Employee Health Is Vital to Economic Health

The American College of Occupational and Environmental Medicine (ACOEM), the nation's leading medical organization devoted to worker health and safety, recently commented on the link between a healthy workforce and a healthy economy. The policy statement emphasizes health and productivity management (HPM) in the workplace. The ACOEM introduced this concept with the following statement:

In its May 2008 issue, the health policy journal *Health Affairs*predicted that "if current trends persist, sometime between 2016 and 2020 existing federal revenues will cover only health entitlements, Social Security, debt service, and a smaller defense budget, leaving nothing for anything else, including the environment, education, or new health initiatives." At the same time, the aging and retirement of the baby boomers – the "silver tsunami" – is bringing with it an increased burden of chronic disease that threatens the U.S. pipeline of healthy productive workers. The balance between economic net contributors ("workers") and those dependent on government programs (i.e., Social Security, Medicare and Medicaid) is on the verge of a dramatic shift.

Health promotion and early intervention are clearly effective in improving health and controlling health costs in the workplace: some studies have shown a return of as much as $3 per $1 invested.

Read the entire position statement at:http://www.acoem.org/comments.aspx?id=4714.

Reference:

1. ACOEM Comments on Healthy Workforce / Healthy Economy: The Role of Health, Productivity, and Disability Management in Addressing the Nation's Health Care Crisis [Position Statement]. American College of Occupational and Environmental Medicine. November 2008.

TOP

Are You Underestimating Your Company's Healthcare Costs?

In a large multi-employer study, researchers found that the full costs of poor health dwarf those of direct medical spending alone. Typically, companies measure healthcare expenses by adding medical care and pharmaceutical purchases. When researchers added the costs of presenteeism and absenteeism, employers spent four times more on healthcare costs than they estimated.

In the study of more than 15,000 employees, direct healthcare costs for medical care and pharmaceuticals totaled $2,375,115. Lost productivity costs, however, were calculated to be $10,307,057. Clearly, a company should look at all costs – direct medical care, presenteeism, and absenteeism – to get a truer picture of the costs of poor employee health.

"Lost productivity due to health-related reasons is a very real cost that is difficult to quantify," said David Sensibaugh, Director of Integrated Health for Eastman Chemical Company, which participated in the study. "This study shows that employers cannot address high healthcare costs by focusing on just direct spending. The poor health of employees is an equally important issue that must also be addressed, and we've begun to adjust our thinking accordingly."

Using the traditional view of assessing medical and drug costs alone, the study found that the top ten health conditions driving costs were:

1. Cancer (other than skin cancer)
2. Back/neck pain
3. Coronary heart disease
4. Chronic pain
5. High cholesterol
6. GERD
7. Diabetes
8. Sleeping problems
9. Hypertension
10. Arthritis

When productivity costs were considered, the top ten cost-driving health conditions shifted to:

1. Musculoskeletal conditions
2. Depression
3. Fatigue
4. Chronic pain
5. Sleeping problems
6. High cholesterol
7. Arthritis
8. Hypertension
9. Obesity
10. Anxiety

In a tightening economy, employers would do well pay attention to worksite wellness. A recent meta-analysis found that effective work health promotion programs resulted in a 22% reduction in sick leave, reduced emotional exhaustion and "burnout," improved mental health, and increased productivity. The most effective health programs promoted healthy lifestyles, regular physical activity, safety awareness, and ergonomic working conditions.

Reference:

1. Kuoppala J, et al. Work Health Promotion, Job Well-being, and Sickness Absences: A Systematic Review and Meta-analysis. *Journal of Occupational and Environmental Medicine*. 2008;50(11):1216-1227.
2. Poor Employee Health Costlier Than Employers Think [news release]. American College of Occupational and Environmental Health. July 2007.

