

Nancy Wellman, PhD, RD
National Policy & Resource Center on
Nutrition & Aging
Florida International University

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About a year and a half ago, we launched a project called “Steps to Healthy Aging” and honestly, I did that because I was in Singapore where they were concerned about obesity in Southeast Asia. What is happening in Southeast Asia is that their obesity rates are rising too and what they are finding is that it is even lower BMIs than we are seeing in the United States. They are finding an increase in diabetes and I believe that probably the effect of obesity on diabetes is what is making us all talk about obesity today. In the past we were very kind and thought if you want to over eat or for different reasons you do over eat that is your business but now we realize that it is causing an increase in the diabetes and that is one of our most costly diseases and that is why we are talking about it very publicly.

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So to give you a little bit of just one slide about our centrum nutrition and aging. I think we are pretty much on target that we are promoting active healthy aging through good nutrition and we talk today about healthy aging, successful aging, productive aging, all aging in a very positive way and so active aging is another thing we talk about. How we are going to do that is by increasing the food and nutrition serves in any place where older adults are served so throughout the home and community based social health and long-term care systems serving older adults and I think again, there is not enough nutrition emphasizes in the programs that work with older adults.

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So, what I was concerned about was, the senior nutrition dining centers and meals on wheels programs were getting enthusiastic about aging but more focusing on physical activity and they were talking about hiring exercise physiologists to run programs. When I was in Singapore I heard about “Colorado on the Move” and America on the move and all that, I thought we really needed a project to get older adults walking more. We as nutritionist can be multi-skilled, do multi-tasks and put together the calories in and calories out in a very simple logical way through eating better and moving more. I thought if we keep those two things together, we can position the importance of active aging through good nutrition in sort of an integrated way. So that was my goal.

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Turned out right about at that time Bush was putting forth this healthier US because again everybody was becoming aware of some of the serious obesity problems in our country. He said that every little bit of effort counts and his four keys to a healthier America. There is a nice document on line about that, that says to be physically active every day eat a nutritious diet get preventive screenings and make healthy choices like wear your seatbelt and those kind of things and preventive screenings are mammograms and things like that.

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So again there was a general awareness and awakening that Americans needed to do more when the dietary guidelines came out in 2000 because they focused for the first time on physical activity in relation to food and again it was the relationship of calories in and calories out. And the guidelines today say that the weight loss of only five to ten percent of your body weight may improve problems associated with over weight such as high blood pressure and diabetes. So, if you increase your physical activity decrease your fat intake and maintain or achieve a healthy body weight, that's one of the guidelines that we are urging all Americans to do. Certainly the fat messages got more specific and it's a little bit different than just decreasing the fat intake. I think the change in labeling for trans fats has made a difference with a lot of food companies already taking the trans fats out. We're all going to benefit from that.

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But here is our problem, we have a sedentary life in the US and it seems to be one of our leading causes of death. There's even a syndrome called the Sedentary Death Syndrome and it is one of the top three causes of all mortality in the United States. Again, there is such a preponderance of evidence that obesity increases your risk for so many chronic diseases and those are killer diseases. So fifteen percent of the 1.6 million chronic health conditions are due to the Sedentary life style alone.

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And so, here we are in America, fairly affluent but we seem to be doing some things wrong and maybe we are not doing them intentionally but our environment is part of our problem. So there is less physical activity that we all need for daily living, we have remotes the garage door for the televisions for every electronic gadgets there is elevators and escalators. I was happy to see in this center that the stairs were rather inviting rather than hidden. There is competition, and I hear this a lot of parents of children that they are really concerned about their children because they spend so many hours in front of the computer and although they have high tech skills and they are learning a lot it's interfering with their energy expenditures. So, the computer, television and all those things encourage us to be more sedentary and then our food here in the United States is quite inexpensive if it is abundant. When you talk about Americans eating, and you mention that we eat in our cars, a lot Europeans are shocked that we eat in our cars. They are just amazed and I say that to our students and they are like what planet are you from, eating from your car is odd? No, we don't even want to get out to go get the food, we want it handed to us so we have a lot of fast food restaurants and a lot of vending machines, and some of those issues are being looked at because everybody again is so aware.

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So for one of the slides here it says "Sure, what the heck, go ahead and humonga size it but again can't blame it all on the fast food industry there is a lot of things that are happening that we have a little more control over but again I think there are issues everywhere for us.

