

# LIVE A 100 YEARS



\$20.

**O**f all the things that we are concerned about in life, our HEALTH is at the top of the list. More people access on-line information about health, than any other category. (except porn ?!) Although North Americans spend more money on healthcare than any other country in the world, the USA ranks close to the bottom of the heap (12<sup>th</sup> out of 13 countries) when it comes comparing the health of Americans to other developed, modern countries. (For my Canadian readers I apologize that most of the stats are American. Although slightly better than the USA, Canada is in the same ballpark with the health problems that we are facing today.)

The American Medical Association Journal (July 26, 2000) clearly stated that the third leading cause of death in the USA is caused by “*medical care*”, (not “bad” medical care, just ordinary medical care) causing 250,000 unnecessary deaths yearly. That is the equivalent of two jumbo-jets crashing every day, ..... all year long. That does not take into account the people who got sick, disabled, or incapacitated due to ordinary medical care, only the ones who actually died, nor does it take into account those injured or killed by medical malpractice.

The death and disease caused by poor medical care cost 77 billion dollars in extra costs to the American economy, not counting the personal hardship to those who were affected. It is estimated that up to 30% of people under medical care, receive inappropriate treatment.

Is it any wonder that more and more people are turning to “alternative” health care providers. One of the last studies that was done showed quite clearly that more people are attending “alternative” healthcare providers than ordinary doctors. (so, the question becomes, who is really, “*alternative*”)

This monograph is about showing you 7 things you can do to live a longer and healthier life.( 8, actually) and about “wellness” and it’s distant cousin “prevention”. The correct name for all this is Holism. What you can do to improve your health **now** and what we can do to prevent your health from declining.

People know more about how their lawn mowers work than they do about how their body works. We have to change that if we are to, really, Live a 100 Years.

The first thing to understand is that ill health is not the result of ‘bad-luck’, any more than it’s the result of ‘evil spirits’. It is a scientific fact that to a very great extent, the know-how is available, to keep ourselves healthy, and live to a ripe old age. That does not mean that this knowledge is widespread and taught as part of our education. Far from it. Due to relentless propaganda by powerful pharmaceutical and ‘food’ company interests, the public has developed some peculiar ideas about ill-health, why people get sick, why we have an epidemic of cancer, heart disease and diabetes, and the, so called “*fight against*” cancer, heart disease, and diabetes.

There is not a disease known, that in some cases have not been “*cured*” by some means or another. It could be by conventional medicine, alternative medicine, faith healing, witch-craft, chiropractic, acupuncture, homeopathy, energy healing, or any of the dozens of healing practices known throughout the world. Think about that. And don’t kid yourself that this is just folklore, or all placebo effect. The evidence is overwhelming, even if not completely understood in the light of our present day knowledge.

The human body is a self-healing mechanism. Doctors don’t heal. The body heals *itself* . . . not in *some* cases, but *in all cases*. Of course something is often done from the inside of a person, or from the outside of a person, to *trigger* the healing process. The mystery lies in the mechanism behind the trigger. Why do some people heal, and others don’t. What’s missing in those that don’t? It would be irresponsible and arrogant of anyone to tell you they have all the answers to these questions, but there are things that are known, which when consistently applied to the mysteries of health and illness, provide us with knowledge and direction to better deal with the realities of sub-optimal health, and with dis-ease itself.

Of all the ideas about sickness and disease that have been put forward in the last 100 years, there is nothing more convincing than the work of Hans Selye’. MD. PhD, the late research scientist from McGill University in Montreal, Canada. You probably know what I’m talking about, it’s *stress*. Stress, is anything that induces a particularly destructive sequence of events within the body, which in turn depresses the immune system. Immune suppression renders the body weak, defenseless, and therefore open to disease throughout the entire body. That process is called The General Adaptative Syndrome, which is a *non-local effect*. The whole body is in jeopardy, not necessarily a specific organ or tissue.

That's why stress can cause anything, anywhere in the body. Of course there are all kinds of stress, emotional, physical, spiritual, environmental, (even 'good' stress (eustress)). They all are *non-local* as far as the body's reaction to them.

Having this knowledge will help you understand how chiropractic can be so remarkably effective in so many different types of ill-health. Chiropractic, primarily, works in a non-local way. It's like having a pebble in your shoe. At first it's just annoying and causes a local irritation, if the pebble is removed, soon, the body has little trouble dealing with healing a blister or inflammation. If it is not removed a person would probably begin to become generally cranky and irritable, the site of the pebble would probably lead to an inflamed, painful part, even become infected, the persons gait would change to try to adapt to the pain, local and distant muscle groups would come into play and contract. At the same time the stressed body would start generating catecholamines, and cortisol, destructive hormones which would circulate throughout the entire body and depress the immune system. From that point on anything can happen. Usually at that point we put a label (diagnosis) on the signs and symptoms the body is showing. We like labels. We often feel triumphant just putting a name on the dis-ease, almost making a cure, secondary.

Now, what has just been described (the whole pebble thing) is just like what chiropractors look for in the spine. They are not known as "pebbles", but are known as "subluxations". The primary job of the chiropractor is to locate these "pebbles" (subluxations) and correct them. The objective is to remove this interference to the body's ability to heal itself. Of course there are dozens of ways to achieve this removal of the stress factor (subluxation). And very often that is all that is necessary to facilitate healing. But sometimes a diet correction or food supplements are needed, specific exercises to speed things up, some mechanical, electrical, or laser energy may be indicated to speed the healing process. Even some general stress reducing methods like meditation or biofeedback are often taught to move the healing process along. However, we must keep in mind that underlying all of this outside help, the body is healing itself. The doctor is only the orchestra conductor, not the musicmaker. That's an inside job.

All doctors spend hundreds of hours learning how the body works. Our extensive training and experience allow us to make recommendations to our patients on a variety of subjects important to health and prevention of disease—such as exercise, nutrition, rest, stress reduction and how to maintain

a positive attitude. Today we're going to share with you some of this vital information about how to **create an environment that is not suitable for sickness.**

In the 1900s the top causes of death were things like pneumonia, tuberculosis, diphtheria. In the last 100 years there have been some amazing advances in the management and treatment of these kinds of diseases.

According to a report published in the Journal of the American Medical Association in 2002, the top 3 killers **now** are:

1. Heart Disease
2. Cancer
3. Medical care; (*not* malpractice, that's a different issue)

We are not living long lives; and certainly not long, healthy, lives. Our bodies are so designed that they should last at least 100 years. What's happened?

Triumphing over illness is a wonderful thing, but it's far better never to get sick at all. And while the headlines shout about ever more dramatic chemical and surgical interventions, new discoveries are working quietly to prevent disease in the first place. **It's the science of wellness, with a little prevention thrown in.**

The new science of Wellness (Holism) draws on breakthroughs in our understanding of how the body works at all levels, from gross anatomy to molecular biology, to our belief system. Researchers are beginning to understand how the body's systems affect one another

If the 20th century was the age of astonishing cures, the 21st may turn out to be the era in which those cures became *irrelevant*. Why? Because people like you are taking steps to *prevent poor health from occurring* in the first place. The name of the game in this modern age is "*high-level wellness*", how to get it and how to keep it: high tech and high touch.

Wellness (holism) is best defined as that state of health in which you are not only free from disease, but that *you feel really good the vast majority of the time*, sleep well, digest your food well, your body eliminates waste products with ease, you arise from 6-8 hours of sound sleep feeling refreshed and anxious to get on with your daily activities, you have harmonious relationships with other people, feel loved and cared for, that you have a purpose to life, you are physically and psychologically hardy, have

a positive outlook on life, enjoy a mixture of interests and activities, and feel somehow spiritually connected. *Does all this sound too good to be true?*

Let us keep in mind that ill-health is not the result of “*bad luck*” . . . it’s most likely a slow accumulation of abuses over a period of time. Most of these poor health-choices are not even considered “*abuses*” by most people, because they have become so much a part of our accepted way of living. All of our lifestyle decisions have (*known*) consequences.

