with early diabetes when they walk a significant amount of time. Reversing diabetes for these patients is a huge win for them and that finding is another great enforcement for the benefits of walking.

### **The Impact of Walking Can Be Remarkably Quick**

The beneficial results are also, often, remarkably quick.

One of the most commonly held beliefs in health care policy circles about various traditional health improvement strategies and programs has been that it always takes a very long time to see any positive economic impact and any beneficial biological returns from healthy behaviors. People in policy circles who have been focused on costs tend to avoid even looking at health improvement strategies as a possible tool for real-world, short-term cost reductions on the theory that the health improvement agendas all will take years or even decades to achieve any significant positive results.

That is, in fact, true of many traditional health improvement agendas. It is, however, absolutely not true of walking. Walking doesn't

just create a set of long-term paybacks of good health over some extended period in time. In many cases, the benefits of walking are realized very quickly.

Depression results are also often fairly immediate. The benefits of walking can be realized in days and weeks. Reversing or improving diabetes, for example, can be an almost immediate payback from walking...both, changing the need for care and reducing the cost of care very quickly.

Positive results for patients with depression often happen in less than a month. Walking reverses some chronic diseases and prevents others and the impact of walking on significant and expensive conditions can often be seen in weeks or months -- not decades.

### [Walking Gives Us a New Way of Thinking About Costs](#)

The practical benefits we can derive from walking are so significant and so immediate that they sometimes seem to be almost unbelievable. That set of information about how our bodies need to walk gives us a whole new way of thinking about the explosion in chronic diseases and their escalating costs.

We need to get people to walk. We need to figure out how to make walking an easy thing to do.

### [Why Hasn't Walking Been a Top Population Health Prevention Strategy?](#)

So why haven't we used this strategy earlier? We were not this smart about the full impact of walking even a relatively short time ago. We actually did not know until relatively recently how many benefits can result from walking. The new data and the expanding science relative to walking is actually a relatively new set of information and therapeutic insights. Those new studies and their findings were not part of the thinking for most traditional health improvement agendas. The lack of walking strategies in the population health planning process in past years makes sense today because the science of medicine is just now beginning

to understand the multiple benefits that can result from walking. Again – the good news is that we do know this information now. Those benefits of walking are increasingly clear. Our bodies obviously -- on average -- function better in many ways when we walk. The human body clearly needs to walk to be healthy. The physiology of the human species clearly needs walking to happen to optimize blood flow, optimize resistance to disease and to balance and refresh internal chemistry. So it is a very good thing that we are finally beginning to understand that very useful fact to be true because once we understand those issues, we can start to do important things that help encourage, facilitate and enable walking in multiple sites and settings. Doing important things now should be our focus today.

### **Walking Doesn't Require a Lot of Special Equipment or Very Much Time**

Walking strategy work can be relatively easy to do.

One of the very best things about walking, itself, is that it is relatively easy to do. Walking doesn't require a lot of special equipment or specially engineered physical settings. Walking can happen almost everywhere. Walking can happen in multiple contexts and walking can be done in a vast array of physical environments. The only equipment needed for most people to walk is walkable shoes. Because it can be done in many places with a minimum amount of equipment, we can be relatively efficient in creating strategies that can be used in almost every setting where we live, work, or congregate. We don't need to build swimming pools or ski slopes to support walking.

### **Walking Benefits Do Not Take a Lot of Time**

The other huge impact factor that we need to know to build our future walking support strategies is that walking also does not need to take a lot of time.

One of the very best things that we are learning about walking is that it doesn't take each of us a lot of walking time each day to realize

high level of benefits. It does take some time -- but it actually doesn't take a lot of time. We don't need to walk for hours every day to benefit from walking. We don't even need to walk for a full hour. Walking 30 minutes a day five to seven days a week is generally enough walking to trigger major health benefits. Longer walking times are beneficial, but extremely high levels of benefits are triggered by those 30 minutes.

Half an hour is real time but 30 minutes isn't a really long time. And, new studies are showing, less than 30 minutes is a lot better for our heart than being totally inactive.<sup>325</sup> Even a relatively small level of motion is beneficial. The new science also tells us that the difference between being fully inert and moving around throughout the course of the day has huge health consequences all by itself. New science tells us that being inert and motionless creates major health risks for each inert person. So any activity is good -- and just walking -- for only half an hour a day -- seems to be enough time to get the body mechanisms that are triggered by walking into positive gear and beneficial functionally for most people.