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So, a couple of years ago, AARP, and through the Robert Wood Johnson Foundation, and a number of other groups got together to put together a national blueprint to encourage more physical activity among adults 50 and over.

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So there is this tide that's been going on for a couple of years and it's aligned with the healthy people 2010, and it found that there was no national organization that systemically addressed physical activity and older adults. So, they wanted to do something about it but said it's kind of a big challenge and we all ought to get together and do that.

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So, they said that they thought we should have a society in which people age 50 and older enjoy health and quality of life that's enhanced through regular physical activity. They wanted to inspire an approach to aging that encourages physical activity in all people's lives. So again, they are setting up this national blueprint with the focus on older adults.

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They talked about what are some of the barriers, and one of the barriers is, that most health professionals don't talk to patients or older adults about physical activity because of the reasons listed. But when they do in fact, there is an effect that people do try to become more physically active, and we just need to help everybody learn how to do this a little bit more. That is why it is good we are talking about physical activity today because one of my goals is to help you become comfortable in focusing on helping older adults and helping yourself to become a little more physically active.

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So, when hardly anyone or let's say only 52% of people are asked about physical activity during routine checkups but those that are asked as I mentioned are almost twice as more likely to become more active.

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And so again, AARP took that information and said that in their report beyond 50 fewer people age 50 and over smoked. Today they are using preventive services and are trying to exercise that's kind of the good news and the same time however a much larger portion is obese in previous years and only some are eating a healthy diet as recommended.

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So what they concluded was that our epidemical obesity which nearly doubled in the past decade could cancel out many of the gains that were achieved in other areas of prevention and treatment of diseases associated with aging. So we are doing well in some areas but our creeping obesity or creeping weight gain is canceling all of that out. So as a result of that rising obesity diabetes has been rising among older men and women particularly those over 50 and that's sad news.

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The institute of medicine which gives us the RDA's which are now called DRI's this time have focused a lot more attention on energy because it's not only the calories that we are eating, but the physical expenditure of those calories. They have a whole chapter in the most recent DRI book on macro nutrients and it give you a lot of powerful information so that is the first time we have ever had a whole chapter on physical activity from the institute of medicine. They gave us new targets to reduce chronic disease risk.

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In fact, they doubled what the surgeon general said we should be doing everyday. They said if you really want to maintain weight at a (heart health at a maximum level) spend at least an hour each day in moderate intense physical activity. So again, that was double the goal.

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The hour of exercise goal a day is the amount that we need to expend if we want to keep our weight at a healthy weight. Then they divided up and again the chapter worth looking at because it is nice condensed information about physical activity. They talk about low moderate and high intensity activities and it is interesting that climbing stairs is considered low intensity activity. I suggest today, you might climb up and down to the alumni club, and see whether you can keep talking as you get all the way to the top because, if you can't keep talking, all the way to the top, then it is not a low intensity activity for you and, it means that you should do more stair climbing. So, I think we all should.

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So that that goal is if it is moderate, it is one hour a day you can cut down to twenty to thirty minutes if you get into really high intensity activities.

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Here's our problem, over 60% of Americans are not physically active and 1 in 4 is not active at all. I have some students that say the co-eds they don't want to sweat. Now it is easier to sweat in Miami but golly gee but it is important that we have an active lifestyle if we want to balance the calories in and the calories out.

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This slide I think is really important because it's got a position stand on exercise and physical activity from the American Academy of Sports Medicine and I think on the next slide is the website for that. I appreciate their position stand because it reassures us over and over again that we are not going to literally kill older adults by encouraging them to be more active so it dispels the myths of the futility and gives a lot of reassurance of the safety of exercise. Now we probably don't want to call it exercise with older adults, but we want to call it physical activity or fitness or they tell me in Oregon I was talking to Joan Smith who runs one of the programs in Portland that now for the first time ever the fitness programming attendance has exceeded the bingo attendance. So, things are changing.

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The position paper again, at acsm.org tells you the benefits of regular exercise and are really very positive. Not only of the health and quality of life and life expectancy, but and we know bone health but postural stability and risk of falling are one is improved and when you can stand more straightly than your risk of falling is a little bit less. Keeping your muscles more intact and that keeps you more stable. It is even good for mental-functioning, it can alleviate depression and it has a total effect on our mineral contents. So, there are a million reasons why we should and why older adults should especially.

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ADA a couple of years ago put out a fitness from 50 forward and there is a manual in that tool kit I think it is available through the bookstore at ADA where the manual can help you establish fitness programs for older adults that you are working with. So again a lot of us are very involved in this.