Our bodies malfunction for reasons that we have known about for many, many years. It is called “*lifestyle*”; you may refer to it as a *stressful* lifestyle. But stress is NOT the PROBLEM; our reaction to stress is the culprit. You can never escape stress, but you can modify the way you react to it. If we look at stress as the bullets, we have to learn how to develop a bullet-proof vest. We already know what to do! However, “*knowing the way is not going the way*”. We know a lot better than what we do.

Emory University, Medical School, in Atlanta stated unequivocally, several years ago: “*lifestyle is more important than all the medical technology in the world*”. Lifestyle has a lot to do with the types of foods you eat, how much you exercise, what goes on in our head (attitude and beliefs), the air you breathe the water you consume, the people you hang-out with, and even your feeling of a connection with a “*higher power*”. (You don’t have to be “religious”)

Herbert Benson MD, of Harvard University, studied the whole concept of stress, illness, and wellness (lifestyle) for 30 years and found out that the simplest, most effective (and least expensive) way for you and I to increase our level of wellness (that’s the bullet-proof vest) was to sit in the silence for approximately 20 minutes, twice a day. He calls it the Relaxation Response, others call it *meditation*. It seems that we can “detoxify” our nervous system by this simple method, that many cultures have used for centuries. . . . and it’s FREE. If you could sell meditation in a bottle, you’d make a fortune.

. We are not talking about the older biomedical approach where prevention was equated with vaccinations, flue shots, and an aspirin a day. We are talking about engaging in activities that lead to high level wellness, and involves doing things aimed at reducing the probability of a disease or dysfunction occurring, ---things such as:

The **7 Steps to Health and Longevity** I’m going to tell you about.

### **Then there’s Secondary prevention**

These are measures, which are aimed towards early detection and treatment. A good example is the variety of health screenings available. Attending screening clinics often helps towards the early detection of disease. Cervical screening, breast self-examination, testicular self-examination, blood pressure checks, dental checks and chiropractic screenings, are all examples of measures which are taken to detect the early onset of problems and start early treatment if required. This can be your “*early warning system*”; not unlike your regular dental check-ups, . . . as opposed to waiting for tooth-aches, or for your teeth to fall out.

**The 7 Steps to Health and Longevity** were discovered in a study called, The Oakland-Alameda Study.....a research study conducted several years ago in which 4000 older healthy individuals were asked: “*what did you do to live such a long, healthy life?*”

Here's what they said:

1. **Sleep regularly 7 - 8 hours per night**
2. **Eat a big breakfast**
3. **Eat regular meals with minimal, or no snacking, no junk food/drink.**
4. **Maintain an ideal weight (not specified)**
5. **Exercise moderately, and regularly, e.g a one hour walk, 3x/ week**
6. **Drink a moderate amount of alcohol regularly (1.5 ounces per day)**
7. No smoking (best if have never smoked)

In other words, these individuals lived moderate lives and used common sense. But the research showed that these 7 health habits significantly reduced the risk of experiencing illness, reduced death rate, increased functionality and improved a sense of wellbeing.

\*#8. *This is something that did was not recognized at first, in this survey that was only discovered later. It is worth mentioning. It is technically called "Social Support". It turns out that those in the study also had a very solid social support system that entailed everything from a close circle of friends who cared about them, to family who cared about them and supported them emotionally, and physically. (they had people who **loved** them) Maybe the Beatles had it right: "all you need is love".*

### **The Facts:**

In the landmark nine-year study of 7000 men and women in Alameda County, California, death rates were twice as high for the most *socially isolated* persons as for those with strong social ties. The investigators examined marital-status, contacts with friends and relatives, and church and group memberships.

Single men 45 to 54 years old died at twice the rate of married men of the same age in one 10-year follow-up

Socially isolated survivors of heart attacks were more than twice as likely to die as those who were less isolated in a three-year study of 2,320 men. They were five to six times more likely to die if they were also in stressful occupations, divorced, exposed to a violent situation, having financial difficulties, or *retired*.)

In a group of 194 Connecticut patients who had heart attacks, 76 died within the first six months after their attack; lack of emotional support was, "significantly associated", with those deaths.

In a study of 1,368 cardiac catheterization patients, men and women who were unmarried or without a confidant were more than three times as likely to die within five years compared to those who were married or had a close confidant.

Ronald Glaser, PhD, is a professor of medical microbiology and immunology at the Ohio State University Medical Center. He and his wife, Janice Kiecolt-Glaser, PhD, a professor of psychiatry, have spent 15 years exploring how the lack of caring social support - whether from family or friends - poses serious health risks. They work in an area of research called psychoneuroimmunology, in the recently

established Institute for Behavioral Medicine Research at Ohio State University. Ronald approaches it from the biological effects and how they work; Janice studies the role of stress and social isolation in causing those effects. In an interview with Ronald Glaser, this was the exchange:

**Q.** How do marriage, family and other close ties influence our health and longevity?

**A.** We need to be with other people. We've evolved as a social species, not as lone wolves. Our family and social ties translate into social support and social support seems to play an important role in buffering the stress in our lives. It may translate into physiological changes that are extremely important to our health. These close social ties seem to result in fewer negative changes in the immune system, thus fewer risks for infectious diseases.

**Q.** How does this connection show up in the laboratory?

**A.** Our first clue came in a study of medical students under academic stress at exam time. We compared the response of students who rated high on a loneliness scale and those rated "low loneliness" because they were more connected with family and friends. The high loneliness students showed more significant immune changes as compared with low loneliness medical students.

We went more deeply into it in a project designed to show whether those immune changes were big enough to have impacts on health. We inoculated 48 medical students with hepatitis B vaccine, a procedure that in some way mimics being exposed to a virus but doesn't pose health dangers. Then we studied the students' antibody and T-cell responses to the vaccine. We found a significantly better immune response among the less lonely students, who were getting more social support and showing less anxiety and stress.

**Q.** What about the effect of marriage on health and longevity?

**A.** We found that both men and women who had a good quality relationship showed a more vigorous immune response. The data showed that a poor quality marriage was bad for the immune system, so if you are in a bad marriage, getting divorced was probably better, but being involved in a good marriage was best for health.

**Q.** Are there other ways in which you've found that stress and lack of social support affect physical health?

**A.** More recently we've focused on the effects of stress on wound healing. Our first study, published in *The Lancet* in November 1995, reported that it took an average of nine days longer for wounds to heal in women who were caring for relatives with Alzheimer's and were highly stressed than it did for others of similar age and economic status. And the testing we did was just on a little wound. Now we're on to other wound-healing studies of the effects of stress. The studies suggest that there is a connection. In each study the effect size is extremely large. Every time we do a study, we see the effect. It's amazing.

**Q.** Do we know how it works?

**A.** Stress increases production of CRF (corticotropin-releasing factor) in the brain, and this CRF stimulates the hypothalamus to increase ACTH (adrenocorticotrophic hormone, also called adrenocorticotropine) production. ACTH in turn stimulates the adrenal gland to make cortisol, which is an immune-suppressing hormone.

This is just one of probably several pathways by which the central nervous system, the endocrine system and the immune system talk to each other. There's a lot we don't know about each of the three systems individually, and when you ask what happens when they start talking to each other, you can imagine the complexity involved. We're just scratching the surface in learning how emotions and social support and behavior have an effect on all these systems.

**Q.** How do hormones "*talk*" to the immune system?

**A.** The white blood cells that fight disease, our immune cells, have receptors for hormones and neuropeptides and brain peptides. When the hormones combine with the receptors of the white blood cells, they modulate the cell function. And when immune cell function is down, that's not good.

**Q.** Because it puts people at risk of getting sick?

**A.** We know that people who are severely immune-suppressed - for example, AIDS patients or those with organ transplants - are very susceptible to all kinds of infections. What we don't know is how far you have to lower the immune cell functioning in individuals who start with a normal baseline in their immune system before they become at risk. We have to learn that. The field of psychoneuroimmunology is going to allow us to learn it eventually.