### [The 30 Minutes Can Be Done in Two Fifteen-Minute Increments](#)

There is even better news about the timeframes.

The 30 minutes a day doesn't even have to be done in one uninterrupted 30 minute stretch. That is -- once again -- wonderful news. We don't need to find a full 30 minutes of uninterrupted walking time each day. The health advantages of walking also seem to exist if the walking is done in two fifteen-minute increments.<sup>326</sup> Some recent indications are that walking twenty minutes at a time might actually be a very high value -- almost optimal -- walking time.<sup>327</sup> It is possible that two twenty-minute walks each day could give most people the best health results and that walking agenda of two twenty-minute walks might have the best impact on our mental health as well. Two fifteen-minute walks seem to be enough to trigger that whole array of benefits mentioned above.

That ability to break the 30 minutes into pieces is another piece of very important information. Why? Because for many busy people, it can be relatively hard to find an uninterrupted 30-minute time slot that can

be used for walking every single day. It can be a lot easier for busy people to find two 15- or two 20-minute walking times at different points in the day.

Fifteen minutes of walking time for an individual can happen going to and from work or going to and from school. Fifteen minutes can even be scheduled and achieved during coffee breaks or during lunch times. Fifteen-minute intervals can happen often and very naturally at different points in our day. That flexibility relative to the timeframes creates a lovely world of walking opportunities for both individuals and for community leaders who want to support walking to improve health. Devoting a couple of basic 15-minute intervals to walking each day can have a major positive impact on our health and on our sense of well-being, and those 15-minute time slots can be logistically very achievable.

### [Walking Can Reduce the Role of Chronic Disease](#)

So, at the macro level, walking takes minimal equipment. It can be conveniently scheduled. And it can have a huge impact on both individual and population health.

All of those facts tell that walking should be a key part of our overall cost reduction strategy for this country. That is true because walking reduces the rate of the chronic conditions that create most health care costs.

Remember what this book has said several times about the origin of care costs.

Chronic conditions currently create 75 percent of the cost of care in this country.<sup>328</sup> Cancer creates roughly another 9 percent of our total care costs.<sup>329</sup> Walking alleviates the incidence of all major chronic diseases and walking even reduces the incidence of several cancers. Preventions and cures are both relevant to walking strategies. Walking can help cure a variety of chronic diseases, and walking can help improve the survival rates for a couple of cancers.<sup>330</sup> Reductions in the need for care obviously reduces the cost of care. Cutting the cost of several of our most expensive diseases by 10 percent or more could be absolutely

achievable for the entire country if we could get a number of people to walk a reasonable amount of time on a regular basis.

### **Walking Could Reduce the Total Cost of Care**

That is a very important point for us to understand and utilize.

If we could get large percentages of the American people to walk a reasonable amount of time, we could have a massive impact on both the incidence of care and the cost of care. People would be healthier, happier, and more productive. It seems too good to be true, but we could all spend less money on health care and we could improve people's lives if we could just get more people to walk.

We clearly need to encourage basic activity levels for Americans.

Unfortunately, we are not doing that very well now. We tend to be a culture of inactivity, and we have engineered physical activity out of our lives and our children's lives. Our school children have never been so inactive. The number of adults in our country who have dangerous levels of inactivity now exceeds 60 percent.<sup>331</sup>

Obesity -- the other major health risk -- only affects 30 percent of America.<sup>332</sup> The next section of this chapter deals with the issues of obesity. As noted above, unhealthy eating and obesity are both real problems. Obesity also needs to be addressed as a key health issue for our country.

### **We Need To Help People Be More Active**

So how can we help people make walking part of their life?

This is a time for creative thinking. Now that we understand the amazing benefits of walking, we need to think creatively in multiple settings about how we can get people to walk.

Workplaces and communities and schools all offer significant opportunities to us.