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We have put together a guidebook for older Americans Act Nutrition Programs for steps to healthy aging, eating better and moving more.

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It talks about the health benefits and it tells about programs around the country about how to set up a program and we have designed a twelve-week program with mini talks and resources and a tips and task sheets to take home to help older adults reinforce their behaviors and measure their own progress.

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In the eating better section we match the nutrition ed with today's issues of older Americans and we encourage better food choices and we help them chart their progress and celebrate their success.

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So, we don't talk about cutting calories and fat and sodium and all those things, we talk about eating more fruits and vegetables, more calcium rich food, we talk about portion size, so that they have a realistic idea. Again we know a third of older adults are under weight, a third of older adults in the programs are over weight and so we are trying to help them understand that maybe some of them need to eat more, and their portion sizes are too small, and others may need to eat a little bit less. We are also talking a lot about fiber because we know we have issues about digestibility with all older adults so we are being bold and talking about constipation and diarrhea quite forthrightly and I think that is a real success. We have these simple food check offs where it should be encouraging older adults to try and eat a little more according to some of those issues there.

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Then we have a moving more section in the guidebook and we are trying to again help older adults believe even if they have a walker that they can walk more and that it would be good for them. We are trying to help them add steps throughout the day to achieve a step goal and it is modeled again after “Colorado on the Move” and it uses step counters, I have mine on, here.

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We don't talk about where “Colorado on the Move” started out saying you should get about 10,000 steps a day that's 2,000 steps is a mile. We don't say 10,000 to older adults because that is just an unattainable goal and most of us want goals that we can reach and feel good about. We have people keep track of their steps for about week and average that out and then give them a goal of the next week of about 10% more and we keep helping them build a little bit more steps into their daily activities. The handbook has walking tips and at the same time, we are encouraging fluids. We do that specifically with the increased emphasizes on calcium rich food especially like more milk, and we talk again about milk in terms of full fat or no fat depending on their weight situation. And then, they keep track of their steps every day to see their own progress.

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So this little step counter is easy to use it just has that one yellow button there. You don't have to step off any length and figure out how many steps in your mile. It doesn't matter because you are looking at the total steps per day. There is a pretty large display that is easy to see. It is pretty accurate. It has a safety leash because it is not water-proof and they could fall into the toilet quite easily. So especially if a thin waistband on, they do and there is a little clip on there to clip it on to something but you can take the clip off and just loop it through a belt. I would have brought them as gifts for you all, but we can't even though we have sold at cost about 10,000 of these so far, we can't get them down to less than about \$11 a piece if you buy them at large quantity. And that is pretty standard around the country, so occasionally you can find a step counter like at a Marshall's or discount store that if it is not too complicated again you might try it out. Sometimes I have seen them for \$10. You can order them online from us. They do have the logo on there.

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When I first heard about step counters, I knew some dieticians who were wearing them and I thought my goodness aren't they compulsive. Aren't they kind of anal and it turns out that it has made a huge difference in my life. If I go to work sit at my computer eat my yogurt for lunch and don't even go out for lunch and get home and I think I'm an active person I play tennis, I kayak, I cross-county ski, I like to walk and bike, if I only go to work and come back I'm hardly at 3,000 steps. It's really an eye-opener. The days I forget to wear my step counter and I try not to forget I'm really much more of a slug, so I put my step counter next to my watch so when I put my watch on in the morning I put my step counter on and you get reinforced for every single step you take. If I'm watching television instead of and my husband is in the kitchen instead of asking him to bring me something I think oh here is an opportunity I can get up and go and get some steps. So it is really kind of amazing and it is an easy technology thing that I don't know what

else could give us more reinforcement. So then we have given them at some meetings where the meetings have had those resources and we have had people wear them, but you have to wear them appropriately otherwise they don't work, and then you hate them. Okay? So, you have to wear it close to your skin and if you have a few extra pounds around your middle and don't like a tight waistband and your waistband is a little bit floppy, that step counter will make it flop and it won't be vertical enough and it won't register at all. It's just as if I'm walking and I open it up to look at my steps because I have opened it, it won't register the steps. It has to be vertical because of those little tumblers in there have to be vertical. But it is pretty easy to wear and pretty fun because you can see some progress. It is also good to write down your step on some simple calendar or something so that you can figure out what are your worst days and especially try doing something on those days when you are the least active.

