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SPOUSE SESSION -- WELLNESS CLINIC: AN OUNCE OF PREVENTION

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Speaker: MICHAEL A. BERRY**

- o This session will address how you can incorporate diet and fitness in your life to ease stress.
 - Stress Management**
 - Relocation
 - Two career couples
 - Examination pressures
 - The traveling actuary
 - Child care concerns
 - Diet and Fitness**
 - Health inventory/survey
 - Assessing your diet
 - o Curing/preventing high cholesterol
 - o Sound nutritional choices
 - Exercise**
 - Finding time for exercise
 - Exercise alternatives

MS. MIMI ROLLAND: We have a marvelous speaker to tell you exactly how to live your life and live it very well. It is difficult for me to introduce this man and one of the reasons is I received 11 pages of background information of what he has done, where he has been and what his accomplishments are.

He lives now in Houston where he consults nationally and internationally. He consults in 4 different areas: health promotion, establishing wellness programs, aircraft accident investigation and general aerospace medicines.

He is a consultant for NASA and he has been a chief of flight medicine in one of their clinics. He has been responsible for the health of the astronauts and their families and he has also been responsible for screening, selecting and training our astronauts for space flights. He has received both national and international awards because he has spent much time over in Europe also. He was voted as an Outstanding Young Man of America for his professional achievement, for his superior leadership ability, and for exceptional service to the community.

DR. MICHAEL A. BERRY: There are some common misconceptions when you are speaking on a subject like this, about wellness or about health promotion. Everybody sort of expects you to be perfect. If you go out to dinner with people nobody wants to order before you do because they are always afraid that you are going to look down upon what they order. You almost feel obligated to order something that is truly the wrong thing to be eating just so that you can show that it really isn't wrong to do that every once in a while. New York is not the easiest place for a visitor to try to maintain a healthy lifestyle. I must admit that our dinner last night was certainly not on the top ten regarding low fat or high fiber. And yet there is really nothing wrong with eating that. You don't want to do that kind of a meal 5-7 days a week, but there is certainly

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nothing wrong with doing it on a periodic basis. And that is, I think, one of the messages that I really want to get over to you: a healthy lifestyle is not something where you have got to have total absence from everything that is wrong or bad for us. The key word that I would really like to stress to all of you is moderation. And I think that holds for most everything that we are talking about with maybe one exception and that gets to the area of smoking. That is one place where total absence is probably the absolute best and moderation as you are trying to quit. But otherwise use moderation across the board and in terms of what you are doing with your diet and exercise. You don't have to be a Jim Fixx type of heavy runner who runs 7 days a week, 4, 5, or 10 miles a day. That is not the kind of thing that you have to do.

One of the big problems we have when we are speaking about wellness is the question of credibility. As I said at the beginning, I try to do my best to eat the kind of foods that are the right kind of foods. I don't do it all the time, and you don't have to do it all the time. I try to exercise at least three times a week, but again there are times when you can't. I was going to jog but Central Park was a little far away to get down to and back in time for this session, so I didn't exercise.

We are bombarded with information on the wellness topics: cholesterol, diet, exercise, etc. And you can actually find anything that you want to believe; somebody has written about it and will support whatever you want to believe. If you want to believe cholesterol is ok and there is nothing wrong with it, I suggest that you buy the September issue of *Atlantic* magazine. There is an extremely lengthy issue on the so-called cholesterol myth. I disagree with a lot of what this particular author has written about but if you want to believe that cholesterol is ok, here is one of the prime examples.

We hear a lot about lite -- lite this and lite that. Lite is the new buzzword for advertising. Just because something is labeled as being lite doesn't necessarily mean that it is good for you. You have to start reading some of the labels. The media has really gotten onto this and has almost given us a problem -- a new stress or a new stressor in our lives -- to try to figure out what we should do. We have all this information but how do we know what the right thing to do is? Somebody says it is good and somebody else with just as good credentials tells me that it is not good. Who do I believe? What I am going to try to do is give you some information that I obviously believe is correct, and let you make some of your own decisions on how you want to utilize this in your own life. Try to pick some of the things that you think are possible to do to make you and your spouse's life a better, more healthy type of an event.