We obviously need walking friendly work environments. We need walking friendly communities. We need walking friendly schools and we need walking friendly routes to schools. Multiple studies have shown that

school children who walk to school get better grades and are less restless in the classroom than non-walking kids.<sup>333</sup>

### **We Need People To Understand the Benefits of Walking**

It is clear that if we are going to do something meaningful to improve the health of our population, we should build a formal, well thought through national agenda, strategy and program around walking. Education and learning is a key first step. We need to teach everyone the basic benefits of walking. All Americans should understand this very basic set of issues. When people individually come to understand the major and very real benefits of walking, people are much more likely to walk. So we need teaching and learning to be a key point of the American strategy. We need to teach everyone in this country the benefits and values of walking -- and we need to make walking easy to do...because when people are ready to walk, we need to make it possible to walk.

Teaching is a key first step. We need our leaders in this country and in every community to teach all of the rest of us the benefits of walking. Culture change is led by leaders and our leaders need to actually lead on this incredibly important issue. We need to explain to all Americans why walking is the right thing to do and we need to explain to everyone the likelihood of a real personal gain for most walkers. The science that proves that gain to be true for people individually and for population health grows every day. That study that was mentioned earlier about Alzheimer's patients needs to be known by a lot of people. The study of high risk Alzheimer's patients showed that when the high risk people were entirely inert, the rate of plaque buildup in the brain was twice as high as the buildup in the brain of high risk people who had normal activity levels. But when those same high risk people simply increased their activity levels and when those high risk patients walked 30 minutes a day, the level of additional buildup in their brains stopped entirely.<sup>334</sup>

That is an amazing result. That is amazing science. That really tells us that simple walking gives us benefits both for our physical health and our mental health. We need to help all Americans understand the impact of all of those studies that prove the clear benefit of walking to us all.

People need to know the science, so that people can make better informed decisions about their own lives.

### Smoking and Obesity Are Also Problems and Opportunities

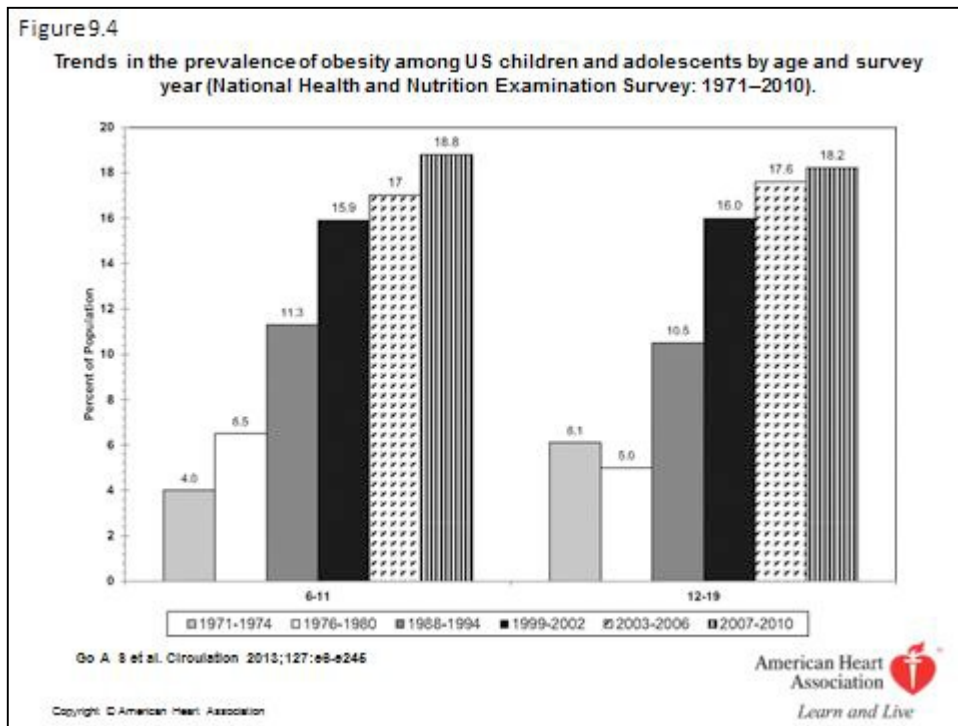
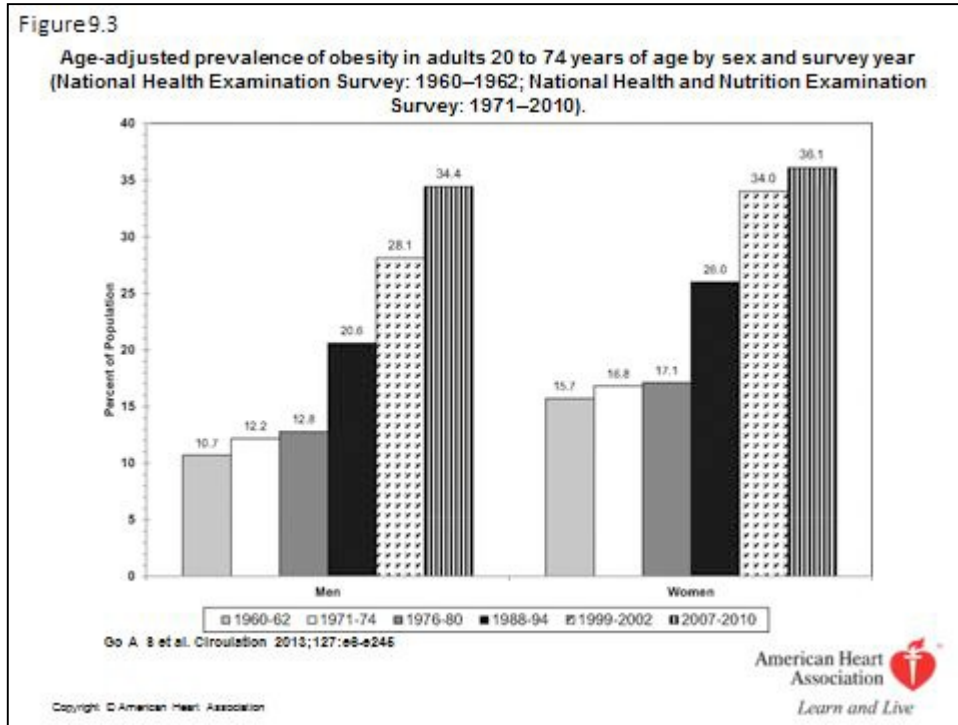
We need to also address both smoking and obesity if we are going to have an optimal impact on people's health. Smoking does more direct damage than any other behavior. We need to make smoking hard to do. We need to encourage people not to smoke and we need to make smoking inconvenient to do.

