



FRESNO METRO MINISTRY

[www.fresnometroministry.org](http://www.fresnometroministry.org)

1055 North Van Ness Avenue • Suite H • Fresno, California 93728

PHONE: 559/485.1416 • FAX: 559/485.9109 • EMAIL: [edie@fresnometmin.org](mailto:edie@fresnometmin.org)

Excerpts and Summary of the 50<sup>th</sup> Community Hunger and Nutrition Forum

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USDA, Community Food Project

Vitamin Cases Consumer Settlement Fund to improve the health and nutrition of California consumers.

MAZON: A Jewish Response to Hunger

California Food Policy Advocates

Kaiser Permanente

## FOCUS: *Active Community:*

Physical Activity and Learning Development

The Built Environment's Impact on Obesity Prevention

Compiled and summarized by Carey Berend and Edie Jessup

Participants were welcomed by Edie Jessup, Fresno Metro Ministry Hunger & Nutrition Project. The packet of materials was reviewed, and participants introduced themselves and their organizations.

**Joe Herzog:** I am the regional chair for CAPHERD, which is the California Association for Health, Physical Education, Recreation, and Dance, which is our state professional organization. I have responsibility for six Central Valley counties. I'm also the current president of the Fresno Alliance for Physical Education and Athletics, which is the Fresno County advocacy group for physical education in the schools. I believe that we are the only local advocacy group for physical education, at least that I know of, in the State of California. We're a pretty unique group. I finished my teaching career at Sequoia, which is one of the PEP grant schools that has a cardiovascular wellness center. The presentation that I'm going to do for you today I actually wrote for the Alaska State Physical Education Convention. I was in Anchorage just a month ago and did not get to give this presentation because the mayor of Anchorage gave some very extensive remarks and kind of cut short several other speakers besides myself. So I took out all the references to grizzly bears and salmon and the Alaska pipeline and rewrote it for you folks today. You'll see some things here that I think will really encourage you in the area of physical education, physical activity, and movement skills as related to cognitive development along with the health issues that we're all facing today that are a combination of nutrition and physical activity.

This is the human brain (visual). This little squishy one, this is a brain of citizens of the world from Barrow to Birmingham, from Cairo to Compton, from New York to New Delhi. It's a pinkish-grey little thing, and it is probably the most remarkable object in the entire universe. This is the brain of a physically-educated person. It's big and healthy. It has perhaps one thousand trillion nerve cells. It has a cardiovascular system that would do justice to any

triathlete or cyclist or marathoner. It is a brain ready, willing, and most importantly, able to learn at its fullest. This is the brain if your P.E. teacher is Paul Zintarski in Naperville, Cathy Wells in Oregon, Monica Patino in Riverside, or Bill Van Deuser, **Jennifer Jordan**, or **Ann Byrd** right here in Fresno.

To quote the most venerable Socrates, "**Mensana incorpore sano**," a sound mind in a sound body, a statement that is profoundly eloquent in its simplicity. When did we in this country lose that concept? More importantly, we must ask ourselves why we lost it. The Greeks recognized the concept and they gave us the Olympic Games. The Romans, who along with the Greeks gave us much of our modern legal day codes, recognized it for a while, but then they lasted a surprisingly short time when they slipped into sedentary living preferring to be spectators rather than participators. I don't believe that anyone of reasonable intelligence would accept the premises of a healthy, active body and the cognitive mind as separate entities, and yet we know that concept drives the structure of curriculum in a vast number of schools in this country today. We must recognize this grievous error for what it is and we must make meaningful change, for our children are suffering grievously for our failure as adults to recognize what is obvious and what the needs of children are. Hopefully this afternoon I will be able to give you some direction and some further enlightenment regarding the value of physical education as a primary source of health and well-being for our children as well as being the most significant catalyst for cognitive development.

There is significant value to the development of partnerships among education, the business community, public service groups, faith based groups, city government, and any other caring institution. Educators acquire greater access to resources to provide for children, children gain access to a well balanced, more meaningful curriculum, and the business community gains access to a healthy, happy, well-motivated, well-adjusted, profoundly productive work source. It is a win-win-win situation in every aspect.

My main purpose today is to connect the physical world with cognitive development. The availability of volumes and volumes of research makes this task easy, and yet you will hear only a minuscule part of that research today and you should keep in mind that more and more comes to light every day. To better appreciate where I've been, I urge you to read any one of three books or all three of them. **Learning With Body and Mind** by Eric Jensen from the Jensen Learning Center in San Diego, **Smart Moves** by Dr. Carla Hannaford, and for a real treat read Dr. John Ratey's **A User's Guide to the Brain**. If you read only the chapter on movement you will come away amazed.