A very common question I get asked is what in the world does aerospace or space medicine have to do with talking about wellness? My background started in the Air Force as a flight surgeon taking care of pilots. It went from the Air Force and fighter pilots to NASA and taking care of astronauts. But there really is a tie-in. There are several points that actually do bridge this gap from aerospace and space medicine to do what we call preventive medicine. In working in the aerospace and space medicine field, we obviously dealt with very healthy people -- our astronauts and pilots -- and we put them into very unhealthy, abnormal type of environments. And our job was to keep people healthy. Well I don't think anybody would disagree with me, that walking out the front door of this hotel is putting you into an abnormal environment. There is nothing normal about that sidewalk out there on Times Square. And so it is the same sort of thing; you can bridge this gap and work with people -- everyday people like you and me -- and try to keep them healthy in the abnormal environments of a crowded city, the busy freeways, etc. We found that each individual was truly unique, particularly when we were looking at physiologic parameters, monitoring blood values and things like this. We could no longer take group normals, which is what your doctor normally works with. In fact this whole Society is sort of founded on that type of thing; what this giant population does, what the statistics show as far as life expectancy. But when it comes down to you as an individual, it doesn't matter what the statistics for the group show. What matters is what is normal for you and that is what you have got to find out.

Something we found out with the astronauts was we had to apply comparing change in them to themselves, not to what was happening to some large group of predominantly ill people. If we wanted to see if something would change we had to say this is where this individual started, and this is where this individual ended up. And that is particularly true when you are looking at the wellness area. You need to use yourself as the monitor, as the control. Obviously we need a very large commitment and that is no different than the commitment that it takes to be healthy so that you can go into space. The nice thing was, the carrot in front of the astronaut or the pilot was a

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lot different than the carrot that is in front of each one of us. If you want to fly in space, you have to be healthy and there isn't anything they wanted to do more than to fly in space. So achieving that commitment for them was very easy. Achieving the commitment to lose 20 lbs. in the next 2 months -- the carrot is a lot more nebulous and is a little harder to achieve. But unfortunately, the commitment has to be the same. It has to be as great or the change is not going to occur.

When man first went into space, the Russians first put their man up, and we followed very shortly thereafter. We did so without knowing absolutely 100% what was going to happen. We had a very good idea that it was going to be safe, but there were a lot of experts out there and very highly renowned experts who were saying we were going to kill this man as soon as he got into orbit and became weightless. We looked at these people that were making those decisions at that point in time, weighed the data and said we didn't believe that was going to happen. We didn't have all the answers but we were going to go ahead and press on. Well thank goodness we did or we wouldn't be where we are today. If we had waited for 100% proof and all the answers we would still be sitting on the ground. I think that is the one thing that you have got to take home with you -- all of the answers are never going to be in. If you are going to wait until every answer is present as far as what to do about your cholesterol, is it good or bad, should I eat it or should I not, you are going to die probably at a younger age because you are not doing anything about it, but still waiting for those answers. We probably never will have enough answers for some people. What you have got to do is to look at the data that is there. Decide what in your best judgment you believe and what you don't believe and make a decision based upon those facts that you see.

I am going to try and give you what I think are some of the facts so that you can make some of those kinds of decisions. So that is what the tie in is between aerospace, space medicine and what we are going to talk about. Very briefly I would like to give you a bit of a history lesson, as to where preventative medicine started and how we got to what we are doing. We will talk a little bit about heart disease primarily, because that is one of the biggies, and then we will get into the risk factors and go from there.

Back in 1900 heart disease wasn't a problem. TB, pneumonia or even diarrhea were the kinds of things that were killing people back in 1900. Due to the advent of vaccines and antibiotics, we got rid of tuberculosis, and pneumonia. Public health laws got rid of the infectious agents that were causing a lot of the diarrhea and the dysentery that were killing people. So today, this whole thing has changed and the diseases of 1900 don't even show up in the top ten anymore. But what we have got, and this is no surprise, we hear about all the time: heart disease, cancer and, low and behold, even accidents. Accidents are the number three cause. In fact if you get down and break it into age groups, accidents actually can go up to number 1. If you look at the younger age groups in the 20s to 30s, accidents are the number 1 cause of death. But we are going to talk about the life style of the kind of things that we do that affect the heart disease. And we are going to talk a little bit about cancer, not in as much detail, because again it being number 2 is not the really big thing. And we are going to talk about something called risk factors. What I call a risk factor may be a little bit different than what this Society looks at as risk factors. But risk factors are not something absolute -- that if you have got this, you are going to get this disease. That is not what we are talking about. We've all got risk factors for cancer, for heart disease, to a variety of levels and degrees. Everybody's risk factors are probably different, there may be some common ones, but the level of severity of a particular risk factor is individual to you. We are not all the same. What you have got to find out is what your risk factors are and how big a problem the ones are that you as an individual actually have.