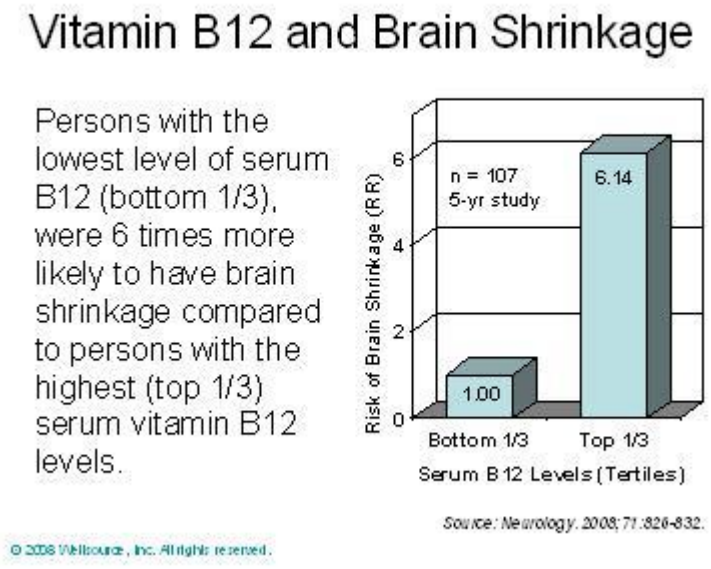
TOP

Does Eating Veggies Shrink the Brain?

You may have seen some of the newspaper headlines suggesting that scientists have discovered that eating vegetables shrinks the brain. What did scientist actually find out?

Researchers at Oxford University enrolled 107 community-dwelling volunteers into the study. All were at least 61 years old and free of cognitive impairment. They tested their vitamin B12 levels yearly and took MRI brain scans to see any changes that might occur over the 5-year study.

Next, researchers correlated vitamin B12 blood test results with brain size. People were divided into 3 groups (tertiles) based on serum vitamin B12 levels. When researchers looked at brain changes, the tertile with the lowest serum vitamin B12 levels (less than 308 pmol/L) were 6.17 times more likely to show significant brain volume loss (brain shrinkage) compared to the third with the highest vitamin B12 levels. It's important to point out that everyone had B12 levels within the "normal" range, but those with lower levels showed greater brain shrinkage.



Vitamin B12 is essential for maintaining nerves and the brain. If levels get too low, the brain atrophies or shrinks. Not a good sign. Earlier studies at Oxford showed that individuals with lower levels of vitamin B12

(but still in the normal range) were linked to increased cognitive impairment and a higher risk of early cognitive decline later in their life.

So what does the study tell us? The authors state that by improving our vitamin B12 status (making sure it stays in the upper range of normal) we may be able to protect our brain and possibly prevent cognitive decline.

Who is at risk of having low vitamin B12 levels? Numerous studies show that vegans have lower average vitamin B12 levels than the general public (thus the headlines suggesting eating veggies shrinks the brain). Reliable sources of vitamin B12 from the diet are primarily found in animal foods (milk and other dairy products, eggs, and meat). Some foods have vitamin B12 added (such as fortified breakfast cereals), many soymilks, most meat alternates (such as commercial veggie burgers), B12-fortified food yeast, and vitamins. It is very important that vegans and vegetarians, who eat no or very little dairy, eggs, or meat, have alternate sources of vitamin B12 daily or take a supplement. All vegans should have their serum vitamin B12 levels checked to make sure they are getting adequate amounts.

Seniors – defined as anyone over the age of 50 – are another high-risk group and should have their serum vitamin B12 levels checked. As people age, their ability to absorb food-bound vitamin B12 is impaired. Even if they have vitamin B12 in their diet (vegetarian or non-vegetarian) they may not be absorbing it. Estimates are that up to 30% of the older population has this problem. This is a well -recognized public health problem that the public needs to be aware of. The solution for vitamin B12-deficienty for seniors is to get vitamin B12 from fortified foods or take a vitamin B12 supplement. Some older individuals may need a large dose (500-1000 mcg/day) to assure that they absorb adequate vitamin B12. There is no danger in getting too much, as the body will only absorb a certain maximum amount daily.

The actual daily recommended intake for a healthy adult (with no absorption problem) is just 2.4 mcg/day. Be sure you get adequate B12 daily to keep all of your nerves, brain, and blood cells in good health.