**Q.** Are there times of the year or types of people who need to be especially concerned?

**A.** At holiday time, we know people are more stressed, people are more lonely, especially if they don't have family or if a loved one has died. These are stressors that are difficult to deal with. If you fall in a risk group, your immune system may be starting out a little low, and if you can't buffer the stress with family and friends, maybe it's wise to take some health precautions, because you could be at risk for a cold or flu - or something worse.

## Seven Antecedents of Good Health

From the Oakland - Alameda Study

**Sleeping regularly 7 - 8 hours per night**

*"Sleep, that knits the unraveled sleeve of care" ..*

Regular, restful sleep is absolutely necessary for healing—it's the time when you heal physically and mentally. Frequently broken sleep can lead to poor concentration and feelings of fatigue and exhaustion. Just think about when you get only 4 or 5 hours of sleep---how do you feel the next day? Do you think more or less clearly? Even dreaming is important—you don't have to remember your dreams or write them down in a journal—but dreams are cleansing, sort of your brain's way of flushing out the day's garbage. And you shouldn't have to rely on alcohol or Unisom to get this sleep, if you do, that's a clear sign of a problem. Some simple tips: don't watch TV in bed, don't drink anything containing caffeine within 3 hours of bedtime, establish a regular set time for going to bed, make sure the room is very dark.

### **Eat a Big Breakfast ...“like a king ”...**

How many people eat breakfast? How many don't eat breakfast because you're trying to lose a few pounds? Unfortunately, that's doing it back-wards. Eating breakfast starts up your metabolism. Without it, your body goes into a state of stress. You will not be at ease; you will be in a state of disease. Once this has gone on for any length of time your going to know it because you're going to develop what are known as symptoms; -headaches, muscle tension, fatigue....Your body needs that food, good quality food, -not doughnuts or soda, in order to function at a high level.

### **Eating regular meals with minimal or no snacking**

This key to prevention is directly related to the last one, about eating breakfast. If you skip meals your body goes into starvation alert because of the stress...So now, when you do eat again, your body says “*I'm taking all of these calories and putting them on your thighs, because I don't know when I'm going to get to eat again!*” Some snacking is okay, but it must be something wholesome and not sugary—not brownies, cookies, chips or cokes---instead you could try a piece of fruit, or a small serving of nuts, or celery with low-fat cream cheese. The key is to avoid the starvation mode without taking in empty calories or surplus calories.

### **Maintain an ideal weight**

There's an old saying that explains this one: Eat breakfast like a king, lunch like a prince and dinner like a pauper. Of course, our modern lifestyle makes this difficult—so much to do in so little time. So a lot of us eat out—at fast food restaurants which we know is not the greatest quality of food. But it is quantity, the portions served in restaurants now are gigantic—many restaurant dishes now exceed a 1,000 calories. For example, a Burger King Double Whopper with cheese has a whopping 1,020 calories. A Taco Bell Mucho Grande Nachos has 1,320 calories. The next time you pick up a menu, assume that most items should be followed by the words “serves 2.” It is advisable to consult a height/weight chart in order to determine whether weight needs to be lost or gained, and from then on regular weight checks are good practice. It really is simple. If your lifestyle burns 1300 calories a day and you take in 2000 calories a day, *where do you think that extra lard accumulates chubby ??*

### **Exercising moderately**

One out of four North Americans report exercising less than half an hour a day, as experts recommend, but less than half an hour a week. Regular, daily, exercise taxes the cardiovascular system by increasing the pulse and respiratory rate. Which means you can utilize more oxygen and increase your stamina, ability to do work. And for you men, recent studies have shown that exercise capacity is a strong predictor of when you'll die. Sustained aerobic exercise has undoubted benefits: jogging,

running, swimming and cycling are all popular activities for achieving this; but you get the same benefit from walking.

Research has shown that regular exercise helps control blood sugar. Exercising also has positive psychological benefits - people who regularly exercise can experience feelings of well-being. It is almost impossible to be a depressive personality, when doing regular exercise, even light, exercise. This is partly due to the effects of your body's natural painkillers, opiates—the technical term is neuropeptides - enkephalins & endorphins. These neurohormones are released in response to the exercise.

Exercise gives an enduring resistance to any form of stress. But before you begin any exercise program, especially if it's been a while, promise yourself you will begin rather gently .... perhaps a non-demanding walking routine would get you going. If there is a "*single best exercise*", it would be walking. Most of us can manage to squeeze a walk in once a day, if we schedule it. Don't wait until you "*get a minute*", .... it won't happen; you will have to schedule it.

### **Drinking a moderate amount of alcohol**

There has been controversy about this one. The exact reasons behind why there is a connection between moderate consumption and reduced risk of heart disease have not been found. It is generally believed that the alcohol is a mild tranquilizer. And to be fair, the jury is still out on exactly how much is considered moderate, it is generally accepted that a good rule for now is no more than one drink, one serving, a day. For example, that's one 12 oz beer, one 4 oz glass of wine, or 1.5 ounces of spirits. (no, you cant save-up the daily allowances for the week-end)

### **Not smoking (best if have never smoked)**

40 years ago, you could see medical doctors on TV, telling you it was ok for you to smoke! Surely, now after the last 15 years, there is no one who doesn't understand why smoking is bad for you: the tar, the nicotine, the fact that you are literally suffocating yourself every time you light up—and you choke those around you. If you want to live a healthy, vibrant life and prevent problems, *don't smoke*. You should not have to get a strong argument to follow that advice.

What we've just covered are the 7 steps to longevity. Follow up research has shown that "*These behaviors help people to maintain good health regardless of their sex, age, and economic status. These behaviors are also cumulative, they build on each other; that is, the greater the number of these factors that you regularly and habitually follow, the better your health.*" (Strauss et al, 1984). These steps are primary prevention, what you can do now. The other key achieving and maintaining an optimum state of health is secondary prevention.

Secondary Prevention measures are aimed at early detection and treatment. Health screenings are a good example. Screenings help the early detection of stress and disease. Cervical screening, breast self-examination, testicular self-examination, blood pressure checks, dental checks and chiropractic screenings are all examples of measures which are taken to detect the early onset of problems and start early treatment if required. Really; are there still people who miss the logic of personal vigilance, and not waiting for symptoms to appear?? ...the whole idea is to find problem areas **before** they cause symptoms, before you even know there's a problem. Think about the guy who drops dead on Monday

morning of a heart attack, ... because he felt great on Sunday, and seemed to be having the time of his life, was he really “*healthy*”, or just *feeling* ok?

It is time for people to realize, and wake-up to the fact, that because. “*I’m feeling fine!*”, does not necessarily mean you are “**healthy**”.

Get serious about your own health, and influence those people you can to do the same, like family and friends. . . . it’s a matter of habit.

### *What about stress ?*

#### **There is a lot STRESS placed on STRESS**

According to a new study by the federal government

- Over half the working people in the U.S. view job stress as a major problem in their lives.
- The number of people who called in sick due to stress has tripled in the past four years.
- 42% of employees think their co-workers need help managing stress.
- Stress is directly linked to heart disease, depression, and a faulty immune system.

What causes stress, the dangerous effects it has on your body, and how you can reduce your stress without drugs or surgery ?

**First** thing we need to do is complete the **Stress Survey** you have in front of you. It’s very simple to fill out. So, let’s do it, ....now.

#### **Your Stress Scale**

In the following table you can look up representative changes in your life and see how much stress value each of these changes is adding to your life. NOTE ANY ITEM THAT YOU MAY HAVE EXPERIENCED IN THE LAST TWELVE MONTHS. Then, total up your score.