Smoking campaigns need to be run and supported. This book doesn't need to reinforce that agenda because it exists today and it is the right thing to do. Smoking is a major behavior problem and we need to help people not smoke.

We also need to deal very directly and effectively with the issues of obesity. Obesity is very much a major health problem for our country. Obesity also creates another major health opportunity. We have an explosion of obesity in our country. We can and should also reduce the rate of obesity in this country. The numbers are staggering. Over a third of our population is now obese.<sup>335</sup> The chart below shows another view of the increase in obesity in this country. As most people know, obesity is also connected to heart disease, diabetes, increased rates of cancers and a wide array of chronic conditions.



**Don't Let Health Care Bankrupt America: Strategies for Financial Survival**



We need to help people be active and we very much need to help people deal with the issues of obesity. Most people who write about the impact of behaviors on chronic diseases lead with obesity as the focus of

their work and mention activity levels lightly or not at all. Some health care pieces about behaviors and chronic disease actually mention activity levels for people only as a factor that can help some people fight obesity. This book takes the exact opposite approach. This book focuses on activity levels first because of the new science about the health improvement opportunities that are presented by activity and about the massive health risks that are created by inactivity. We need to do better with both obesity and inactivity -- and the easiest and highest leverage strategies relative to inactivity.

### **Walking Is a Tool That Can Transform Community Health**

Walking is a major focus of this book because walking is a clear tool that can transform community health. That absolutely does not mean we should ignore obesity. Obesity is a huge health risk and obesity needs to be addressed as well. A number of studies have shown that when people start walking regularly, weight loss often follows. Appetites change. People who are not as depressed also often eat less.

We need to take practical steps and achieve education programs to help prevent and reduce obesity as well as increase activity if we are going to achieve better levels of population health.

So what can we do to help people who are now obese?

And what can we do to keep people from becoming obese?

Obesity -- like inactivity -- results from individual choices that people make about personal behaviors. Obesity is also very much behavior-linked. We need to help people understand and use behaviors, approaches, and strategies that prevent and help reduce obesity.

### **Make the Right Thing Easy To Do**

Healthier eating is an important first step.