Sources of Vitamin B12

	(mcg)
Herring, 3.5 ounces	10.0
Salmon, 3.5 ounces	2.5
Beef, 3.5 ounces	2.5
Yogurt, 1 cup	1.4
Milk, 1 cup	0.9
Cottage cheese, ½ cup	0.8
Feta cheese, ¼ cup	0.6
Swiss cheese, 1 ounce	0.5
Egg, one	0.5
Brewer's yeast with B12, 2T	0.5
Chicken, 3.5 ounces	0.3
Cheddar cheese, 1 ounce	0.2
Fruits, vegetables	0.0
Legumes, nuts, grains	0.0

Recommended intake
2.4 mcg/day

Reference:

1. Vogiatzoglou A, et al. Vitamin B12 status and rate of brain volume loss in community-dwelling elderly. *Neurology*. 2008;71:826-832.

TOP

Serum Vitamin D Status and All-Cause Mortality

Getting adequate sunshine – a source of vitamin D – could cut your risk of death from any cause in half in the next 8 years, so says a new study on vitamin D reported in the *Archives of Internal Medicine*. Who would have thought that sunshine could make such a difference in our health?

New estimates are that 50-60% of the older population in North America and the rest of the world do not have satisfactory vitamin D status. And the situation is similar in younger populations. The minimum level of serum vitamin D (measured in the blood by checking 25-Hydroxyvitamin D) has recently been suggested to be at least 20-30 ng/mL based on adequate levels for good bone health, lower fractures, lower incidences of cancer, adequate immune function, lower rates of heart disease, and now, lower rates of death from all causes. The problem is that two-thirds of the senior population in North America has levels less than this!

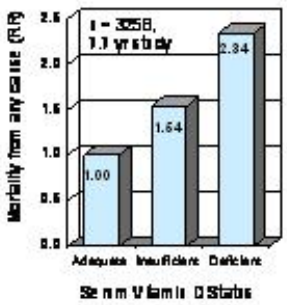
This newest research was done on 3,258 consecutive persons (average age 62) who went to a hospital for angiography (suspecting coronary heart disease). Researchers checked serum vitamin D levels, followed these people for nearly 8 years, and correlated serum vitamin D levels with all cause mortality. They found that as vitamin D levels went up, deaths from all causes went down. The lower the vitamin D levels, the higher the risk of dying.

People were divided into 4 groups based on their serum vitamin D levels. People with the lowest vitamin D levels (bottom 25%) were more than twice (RR=2.08) as likely to die during the 8 years of follow-up compared to individuals with the highest vitamin D levels (top 25%). This increase in mortality was after adjusting for other possible confounders including age, sex, BMI, physical activity, smoking, diabetes, blood pressure, cholesterol levels, aspirin use, and other factors.

In this study, two-thirds of all persons had serum vitamin D levels less than the very conservative standard of adequate (serum vitamin D greater than 20 ng/mL). A more recognized standard is at least 30 ng/mL for adequate vitamin D.

Vitamin D and All Cause Mortality

Persons with low levels of serum vitamin D had a 54% to 2.34 times increased risk of death from any cause compared to people with adequate levels (30 ng/mL).

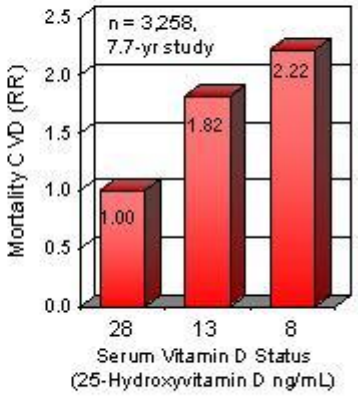


Archives of Internal Medicine 2008;168:1340-1349

People with vitamin D levels less than 10 ng/mL were classified as “deficient” and had 2.34 times higher all cause mortality rates compared to people with adequate vitamin D levels. People with insufficient vitamin D levels (10-29 ng/mL) had a 54% increased risk of dying. These are big differences in risk of dying from any cause. Mortality rates from cardiovascular disease were also higher by 1.82 times in the insufficient group, and 2.2 times in the deficient group compared to adequate vitamin D levels.

Vitamin D and Cardiovascular Mortality

Persons with low levels of serum vitamin D had a 1.8 to 2.2 times increased risk of death from cardiovascular disease (CVD) compared to people with higher levels (28+ ng/mL) of vitamin D.



Source: Archives of Internal Medicine. 2008 Jun 23;168:1340-1349.

When comparing people who didn't have coronary heart disease, more similar to the general public, the risk of all cause mortality was 3.6 times higher in those with low serum vitamin D levels compared to adequate (30 ng/mL) levels. This is the first large study to demonstrate that overall mortality is closely and independently related to vitamin D status.