*(Adapted from the "Social Readjustment Rating Scale" by Thomas Holmes and Richard Rahe. This scale was first published in the "Journal of Psychosomatic Research", Copyright 1967, vol.II p. 214. It is used by permission of Pergamon Press Ltd.)*

<b>STRESS</b>	<b>EVENT VALUES</b>
1. DEATH OF SPOUSE	100
2. DIVORCE	60
3. MENOPAUSE	60
4. SEPARATION FROM LIVING PARTNER	60
5. JAIL TERM OR PROBATION	60
6. DEATH OF CLOSE FAMILY MEMBER OTHER THAN SPOUSE	60
7. SERIOUS PERSONAL INJURY OR ILLNESS	45

8. MARRIAGE OR ESTABLISHING LIFE PARTNERSHIP	45
9. FIRED AT WORK	45
10.MARITAL OR RELATIONSHIP RECONCILIATION	40
11.RETIREMENT	40
12.CHANGE IN HEALTH OF IMMEDIATE FAMILY MEMBER	40
13.WORK MORE THAN 40 HOURS PER WEEK	35
14.PREGNANCY OR CAUSING PREGNANCY	35
15.SEX DIFFICULTIES	35
16.GAIN OF NEW FAMILY MEMBER	35
17.BUSINESS OR WORK ROLE CHANGE	35
18.CHANGE IN FINANCIAL STATE	35
19.DEATH OF A CLOSE FRIEND (not a family member)	30
20.CHANGE IN NUMBER OF ARGUMENTS WITH SPOUSE OR LIFE PARTNER	30
21.MORTGAGE OR LOAN FOR A MAJOR PURPOSE	25
22.FORECLOSURE OF MORTGAGE OR LOAN	25
23.SLEEP LESS THAN 8 HOURS PER NIGHT	25
24.CHANGE IN RESPONSIBILITIES AT WORK	25
25.TROUBLE WITH IN-LAWS,OR WITH CHILDREN	25
26.OUTSTANDING PERSONAL ACHIEVEMENT	25
27.SPOUSE BEGINS OR STOPS WORK	20
28.BEGIN OR END SCHOOL	20
29.CHANGE IN LIVING CONDITIONS (visitors in the home, change in roommates, remodeling house)	20
30.CHANGE IN PERSONAL HABITS (diet, exercise, smoking, etc.)	20
31.CHRONIC ALLERGIES	20
32.TROUBLE WITH BOSS	20
33.CHANGE IN WORK HOURS OR CONDITIONS	15
34.MOVING TO NEW RESIDENCE	15
35.PRESENTLY IN PRE-MENSTRUAL PERIOD	15
36.CHANGE IN SCHOOLS	15
37.CHANGE IN RELIGIOUS ACTIVITIES	15
38.CHANGE IN SOCIAL ACTIVITIES (more or less than before)	15
39.MINOR FINANCIAL LOAN	10
40.CHANGE IN FREQUENCY OF FAMILY GET-TOGETHERS	10
41.VACATION	10
42.PRESENTLY IN WINTER HOLIDAY SEASON	10
43.MINOR VIOLATION OF THE LAW	5
TOTAL SCORE: _____	

## STRESS SCALE FOR YOUTH

STRESS	EVENT VALUES
1. DEATH OF SPOUSE, PARENT, BOYFRIEND/GIRLFRIEND	100
2. DIVORCE (of yourself or your parents)	65
3. PUBERTY	65
4. PREGNANCY (or causing pregnancy)	65
5. MARITAL SEPARATION OR BREAKUP WITH BOYFRIEND/GIRLFRIEND	60
6. JAIL TERM OR PROBATION	60
7. DEATH OF OTHER FAMILY MEMBER (other than spouse, parent or boyfriend/girlfriend)	60
8. BROKEN ENGAGEMENT	55
9. ENGAGEMENT	50
10. SERIOUS PERSONAL INJURY OR ILLNESS	45
11. MARRIAGE	45
12. ENTERING COLLEGE OR BEGINNING NEXT LEVEL OF SCHOOL (starting junior high or high school)	45
13. CHANGE IN INDEPENDENCE OR RESPONSIBILITY	45
14. ANY DRUG AND/OR ALCOHOLIC USE	45
15. FIRED AT WORK OR EXPELLED FROM SCHOOL	45
16. CHANGE IN ALCOHOL OR DRUG USE	45
17. RECONCILIATION WITH MATE, FAMILY OR BOYFRIEND/GIRLFRIEND (getting back together)	40
18. TROUBLE AT SCHOOL	40
19. SERIOUS HEALTH PROBLEM OF A FAMILY MEMBER	40
20. WORKING WHILE ATTENDING SCHOOL	35
21. WORKING MORE THAN 40 HOURS PER WEEK	35
22. CHANGING COURSE OF STUDY	35
23. CHANGE IN FREQUENCY OF DATING	35
24. SEXUAL ADJUSTMENT PROBLEMS (confusion of sexual identify)	35
25. GAIN OF NEW FAMILY MEMBER (new baby born or parent remarries)	35
26. CHANGE IN WORK RESPONSIBILITIES	35
27. CHANGE IN FINANCIAL STATE	30
28. DEATH OF A CLOSE FRIEND (not a family member)	30
29. CHANGE TO A DIFFERENT KIND OF WORK	30
30. CHANGE IN NUMBER OR ARGUMENTS WITH MATE, FAMILY OR FRIENDS	30
31. SLEEP LESS THAN 8 HOURS PER NIGHT	25
32. TROUBLE WITH IN-LAWS OR BOYFRIEND'S OR GIRLFRIEND'S FAMILY	25
33. OUTSTANDING PERSONAL ACHIEVEMENT	

(awards, grades, etc.)	25
34.MATE OR PARENTS START OR STOP WORKING	20
35.BEGIN OR END SCHOOL	20
36.CHANGE IN LIVING CONDITIONS (visitors in the home, remodeling house, change in roommates)	20
37.CHANGE IN PERSONAL HABITS (start or stop a habit like smoking or dieting)	20
38.CHRONIC ALLERGIES	20
39.TROUBLE WITH THE BOSS	20
40.CHANGE IN WORK HOURS	15
41.CHANGE IN RESIDENCE	15
42.CHANGE TO A NEW SCHOOL (other than graduation)	10
43.PRESENTLY IN PRE-MENSTRUAL PERIOD	15
44.CHANGE IN RELIGIOUS ACTIVITY	15
45.GOING IN DEBT (you or your family)	10
46.CHANGE IN FREQUENCY OF FAMILY GATHERINGS	10
47.VACATION	10
48.PRESENTLY IN WINTER HOLIDAY SEASON	10
49.MINOR VIOLATION OF THE LAW	5
TOTAL SCORE=_____	

We have asked you to look at the **last twelve months** of changes in your life. This may surprise you. It is crucial to understand, however, that a major change in your life has effects that carry over for long periods of time. It is like dropping a rock into a pond. After the initial splash, you will experience ripples of stress. And these ripples may continue in your life for at least a year.

So, if you have experienced total stress within the last twelve months of **250** or greater, even with normal stress tolerance, you may be **OVERSTRESSED**. Persons with Low Stress Tolerance may be **OVERSTRESSED** at levels as low as 150.

**OVERSTRESS will make you sick.** Carrying too heavy a stress load is like running your car engine past the red line; or leaving your toaster stuck in the "on" position; or running a nuclear reactor past maximum permissible power. Sooner or later, something will break, burn-up, or melt down.

What breaks depends on where the weak links are in your physical body. And this is largely an inherited characteristic.

Ok, so now that you know how stress is affecting **you**, ... headaches, back spasms, neck pain, irritability--your body has developed these in response to stress. Don't let anyone tell you stress is just in your head; it is in your body too.

## What is stress?

There's really no medical definition of stress, --but it can be thought of as any factor that has a negative effect on body functioning. But not all stressful things are bad for us. Right? Some people perform better on the job or in sports under some pressure—it's kind of motivating. Some stress is character building—challenging yourself, learning how to cope with new situations.

*Stress is like a violin string, if there's no tension, there's no music. But if the string is too tight, it will break. You want to find the right level of tension on the string for you--the level that lets you make harmony in your life.* However, after completing the survey, I think most of us found that we have too much stress already.

And that's dangerous because stress not only causes headaches and neck pain and irritability, fatigue...stress affects every organ and tissue in your body ..... it can kill you.

## What stress does to you

Let's talk about some of the dangerous effects stress has on your body.