Before I go any further it is important for me to say this. The job of physical educators is threefold. First, to improve the health and fitness levels of children by seeing that they engage in challenging, enjoyable, meaningful physical activity on the most regular basis, preferably every day. Secondly, to teach children that physical activity is a normal, valuable, viable, easily attainable component in their everyday lives. And lastly, to give them a working storehouse of activities that they may carry with them throughout all of their lives and the knowledge to know what activities are appropriate at any given stage of life for the maintenance of good health and fitness. If each of us as physical educators achieves these three goals we would have fulfilled our purpose as educators, but now we're all being asked to do more. We're being asked to do what many of us have already been doing for the last decade or so, to inculcate specific cognitive processes into our own physical education curriculum. We are being asked to do more and more in the same amount of time with the vast number of students that most physical educators deal with today. We can and we will, because the physically educated person is inextricably linked to the cognitive person, and the link is forged in the human brain.

There are several specific terms that you should be knowledgeable about. First of all, movement. **Movement** is simply the act of moving through your own daily environment, the three-dimensional world that we all move through day to day. Babies experience movement before they're even born. **Activity is purposeful movement**. For young children we call it

play. As kinesthetic sense learners it is their chance to explore their world, to experience sound and surface, to touch and manipulate, and it is fundamentally important in their social, emotional, physical, and cognitive growth. **Physical education is structured, directed exercise, and it has multiple values. Its cardiovascular effects promote brain development, recall, and memory in a way that nothing else does. It strengthens our heart and lungs and our vascular system and allows the dissemination of oxygen to all parts of the body. Physical education allows us to direct specific activities to specific areas of the brain. Balance boards and balance beams, for instance, stimulate the vestibular system, which is our system of balance, which is fundamental to the development of a child's reading skills. Highly structured games including team, individual, and dual affect the limbic system and the amygdala, the site of our emotions. Emotions affect how we feel about ourselves as well as how we learn. The root of the word "emotion" means "to move."**

**Movement, activity, and physical education have definitive effects on brain growth and development as well as the cognitive learning process itself, and today I will touch on both of those concepts as concisely as possible. A young child's brain can have up to a thousand trillion nerve cells. A person of my age has maybe half that, about 500 trillion or a few more. Even though the brain only makes up about 8% of your body weight or perhaps a little less, it consumes 25% of all the oxygen and glucose that your body produces. The fastest computer ever built is capable of 34 trillion computations a second. That seems just an amazing figure. It pales in comparison to the human brain. A human brain maxed out in nerve cells and dendrite growth has the potential of 10 to the trillionth neurochemical responses in that same one-second period. There is nothing like the human brain anywhere. Try as you might, you cannot supply the brain with its needs through a narrow, cholesterol-congested cardiovascular system. You cannot do it, and proper nutrition and physical exercise are far and away the best method of keeping that system healthy and productive.**

Allow me, if you will, to take you through a series of studies that I hope will broaden your perspective and background in the area of brain research and cognition. I am not an original researcher. I read and I go through the studies. I've been through about 120 studies or summaries of studies and tried to pick out a dozen or so that I think will give you the foundation that will cement the importance of physical activity in terms of the learning process. The first group of studies was compiled by **Cathy Summerford**, the 1998 CAPHERD Teacher of the Year. Cathy is a former Fresno State student, a graduate of Fresno State. First of all, a study was done on Seattle by A.G. Gilbert. Third graders studied their language arts concepts through a series of dance activities. During that study period, reading scores in Seattle diminished by 2%. However, the study group experienced a 13% rise in their reading scores in the first six months of the study. From Scripps College in Claremont, California, 124 students were equally divided into exercisers and non-exercisers. Those that exercised 75 minutes a week or more demonstrated quicker reactions, had more definitive thought processes, better focus, as well as improved memory. From **John Olson and Martens** in Canada in a study of 500 Canadian students, students who spent an extra hour a day in their physical education class performed notably better on their end-of-the-year exams than less active students. **When physical education time was increased to one-third of the school day academic scores went up.** Keep that one-third figure in mind because it will reappear but in a different country.

**Moses Alvalos** and Gail Dennison: When the body and the head move, the vestibular system is strengthened and eye muscles strengthen as they move in response with each other. Efficient eye teaming enables a student to focus, track, and concentrate when reading. As the muscles strengthen and move more in concert with each other, more connections are developed in the brain. The more connections you have, the more material you can deal with. I suggest to you that when you're traveling with children or grandchildren if you have one of those fancy rear-seat DVD players turn it off, take it out, and pitch it out on the highway. Take the most scenic route you can to wherever you're going and allow those children to use their eyes

to develop long-term focus so that their eye muscles strengthen. **To sit and look at a computer screen literally freezes the muscles and there is no development that children need to track numbers and letters when they read.** Dr. Susan Brink suggests that **exercise can reduce stress and we have a fringe benefit. We know that chronic stress releases chemicals that kill nerve cells in the hippocampus, which is the area of the brain primary to long-term memory formation.** Physical exercise is one of the best ways to stimulate the brain and reduce stress. What do you and I do when we're normally stressed out? We take a walk, we go jogging, we lift weights, we shoot hoops, we do Tai-bo or step aerobics or Pilates or ride a bike, but we find positive ways to relieve our stress. At least I hope you're all doing that.