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So, well we were all excited about these step counters but we didn't know whether older adults would like them or could use them. We knew that Take 10 Project in schools was using step counters with kids and they loved them because, again, it is a little techno piece. We decided that we had to see, before we got all enthusiastic about this, whether older adults could and would use them. We had a "Moving More Model" where we were just focusing on the steps and we wanted to see whether our typical clients, who are low income in the older Americans Nutrition Program, could use them. So, we went to Little Havana, in Miami. We had a group of, I think about 30 older adults, 61-92 years of age, half had heart disease or arthritis; 3 out of 4 were over weight, they had a number of other issues that you think would discourage them from moving more, but we had almost all them wear the step counters successfully and record their daily steps. They increased their steps an amazing 73%. That's pretty awesome results. Now we have been in the process of testing the guidebook where we are doing little mini sessions with them eating better and the moving more and we've just completed a program at 2 other sites run by the Little Havana Nutrition Program. We had a control group where we just gave them the step counters and then we had the other one where we were doing the sessions. The students tell me already that right from the very beginning they felt so badly because the mini sessions with eating better and moving more were going so well and there was such positive feeling about it that they felt terribly that they had only given the step counters to the other folks. They set up a little walking path in the senior housing center but they made it short. They made it only 220 steps so that people would be out there seeing one another. It has changed the social environment tremendously and that program and people are really very, very enthusiastic. So we don't have the data yet but I think we are going to have some interesting data from that program that we will be talking about soon.

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And why do you want to collect data often you are all of us are very busy and we know what we are doing is the right thing to do but sometimes we sort of excuse ourselves and say well I'm just too busy, I know it is helping I'm just too busy I can't imagine collecting data. But again, we are trying to help the older Americans nutrition programs understand that by collecting some data they can share their successes and challenges with a lot of different people solve some of the challenges and they can improve the program the next time they do it. Also, I think it is really

important that we all document whatever it is that we are doing because we want to show how effective we are so that we can either increase the numbers of our staff that are delivering nutrition services or we can generate more money. And in these programs they could take this information to the county commission or the city government or whatever and again how timely their approach is again, by hooking together physical activity and the nutrition better diets. Then really they could really help other people understand some of the challenges that are particularly problematic for older adults.

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But if you are going to do research and you are not university based and doing it in a laboratory at a bench then you have to have easy to use methods and measures and you have to maybe think a different way of how to show the data. Physical activity on functional status, well that may mean that you have to find a little tool and again we are going to have some of these tools listed on our website for you and the forms available to talk about functional status and there are tools like that. Show improvements in physical fitness, muscle strength, flexibility, and balance. Again the physical therapists and occupational therapists can tell further their therapy helped you with range of motion when your shoulder and they measure it by degrees and so there are ways to show flexibility and we have incorporated some of those in that pilot program. Body mass depending on how long you are working with older adults using step counters and tips for eating better you may or you may not improve the BMI. Again, we are seeing quite a number of changes there. Again, you can show that the risk for obesity, heart disease and diabetes drops a bit based on the outcomes in other of the measures. Then quality of life and again this is a real Miami antics dote here. There is a scale to measure quality of life. You just show some one a line. It is just a one-question scale. You show them a line and you say this is excellent quality of life and this is poor quality of life where would you say your quality of life is on that scale OK and they just put an X or you put the X for them. In Little Havana in Miami, they couldn't believe we were asking. They said but we are here in the United States, it is wonderful. You know. Several of them starting singing the Star Spangle Banner to the students, so the quality of life scale didn't work in Little Havana in Miami, but it gives us an idea of the sensitivities we have to have to some of our ethic groups. Again, if you are trying to do some applied research, whether you work with older Americans in a dining center or whether in work with them nursing home or wherever you work with them, partnering with a local university is a way to go. Again it is a win-win situation and you can show how effective you are and they are always looking for applied research projects for student experiences and to also share with the world through publications.

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So you can get information about steps to healthy aging at our website at www.fiu.edu/~nutreldr there is a little logo right on that first page and I think that through that portal you can learn more about the President's Initiative and we have a brochure that you can download. Anything that we have done is for the public use or a modification or whatever. Get ideas from us to find programs for yourself. Develop programs and use some of ideas.

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The other thing I would like to suggest and then I'm going to change into the other slide format and that is you may want to join our NAN Listserv. It's the nutrition and aging network listserv and at our website and you will get bi-weekly highlights on nutrition and aging, what's new in the resources and have come out, what's new from the Feds, what's new in the literature, so you may want to do that so let see if I can move on to the other one now.