- Researchers have now studied daughters of woman with breast cancer and found that stress may actually increase the daughter's risk of developing breast cancer. And they think this is because stress suppresses your immune system –your body's natural defense mechanisms. You have natural killer cells, they're like pac-men on patrol in your body. They fight off abnormal cells like cancer cells as well as bacteria and viruses. Stress directly stops these guys from doing their job-which is protecting you. Consequently, people under stress get colds and flu more often, and it takes the stressed person longer to get well. Not everyone gets the flu or a cold right? Why is that? It's your body's ability to withstand the invasion and people under stress have less protectors.
- You may have genetic tendencies, like stroke, cancer that runs in your family...but not everyone in your family gets stroke or cancer. Unfortunately, stress can cause these tendencies to come out because stress lowers your defenses.
- How many people get stressed from their job? -Researchers from the Finnish Institute of Occupational Health have determined that work stress actually doubles the risk of death from heart disease --even in healthy people.

Here's some more documented effects of stress that scientific research is discovering:

- In women stress is associated with increased risk of disease and premature death from cardiovascular events. This study, published in the March-April, 2001 issue of Psychosomatic Medicine
- A study from Japan found that women who say they have a high level of stress have an increase of having a stroke.

- a recent study from the medical journal *Circulation* found that men and women with high stress had increased risk of a heart attack.

And if that wasn't enough...

- Stress is linked to atherosclerotic vascular disease...which is hardening of the arteries and makes you have strokes and heart attacks.

The scary part about all these dangerous effects is that most of them are *silent*, they have no symptoms. You wouldn't know you were going to have a heart attack, or stroke.

Symptoms, while useful to let you know something is definitely wrong, are a poor indication of your health. For a lot of people with Cardio-Vascular Disease, (CVD), the first symptom is a fatal heart attack. If you asked them on Sunday how they felt, they would have said I feel great...the next day they die. A cancerous tumor growing in a woman's breast takes between 3 and 5 years before she'll have symptoms; but are either one of those people really healthy? .....hardly !

Recognizing where stress comes from is the first step toward exploring the multitude of ways to relieve it

### **What causes stress?**

There's basically three causes: (1.) physical, (2.) chemical and (3.) emotional. Stress interferes with your body's ability to communicate with your brain, by depressing the immune system, your natural ability to resist disease and infection

**Let's look at emotional causes**—it's what you *think* about. What you feel and think about has an effect on your body. For example, if I hooked you up to a heart monitor and blood pressure cuff and asked you to close your eyes and think of the one time in your life when you were most angry—almost instantly your blood pressure would go up, you would start to sweat just a little bit, your heart rate would increase, your muscles would start to tense up. Now imagine if you walked around like this all day. Can you see how that would affect your body and your nervous system?

In the same way, your job can make you angry or upset if you feel unappreciated, or you don't like your boss...but your reaction to these circumstances can put your health in danger. If your body is very sensitive to stress, what you think about can dramatically affect your health.

I'll give you some simple solutions on how to reduce the emotional causes of your stress.

### **Chemical causes of stress**

Chemical causes are what we eat, breathe, drink and put in, on or around our body.

#### **Food**

- For example, if you eat Big Macs, pizzas and Pepsi for lunch—you're *not* giving your body quality fuel and are putting additional chemical stress on your body. Most fast-foods contains many chemicals, preservatives, enhancers, softeners, thickeners, artificial colors, trans fats, sulphites, and antibiotics.

- The kinds of fats in fast food and processed foods are called saturated fats and trans-fats. These fats are very *inflammatory*, which means that in your body they cause inflammation—which can lead to chronic pain—in your muscles and joints—and they cause inflammation which makes it easier for you to develop plaques in your blood vessels.
- Another source of chemical stress is one of the most popular drugs in the world—caffeine. How many drink coffee in the morning, or a coke? It gets you going because it causes your adrenal glands to release a hormone called epinephrine (adrenaline). Epinephrine is a stress hormone and is released when you are frightened, or under pressure or need to run for your life. Most of us aren't frightened or need to run for our lives at 7 in the morning. So drinking coffee or the coke increases our blood pressure and temporarily wakes us up. And that's not all. The effects of drinking caffeine stick with you until bedtime, even if you don't drink any caffeinated beverages after 1 p.m. So you are chemically “stressed” all day long. All these negative and long-lasting effects of caffeine could contribute to heart disease.

### Air

- The American Lung Association says that most of the US breathes damaging polluted air...no surprise right? With all the traffic and exhaust. Those chemicals are very irritating to your body and can actually get stored in your fat cells.
- Unfortunately, staying inside may be just as bad. Indoor air, including the air in your home or apartment, can be even more polluted than the outdoor air of a big city. Many of today's newer homes with weather-tight construction and inadequate ventilation actually have higher levels of unhealthy air than some older, draftier homes. The U.S. Environmental Protection Agency (EPA) rates indoor air pollution among the top environmental health risks.

### Water

- The water we drink—if you look in the dictionary, it says that water is a colorless, odorless, tasteless liquid—*does that sound like your tap water?* There are 1000s of chemicals in your drinking water, some of which are proven to increase the risk of cancer.
- The US Geological Survey (USGS), recently did a water survey 139 streams in 30 states found synthetic hormones and antibiotics.
- They also found insecticides and detergent residues. Among the most common contaminants were steroids and nonprescription drugs.

Water treatment plants are not designed to remove these chemicals, and I think you can understand that drinking steroids, hormones or detergents would not be good for you.

### Physical causes of stress

Physical causes of stress cause interferences between your brain and your body. Some examples would be

1. An injury, like a fall or a car wreck.
2. **micro** injuries, like bad posture or repetitive motions—doing the same action with your arms or back over and over again

### 3. joints in your body that aren't moving correctly

What all these physical causes have in common is that they disrupt the normal communication between your brain and your body. Normal body function depends on normal communication between the brain, spinal cord and the rest of the body. Interference in the lines of communication causes malfunction and stress to the body.

The brain is connected to the body by nerves. There are nerves to your low back, sinuses, and lymph nodes everywhere. This is the nervous system. When communication is 100% , when the brain and the body work at 100% -the result is normal function. Interferences at the spinal level between your brain and body are called subluxations and they cause your body to malfunction. Any time your body malfunctions, you go under a state of stress. You will not be at ease, you will be in a state of dis-ease

For example, if the area of the spine that supplies nerves to the stomach is subluxated—interfering or irritating these nerves---then information going to the brain about the pancreas and its function, stomach acid and digestion, will be distorted and the brain will not be receiving accurate data on its condition. Likewise, decisions made in the brain and conveyed along the nerves will be disrupted and correct responses will not be made.

#### **Solutions for Chemical Stress**

- **Reduce or eliminate caffeine.** Which is in coffee, colas, iced tea
- **Drink clean, pure, filtered water.** (don't buy the bottled stuff, make your own)
- **Eat less saturated fats** like the ones in hamburgers and fried foods. Instead, try to eat more fish like salmon, tuna or sardines. They have **Omega 3 fatty** acids which are anti-inflammatory and are in every cell of your body, If you don't have them in the correct amounts, Your body doesn't work right. In Europe, they have done studies with people suffering from depression, and gave them Omega 3 fatty acids only—and their depression went away;...powerfully good stuff

#### **Solutions for Emotional stress**

The best, and hardest thing, you can do is remain hopeful and keep a good attitude. Feeling happy and hopeful is powerful protection against heart disease and stroke. Here are a few strategies that are simple, but not always easy:

#### **Skinned Knees Heal Themselves**

We scrape our knee and the wound heals. "If you step back and think about it, it's remarkable," Carlson writes in Good Housekeeping. *"In order to handle the big stuff in life, we need to trust that our emotional wounds--like physical ones--can heal on their own."*

#### **Measure Twice, Cut Once**

Before reacting to stressful events, stop and THINK. Take a few minutes to assess the situation and figure out the best response. Silence the extraneous thoughts. Focus on what's most important now.