**Hiro Kinoshita** at the University of California, Irvine, discovered that **exercise releases BDNF. That's a brain-derived neurotropic factor that enhances cognition by allowing the nerve cells to communicate with each other more efficiency.** Kaslak also tells us that BDNF is thought to play a role in the hippocampus, the site of the brain associated with spatial memory. Harvard's Dr. John Ratey: Motor function is as crucial to some forms of cognition as it is to physical movement. If we can better understand movement we can better understand thoughts, words, and deeds. **In most cases human beings think in terms of action sequences, formulating plans and then executing them. The deeds themselves certainly rely on motor functions, but so does the thinking that precedes them, so even in the classroom physical activity during cognitive lessons is a vital thing. The brain circuits used to order sequence and time for a mental act are the same circuits in the cortex that are used to order sequence and time for a motor act.** Whether the activity is maintaining body temperature, dancing like Baryshnikov, or learning to read, movement cannot be separated out from any other brain system. It is part and parcel.

It is well known that **exercise is fundamentally responsible for the increase in the thickness of the myelin sheath. The myelin sheath is that fatty substance that overlies the axon in the nerve cell. The myelin sheath is responsible for increasing the speed of the electrical impulse of the nerve. It also protects the nerve from trauma.** Physical activity is almost the only factor that is responsible for the increase in the thickness of that myelin sheath, so it is profoundly important. The more we exercise the more protection we have.

Dr. Candace Pert states that 98% of all learning happens through the body. **Kinesthetic learning sends information to long-term memory and retrieval is nearly 70% improved in an active person versus an inactive person. We know that 85% of all young children are natural kinesthetic sense learners.** That is their fundamental learning modality. We have become aware that many of our learning disabilities and many of our emotional disabilities are best treated through physical activity, and that's a whole separate category that I don't even have time to get into. **In the treatment of dyslexia now they have found that treating dyslexics through specific physical activities designed to stimulate the cerebellum has had great success.** The University of Exeter in Great Britain had fundamental success with a study which they found, typical British understatement, as encouraging, and they have expanded that study from 40 students to about 200.

Brewer and Campbell have concluded that movement and rhythm stimulate the frontal lobes of the brain and enrich both language and motor development. **Learning to keep a steady beat is fundamental to helping a person learn the cadence and rhythm of language, which is fundamental to understanding its meaning. We know that exercise that crosses the midline of the body helps enhance brain development and growth.** We know that the right side of the brain controls the left side of the body and vice-versa, so when you do activities such as simply patting yourself on opposite shoulders, anything you do that

crosses the midline of the body, helps enhance brain growth and development and activates the brain for better learning.

**Mark Logbaum, Ph.D. at Texas Tech University: Physical activity is critical to the brain's ability to process and retain information. Aerobic activity especially improves the brain's cognitive, executive, and motor functions, which control everything from short-term memory to organizational skills to balance.**

One of the most interesting persons in our field is Jean Blades Madigan. Jean is a former Texas Teacher of the Year and a world-renowned neurokinesiologist, and if you have the chance to hear her speak you should fly clear around the world to do so because she is amazing, and you should read everything she's ever written. I want to summarize briefly part of a page that she sent me for the Alaska presentation. First, **repetitive gross motor movement strengthens secondary dendritic branching. That's the part of the nerve cell that remembers details. Daily exercise cements the details learned in the previous 48 hours. The human brain unconsciously processes cognitive information while you're at play or while you're involved in physical activity. If that physical activity doesn't take place, anywhere from 20% to 80% of that learned cognitive information is lost.** Exercise promotes the growth of new brain cells in the hippocampus, the learning and memory center of the brain. It promotes the production of BDNF, which causes the neurons, the nerve cells, to fire faster and communicate with each other more efficiently. Oxygen and glucose get to the brain faster. Oxygen is the carrying agent. Glucose is the fuel that fires the brain. The vestibular system is activated for better balance enabling the student to better read numbers and letters left to right across the written page. Crossing the midline integrates and energizes the brain for better focus and retrieval of memory. Exercise activates chemicals such as serotonin and dopamine that reduce stress and elevate self-esteem. **Basic motor skills lay the foundation for other learning. What makes us think is what makes us move. The opposite of exercise, sitting in a chair, inhibits learning. When you sit for longer than 17 minutes blood pools in your hamstrings, the large muscles in the back of your leg. That pulls needed oxygen and glucose from the brain and when that happens the body produces melatonin and your brain is essentially telling your body, "You can go to sleep because no movement has occurred."** If you walk into any college lecture class halfway through you know this principle is operating at its peak. It certainly worked well for me. Exercise brings the body and the brain into better bio-balance creating an improved learning state for the student.

So this would be a good time for all of you to stretch a little bit, cross the midline, activate both sides of your brain, and flush a little fresh oxygen up there, because I don't want you to miss any of this really good stuff. I want you to be absolutely clear about what I'm telling you today. **Physical activity does not make children smarter. It makes them potentially better learners. I think that's all we can ask for. The brain is a meaningful learner. Meaning is more important than information. "Learning is experience. Everything else is just information."** That's from a gentleman named Albert Einstein.