We definitely need to help obese and overweight people with healthier eating. When people eat healthier foods and avoid unhealthy foods, the problems stemming from obesity are much easier to resolve. So we need to help people eat healthy food. We need to figure out how to

do that in practical ways. We need to make the right thing easy to do by making healthy food cheaper and easier to obtain than unhealthy food.

If we want to think in terms of process improvement and not just think in terms of lecturing people about obesity or scolding people about being overweight, we need to take practical steps to make healthy eating easier to do for people who need to practice healthy eating. The very best care and health-improvement strategies are often those strategies that figure out the right thing and then make the right thing easy to do.

### [Make the Right Thing Easy To Do for Obesity](#)

So how can we do that for obesity? We need to start with the food supply. We need to make healthier food available more broadly. We know what unhealthy foods are. It isn't a secret. We should avoid those foods. We need to cut way back on consuming saturated fats, for example. We clearly need to entirely eliminate trans fats from our diets. Fat intake can be a kind of dietary poison. Fat intake clogs arteries and increases heart attack risk. Overweight and normal weight people both need convenient access to healthier, lower fat foods.

We also need to reduce our sugar intake. Multiple studies show that weight and health can be improved when people reduce their intake of sugar.<sup>336</sup> We very much need vegetables, we need foods with natural sugars, and we need lean proteins to be easily available.

Tofu and other protein substitutes can be worked creatively into diets. We need to teach people how to integrate those foods into their diets to improve health. Most people do not know how to add tofu to a diet other than by going to an Asian restaurant and ordering their tofu curry. That strategy isn't useful for home cooking. We need to educate people about the value and benefits of healthy eating -- and then we need to facilitate access to healthier food in our workplaces, schools, and communities.

Clearly, we need to teach, preach, enable, and support healthy eating. We need to create access to healthier foods and we need to help people with the volume of food intake. High volumes of food intake obviously help make people overweight and obese. We need people to eat

less. We need people to eat less sugar and to avoid saturated fat entirely. That will only happen if people believe that there is a value to be achieved by eating less that will exceed the downsides that people often experience when trying to eat lower volume of food.

### [Dieting Can Trigger Negative Neurochemicals](#)

One major challenge that we obviously face for our healthy eating strategies is that dieting and food intake reduction can both trigger negative neurochemicals in many people's brains. Stress levels and stress chemicals can be triggered in people's brains by various diets and by food intake reductions.<sup>337</sup> It's hard to maintain any level of weight loss as a personal agenda or as a set of consistent behavior choices for an individual when the process of reducing food volume intake increases stress and generates negative neurochemicals in people's brains.

By contrast, activity levels generate positive neurochemicals in most people's brains. That negative neurological impact that can result from reducing food intake and the positive impact and neurochemicals that can result from activity levels is one of the key reasons why increasing activity levels and improving activity agendas to get people walking regularly and often has a higher likelihood of success for actually improving both population health and individual health compared to health improvement strategies that are built around reducing people's eating levels. That is an important biological difference. Walking creates positive neurochemicals. Dieting can create negative neurochemicals. To enhance the likelihood of success for any behavior change strategies, it is better and easier when our neurochemicals support our strategy. It is obviously harder to follow a plan when our neurochemicals actually resist our strategy. Walking and dieting have very different neurochemical impacts. Walking generates positive neurochemicals much of the time. Some people even become somewhat addicted to walking. Almost no one becomes addicted to diets or to food deprivation and the few people who do have that addiction to food deprivation often have other significant difficulties.

So when we look at the agendas available to us for reducing obesity and compare them to the agendas involved in reducing inactivity, the solution set that has the highest likelihood of working well in the real world to improve population health in the immediate future involves increasing activity levels -- specifically walking.

That's why the opening pages of this chapter on health improvement were focused on walking and not on obesity. That probably surprised some readers. Obesity usually gets a lot more attention than inactivity in health-related publications. Most people understand the risks of obesity. Relatively few people appreciate the risks of inactivity.

### [Fit Beats Fat for Many People](#)

Interestingly, when you look at the relative risks to an individual that result from inactivity versus obesity -- fit actually beats fat as a risk reduction focus for most people. Being inert is very high risk.