#### **Don't Honk At the Slow Guy**

We have so much to do. We get impatient. We yell. We get annoyed. We explode. We get frustrated. We honk. The solution: Learn to be more patient.

**Celebrate Silence-**I teach my patients how to make room for quiet time, because simply taking 20 minutes twice a day to do NOTHING—can reduce blood pressure, anxiety and stress.

### **Solutions for physical causes of stress**

Get checked to see if you have improperly moving joints that are causing interference and , get checked for nervous system imbalance that can be causing your body stress and weakening your immune system or silently damaging your heart and blood vessels...

Reduction the interference between your brain and your body has been shown to:

1. decrease blood pressure
2. increase your lungs' breathing capacity

Source: Mechanisms of physiological responses to chiropractic adjustments—Webster and Alattar

3. Improves Immunity, so you're more resistant to stress and infection.

\* A study by Ronald Pero, PhD. Chief of cancer prevention of NY medical Institute found that *“Chiropractic patients had a 200% greater immuno-competence than non-chiropractic patients.”*

- o In 1989, a study of 400 children showed that children receiving chiropractic had significantly less occurrence of infectious diseases.
- o In 1997 a study of 332 children showed that kids with a history of chronic ear infections under chiropractic care for 6 months had NO MORE infections in 80% of the cases.

*Have you ever had a pebble in your shoe?* A tiny pebble can, because of its constant irritation of a nerve, drive you crazy. At first it feels like a pressure, then an irritation, and finally, pain. At this point, you could take some painkillers so you wouldn't know the rock was there. You could massage real good and make it feel good for awhile, and you could exercise your foot and leg and get it real strong. The only problem is the stone ...it's still there?

**So lets' summarize—#1** stress makes you sick . There are physical, chemical and emotional causes of stress. We've given you some solutions, *but have not mentioned the big one yet.*

In his book, *Timeless Healing*, Herbert Benson MD, a Harvard university researcher for 30 years, comes to the inescapable conclusion that, *“going into the silence twice a day”*, is as close to the Holy Grail of stress reduction, as we can get.

Herbert Bensons research has repeatedly shown that practicing the\*“Relaxation Response” (otherwise know as *“meditation”*) is the single most important thing that a person can do to reduce the negative effects of stress.

\*The Relaxation Response is a simple practice that once learned takes 10 to 20 minutes a day and can relieve the stress and tension that stands between you and a richer and healthier life. The technique was developed by Herbert Benson, M.D. at Harvard Medical School, tested extensively and written up in his book entitled, *“the Relaxation Response”*. ... or his latest. *“Timeless Healing”*.

I encourage you to set aside 10 or 20 minutes today and try it. The following is the technique taken word for word from his book.

**1.**

Sit quietly in a comfortable position.

**2.**

Close your eyes.

**3.**

Deeply relax all your muscles,  
beginning at your feet and progressing up to your face.  
Keep them relaxed.

**4.**

Breathe through your nose.  
Become aware of your breathing.  
As you breathe out, say the word, "ONE",  
silently to yourself. For example,  
breathe IN ... OUT, "ONE",- IN .. OUT, "ONE", etc.  
Breathe easily and naturally.

**5.**

Continue for 10 to 20 minutes.  
You may open your eyes to check the time, but do not use an alarm.  
When you finish, sit quietly for several minutes,  
at first with your eyes closed and later with your eyes opened.  
Do not stand up for a few minutes..

**6.**

Do not worry about whether you are successful  
in achieving a deep level of relaxation.  
Maintain a passive attitude and permit relaxation to occur at its own pace.  
When distracting thoughts occur,  
try to ignore them by not dwelling upon them  
and return to repeating "ONE."  
With practice, the response should come with little effort.  
practice the technique once or twice daily,  
but not within two hours after any meal,  
since the digestive processes seem to interfere with  
the elicitation of the Relaxation Response.

The Relaxation Response, Herbert Benson, M.D.

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## Spiritual Health

In order to provide a contextual framework for discussing interventions with a spiritual health component, it would be useful at this point to briefly review definitions of spiritual health synthesis of earlier studies concluded that the spiritual dimension is related to: meaning and purpose in life, concern and caring for others, and commitment to a God or “larger force”. In later articles, Chapman offered the following definition,

Optimal spiritual health may be considered as the ability to develop our spiritual nature to its fullest potential. This would include our ability to discover and articulate our own basic purpose in life, learn how to experience love, joy, peace and fulfillment and how to help ourselves and others achieve their full potential.

A more recent definition that seems to include many of the same components as those cited above was put forth by Hawks, and states that spiritual health is:

**A high level of faith, hope, and commitment in relation to a well-defined worldview or belief system that provides a sense of meaning and purpose to existence in general, and that offers an ethical path to personal fulfillment which includes connectedness with self, others, and a higher power or larger reality.**

The above definitions are consistent with others in the literature. Accordingly, programs for enhancing spirituality could include: opportunities to explore various worldviews and belief systems (religious and non-religious) in a personal search for truth, meaning, and purpose; activities that lead the participant to appreciate their unique potential and identify the path that will lead to the realization or fulfillment of that potential; and opportunities for developing and strengthening relationships and a sense of connectedness with self, others, and a higher power or larger reality.

## **Models for Enhancing Spiritual Health**

Based on the described selection criteria, three programs were chosen for presentation and discussion: **The lifestyle heart trial**; psychosocial intervention in cancer; and the stress reduction clinic at the University of Massachusetts Medical Center.

The lifestyle heart trial. The lifestyle heart trial represents two randomized, controlled clinical trials that have been published to date. While the research is ongoing, the most recent trial involved angiographically documented coronary artery disease patients that were randomly assigned to treatment or usual-care control groups. Usual-care subjects received traditional medications, surgery options, cardiac rehabilitation programs, and standard dietary and exercise recommendations. In addition to appropriate medical interventions (when necessary), treatment subjects received a low-fat vegetarian diet, stress management training, and moderate exercise. Adherence to the dietary component of the program was measured using the CBORD diet analyzer (based on the USDA database), and adherence to stress management and exercise regimens were tracked using self-report questionnaires. Those who analyzed the data were blind as to subject assignment.

At one-year follow-up, angiography showed that the treatment group had a significant regression in the extent of occluded arteries, while the usual-care group experienced an increase in the level of blockage. In addition, reductions in blood cholesterol levels, blood pressure, body weight, and angina pain were similar to those obtained with aggressive drug therapy, but with no side effects. Interestingly,

there was a dose response relationship between program adherence and improved physiological outcomes, suggesting a causal relationship.

The lifestyle heart trial demonstrated clinically significant heart-disease reversal in 82% of participants after only one year, without negative side effects of drugs, while patients receiving traditional drug care continued to worsen. From a cost efficiency stand point, it is interesting to note that participation in the **heart trial program is 1/10th the cost of a single bypass surgery.**

The major premise behind the lifestyle heart trial's approach to the treatment of coronary heart disease is that the farther back you intervene in the multi- causal chain of illness, the more beneficial the effects. Rather than the biomedical approach of treating the later causal factors of heart disease with surgery and/or aggressive drug therapy, the heart trial program attempts to emphasize the earliest links in the chain of heart disease.

According to the lead researcher, Dr. Dean Ornish, this philosophy reflects the view that a lack of emotional and spiritual health is the most elemental cause of heart disease, as the stress that results from poor emotional and spiritual health influences the development of negative health behaviors that then place the individual at risk for developing heart disease.

The daily one-hour "stress reduction" regimen, which included imagery, meditation, yoga, relaxation, and biweekly group support sessions, was intentionally designed to help participants enhance their emotional and spiritual well-being through increased connectedness with self, others, and a higher power. If successful, the inner strength, peace, and sense of individual purpose developed in the program theoretically helps participants choose and maintain healthier lifestyles.

In other words, the program represents an internal, spiritual based motivation for lifestyle change, rather than an external, risk-reduction (fear) based motivation. At this point, it is still not possible to say to what extent, the stress reduction component contributed to observed behavior changes and to the improved cardiovascular functioning of treatment subjects.