One significant area of concern to us is how our children compare with children around the world. In a survey published in the August 2003 edition of *Medicine And Sports* in science and exercise noted that 6 to 12 year-olds in America spend about 390 minutes in the classroom, 70 minutes at lunch and recess, and about 60 minutes a week in physical education, if they have it at all in the elementary schools. Their Swedish counterparts spend 90 minutes less in the classroom, about 30 minutes more at lunch and recess, and about 20 minutes more in physical education. The rates for obesity in Sweden are 10% lower among their girls and 20% lower among the boys. Other studies show that Swedish children continue to test equal to or above our own children in both math and science. In the 1950s European children rated much higher than American children in upper body strength. American children rated higher in

cardiovascular performance. Unfortunately now, most countries in the world including ours are at a distressingly low point, a result of worldwide obesity. The French recently reported that 50% of their 10- and 11-year-old boys are overweight. That's one in two. Great Britain is now investigating giving tax breaks to people who take exercise classes, join gyms, and buy equipment, anything in the realm that helps stem the tide of obesity and diabetes, which has such grave economic consequences for all of us. That same idea has been floated in the legislature in this country, and I think down the road that that has a real chance. **The cost of obesity and the epidemic of diabetes is just huge, as all of you here know, and if we don't do something to stem that, some incentive to stem that, it's going to be tough. Four countries near the top in math and science scores are Japan, Canada, New Zealand, and the Netherlands. All have intensive activity, music, and arts programs in their schools. We're doing the opposite.** As do many Canadian children, Japanese primary students spend about one-third of their school day in physical activity broken up into small activity periods. Most of those students begin their day with some form of activity.

American children, on the other hand, are being taken exactly in the opposite direction with two-and-a-half hour blocks of language arts and two-hour blocks of mathematics. **Disturbingly, Atlanta, Georgia, recently made the headlines by building an elementary school without a playground. What sort of convoluted logic is that?** You think back to your days in school. Would you want to go to a school where you didn't have at some point in the day time to go out with your friends and play and burn off some energy, or would you rather be stuck in the same room all day long? It's some sort of Machiavellian plot. Equally distressing, and this really angers me, earlier in the year I happened upon a quote in the Fresno Bee by an associate superintendent from **a school somewhere in the Northeastern United States. Their district had recently banned recess from all of their elementary schools for all children. Her statement was, "We are preparing our children for life in a global economy. There is no time for play." Think about that statement for a moment. We're talking about elementary children. There is no time for play?** If that's not some Orwellian concept I don't know what is. With all that we know about the value of play, with all the wonderful programs that are being developed in California and Alaska and Ohio and North Carolina and so many other places, it really does anger me that someone with such control over children can be so unaware and so blatantly dismissive of common sense.

In stark contrast to that, because there is a good side here too, perhaps the premier physical education program in the country is at Central West High School in Naperville, Illinois, under the direction of **Paul Zintarski** and strongly supported at the middle school by **Phil Lawler**. At Central West the academic counselors encourage their students to take their most challenging academic class immediately following physical education verifying the value of an aerobic cross-lateral program that Paul runs in his department. Seniors leave Central West High School with a 14-page physical fitness and wellness assessment. I don't know any place else in the country that does that.

I want to take just a moment now to show you three charts. These will lift your spirits. They have gained much notoriety in the past year. These are the **comparisons of the 2002 Fitness Gram results, which is the California state physical fitness test, and the 2002 SAT-9 tests, and I will point out some really interesting stuff here.** The bottom numbers are the number of fitness standards achieved, 1 through 6. These are healthy fitness zones, not a specific number but a range of scores in which children can fall in order to be considered healthy. The side numbers are SAT-9 percentile scores, and as **you can clearly see, there is a perfect curve from the number of fitness standards achieved in relation to the scores. The children who achieved the lowest number of healthy fitness zones had the lowest scores in both math and reading, and there is a perfect curve, actually it's a little steeper at the upper end. This comparison involved about 575,000 students in the State of**

**California in grades 5, 7, and 9. The fitter students are the better they perform in the classroom.** You know that if this is happening and grades 5, 7, and 9, it's happening in 1, 2, 3, 4, 6, 8, and 10 as well. I've shown these to a number of people. A reporter for the Anchorage Times, which is a terrific newspaper, by the way, snatched them up and made prints of them and I believe that they were published the following day in the Anchorage newspaper. This is very revealing information. This is what we've been saying for years as physical educators. In the field we knew this was happening, and there it is in concrete.

Aristotle said, "Life is movement." Thomas Jefferson once said in a letter to his daughter, Martha, "Exercise and recreation are as necessary as learning. I will rather say more necessary because health is more important than learning." John Adams in a letter to Abigail regarding their children said, "Without strength and activity and vigor of body the brightest mental excellencies will be eclipsed and obscured." The ever perceptive Ben Franklin said quite simply, "The used key is always bright."