What can we learn from this study? First, if you don't know what your serum vitamin D level is, you might want to get it checked. Ask your doctor. This is especially important for older persons and persons who seldom get out in the sunshine. If your level is below 30 ng/mL (or 73 nmol/L) then you need to take preventive steps to improve it. Fortunately that is easy.

Being in the direct summer sunshine for 10-15 minutes a day with a good portion of your body's skin exposed, will produce all the vitamin D most people will need (one session like this may produce over 20,000 IU of vitamin D). Your body will produce all the vitamin D it can in the first 10-15 minutes. To get the want maximum benefit from the sun, aim for two 10-minute sessions daily, separated by several hours. Longer exposure is not beneficial and may result in sun burn.

If you live in a northern climate, the sun will not make much, if any, vitamin D in the winter. The sun is not high enough in the sky and ultraviolet rays that make vitamin D are filtered out in the atmosphere. In this case you will need to take a vitamin D supplement. In this study, serum vitamin D levels dropped by 89% from August, the end of summer, to March, the end of winter.

Most vitamin D researchers recommend taking at least 1,000 IU of vitamin D daily in the winter, or every day if not in the sunshine regularly. The national recommendation in Canada is 1,000 IU daily. You can safely take up to 2,000 IU of vitamin D a day. The goal is to get your serum 25-Hydroxyvitamin D level above 30 ng/mL. When you do, you most likely will be improving your odds for a longer, healthier life.

Emerging Serum Vitamin D Norms

Vitamin D status	(ng/mL)	(nmol/L)
Deficient (high risk)	<20	<50
Insufficient (moderate risk)	20-29	50-72
Adequate (low risk)	30 or higher	73 or higher

Serum vitamin D test results (25-Hydroxyvitamin D) are shown in these two units.

Reference:

1. Dobnig H, et al. Independent association of low serum 25-Hydroxyvitamin D with all cause mortality. *Archives of Internal Medicine*. 2008 Jun 23:168:1340-1349.

TOP

Vitamin D and Breast Cancer Survival

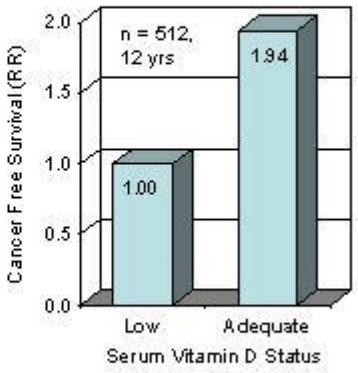
A new report from the American Cancer society suggests that a healthy vitamin D level in the blood may help women with breast cancer to have better long-term outcomes. This report comes from a presentation by Dr. Goodwin from the University of Toronto at the annual meeting of the American Society of Clinical Oncologists.

Goodwin and her colleagues measured blood levels of vitamin D in 512 newly diagnosed breast cancer patients and tracked their progress of their cancer for a period of 12 years. For analysis, they divided women into 3 groups: those with deficient vitamin D levels (<50 nmol/L or <20 ng/mL), those with insufficient vitamin D (50-72 nmol/L), and those with a healthy level of vitamin D (more than 72 nmol/L or 30+ ng/mL).

Compared to women with healthy levels of vitamin D, those with deficient levels of vitamin D had a 94% increase in “worse outcomes,” measured as being disease-free or not. When looking at overall survival, those with deficient levels of vitamin D had a 73% decrease in survival compared to those with a healthy level of vitamin D. These outcomes were independent of age, weight, tumor stage, or tumor grade.

Vitamin D and Breast Cancer Survival

Women with breast cancer who had adequate serum vitamin D levels (30+ ng/mL) had nearly twice the survival rate after 12 years of follow-up than vitamin D deficient (<20 ng/mL) women.



CA: A Cancer Journal for Clinicians. 2008 Sep/Oct;58:264-265.

If you are concerned about your vitamin D level, ask your doctor for a blood test of 25-Hydroxyvitamin D. In this study of over 500 women, only 24% of the women were in the healthy range (more than 72 nmol/L or 30+ ng/mL), 37.5% were deficient in vitamin D, and 38.5% were insufficient (see new recommended serum vitamin D levels in table below).