When we are talking about a heart attack, we talk about double, triple, and quadruple bypass. The arteries supply the blood but because the heart is an organ, it also needs blood itself. The blood vessels that come off up at the top of the heart come right back and bring blood to the muscles so that the pump can actually do its job. These are the things that unfortunately are very prone to getting plugged up and oftentimes get plugged up with crude just like the pipes in your house. You have been in a house for 20 or 30 years and all that scum builds up and you have to get pipes replaced. Well these are the things that plug up and they often do it faster than a lot of the other arteries in our bodies. The bypass operations actually bypass a place where plaque has been. Every one of you, no matter what your age, has got calcium, scar tissue, cholesterol, and other fats that build up in your arteries to some degree. Some of us have more of it than others, but everybody gets it. We used to think that this was only something that occurred very much later in life, but we have now found that it actually starts from the day that we are born. We can actually

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see unfortunate amounts of it in very young people and so this is why the big thing has started with cholesterol and fat.

We said we are going to talk about risk factors. A noncontrollable risk factor is one where you can't do anything about it. If you've got a very bad family history, a lot of individuals have either had or died of heart attacks at age 50 or less, that is probably something genetic that is in your family. That puts you at a much greater risk. And there is not a thing you can do about that. God decided who your parents were going to be long before you had anything to say about it and that's what you are stuck with. But when you get to the controllable ones -- like what your weight is, do you exercise, do you smoke, what kind of diet do you have -- you have got some control over those risk factors and those individuals ought to be even more motivated to do something, if they have some of these bad uncontrollable ones. The ones that are particularly bad are the heart attack by age 50 and family history of lots of hypertension. You ought to be well aware of what your blood pressure is and not just assume because you feel good that your blood pressure is ok.

A family history of diabetes is a bad, uncontrollable risk factor. This is actually a disease where you have problems with your sugar and how your body uses it. But part of the reason that you've got this sugar problem is an organ that controls it has got problems with the circulation to it. Also, all of the small blood vessels, arteries of the body, are damaged and plug up a lot faster in people with diabetes. So that is why diabetes is important. Also, gout causes a side effect of the disease; it causes some problems with arteries in the body.

Age is a factor primarily because of what we do during the time we have been put here on this earth. We would like to see it not be a factor but just because you are 60 years old your risk is greater. What is really important is to look at what you have done for those 60 years. What has your risk of all the controllable kinds of things been during that 60-year time frame. We haven't gotten to that point yet, so we still see age as a risk factor as far as heart disease. We are all aware that the older you are, the higher your risk, but it really means, what have you been doing during that time period?

Sex is a risk factor and the women have got much better statistics than us men. We don't really understand exactly why it is; it may have something to do with estrogen, the female hormone that gives a lot of protection against heart disease. However if you turn around and give that same estrogen to men, it doesn't make the heart disease risk go down any lower; so there has got to be something else that is doing it other than just the hormonal factor. There is some chemical factor, different types of fat that women have much more of on the average, but again even taking those into account, generally women do much better. So everything else being equal, the woman is going to have a much less risk of heart attack than a man will.

We are going to spend some time on the kinds of things that you take into account that are risk factors, meaning they influence the possibility of developing heart disease and therefore a heart attack. I keep using the word heart attack. When I say heart attack, I am talking about that event where that artery plugs up entirely. When it plugs up entirely that can be where say 95% of the vessel has become occluded by crude and the vessel then, due to whatever reason, may have a spasm in the wall and it closes down and is 100% occluded. When it becomes 100% occluded, the heart muscle that it supplies, the portion of muscle that it supplies, dies or becomes severely damaged. That is what a heart attack is. That same event in the brain is a stroke. The disease process is identical. Both can obviously be fatal but the process of what is going on is the same, it just depends on whether you are talking about arteries that supply our heart or arteries that supply our brain.

We are going to talk about cholesterol level in a little more detail. We are going to talk about total cholesterol and high density lipoprotein (HDL). If you have heard of something called good cholesterol and bad cholesterol, the HDL is the so-called good stuff. Depending on how you want to look at it, the total is actually the bad; it is the one number you want to have very low. We will talk a little about hypertension and high blood pressure in more detail. We won't go into any more detail on diabetes, but that again is something that affects our blood vessels, and therefore makes it more prone to being plugged up. We will talk about obesity and weight. Stress is a definite factor and we don't totally understand it. We are learning more and more about it all the time.