For education not to include motor function exercise and activity in combination with cognitive development is like building castles on sand. **Dr. Robert Malamo** of McGill University concludes after 30 years of study in this field that **all thinking has a physical link. Some neurophysiologists have come to the belief that all human thought is based in movement. The World Health Organization now tells us that there are one billion undernourished people on the planet and that, conversely, there are 1.1 billion over-nourished people. For the first time in history there are more people on the planet eating too much than there are having too little. Obesity and diabetes and sedentary living are having catastrophic effects on the human population around the globe, and we know that for the first time in more than a century we have a generation of children predicted to have a shorter life span than that of their parents. We as adults must take responsibility and we must do so today.** We should have done this 30 years ago. **We have overindulged our children, allowed them to become sedentary, to live in front of the TV and the computer. We have failed to build enough parks for them. We have failed to keep the streets safe for them, as safe as they were when I was a child. We have succumbed to the worst of marketing practices and fill our children with food that we would not give to our pets if indeed we care about our pets. When children need exercise and activity the most we have taken it from them and standardized tested them ad nauseam as if a test score were the mark of an educated person.** Certainly, we all recognize that children need to be assessed and evaluated so that curriculum can properly be structured and directed, but the true marks of an educated person are enthusiasm, excitement, creativity, motivation, insight, and inspiration, and yet gone from many of our schools now are shop classes, drafting, art, music, and sadly, physical education, all of those things that our kinesthetic-sense children need and must have, children who learn by manipulating, by moving and handling, children whose brain learns in three dimensions, not solely in the flat, two-dimensional world of desk work.

**We continue to subject children to hours at a desk without movement, and I fear that our view of children has recreated the Pilgrims' fundamentalist view of a child as a miniature adult. In reality we need to see children as caring, creative, questioning human beings, individuals in their own right. We must get our children up and moving for their health, for their education, for the very substantiation of their own lives.** It is imperative. We must provide our children with the most meaningful, most comprehensive, most interdisciplinary education possible for their benefit, not just ours. They deserve no less. Aristotle knew it. Socrates knew it. John Adams knew it. Ben Franklin knew it. Thomas Jefferson knew it. We have lived our lives and we have built the greatest democracy in the history of mankind, built on much of what the founding fathers thought and said, so let us take their words to heart. Jefferson said, "If you expect a nation uneducated and free you expect something that never has been and never can be. Children who engage, who experience movement at a young age who are physically active and physically educated throughout their

lives are happier, healthier, more well adjusted, more motivated, more creative, and they are, simply put, all in all superior learners. To obscure the link between exercise and learning capacity, learning potential, is to deny the undeniable.

Our children are in crisis and it is time for education to recognize our proper place in the scheme of things as physical educators. It is time for school administration to give us the tools to do our job as only we as physical educators can. We, you and I, must step forward. By being here today, by showing that you care, you have taken that step forward, and for that I commend you. You will make a difference and you will make it for the children by being a role model in this city, in this state, and in this nation. I appreciate your patience and attentiveness today and I trust that you have found some substance in what I have brought to you. **I hope that you will take some time to do some investigation on your own** and then you will know that I have been forthright and honest with you. For my part, after 40 years in education, now more than ever I am a firm believer that no other discipline brings to our children the stuff of life and the knowledge of life as does quality daily physical education. No other discipline has more value or more potential or more importance than does quality daily physical education. I want to thank you for the opportunity to stand here before you today and discuss a topic, a lifestyle that over the last 30 years unfortunately has worsened and now must change for the better. Every child in this nation, the country with the greatest resources of any nation on the planet, **has the inherent right to grow up fit and healthy and enjoy all of the benefits thereof. It is our responsibility as adults to assure that right to our children.** Let us walk together hand in hand to guarantee our children a healthy, productive, pleasurable life, a life fully worth living. Thank you.

**Eddie Jessup:** Thank you so much, Joe. Will you entertain questions if folks have them?

**Marian Mosley, Fresno/Madera Medical Society Alliance:** The excuse given in the public schools, particularly Fresno Unified, is that there is not enough time in the school day in order to have any physical activity. They need to spend every minute in the academic process because of test scores. We do have a prototype that has just opened in West Fresno called the **(KIP?) Academy. This is 60 5<sup>th</sup> graders, and we solved the problem of time. Our school starts at 7:30 in the morning and goes until 5 o'clock in the afternoon. There's heavy academic performance but also during the academic presentations there is a lot of movement.** We are teaching multiplication tables that become literally a rap and the kids stand up and dance and do various things, but they're learning tremendously. Then in the afternoon from 3 to 5 there is time for our sports club, and every child belongs to some part of the sports club according to what they're interested in. We are not having competitive sports at this time. I invite any of you to come over and visit at any time. You don't need to make an appointment. The school is located in the educational part of the Pearly Baptist Church on Church Street. If any of you know where Hinton Center is, it is located right behind Hinton Center. We have 60 5<sup>th</sup> graders. Our reading levels are from 1.9 to 8.9. All the children are included. **We are demonstrating that movement frequently is very important to the learning process, and I think we will prove it come next June.**