Having adequate vitamin D appears to be important to the health of the body and its ability to fight successfully against breast cancer. Dr. Goodwin pointed out that these results, as remarkable as they are, are preliminary findings and need other studies to show repeated benefit as well as clinical trials before we know for sure.

Meanwhile, getting adequate vitamin D is important for everyone, whether they have breast cancer or not. Other studies show that adequate vitamin D may help reduce the risk for many other cancers, reduce the risk of heart disease, build stronger bones, and help strengthen the legs in older age resulting in fewer falls. One study showed that adequate vitamin D significantly improves overall survival. Vitamin D has no side effects other than better health!

To get adequate vitamin D, researchers recommend that you get at least 10-15 minutes of direct summer sunshine on the skin most days, and/or take a vitamin D supplement of at least 1,000 IU daily (up to 2,000 IU daily is considered safe by the National Institute of Medicine). The only way to know if your serum vitamin D levels are adequate is to get a blood test (25-Hydroxyvitamin D) from your doctor.

Note: New emerging norms for serum vitamin D (25-Hydroxyvitamin D) are listed below:

Serum Vitamin D Status*	ng/mL	nmol/L
Adequate (healthy level)	30	73
Insufficient (increased risk)	20-29	50-72
Deficient (high risk)	Less than 20	Less than 50

* Note: Serum vitamin D levels are often reported in two different units as shown above.

Reference:

1. American Cancer Society. Study sees link between vitamin D, breast cancer prognosis. *CA: A Cancer Journal for Clinicians*. 2008 Sep/Oct;58:264-265.

Can Drinking Water Help You Lose Weight?

For years, I have heard people say that drinking lots of water daily can help in a weight loss program. A new study gives evidence that this may be true. Investigators looked at how much water and other liquids 174 women drank in a year-long weight loss program conducted at Stanford University. They also carefully monitored diet, physical activity, weight, percent body fat, and waist circumference – both at the start and at 2, 6, and 12 months later.

Water intake was measured both in absolute amounts (grams) and as a percent of all liquids consumed. While controlling for possible confounders (exercise, diet, etc.) researchers looked at water intake and changes in both weight and body composition. They found that increases in water, in terms of absolute (grams of water daily) or relative (%) intake, were associated with a significant loss of weight and body fat over the year, independent of other possible confounders.

Just how water results in benefits for weight loss is not fully understood. However, it appears to have an independent benefit in weight loss as well as encouraging healthier eating habits, such as drinking water in place of soft drinks and other higher calorie beverages. Water also has benefits to kidney and bladder health, temperature regulation in hot climates, and a healthy circulation. Drinking water may also help suppress appetite and calorie intake.

All of these reasons add credibility to the idea that drinking water frequently throughout the day and staying well-hydrated may help in long-term weight loss and weight management. It's an easy practice to try, is inexpensive, and has healthy side effects. The researchers concluded their article by saying, "The results suggest that drinking water may promote weight loss in overweight dieting women."

Reference:

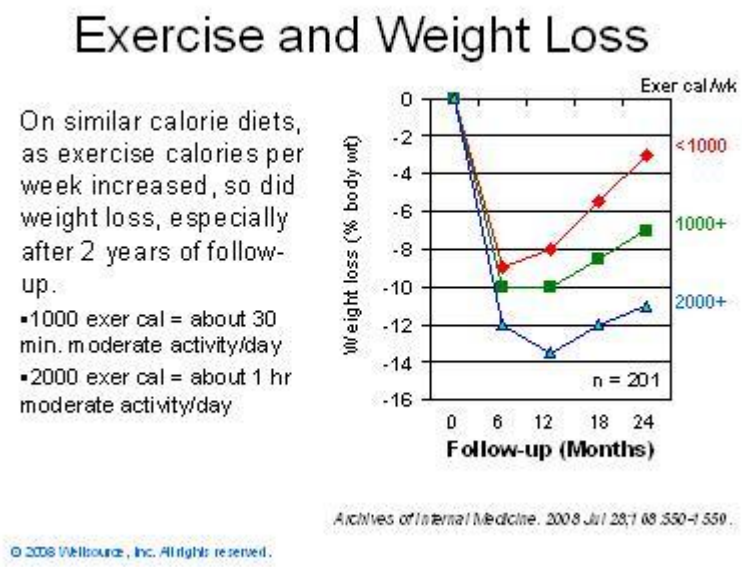
1. Stookey JD, et al. Drinking water is associated with weight loss in overweight dieting women independent of diet and activity. *Obesity*. 2008 Nov;16(11):2481-2488. Epub 2008 Sep 11.