If you have to choose between being thin and being active, thin loses to active as a risk reduction strategy. Thin people who are inert are often at a higher health-risk level than overweight people who are active. Overweight people who walk -- who choose to be active -- have risk levels equal to or better than inactive people who are much thinner.<sup>338</sup>

So another very important point to keep in mind as we set up our highest priority agendas for better health for our work places, our communities and our schools is that being inert is a higher health risk than being obese for most people. The risk is higher for inactivity and the frequency of inactivity is greater. We actually have roughly twice as many inactive people as we have obese people in this country.<sup>339</sup> That information actually gives us a huge opportunity to add value to a lot of lives. Look at the real numbers earlier in this chapter. About 30 percent of Americans are measurably obese.<sup>340</sup> About 60 percent of Americans are inactive.<sup>341</sup> So we need to make some serious decisions about our health improvement agendas going forward. We need to work on both obesity and inactivity. Healthier eating and active living create a very good overall strategy. In each area, it makes sense to focus our energy on

the behaviors of highest risk and on the highest likelihood of putting strategies in place that actually work.

### Diabetes Is a Disease of Urbanization

We Americans are not alone in facing this set of behavior-related health issues. The whole world is facing similar problems relative to behaviors and chronic disease. The rate of diabetes is growing across the planet. Diabetes is now common in countries where it was once rare. Why is that happening? Why is diabetes becoming common in countries that used to have almost no diabetics? There is no germ that carries diabetes as a disease across national boundaries. So why are we seeing a worldwide epidemic of diabetes?

Cities are the problem.

Diabetes is a disease of urbanization. We are urbanizing in country after country. We have more megacities on the planet today than at any time in the history of the world. The chart below shows to top ten cities 30 years ago by size and the top ten cities today. We humans are massively urbanizing. Why does urbanization trigger diabetes? Look at how people live in cities. Urbanization triggers some significant behavior changes. When people in many countries used to live in the countryside (instead of in the new megacities), people in those countries walked extensively. They also ate a lot of fruits and very local agricultural products. There was almost no diabetes in those rural communities and there were relatively lower levels of diabetes in those countries.

Figure 9.3

### Top World Cities By Population

1950			2012		
Rank	Country	Population	Rank	Country	Population
1	New York, United States	12,463,000	1	Tokyo-Yokohama, Japan	37,126,000
2	London, United Kingdom	8,860,000	2	Jakarta, Indonesia	26,063,000
3	Tokyo, Japan	7,000,000	3	Seoul-Incheon, South Korea	22,547,000
4	Paris, France	5,900,000	4	Delhi, DL-HR-UP, India	22,242,000
5	Shanghai, China	5,406,000	5	Manila, Philippines	21,951,000
6	Moscow, Russia	5,100,000	6	Shanghai, SHG, China	20,860,000
7	Buenos Aires, Argentina	5,000,000	7	New York, NY-NJ-CT, United States	20,464,000
8	Chicago, United States	4,906,000	8	Sao Paulo, Brazil	20,186,000
9	Ruhr, Germany	4,900,000	9	Mexico City, Mexico	19,463,000
10	Kolkata, India	4,800,000	10	Cairo, Egypt	17,816,000

Source: Four Thousand Years of Urban Growth: An Historical Census by Tertius Chandler. 1987, St. David's University Press. 2012: <http://www.dcomgrashtia.com/d3-world/uk.pdf>

So why is urbanization a cause of diabetes?

When people move to those large cities, many end up in inadequate housing situations, in slums and various settlement areas. In those settings they tend to walk very little. Entire days can be almost motionless for a jobless person living in a slum. Many people who live in the new, large urban slums stay very close to their hut or shelter. Their food and the food eaten by other people in those countries has switched from locally grown foods to eating mass-produced imported foods. Those newly urbanized countries now import cheap food in large quantities. The new diets of the people in those megacities are now dangerously white. Their food base tends to be white sugar, white grain, and white rice. White food in those three categories of food can create a level of nutritional poison. Diabetes is the common result from the intake of eating only those processed white foods...and eating them in large quantities...and then being inactive to the point of being almost inert.

There are now large numbers of people who are diabetic in each of those countries. The urban dwellers in those countries face the double blow of bad and unhealthy food and inactivity. The people who live in

those new urban settings are increasingly obese and in some settings they are literally almost entirely inert.