**Joe Herzog:** I know that you're right. The volume of research that I've been through is just profoundly overwhelming, and you as community resource people grasp this. I think parents understand now. **Eighty-five percent of all teachers and eighty-eight percent of all parents think that kids should have daily physical education in K-12. The legislators are understanding. CAPHERD has half a dozen very friendly legislators in the California State Senate who are writing multiple pieces of legislation favorable to physical education every year.** Several of them have been passed and there are some significant changes coming, but I will tell you the problem is with school administrators. I'm not necessarily

picking on school administrators because the pressure from above them to raise test scores is not permitting them to look at this wealth of research and say, "Yeah, we need to get our kids up and moving." The pressure is being directed specifically at them – sit the kids down in a desk, open a book, teach them to read – and **they're just ignoring all of this wealth of scientific research which is really profound about how physical activity supports cognitive growth.**

**Rev. Walt Parry, Fresno Metro Ministry:** How do we make the change? I know a third grade teacher who brings his kids in early from recess so they can study for the test. Basically, studying for these tests that are happening is getting in the way of education, health, and about everything else. How do we make that change?

**Joe Herzog:** The first thing is that **last year physical education was added to Coordinated Compliance Review, so in two more years when the State of California comes into Fresno Unified and says, "We're looking at your program," elementary teachers will have to show that A) in their lesson plans physical education is planned for and B) the number one point in CCR is that the district is meeting the mandated 200 minutes of physical education ever ten days for elementary kids and 400 minutes for middle school and high school kids.** That's in CCR, and if the district can't show that it's meeting those goals then they are no longer in compliance.

**Rev. Walt Parry:** Does that apply to the last two years of high school in Fresno Unified?

**Joe Herzog:** The high school physical education requirement is somewhat convoluted. **There is technically a four-year requirement in California. Two years are automatically waived, so it is required for 9<sup>th</sup> graders and one additional year. It doesn't say which one.** That's up to a student's choice. There are some profound changes coming to that. A law has already been passed that affects that. We're kind of holding back on that information right now, but **in another year some very interesting things are going to be dropped in the laps of school administrators that are going to greatly increase the amount of physical activity that our kids are getting in high school.**

**Rev. Walt Parry:** I thought your SAT-9 score and that parallel was of interest because a lot of high school students are encouraged not to engage in physical education. **As our campus sites are overcrowded we're putting more and more portables and taking away open space. What can we do about that? Also, what would be your vision of an effective Parks and Recreation program for a city and for a county? I know in Fresno the budget has been cut about every year and then we wonder why kids are having trouble with police. What would an ideal Parks and Recreation program look like that would really meet the needs of the community?**

**Joe Herzog:** First, of all, we need somebody who has three or four billion dollars. **Fresno has something like 20% of the park space available for the population that it has.** I think that's the figure I heard a couple of years ago. **We need to build parks everywhere, and they don't need to be great big ones. They can be local parks, corner lots that remain unsold. Put a cement path around them that kids in wheelchairs or handicapped people can use with some open grass space in the middle. Kids can play Frisbee or soccer or throw a ball or anything. We need more parks in this town.** There is just no question about it. I know that costs money. It means you have to hire additional personnel and **that costs money.** I don't know where the money is going to come from, I honestly don't, but **at some point whoever is in charge has to prioritize what's best for children and what's best for the city. It's the same thing in the schools. Physical education is always the least priority and it's**

**affecting the health and fitness of our children. It's affecting their development in the classroom, and until somebody is smart enough to re-prioritize that and move us up, if not to the top at least in the upper echelons, it isn't going to change.** Parents and community service organizations have to **band together and go to the administration and go to the school board and say, "Look, we recognize this as fundamentally important."** **Parents have more power than anybody else. Parents need to get together and start going to individual school principals, school administrations, and say, "We see practices here that are inappropriate and we want them changed, and if you don't change them then we're going to go over your head."** As a CAPHERD representative I'm going to as many parents and PTA groups that I can get to and I'm going to the state legislature. I've already met with Chuck Poochigian, Steve Samuelian, and a couple of others in Sacramento and we're pushing it up there. **I don't think school administrators are going to change until the pressure comes from either side and says, "You have to change."**

**Ray Ensher, Health Care for All:** I've talked to just about every school board member here in Fresno. Do you really think that they want to cut out athletics in high schools? None of them have told me they want to cut. They are under such pressure. You talk about priority. **The problem is that even with passage of the after school programs there is no funding for it.** This is a real dilemma and a frustration and problem we have, so how are you addressing that?