Physical Activity and Weight Loss

How important is physical activity for long-term weight loss? That was the focus of a study including 201 women in a weight loss program sponsored by the University of Pittsburg. All women were encouraged to eat lower calorie meals (1,200-1,500 calories per day). Then women were randomly assigned to either no additional physical activity or increased levels of physical activity. Some exercised at 1,000-1,500 exercise calories a week (about 30-45 minutes of walking daily), and others 2,000 or more exercise calories each week (equivalent to walking an hour per day).

After 6 months in the program, all groups lost a similar amount of weight: the high exercisers lost about 12% of their body weight; the moderate exercisers lost 10% of their body weight; and the non-exercisers about 9% of their body weight.

Over the next 2 years, however, those who continued their physical activity were able to maintain most of their weight loss (7-11% of their body weight) while the non-exercising group regained most of their weight loss (see graph below).



Those who were most successful in maintaining a weight loss of at least 10% of their initial body weight were those who expended about 2,000 exercise calories per week. This is equivalent to about an hour of moderate physical activity, such as walking daily. In this study, they found no difference in weight loss in those who exercised vigorously or moderately, as long as they burned at least 2,000 calories weekly.

While both groups lost similar amounts in the first 6 months, the difference after 2 years was remarkably different. This study points out the importance of not only changing eating habits but becoming more physically active for long-term weight management success.

Reference:

1. Jakicic JM. Effect of exercise on 24-month weight loss maintenance in overweight women. *Archives of Internal Medicine*. 2008 Jul 28;168:1550-1559.

TOP

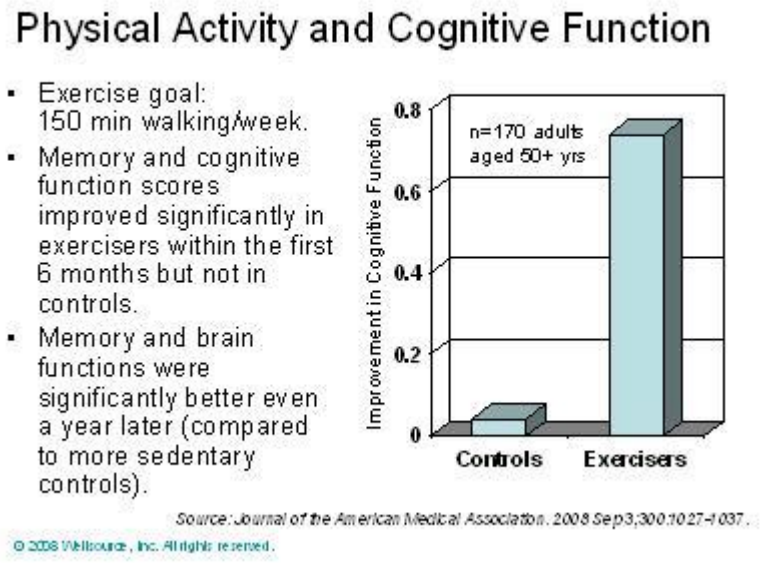
Effect of Physical Activity on Cognitive Function

How's your memory? Interested in keeping your mind functioning at top performance? Most of us are, but we often don't think about such things until the mind starts slipping. Alzheimer's disease and dementia are becoming more common in this aging society. New research suggests regular physical activity is one effective option you have in slowing mental decline and, in fact, improving brain function.

Researchers at the University of Melbourne studied the effects of physical activity on brain function. They selected 170 older adults (age 50+) who reported memory problems but didn't yet show definite signs of dementia. Then they randomly divided them into 2 groups – an exercise group and a control group who received normal care but were not encouraged to exercise.

All participants were given mental tests to determine their cognitive abilities at the start of the study. The exercise group was encouraged to exercise at least 150 minutes (three 50-minute sessions) weekly. Walking was the most common form of physical activity. Both groups wore pedometers and recorded their steps taken daily. After a year and a half, both groups repeated the cognitive tests.