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Gout is a disease; it is really arthritis. It is due to uric acid building up at high levels in our blood. That chemical uric acid, causes our blood vessels to deteriorate faster than normal. That is why it is also related to the incidence of heart disease.

The use of oral contraceptives puts one at a higher risk because of what the chemicals that are in most of them do to our blood vessels. The nice thing about it however is that once they are stopped your risk actually will go back to what it was when you were not on them. It does increase one's risk due to some blood vessel changes that will occur temporarily while you are on the birth control pill. As an aside the same thing will happen when one is pregnant but it happens to an even greater degree. It is not either/or; just because you are not on birth control pills doesn't mean you are going to get pregnant I realize, but there is a lot of tradeoff in terms of risk, so don't just look at that as being absolutely bad. After menopause has occurred in the woman, her risk will gradually increase and become equal to that of men, so even though women are better off at the younger ages, it is not something that stays with women throughout their lifetime unfortunately.

You want to have a cholesterol below 200 if at all possible. Most people tend to agree that 240 is a so-called real absolute cut-off of abnormal and if there is anything that you can do to get it down below 240, you want to do it. If you can't get it below 240, then you ought to be on medication. The higher your cholesterol the greater your risk of having a heart attack. The obvious answer is you want to have as low a cholesterol level as is possible, particularly below 200. You need to know the number because you don't want to be told by your doctor that your cholesterol is normal. What is normal? You need to know the number because if normal is 220 then you want to get it down below 200 if at all possible. And yet you could be told it is normal at 220 and you could be told it is normal at 180. You want to know the numbers. I think we are finally getting the message across to most physicians that it is something that is important.

You want your HDL, this high density lipoprotein to be as high as possible. On the average, for most women HDL is about 50-55. Men across the country run about 40 to 45, and that is on the average. There are a number of things that will make your HDL go up but you want your HDL to be as high as possible. If you can have an HDL that is in the 60 or 70 or 80 or 90 range, so much the better. That percent is a higher portion of your total cholesterol number. Obviously you end up in sort of a dilemma when you are working on things that bring your total cholesterol down, because if your HDL is part of it, you are also going to bring it down. So you have got to work on things to decrease your fat and your total cholesterol and also at the same time work on things that will keep your HDL up. The HDL acts like a vacuum cleaner if you will, and actually will pull out the fatty deposits that are in the artery wall, will carry it off and let the liver metabolize it and get rid of it for us. So we are getting some good beneficial effect. The more of it you have around the more cleaning you are going to have done. The low density lipoprotein (LDL) is bad, as it actually will penetrate the artery wall, and it ends up depositing itself as the fat. This thickens the wall of the artery, causes scar tissue around it, and eventually will end up totally plugging up the artery.

Low blood pressure is not an illness. It is not something that is wrong with you. It is something beneficial in actuality. It is going to make you live a lot longer than somebody who has a higher blood pressure, whereas both may be normal blood pressures. If you are running blood pressures above 140/90, that is considered abnormal and you ought to be doing something to get it down, be it medication or exercise or weight loss. But you don't want to have consistently high blood pressure above this so-called cut-off. Blood pressure of 120/80 is the so-called textbook normal blood pressure. If you are running, say 100/60 and you think that is really low and wonder if there is anything wrong with it, there is absolutely nothing wrong. Your blood vessels are going to last longer because they don't have to stand as high a blood pressure. If you can lay down and jump up, stand beside the bed, jump up out of your chair and not get lightheaded and dizzy and fall down, there is absolutely nothing wrong with 100/60. There is nothing wrong with 90/50 if you don't have problems with it. All that means is that your vessels are going to last longer and God bless you! I think that is great. I wish mine were that low. So don't think of low blood pressure as being something that you wish you did not have unless you've got some problems with it and you actually are having symptoms of dizziness.

As I said medication is not the only way to control blood pressure, but if it is high, then you want to think about things which will bring your blood pressure down -- exercise, diet, and medication in that order; medication sort of as the last resort if none of the other will work. The reason

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again that blood pressure does factor in as a risk factor is because it damages the blood vessels, it wears them out faster, and it causes the scar tissue to form faster.