**Joe Herzog:** Fresno Unified says that school enrollment is declining. That means there are empty classrooms throughout the city. **Why not shut down some of the properties that we have that administrators are using and make the classrooms into offices and use the available facilities and sell off that property.** With property values now you can make a lot of money off that. I talked to **John Mauer (head of FUSD PE)** last month and I told him that I thought he should write a letter to the Bee. People keep clamoring about cutting back athletics. Athletics in the last three years has taken a 15% cut in Fresno Unified. **It's not like athletics is the sacred dragon here. They have taken serious cuts in their funding and they were under-funded to begin with. I would like to see a division of athletics and physical education, a clear-cut demarcation, because for the money that is available 90% of it goes to athletics and 10% goes to physical education, and yet we know in this district 65% to 70% of our kids do not participate. The kids who need money and facilities and teachers the most are the least likely to get them.**

**Eddie Jessup:** I think that given the cutting of budgets that we have experienced in education, the cutting of programs, we're at a point, certainly, with the Healthy School Environment Policy Committee of looking at **how we can stop paying for athletics and so forth with soda sales. Our soda contracts in Fresno Unified are huge and most of them go for extracurricular activities and for athletics. Some of them even cover academics, but we're doing it by selling sodas and food that is not good for our kids.**

**Joe Herzog:** I have a whole list of studies that Edie has seen and that I sent to Bob Reyes at Fresno High that show that virtually every school who shuts down the sale of sodas and junk food and replaces them with healthy foods and healthy beverages on campus **makes money.** They may make a little bit more. I've only seen one school that admitted that they did not make as much, but balance that against 15 or 20 or 30 that said they were making as much or more. **We have to get it across to school administrators that you can make as much. The people who will suffer are classroom teachers who are selling candy and whatever out of the classroom to make money for their own individual stuff. They're going to have trouble, but I think it's long overdue that education needs to stop making money on the backs of children and promoting poor health in the process. We**

**have a moral and ethical responsibility to end that practice.** It may mean kids don't get to take a field trip, and I know some field trips are really good. I used to take kids out to the Kings River and took them fly fishing and it was a life-building experience for the kids at Sequoia, but healthy kids are better learners in the classroom and if we don't produce healthy kids, well...

**Eddie Jessup:** Thank you so much. Are there other questions at this time?

**Sharon Melson:** I just noticed in elementary schools just by visiting them that a lot of kids just sit around at recess, so that seems a time that they already have that could be used to promote them to move a little better. I have a granddaughter in Clovis whose principal was one who would get out there and do a little cross country with the kids and things like that. He had a huge program because he would go out there and lend that support, so I think some of that is an internal thing with each school.

**Joe Herzog:** That's like a Russ Painter at Manchester G.A.T.E. We need to recognize here, too, that **by law recess and physical education time in elementary schools are separate entities. The 200 minutes every ten days is not the same as whatever time kids get for recess. Recess is free time to do what they like, but that physical education time is supposed to be a lesson-plan directed, structured activity that promotes good health, and the side benefit is that kids do better in the classroom.**

**Sharon Melson:** **Some of the schools are on block schedules. How does that affect P.E. if the minutes are the same? Does it make a difference if they're three times a week as opposed to five days a week if the minutes are the same?**

**Joe Herzog:** I never taught block scheduling but I would like to have tried. The teachers that I know who have done block scheduling absolutely loved it. When they were doing SAT-9 testing at Sequoia we would occasionally get periods that were 80 or 90 minutes long. I just loved it because you could do a couple of different activities. You could do cognitive stuff. There was time to do anything. The down side, of course, is that kids are only active three days a week instead of five. We used to give kids homework assignments on the off days such as go out and walk for 30 minutes or do something physical and then have your parents sign the sheet and turn it back in.

**Larry Trullinger:** In my formative years in school I grew up in the Northwest and I never saw single-story, sprawling campuses for schools like I see in Southern California and this area. **As land values increase the school board should decide that they're going to go at least two stories.** All of our schools in the Northwest were at least two stories. That would cut the amount of land use in half and there would be plenty of room for playgrounds, exercise, and all the rest.

**Joe Herzog:** And lots of stairs to climb. Yeah, I agree with that. I really enjoyed the time and it's been a pleasure speaking to you. I'd love to talk to every PTA or school site committee in the Western hemisphere if I could. Thank you for being such a great audience.

**Eddie Jessup:** Thank you so much, Joe. I really appreciate this because it is the other half of our look at how eating contributes to chronic disease by diet. Jeremy Hofer will show a clip on an idea called the Walking School Bus, an idea about getting kids moving.

**Jeremy Hofer, Fresno Metro Ministry:** In the last 15 minutes Joe spoke real shortly on how we build our schools affects the way that children exercise. If children don't even have a

playground to go play, obviously they're not going to be playing. I just want to expand the discussion to include the way we build our communities affects how children play, so if we don't have parks, if we don't have walkable communities where kids can easily get to school with their parents, we're not going to have kids walking to school. We can't ask kids to walk to school or exercise if we don't build communities in the right way. I wanted to share just a short clip. I'll just play it for five minutes. It's about a walking school bus. This was developed by somebody in Sacramento at the state government level and it's related to physical activity and getting our children moving.