Here is what they found: Exercisers showed improved cognitive function. The improvement was moderate, but their mental abilities were significantly better, including memory. Improvement was apparent within 6 months of the start of the exercise intervention and continued and was still significantly apparent a year after the formal exercise program ended. The controls, on the other hand, showed no significant improvement in mental function during the study period.



These results are encouraging. Prior studies had looked at a variety of medications and vitamins (B and E) clinical trials, but saw no significant improvement in brain function. Exercise, on the other hand, was effective in improving brain function and had no adverse health effects, which were quite common amongst those in the medication trials.

The mechanism why exercise is beneficial to the brain is not fully understood but the researchers offered these ideas:

- Regular exercise improves circulation, not only to the muscles and heart but also to the brain. The improved circulation in the brain helps to keep it healthy and improves mental function.
- Within 3-4 weeks of increased aerobic activity, the brain begins to show improvement in angiogenesis, circulation, and brain perfusion, all of which help improve mental abilities.
- Regular exercise has also been shown to contribute to brain improvement by growing more synapses, neurons, and an improved response to stress (improved coping ability).

Other studies have shown that regular exercise improves mood, decreases depression symptoms, and enhances overall well being. The authors point out that their study showed better improvement in cognitive abilities and slowing of dementia than any drug studies have demonstrated. They further stated that exercise is an inexpensive intervention for maintaining good mental functioning that is freely available to all persons, and with few or no side effects other than overall better health and longevity.

In an editorial in the same medical journal commenting on this research, the authors suggest other effective actions that help maintain good mental ability:

- Encouraging higher education (people with more education have less mental decline with age)

- Maintaining a mentally rich environment – thinking, learning, mental challenges
- Healthy eating, especially foods that help maintain good circulation and prevent diabetes
- Opportunities for continued social interaction
- And from this study, regular physical activity throughout the lifetime; at least 30 minutes of moderate to vigorous activity daily.

Reference:

1. Lautenschlager NT, et al. Effects of physical activity on cognitive function in older adults at risk of Alzheimer disease. *Journal of the American Medical Association*. 2008 Sep 3;300:1027-1037.

TOP

Can Ginkgo Biloba Help Prevent Dementia?

This was the focus of a study of 2,587 older people with good mental function and 482 persons with mild mental dysfunction. They were divided into two groups (double blind study): one group received Ginkgo Biloba twice a day (120 mg) and the other group got a placebo. After 6 years of follow-up, researchers looked at the results. Their conclusion: Ginkgo Biloba had no beneficial effect on preventing mental decline or Alzheimer's disease in either the good mental functioning persons or those with mild mental dysfunction. In fact, the placebo group did a little better. If you want to prevent mental decline, the best proven preventive action is to be physically and mentally active.

JAMA Nov. 19, 2008

TOP

Longevity

Living past the age of 100 is becoming more common today. The world's oldest person, Edna Parker, died recently at the age of 115 years of age. When people asked about reasons for her longevity, her son pointed out that she never smoked, never drank alcohol, led an active life, maintained a healthy weight, and was never a worrier. Even though she spent her last years in a nursing home she kept active, walked a lot, and often pushed other patients in their wheel chair. Her advice to others regarding a long life was "more education." We can learn a lot about successful living from people like Edna.

Adapted from the *Seattle Times*, Nov. 27, 2008

TOP

New Overweight Standards for Children

In kids 6-11 years old, obesity (excessive overweight) has increased fourfold since 1970. How do you know if children are overweight or obese? The Endocrine Society has released new standards for overweight and obesity in children. Children with a body mass index (BMI) in the 85th percentile or above are termed overweight (at increased health risk). This represents almost one-third of all children. These children are at increased risk of being overweight as adults and increased health risks, including diabetes, joint problems, high blood fats, high blood pressure, and eventually cardiovascular disease.