Smoking is not very glamorous. It is bad just from a physical point of view. It is bad for your skin. Unfortunately the media has gotten into this too, and they have tried to make smoking look very glamorous. They always say, as Virginia Slim does, "you've come a long way baby." Well unfortunately women have come so far that whereas breast cancer used to be the number 1 cause of cancer death in women, they now have the same problem that the men do as the number 1 cause of cancer death in women is lung cancer. Breast cancer is now number 2 and it is all because smoking has been made to look glamorous. If most of you are nonsmokers I commend you. We are really seeing the problem in the younger generation -- in the teenagers and those in their early twenties. Smoking is going to increase your risk of cancer. It is going to perhaps make you have emphysema at a later point in time. As far as heart disease, nicotine as a chemical causes something else to go on inside our blood vessels. It causes little microscopic pits to occur inside these blood vessels and allows the fat to come through and deposit inside the walls. It allows scar tissue to form to try to close up these pits and the whole process is just that much faster. And that is simply caused by the nicotine itself. Every cigarette you smoke is an increase in risk. If you can cut yourself from a pack a day to a half a pack a day, you are doing some good. Don't look at it as "well gee whiz, I have been smoking for a long time, it is not going to do me any good to even cut back." That is not true. Cutting back will even help so don't delude yourself into thinking that you have done the damage and nothing is going to happen. You can even repair some of the damage that is done. So there is a reason to quit. Smoking is related to heart disease, lung cancer, mouth and throat cancer, emphysema and a lot of other respiratory diseases.

There are some tables that came out in 1983 which unfortunately allowed everybody to weigh a little bit more. How many people have used weight tables to decide if you are overweight or not? You look at the weight table and it's got small frame, medium frame, large frame. And most people say, "oh, I must be in the large frame area here." There are some guidelines that will scientifically tell you where you ought to be, in small, medium or large frame. I think the 1959 Metropolitan tables are a lot more realistic as far as the weight that they will allow. I really don't think the changes that they made for the 1983 tables are legitimate.

Obesity is related to a lot of things, in addition to heart disease. It makes the possibility of developing diabetes much greater. It is related to liver disease, gall bladder disease, and arthritis. It increases the wear and tear on your joints. So there are a lot of reasons to watch what is going on. Ninety percent of slim people will live to be age 60 whereas only 60% of the obese people will live to be age 60. That in itself ought to be a good motivating factor.

Exercise will make your heart a much more efficient pump; it will allow it to do its work with fewer beats, and at a lower blood pressure. Therefore it doesn't wear out as fast. Exercise is extremely beneficial. Exercise will lower your cholesterol. Exercise will lower your blood pressure.

Risk factors add exponentially. Meaning there is one risk factor of the first plateau. Two risk factors more than triples. With three risk factors it jumps even higher again. So, the answer is you have got to know what your risk factors are before you can start modifying them.

You can use risk factors to look at cancer. It is a little bit more difficult but you can do it. The number 2 cause of cancer death in women is breast cancer. There is a lot of crossover, when you really get down to it, of the healthy things that you do for heart disease and things that you do for preventing cancer. Family history as far as breast cancer goes is one of the real biggies. If you are an individual that has a family history of breast cancer, I would highly recommend that you consult your physician. You need to take the step of making sure that you have been screened and examined so that you don't end up with it. The number three cause of cancer death in women is cancer of the colon. Women tend to think that colonoscopy or the proctoscopic exam is something the men have to have, that it is sort of their counterpart of the annual pelvic exam that the women have. Unfortunately it is something that women ought to have also, because like I say, it is the number three cause of cancer death in women. A low fiber diet and high animal fat diet will end up giving you a much higher increased risk. You really see the risk start to climb starting at age 40. Once you hit 50 it climbs even steeper still. The American Cancer Society recommendation is that after age 50, every male and female have a colonoscopic examination

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done. It is a lot worse sounding than it actually is. I promise you. But don't look at it as a problem that just men have to deal with.

There was a study done in southern California and particular individuals were chosen because they were smokers, because they had high blood pressure and because they were overweight. Those three things had to be present. In this particular study they had them stop smoking, they had them lower their cholesterol by exercise and by diet, which also tended to bring their weight down. A year later their blood pressure was brought under control. The message I really want you to take away is the fact that you can make some changes and you can reverse some of the damage that has been done. Don't delude yourself by saying it is all over. "I have ruined them already; therefore there is no point in doing anything new." That is not true. You are fooling yourself. The answer obviously that I am trying to get across is we want to reduce our risk factors. If we are going to reduce them, we have to know what our risk factors are.