So what can be done about that problem in those countries? Now that we know what the problem is and also now that we know what can be done to mitigate the problems, the leaders in those countries need to go to some obvious next steps and turn that medical science into political, functional, and societal realities. Those countries need to create movement and activity in those urban settings -- getting people on their feet daily in ways that will help restore health. Food supplies need to be improved. It's time for practical solutions to those very basic and fundamental problems. The issues are just as basic as having safe water to drink. Activity levels and safe water are both basic conditions of better health.

It's time for practical solutions to those very basic and fundamental problems. The issues are just as basic as having safe water to drink. Activity levels and safe water are both basic conditions of better health.

### [We Did Not Knowingly Support Inactivity](#)

So why are we just beginning to take steps to support walking and better levels of activity?

We did not do practical things to solve those problems in the past in part because we did not expect the problem to get this bad. We also, to be honest, did not know any practical things to do. The obesity epidemic was obvious to everyone, but no one knows how to deal effectively with obesity. When people live on a diet of processed food that can trigger the biological result of obesity, it's pretty hard to simply change the food supply of a great array of people. The white sugar, flour, and rice diets are all cheap, seductive, and tasty. They are particularly attractive and dangerous to people who are inactive.

To have an impact on the epidemic of diabetes today, all of the countries facing those issues will need to get people on a healthy eating agenda to restore them to normal weight levels. Increasing activity levels actually can help. We basically do need a universal HEAL agenda -- Healthy Eating Active Living -- to be the collective, widely supported



strategy for multiple countries. All of those countries need to help people increase their activity levels and learn about the damage created by our current diets.

### **We Very Much Need a National Culture of Health**

In this country, we need our national government and our national leaders to take a lead role in helping us create, aspire to, adopt, and adapt to a culture of health. There is no reason for our national leaders not to make building a culture of health for this country into a major priority for us all. We need clear, national leadership from the White House, the Secretary of Health, the Surgeon General, and from the U.S. Congress to explain to the American people why we will all be much better off if we achieve a culture of health.

We need to teach healthy behaviors and we need to create a national belief system that says healthy behaviors are desirable, and those behaviors are what we all should choose to do. At this point in our history, we need our leadership at multiple levels to be helping all of us – people in communities, people in schools, and people in working settings -- to understand and appreciate both the new science of health and the behavioral choices we each have.

Diabetes isn't inevitable and it isn't a communicable disease. It is a biological result that is incurred by the behavioral choices we make. We now need to teach people that their risk of cancer, stroke, heart disease, diabetes, and depression can all be impacted by our behaviors. We need people to collectively believe in a culture of health so that we all help each other and reinforce each other's healthy choices.

### **We Need To Make Healthy Behaviors Easy To Do**

As people decide to make healthy behaviors the way we live, we will need to set up ways of making those healthy behaviors easy to do. We very much need our local governments to help make that agenda of health real in practical and very local ways.

Why do local governments need to be part of that health improvement agenda?

Walking is a very local thing to do. Eating healthy local foods is also an inherently local thing to do. We can only walk where we are. We need local governments to create and maintain safe places to walk, and we need local government to facilitate widespread access to healthy -- often locally grown -- foods.

Improving our collective health is obviously the best single strategy we can have to bring down the costs of care in this country. In prior years, some people made that statement, but the people who made that statement generally did not have any actual strategy or practical steps in mind to help achieve that goal. This book is about practical steps -- for both care improvement and improved health.

We are a lot smarter now. We are better informed. Our tool kit is better. The science of health and prevention is very clear and has definitely gotten better. When people stop smoking the health benefits for those people begin very quickly. We also now know that there is also an almost immediate positive financial return from improving people's activity levels. We know that walking is a sufficient, efficient, and an entirely effective way of achieving our health goal of better levels of activity.

We also know that there are very quick financial returns from helping people lose weight. So we need to apply that new wisdom in our communities and our workplaces. We need workplaces that sponsor, encourage, and enable walking for their workers. That is possible to do. It isn't hypothetical, theoretical, ideological, or philosophical. It is purely practical.

Employers prefer practical solutions to real problems, so we should do practical things in work settings to help improve our workers health.

On a large scale, we need laws that make smoking expensive and inconvenient. We need food laws that restrict the worst kind of dietary fats and discourage use of the unhealthy processed sugar. Unhealthy foods should be more expensive and harder to obtain, while healthy foods should be the cheapest and most readily available option. We need

people to understand the true negative health impact of unhealthy foods so they can make the right choices.