## **PSYCHOSOCIAL INTERVENTION IN CANCER TREATMENT**

A study examining the effects of a complex psychosocial intervention on survival time in patients with metastatic breast cancer was conducted by Spiegel and colleagues at the Stanford University School of Medicine. Eighty-six patients were randomly assigned to treatment or usual-care control status. The one-year experimental intervention consisted of weekly 90-minute sessions of support group therapy and self hypnosis. The focus of the program was on living life as fully as possible, and the sessions revolved around seven themes (many of which seem related to components of spiritual health as defined above): encouraging mutual support, coping with dying, developing a life project, realigning social networks, working through doctor-patient problems, enhancing family support, and pain control. Each session was composed of members sharing their fears, learning coping strategies for dealing with death, grieving the loss of members, helping each other, learning to savor the preciousness of life, facing disease directly, and practicing self-hypnosis for pain control.

The program taught patients to take a direct approach in their fight against cancer instead of "wishing" the disease away. Patients were taught to make the most of each and every day, to improve

communication with family and physicians, to lean on one another, to master and express their fears, and to control pain and symptoms. Social isolation was countered in the program as Spiegel reported that members experienced a profound bonding as a result of the group support.

At ten-year follow-up, analysis of death certificates indicated that the experimental group had lived approximately twice as long as subjects in the control group who received traditional care only (37 vs 19 months post- intervention). Additionally, intervention subjects reported only half the pain sensation of control subjects on a standard linear analogue scale. Finally, repeated measures from the Profile of Mood States taken at four-month intervals showed that control subjects suffered a substantial worsening of their mood, including anxiety, depression, fatigue, confusion, and loss of vigor. Treatment subjects, on the other hand, showed a significant improvement in the same mood states during the course of the intervention.

Spiegel suggests that sharing a common dilemma gives members a sense of acceptance, thus decreasing anxiety and depression. As a result, healthy behaviors may increase, mood states become more positive, patient/physician relationships may improve, and the immune system may be stimulated to help fight the cancer more effectively.

While the researchers in this study did not state an explicit goal for increasing spiritual well-being, it seems plausible that spiritual health components were being enhanced as subjects were encouraged to: develop a strong sense of connectedness with others in the group, establish a life mission and life projects, strengthen family ties, share life experiences, and contemplate the meaning of their own death.

While it is still not clear exactly why group support is beneficial for cancer patients, other research adds support for the efficacy of group support as an adjunct to traditional cancer therapy. A similar psychosocial intervention was used in a study conducted at UCLA with 68 patients diagnosed with malignant melanoma. Again it was found that over a six-year period there was a 60% reduction in cancer related mortalities among the intervention group (3 of 34 subjects died) as compared to the control group (10 of 34 subjects died).

**The stress reduction clinic.** Patients at the University of Massachusetts Medical Center who are experiencing chronic pain, insomnia, cancer, hypertension, stress and a host of other disorders that have not responded fully to traditional treatment might be referred to the Stress Reduction Clinic of Jon Kabat-Zinn for additional therapy. The primary practice of the clinic is group-based mindfulness meditation that includes formal "sitting" meditation and yoga, as well as informal techniques such as walking meditation and daily mindfulness.

Participants are encouraged to adopt an attitude of commitment to the program while at the same time avoiding a "goal" orientation. Instead the attitudes of acceptance and non-judgment help them find internal, holistic healing through greater self-awareness followed by self-acceptance. They are taught to live in the moment and become more aware of feelings, sensations, and thoughts.

They then become better able to gain control over pain, insomnia, fear, or stress and learn to respond to their feelings and sensations in more appropriate and meaningful ways. Like the psychosocial intervention for cancer, the stress reduction clinic does not have a stated goal for enhancing

spiritual well-being. Yet, some spiritual health components seem to be targeted such as rearranging priorities to find new meaning and purpose in life, finding a greater sense of connectedness with others, and especially finding more connectedness with self. Several studies have been published that suggest the usefulness of the stress reduction clinic in reducing the physical symptoms of chronic pain, reducing psychological problems such as anxiety, stress and depression, and as a potentially important adjunct to photochemotherapy for psoriasis.

## **Spiritual Methods and Outcomes**

All three of the programs discussed above have published detailed descriptions of the interventions used and the theoretical frameworks upon which the interventions are based. Even though the interventions described above were conducted by highly trained experts with access to extensive resources in expensive clinical settings, many of the components used in the programs (imagery, meditation, group support, etc.) could be adapted for use as adjuncts in health promotion curricula covering a broad spectrum of desired health and behavioral outcomes.

While there is insufficient evidence in the research literature to draw firm conclusions, it is plausible, as Dr. Ornish suggests, that the observed physical and emotional health outcomes are the end product of a causal chain of relationships that begin with the spiritual components of meaning and purpose in life, and connectedness with self, others, and a larger reality. As such, placing more emphasis on the spiritual dimension as a potentially important factor in influencing health behaviors and outcomes (which then largely influence physical and emotional health outcomes) may merit greater attention among health promotion professionals.

The above programs seem to target some of the components of spiritual health as defined above. To different degrees in different programs the individual is encouraged to: develop faith, hope, and commitment in relation to a larger worldview; clarify purpose and meaning in life and identify a path to personal fulfillment; and establish a sense of connectedness with self, others, and a higher power. As such, it may be useful to view techniques such as meditation, imagery, and group support within a broad framework as tools for enhancing the spiritual health components of self-awareness, connectedness with others, and meaning and purpose in life-- rather than looking at them narrowly as superficial stress reduction techniques that simply help people "*calm down*" or "*escape from their problems*."

It might be argued theoretically that the above programs are using imagery, meditation, and group support to bring about changes in a sense of life purpose, self awareness, and connectedness with others. As these changes occur, the participant might experience higher levels of emotional and behavioral health as mood states improve, coping skills improve, a sense of connectedness increases, and stress and pain levels decline.

In terms of physical health, a variety of symptoms might be reduced and ultimately not only the quality, but the quantity of life might be enhanced through disease reversal and reduced mortality rates. Within this theoretical framework, it might be further argued that if spiritual health is important for those who already have chronic pain and illness, as in the programs described above--then spiritual health may also offer a possible path to prevention and wellness for those who are not ill or in crisis?

## **Implications for Your Health Education**

In the 17th century, Rene' Descartes philosophized that the human body operated in a very mechanistic fashion, independent of the mind. Since his day, biomedicine has emphasized the bodily nature of illness and concentrated primarily on physical interventions (i.e. surgery, drug therapy), while largely ignoring the role of the mind in healing. Psychoneuroimmunologists, however, have spent the last two decades investigating the possibility that the mind and body might be interconnected and inseparable, and that emotions, mood states, and thoughts may play a significant role in the physiology of human health and healing.

At the same time, sociologists and epidemiologists have demonstrated health implications for social support and connectedness with others. These discoveries have fueled the ongoing interest in mind/body medicine, new age healing, and alternative therapies.

The next question that needs to be resolved, however, is--what is it that actually determines our emotions, mood states, thoughts, and sense of social support? Why do some people have higher self-esteem, and what makes some people more creative, hopeful, optimistic, fun loving, resilient, connected with others, and psychologically hardy? A possible implication of the above programs is that our search for spiritual meaning, our recognition of our own unique potential, and our quest to realize that potential and find peace, actualization, and connectedness in our lives are factors that help determine our mental and social states--and that ultimately influence our physical states.

The spirit, mind, and body represent forces that may be interconnected, inseparable, and simultaneously interacting with each other on numerous levels. If we want to go as far back in the chain of disease causation as possible, perhaps we must reconsider the philosophy behind the lifestyle heart trial and look to the inner depths of the human spirit as a starting point for holistic health promotion.

***The medical profession has not done “their duty”, and needs to fully exercise the opportunity to explore the deeper spiritual nature of human experience as it influences mind/body health and healing, especially from a prevention and wellness standpoint.***

Since the spiritual dimension of health seems to hold profound implications for disease prevention and human wellness, it seems natural for those in the field of health promotion to step to the forefront and exercise their expertise to develop, implement, and evaluate spiritual health strategies and interventions as integral components of comprehensive health promotion curriculums and programs. This aspect of health is often the focus of “alternative” healthcare providers.