Whole milk is very high in fat. Depending on the kind of buttermilk, again it is very high in fat. You don't want to be drinking it on a very regular, particularly on a daily basis for a week. The reason cheese is not good for you is the fat content. So look for the skim milk kinds of cheeses. They don't taste as good unfortunately, but those are the things you want to steer to on a more regular basis -- as opposed to having large amounts of cheddar cheese seven times a week. That is, you are really upping your fat content. There is nothing wrong with beef per se. Everybody thinks they have to become a vegetarian; have nothing but vegetables and maybe fish. That is not really true. Beef per se is not bad for you. Again judge the kinds of beef one gets as to how much fat it is. If you like beef, again try to steer towards the types of beef that don't have as much fat in them. Have fish and chicken at least equal, if not exceeding the number of times per week that you have beef. Have pork the same way. Have at least a 50/50 mixture on a weekly basis; if you can, make it more -- 60/40 or 70/30 of the low fat, meaning turkey, chicken, and fish compared to higher fat, beef, and pork. And so that is sort of a goal that you want to shoot for. Ice cream again is high in fat, depending on the kind of ice cream. The ones we like the best have the highest fat content. What I am saying here again is, you don't have to abstain from it. But you need to look at what you are doing in the long run in terms of how many times a week and how many times a month; so that you don't have ice cream after every single meal seven days a week, four weeks a month. That's not good. But I am not saying to cut out ice cream and never buy it again either. I think that is impossible. You would be setting yourself up for failure. You would give up and say, "screw it, I don't want to, I don't care, I enjoy it and I've got to have something in my life that I enjoy so I am going to do it anyway." And then you are out of control again and that is what you don't want to do. You want to be in control.

We get salt in everything in our diet. It is the sodium chloride that is bad for you. There are ways that you can consciously cut back on the salt. Unfortunately there are more prepared foods becoming available all the time. That is what the packagers are doing so that we don't have to spend time in the kitchen. All you have to do is take something and throw it in the microwave and ten minutes later you have a full three-course dinner going. The more preprepared it is, probably the more salt it has in it. That is the one bad thing about it, although the packagers and manufacturers are becoming a lot more conscious, both about fiber, fat and salt contents. So maybe we will see some of this coming down a little bit more but you need to be aware of it. And if you can cook things that are not preprepared, you are probably doing better as far as the salt goes. If you have ever tried a salt substitute, they taste like hell. They are terrible tasting. They are very salty. You get the salt taste, along with a very metallic tinfoil kind of a taste. And that is potassium chloride and potassium chloride is ok. It's not going to be bad for you. But it doesn't taste the same. Yes if you've got to have something salty you will do with that. But try putting it on popcorn and you will never eat popcorn again, I guarantee you. But Lite-salt is a 50/50 mixture of sodium chloride and potassium chloride and for most people it seems to work very well. You can almost just switch over and use it entirely. Now if you have a lot of bridgework say, fillings and metal in your mouth, even that small amount of potassium chloride may give you a very metallic taste. But it is something that you can at least cook with. If you can just switch from regular salt to Lite-salt you have cut your sodium chloride intake by 50%. And you haven't had to change anything other than what you buy at the store. So that becomes a very easy kind of a thing. If you can do that -- and think about how often you sit there and sprinkle it on something -- and cut back on that, then you are obviously cutting your salt intake even more.

A high fiber diet is good as far as cancer risk factors go. It is good also from a heart disease point of view. Obviously everybody now knows about oat bran being a very good type of fiber. Again

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you can't watch tv without hearing about oat bran. But it will help to move stuff through the colon faster, less fat is absorbed, and it lowers your cholesterol. There are a lot of good beneficial things that it does. Obviously things like broccoli are particularly high in fiber. A lot of people feel if they eat a salad every single day they will be getting a lot of fiber. I don't care how much celery you put in that salad, those strings in the celery don't do you a darn bit of good as far as fiber content. About the only things that have any fiber content are the condiments at the very end of the salad bar line. Those are going to do you more good than the lettuce and tomatoes themselves. A common question that we get asked is how do you know if you are taking in enough fiber? There is one very simple rule because everybody is different. The way you process your food is different than the way my body processes my food. We are all unique in that respect. Our diets are obviously different but there is one very simple rule, if you will take the time to do it, and a lot of people do not like to, but it is one way that you know that you are getting enough fiber. And particularly if you are consciously trying to eat enough fiber. And it is a rule called floaters and sinkers. If you will take the time when you have a bowel movement to turn around and look, if the bowel movement floats you get enough fiber. If it sinks you don't get enough fiber. Very simple rule. And you don't have to sit there and add up 10 milligrams, 20 milligrams or whatever.