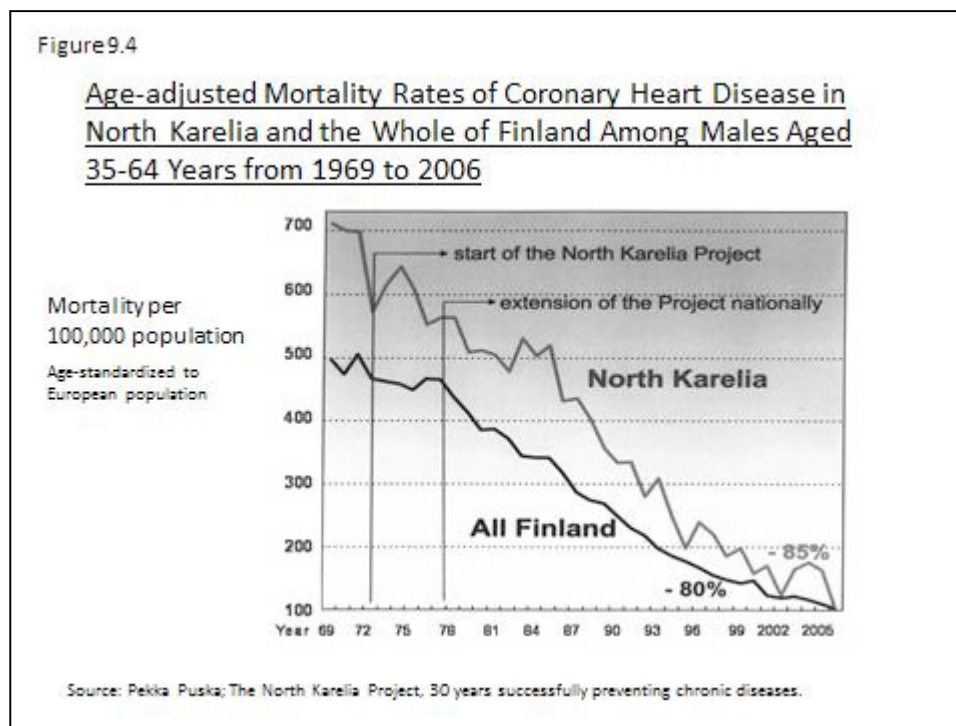
Knowledge is power. We need people with the power to change their own lives. We need support for healthy eating at multiple levels and we need laws that restrict access to unhealthy foods. Those efforts can all be an effective part of our overall health improvement agenda.

### **Finland Proved That a Culture of Health Is Possible**

Health care costs now consume roughly 18 percent of our total economy.<sup>342</sup> We are on a path to expand that 18 percent to more than 20 percent.<sup>343</sup> Twenty percent will be financially crippling. If we create a true culture of health and people increase the levels of healthy behaviors -- we can keep that from happening. We can significantly improve health outcomes, reduce the need for health care services, and bring down the total cost of care by having healthier people. That's how this chapter began. It is the truth. It would be irresponsible of us -- now that we know the science and understand the actual impact of the health agenda -- not to create an activity friendly culture of health and put in place a community infrastructure that supports, enables, and facilitates health.

Finland actually went down that road to create a culture of health as a country. Finland went from being probably the least healthy country in Europe to being the healthiest country in just a few years by very deliberately creating a culture of health.

The next chart shows the success levels in Finland. We can replicate those results here.



We have been both ignorant and passive about those issues for too long. We need to transform ourselves into a nation of people who make more healthy choices and we need to take health to the next agenda.

It isn't rocket science.

It may, however, involve some political science. These recommendations are definitely well supported by medical science. Now it is a matter of values. It is both unethical and economically stupid not to do the right thing now that we know the right things to do.

### [We Can Keep Health Care from Bankrupting America](#)

We need to improve our care delivery in this country. We need to improve the safety of care in this country. We need to create a rich and comprehensive data flow that gives us all the data we need to deliver care and improve care in this country.

We need to make care better and we need to make care more affordable. We need to directly address both the quality and the costs of care.

## **Don't Let Health Care Bankrupt America: Strategies for Financial Survival**

That can all be done. We will need to change a few key things we do -- but those goals are within our grasp.

This book is intended to offer a path to achieving those goals and achieving them quickly enough that we can keep health care from bankrupting this country.