### **Conclusion**

After surveying social work faculty members from four schools of social work in two Eastern universities, Dudley & Helfgott concluded that there was positive support for including spirituality topics in the social work curriculum, the literature has been positive in support of a client empowerment approach to spiritual health education.

The three programs detailed in this paper use interventions such as imagery, meditation, and group support activities that seem to address some of the components of spiritual health as defined in this paper, including meaning and purpose in life, self-awareness, and connectedness with others and a larger reality. Improved spiritual health may be associated with improved behavioral and emotional

health in such areas as diet, activity levels, communications skills, treatment compliance, reduced anxiety and depression, and improved mood states.

These positive behavioral and emotional improvements in turn may be associated with heart disease reversal, reduced cancer mortality, enhanced immune function, and reductions in pain and other body symptoms. Since it is possible that enhanced spiritual health might be associated with a variety of improvements among those who are ill, it may also be useful as an important approach for enhancing wellness and preventing disease among those who are not ill.

The upsurge in societal interest in spiritual matters possibly reflects a desire to bring balance and harmony to a culture that has placed too much emphasis on material empiricism and consumerism--to the detriment of body, mind, and spirit. As spiritual health definition, theory, and practice become more firmly established, health educators will be in a good position to help restore that balance in such a way--that "*the outward and inward man [may] be at one*" (Socrates, Phaedrus 279).

Interesting ....

**EFFECTS OF PRAYER ON PATIENTS:** from the Wall Street Journal

Should doctors pray for their patients? Three leading cardiologists say they do, according to Medical Tribune. One of them, Randy Byrd, did a double-blind randomized study of 393 coronary care unit patients at San Francisco General Hospital. He arranged for people to pray for 192 of the patients but not for 201 others. The groups were comparable in terms of age and severity of conditions. The prayed for subjects suffered fewer complications in three areas:

- \* Only three required antibiotics, compared to 16 of the control group.
  - \* Only six suffered pulmonary edema, compared to 18 of the non-prayed-for.
  - \* None of the prayed-for required intubation. Twelve of the others did.
- "Based on this study, I believe that prayer is effective and beneficial,"* Byrd said.

The study was conducted over a 10-month period while Byrd was an assistant professor of medicine at the University of California, San Francisco, and working as a staff cardiologist at San Francisco General.

Arthur Kennel, assistant professor of medicine at Mayo Medical School, said the study gave scientific credibility to his own observations. *"I pray for my own patients, and I feel my prayers benefit them."* John Merriman, chief of staff-elect at Doctors Medical Center in Tulsa, also expressed no surprise at the findings. *"I believe that patients named in prayer do better."*

Byrd had recruited Protestants, Catholics and Jews around the country to pray for members of his designated group. They were given the name of the patient, the diagnosis and the conditions. They were asked to pray each day but were not told how.

*"Each person prayed for many different patients, but each patient in the experiment had between five and seven people praying for him or her."*

REF: Byrd: 749 Elysian Blvd., Big Bear City, California 92314.

## We're a strange bunch.....

We all want to be healthy and fit, and attractive .....*and live forever*; but a precious few are willing to do much about it, on a regular basis. The truth is we are *spoiled*, and lack the personal discipline required to get what we say we want out of life. Nobody said it was going to be “*easy*”. It is “*simple*” though .....

Everyone needs to be better informed concerning health: (not the current propaganda)

- (1) **what you put in your mouth...** “*we are what we eat*”
- (2) **what you put in your mind** ..... or what you allow into your mind
- (3) **how much you use your body**; don't call it “*exercise*”, just “*movement*”.

Unless we stop conning ourselves, and allowing ourselves to be conned, about the type of food we eat, that has become “*normal*”, we are all going to end up weighing 400 pounds, with diabetes, heart disease, and an early death. It is really that simple.

There is also another simple rule to follow, and it is a far cry from the “US Food Guide Pyramid”. The closer the food is to its original, natural state, the more beneficial it will be for your body. The more “refined”, and packaged (processed) the food is, the lower the value to your body .... and often more damaging. A Coke for breakfast maybe? Pop-Tarts anyone? Fruit-Loops perhaps? (better you should eat the *box*, not the contents.) We are conditioned by big biz (manipulated) to eat for *mouth-appeal*, not nutrition, and health. Cattle are better fed than we are.

If one does not know how to food-shop, one can learn. I believe this is a large part of the problem. I see younger families in the supermarket filling their baskets with junk-foods. Processed foods filled with fat, empty calories and chemicals, and lots of soft drinks (“*the single greatest cause of obesity*”) Who taught them that ? Simple cooking methods with a variety of fruits and veggies and a minimum of meat is not only more economical, but much healthier.

It has been known for a long time that most bodies do not process dairy products and wheat products very well, and are often the source of “food allergies”, which can produce a variety of peculiar symptoms from runny nose to bowel problems.

Heart disease, the top killer, is directly related to your food intake, and can be reversed by a change in diet, and a little *head-tripping*, particularly the Ornish routine and diet. Why is it not widely promoted ? Why doesn't everybody know about this ? Where is the news media ? .... Oh my! . . .*what would happen to pharmaceutical sales, and the purple pill for poopy-people ?*

Cancer, now the leading cause of death: (Sept '07) The American Cancer Society has finally accepted that there are foods (cruciform) that contain anti-cancer agents and that if we ate more of those veggies, cancers would be greatly reduced. Why is this fact not widely publicized?

Diabetes two, is skyrocketing in our society, and yet it has been known for a 100 years that there is a direct relationship to the consumption of refined carbohydrates and the onset of diabetes.

It is an established fact that the agricultural soils in North America have been so depleted in nutrients (since 1936) that the food grown in these soils no longer contain the levels of nutrients our bodies require ..... that means we should all be taking “food supplements” (vitamins and minerals)..... gotta get the “right” ones too. Has your doctor told you that? How come?

Osteoporosis is a disease of inactivity, physically; -working people don't get it. We have been persuaded by the press that we should all be loading up on “calcium” to avoid this scourge. Yet over 95% of all the calcium supplements sold are a type of calcium the body cannot metabolize?! If the calcium you are taking is listed as “calcium carbonate” (also know as chalk .... as in black-board) ..... forget it; you might as well throw it down the toilet because that is where it will end up anyway. Your body only absorbs about 4% when calcium is in the carbonate form. Gotta get some good stuff, e.g. *calcium citrate*. The body will absorb approximately 47% of calcium citrate. Why doesn't everybody know that, with all the hullabaloo about osteoporosis?

There is more to learn, to treat our bodies better. If you can learn a computer program, you can learn to take better care of your health. People spend years improving there golf swing, but wont spend a little time to understand how to improve health, and increase longevity. That's weird.

Most people spend more time planning their two week vacation than they do planning the rest of their lives .... that's weird too.

Go to the Internet, or library, or go to the bookstore. Investigate the Lifestyle section. Pick a book or two that will help you understand what is needed to improve your understanding of:

- what you put in your body
- what you put in your mind
- necessary body movements (exercise)

***Want to live a 100 years.....?***

#### THE SHORT VERSION ?

1. Eat breakfast
2. Don't skip any meals, go easy on the snacks
3. Walk at least 30 minutes every day or walk 1 hour 3 times a week
4. Drink filtered water, never soda pop
5. Eat 5 servings of fruits and vegetables every day
6. Pack your own snacks
7. Eat dinner at home
8. Don't eliminate fats
9. Four foods to eat: fiber, veggies, berries, nuts, protein
10. Get rid of stress by meditation
11. Educate yourself; be skeptical of prescription drugs
12. Find some really neat people to hang-out with, .....even family.
13. Find a way to give yourself away, like volunteer work.

14. Develop a “gratitude attitude”.
15. Show kindness in every situation
16. Be good to yourself

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