Breast cancer risk, again let me just reiterate that family history is extremely important. If family history is an issue for you, I highly recommend that you get screened. Mammograms are an essential part of that screening.

Do not be misled, if you are a nonsmoker, by the smoker who says that his smoking is not damaging you and he has the right to smoke sitting right next to you. You are accepting some risk from side stream smoke. Nicotine does damage the blood vessels, it does increase your risk. So the more smoke-free your environment can be, if you are a nonsmoker, the better off you are going to be. And you know we have enough other things that we do to ourselves without having to let somebody else do something to us in terms of the risk that does come from smoking. And if you are a smoker, obviously, you work your darndest to try to not have that as a risk factor. Because it definitely is one of the biggies.

The more times that you exercise during the week, the better off you are.

If you are an individual that has a lot of stress situations, either at home or office, that are causing you problems and you do not believe that you have adequate stress management techniques, you have got a problem. And that is something you ought to be dealing with and learning more about. Talk about a subject where you can be absolutely overpowered by the amount of literature that is in the bookstores nowadays! There are lots of good, not terribly lengthy, stress management types of self-help publications that are very good. The *Relaxation Response* I think is one that is particularly good in terms of things that you can do on a realistic day-to-day basis within your life so that you can better manage the stressor, the stress that is occurring inside. We do know stress lowers our resistance to physical illnesses.

I can't give you any good guidelines as far as weight and percent body fat because weight really has absolutely or very little to do with it. If you measure Arnold Schwarzenegger as an example, on a weight table, he would be coming out totally obese. He would be so far off the top of the scale it would be unbelievable. The percent of body fat on that man is probably less than 5%. Obviously that kind of weight, muscle and bone is not bad. What you don't want to have is a large percentage of your body weight carried as fat. Because it becomes mobilized then and gets dumped into the blood stream. As an example, body fat that is carried in the gut like a beer belly is the worst kind of all because it is mobilized faster than any other kind of fat. If you have generalized body fat -- legs, arms, and everywhere -- you are better off than the man with a big beer gut.

Just to talk briefly about nutrition, a study was done that looked at cholesterol content and total fat content. The reason you would not want veal is because of the amount of cholesterol. But, as with everything, there is a tradeoff. The total fat content is very low. Pork has got the highest fat content, but if you are only worrying about cholesterol and not total fat, there is no real difference between beef, lamb or pork. If I asked what has the worst cholesterol problem of those three I am sure everybody would have raised their hand and said pork. Well that's not true. But it does have a lot of fat in it. So, you have to be aware of those things. Looking at chicken and turkey, obviously there must be a difference between light meat and dark meat. The reason dark

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meat tends to be more moist and tender, is that it's got fat in it. The dark meat has more than double the total fat content. Although again if you are looking at cholesterol, there is not much difference. How can you get the lowest cholesterol and the lowest total fat content? What you are going to eat is light meat turkey. It is definitely the overall best. White meat turkey has 59 milligrams versus white meat chicken with 72 milligrams. And if you look at total fat, it is 1.3 versus 3.8. So, you can see why manufacturers are doing so much with turkey these days.

Now everybody knows salmon is supposed to be good for us, right? But one of the reasons salmon is good for us is because of a particular kind of a chemical substance that is in the fat. But if you look at calories, there is a fair amount. In terms of the calories you are going to get from salmon, it is going to be a lot more than if you eat perch or something like that. And so, you are not going to get a whole lot of cholesterol but you are going to get a fair amount of fat. But it is still lower, way lower than beef, lamb, pork, etc. Shrimp is really high in cholesterol. In terms of a trade-off, there is a lot of cholesterol comparatively to other fish, but shrimp is not all that bad as far as total cholesterol if you are comparing it to the meats; and if you take total fat content, it is really low. So if you are an individual that has a cholesterol problem then you might want to stay away from it. If cholesterol is not a problem with you, and you are just trying to watch your weight, shrimp is not bad. It is really great. It has very low fat content.