JAMA Nov. 19, 2008

New Overweight Norms for Children

Weight Classification	Norms	Prevalence (%)	Risk Status
Underweight	5th percentile or less	---	Increased health risk
Normal weight	Less than the 85th percentile	67.9%	Low risk
Overweight	85th to 94th percentile	31.9% (above 85th percentile)	Increased risk
Obese	95th percentile or higher	16.3% (above the 95th percentile)	High risk (diabetes, blood fats, blood pressure, joint problems…)
Very obese	97th percentile or higher	11.3%	Very high risk

TOP

Featured Health Links
BMI Calculator – To determine if your children (ages 2-18) are at increased risk for their weight, go to the CDC BMI Calculator for children and teens at: http://apps.nccd.cdc.gov/dnpabmi/Calculator.aspx

AMA Fitness is Medicine Initiative – Presentation by AMA president.
>http://www.ama-assn.org/ama/pub/category/18118.html and
>http://www.ama-assn.org/ama/pub/category/18149.html

Physical Activity Guideline for Americans:

Factsheet for adults: http://www.health.gov/PAGuidelines/pdf/fs_adult.pdf

Personal fitness guide: http://www.health.gov/PAGuidelines/pdf/adultguide.pdf

TOP

Resources

PowerPoint® Slides

- Vitamin B12 and Brain Shrinkage — Reports intake of Vitamin B12 and Brain Shrinkage. (4 slides)
- Physical Activity and Cognitive Function —Shows how exercise helps the brain.(3 slides)

- Vitamin D and All Cause Mortality —Graphs the effect of Vitamin D on Mortality. (7 slides)
- Exercise and weight loss —Graphs how physical activity contributes to weight loss.(1 slide)
- Family History and Hypertension —Graphs family history and the risk of hypertension.(2 slides)
- Vitamin D and Breast Cancer Survival —Graphs Vitamin D levels and Breast Cancer Survival.(3 slides)
- Drinking Water Promotes Weight Loss — Shows the increase of water in take and weight loss.(1 side)

Recipes

Try these delicious home-baked cookies for the holidays!

Carob Chip Cookies

1 c	Carob chips, sweetened
1c	Peanut butter, natural
1/2 c	Maple syrup or honey
1 tsp	Roma, coffee substitute
1 tsp	Vanilla extract
1/2 tsp	Maple flavoring
4 c	Granola, dry
1 c	Currants or Raisins
1/2 c	Nuts, chopped (walnuts, pecans, peanuts)
1/2 c	Dried coconut, grated (opt)

Combine carob chips, peanut butter, sweetener of choice, Roma and flavorings in a small saucepan. Warm over medium heat stirring frequently until carob chips are melted. Mix granola, fruit and nuts together in a large bowl. Pour carob sauce over granola mixture and stir until well mixed. Prepare a 9" x 13" baking dish with cooking spray. Spread the warmed carob/granola mixture into the dish evenly and press mixture down. Spray a knife with cooking spray and cut mixture into squares. Refrigerate until cold. Break the squares apart and store in an airtight container in the refrigerator until ready to serve.

Yield: 48 squares

Oatmeal Rasin Cookies

2 c	Quick oats
1/2 c	Whole-wheat flour
1/4 c	Unbleached white flour
1/2 tsp	Cinnamon
1/4 tsp	Salt
1/2 c	Pecans or walnuts, (opt)
1/3 c	Raisins
1/2 c	Water-packed tofu, silken
1/2 c	Light brown sugar, packed
1/2 c	Smart Balance, "Light" (non-hydrogenated spread)
2 T	Molasses, mild
1 tsp	Vanilla Extract

Combine dry ingredients (oats thru raisins) in a medium bowl. In a mixing bowl, combine tofu, sugar, Smart Balance, molasses and vanilla and beat until creamy. Add to dry ingredients and stir until evenly mixed. Prepare a heavy-duty baking sheet with cooking spray. Drop dough by spoonfuls unto the baking sheet and

gently form into cookie size shapes. Bake at 350 degrees F, 20 minutes or until lightly browned. (If using an "air-bake" sheet, increase temperature to 375 degrees F.) Cool on a baker's rack.

Yield: 18 cookies

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About Making Healthy Choices™

The Making Healthy Choices™ newsletter is written by Don Hall, DrPH, CHES, founder and CEO of Wellsource, Inc. with contribution from associated health professionals. It is available as a resource to Wellsource clients and other select organizations involved in promoting health.

Selected content is general health information from evidence-based research. Its purpose is not to treat disease but to promote healthy lifestyles. Persons with health problems should consult their physician for specific guidance.