**Jeremy Hofer:** It's called *Wait for the Wave* - That was an example of one mother coming up with a campaign. There was another mother who came up with the idea of a **walking school bus**. In the morning they would receive training and they received gear and a walkie talkie and they'd have their route that they would work out with 10 or 12 kids in the neighborhood with the idea that this is better than kids getting driven to school every day. The school bus just goes and it's kind of this long trail as they go to school every day, so kids are getting exercise. There is one Safe Route To School program in Fresno at Wishon Elementary and they're going to be receiving a cross walk and a light at Clinton and 9<sup>th</sup> Street. It's one of the most dangerous intersections in the morning. The community is built so that all the kids are living on the other side of this road that they have to cross to get to school. By creating a cross walk and putting a signal light there coupled with a series of events throughout the year that they have to do, such as having a day where the kids at the school walk to school. This is one example of changing our environment, the way that we build our cities, to ensure that kids are safer and can walk to school better.

**Edie Jessup:** It's a small idea, and when we talk about the built environment, which is something that we are talking about more and more, it is the start of beginning to look at our neighborhoods and how our kids get from home to where they go to school and wherever else they go and **paying attention at the urban planning level: our schools paying attention to how it is that kids get to them. There are a number of places in Fresno, too, where there are the big walls that have been built as buffers, but they really also prevent people from getting from one place to another unless they get in a car and go all the way around. We are designing our cities and designing things for our children frequently that do not allow them access to what would normally be the kind of activity that we would like to see for them.**

Are there any other comments or questions about the tie between this physical activity and all of the discussion that we've had over the last year around the kind of food that we eat?

**Dayatra Latin, Community Food Bank:** As a parent I can say that physical activity and healthy eating does work for education and higher test scores. As a parent I can't put all the blame on teachers if my son or my daughter scores poorly at school, so as a parent I have to take back control in what my kids do. I examined our lives and we made some changes in what we do, so we exercise. **I make sure my kids exercise at least 60 minutes a day. My son, who struggles in school, has greatly improved his test rates.** Just sitting here today confirms to me that eating right, and they eat five fruits and vegetables a day, which is excellent, and exercising consistently makes a huge difference. My daughter, who is a little chubby, her self-esteem has shot up amazingly as she loses her weight and sheds those extra pounds. It's amazing. I'm happy to see all the teachers here and those who are with the school system who are concerned, because often, as my kids are in Fresno Unified, I think administrators don't care, but I'm learning to figure out how to work with them. But I also encourage you if you work for a social service agency and you work with parents, teach parents how to be there for their kids. Teach them how to cook healthy and cook right at home and teach them to turn off the

T.V., read a book, and go outside with their kids and play. I can tell you from personal experience that's the best thing that we can do for kids, and I appreciate this time to come together.

**Participant comment:** Teresa, I'm going to put you on the spot. Could you talk a little bit about what the **bicycle coalition** has done in schools and working with schools to get kids on bikes and safety measures and things like that?

**Theresa Rogerson, Fresno County Bicycle Coalition:** I'm not only on the Fresno County Bicycle Coalition but I'm also a member of the **Bicycle Pedestrian Advisory Committee for the City of Fresno. We created this advisory committee specifically because we have a real problem here with health and obesity rates and diabetes rates and in the air quality.** This was a way that we can address all of those issues all at the same time. The advisory committee has been in existence for about a year now with the city. We've been trying to do just what Jeremy is talking about, **changing our community, changing the built environment to make it easier for people to walk and bicycle, not just kids but adults and everybody.** He also mentioned that there is a **Safe Routes To Schools grant. This is a state grant that local areas can apply for. We do have one for one of our schools but we'd like to have a lot more.** We need a lot more. We have a grant writer at the city that writes a lot of grants for the things that we do trying to get facilities like bicycle lanes and that kind of thing built so that we can get around in a healthier way. If anybody has any other questions about that you can come over and I'll talk to you.

**Ray Ensher:** This lady was talking about the recess time. When I was teaching in a North Fork School we kept adding more tetherball courts because all the kids wanted to play tetherball, but we really encouraged the kids during recess to get involved. We had the jungle gyms and the whole thing on the playground. Of course, at that time we were a pretty wealthy district because we were in the Sierra High School District so we got pretty much anything we wanted, but the thing is there are things you can do with kids at recess that can help out there.

**Edie Jessup:** Thank you, Ray. I would like to ask all of you as you think about this and leave if you would **call your local school and find out how many minutes of physical activity they have for their kids, if they have bicycle racks and have the setup for kids to be able to bike to school. And ask them how their program works and call me and tell me what they say** and we will start taking some notice of this. I would hope that you would start asking those questions. **I think Joe is saying that we need to both talk from the level of neighborhoods and parents talking to schools about physical activity, nutrition, and health, and it has to happen from the policy level also, both from the state policy level and from our local policy level. We need to be talking to people about what we really want and what we know is really good for our kids.** Thank you very much. Have a very good holiday, and come next month for the Community Hunger & Nutrition Forum.