You want to lower your LDL. Eat less animal fat and eat more fiber; it absorbs less that way. Exercise aerobically and maintain your ideal weight. HDL is the good stuff that you want. Eat more fish, eat garlic, drink moderate amounts of alcohol, and stop smoking. Smoking lowers your HDL. These are the guidelines that came from the National Institute of Health for healthy Americans. Again these are things that I think all of us are basically aware of.

Very quickly let me go over stress. Stress is when your gut says, "no," and your mouth says, "sure I'd be glad to." Stress is not something external. It is not something out there on Times Square or on Broadway. Stress is something that chemically is going on inside our body. It is something that we have to learn to manage. What are external to us are stressors and there are good stressors and there are bad stressors but they all do something to us. And there are two stress reactions: a distress, obviously that must be the bad, and stress which is good. And they both form sort of vicious cycles that perpetuate each other and cause problems. The U stress has stressors which are looked upon as opportunities. You have a growth-enhancing reaction giving you strength, resistance to this, and you end up with a perpetual cycle that gives you a good feeling. That is the kind of thing that you want stress to do. Stressors are not bad things; stressors are not looked upon as bad, but as opportunities. The distress vicious cycle reaction is an overload type of a situation where you have got so many things hitting on you can't deal with them. They cause more stress in and of themselves. You become more vulnerable and it just goes around and around and causes problems. There is a general increase in irritability, depression, pounding in your heart, dryness of the mouth, impulsive behavior, emotional instability, and an overpowering urge to run and hide. I'm sure we have all had that at varying times. If this becomes really big, you've got some problems: inability to concentrate, accident proneness, fatigue, free floating anxiety. That just means you are upset and you are anxious and you can't even tell why. It is just sort of there and somebody asks what's wrong and you don't know. You are upset, you are anxious. Feeling of tension, tightness, alertness, trembling, nervous tics, those are all the kinds of things that you don't want to have.

You are a rare individual if you can get rid of the stressors. You cannot get rid of the pressure at work, you can't get rid of your kids, you can't get rid of your budget that you can't meet. That side of the equation is fixed. It is a given. You have got to learn how to manage what those stressors are doing to you so that they do something different and they don't cause the problems. That is what stress management is. And you have got to change the reaction inside you. The stressors are stuck, you have them and you are going to have to learn to live with them. Change the way your body reacts to them. And there is a lot of help out there doing it. Stress management courses are excellent. More and more companies are coming up with internal company stress management programs. There are lots and lots of good books. The *Relaxation Response* is one I personally think is very good. Exercise three times a week, at a minimum. Less than that and you are helping your muscles but you are not helping your heart. Aerobic exercise helps your heart. That doesn't mean lifting weights three times a week. That means doing something that makes you consume more oxygen when you do it. That is what aerobic exercise is. It can be an aerobic dance class, it can be jogging, it can be jumping rope, it can be running the stairs, it can be walking, simple walking, there is absolutely nothing wrong with that. You have got to do

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something that becomes a habit, that you do a minimum of three times a week, that you do a minimum of 20 minutes every time that you do it. Hopefully try to get your heart rate increased to at least 60% to 70% of what your maximum heart rate is. You can do that walking. You can definitely do it walking. It is easier to get it up jogging but you can do it and have a lot of benefit from walking.

So what it gets down to is we have a bunch of choices we can make. We can make bad choices or we can make good choices. I hope I have given you some information so you can make some of the good choices. Don't feel like you have got to go and work on everything that there is wrong. If you are overweight and you don't exercise and you smoke, don't think you have to do all of those. If you are trying to do five risk factors all at once, you had better get a stress management course because you are going to have difficulty in that area if you don't already. Take one step at a time and go at it slowly; that is the way to do it. You don't have to do everything at once. What you want to make up here is your own personal vaccine. Just like getting immunized against the flu, you decide how much of each one of these kinds of things, such as stress management, exercise, etc. that you personally need. Your vaccine is going to be different than my vaccine. Everybody's is different. You have to know what your risk factors are if you are going to do that. And what you are trying to achieve obviously is a healthy lifestyle. But again I emphasize it gets down to it being your life and your health and your choice. You are the only one that can decide to do it. I can give you the information, I hope I have done that, but you have got to make the decisions on what you are going to do with this information. Yesterday's successes belong to yesterday along with yesterday's defeats and sorrows. The day is here, the time is now. Now is when you need to try to do something and where you want to be is your best.