

Alternatives[®]

FOR THE HEALTH-CONSCIOUS INDIVIDUAL

January 2005

Volume 10, No. 19



Dr. David G. Williams

A Butter Way to Total Health

When this issue reaches most of you, it will be in the dead of winter, a time when many either choose, or are forced, to remain indoors for extended periods of time. As a general rule, most people are less active physically during this time, and have less exposure to the sun (resulting in a decrease in your body's ability to manufacture vitamin D from sunlight).

The widespread seasonal drop in vitamin D levels has been a concern of mine for several years. It was one of the reasons that years ago I increased the amount I recommend you get in your daily multivitamin. Vitamin D helps in the absorption and utilization of calcium and phosphorus, both of which are necessary for bone mineralization and calcification. In addition, a lack of vitamin D is associated with increased rates of multiple sclerosis, weak bone structure, and increased bone fractures (particularly of the hip and spine). It is now estimated that one-third of the women in the US over the age of 80 have a hip fracture during their lives, and 50,000 women die each year as a result.

Researchers have also found that decreased vitamin D levels can raise levels of harmful forms of cholesterol. A recent study found cholesterol levels tend to peak in December and January when our sun exposure is at its lowest, and decline in the spring and summer. (*Arch Intern Med* 04;164:863-870) Remember, though, that high cholesterol is not a disease, it's a sign of something gone wrong in your body; in this case, it's the vitamin D.

In addition to vitamin D-containing supplements, I have strongly recommended the consumption of vitamin D-rich foods like sardines. I realize

that sardines certainly aren't one of the glamour foods of the day, and many people wouldn't eat them if they were paid to do so. (I think they're losing out on one of the best deals around.) Another vitamin D-containing food that continues to get a bad rap is butter. There seems to be no end to the attempts to improve on butter-like spreads using all types of oils and "health-promoting" fats. Most, if not all, in my opinion are a total waste of money and effort. Butter and butter oil, which has recently become available again, are two excellent foods you should include in your diet.

I've discussed butter on numerous occasions, so I won't go into great detail here, but butter oil is something most people aren't very familiar with and something you should know about.

Although butter is generally still considered to be a "bad" high-fat food, more and more research continues to show practically all the components of butter have amazing healing and protective properties. Many of the benefits of butter are unrecognized today, even though they were demonstrated long ago by a dentist in Cleveland, Dr. Weston Price.



In This Issue

A Butter Way to Total Health	145
News to Use	147
Mailbox: What to Do About the Flu	149
Equal Length Equals Strength	150

You will observe with concern how long a useful truth may be known and exist, before it is generally received and practiced on.—Benjamin Franklin

The Search for True Causes

In the early part of the 20th century, Dr. Price was alarmed at the increasing amount of dental problems he was beginning to see in his younger patients. To learn the cause of the problem, he spent 10 years traveling to isolated areas of the world. He studied the relationship between traditional diets and health in people like the Eskimos and Indian tribes in Canada, the Everglades, and other indigenous societies in Australia, New Zealand, South America, and Africa. He discovered many similarities among their natural food choices, which had not yet been contaminated with refined sugars, canned foods, pasteurized dairy products, and denatured or rancid fats and oils.

Dr. Price found that tooth decay was practically non-existent among these people. Even without any form of toothbrush or dental care, their teeth were straight, strong, and healthy. As a general rule, they didn't suffer from any bone diseases commonly associated with calcium and phosphorus imbalances, such as osteoporosis and spontaneous bone fractures, which are now so common in our society. Further analysis of these diets indicated that they contained ten times the amount of fat-soluble vitamins—A, D, E, and K—as did the American diet of his day (which is probably even worse today).

Factor X from Inner Space

Their increased amounts of these fat-soluble vitamins came from foods like fresh, and often raw, fish, fish roe (eggs), organ meats, animal blood and glands, eggs, insects, vegetables, whole grains, tubers, fruits, and unpasteurized dairy products (milk, cream, cheese, and butter). Upon further analysis, the animal foods and by-products were found to contain a catalyst Dr. Price referred to as "Activator X." He felt this X-factor in these foods helped increase the absorption and utilization of the fat-soluble vitamins. It appeared to be most

abundant in fresh eggs, organ meats, cod liver oil, and in the butter made during the spring and fall from cows grazing on fast-growing new grass.

Based on his findings, Dr. Price began to treat his own patients with nutrition. One of his primary tools in the treatment of osteoporosis, tooth decay, arthritis, rickets, and chronically ill children was a concentrated form of the X-factor called butter oil. From all reports, the results he obtained were nothing short of amazing. The oil was formed by centrifuging (without using heat) organic, raw, dairy cream until the oil separated from the milk solids and whey. Oftentimes he would have patients also take cod liver oil to help magnify the effects.

Recently, a high-quality butter oil has once again become available. It is called X-Factor Gold. Just as Dr. Price made it years ago, it is made from unpasteurized cream, centrifuged, and heated to only 96 degrees so it can be liquefied for bottling purposes. It is made only from April to October when the no-hormones-added milk cattle in the Northern Plains have access to rapidly growing green, pesticide-free grass.

The concentrated X-factor oil isn't cheap. To make eight ounces of the oil takes eight to nine pounds of skimmed cream, which is equivalent to between five and six pounds of heavy cream. An 8-ounce jar with shipping will cost just under \$60. The recommended daily dosage is half a teaspoon a day. Typically, this is eaten directly from the jar (that's the way I do it, and the way I feed it to my family and young son). Don't use it in cooking or add it to hot food; the heat will kill the active factors. An 8-ounce jar is enough for roughly 96 half-teaspoon servings. The product is very stable and can be stored in the freezer, refrigerator, or without refrigeration (preferably in a dark, cool cabinet). I refrigerate mine.

Continued on page 148



ALTERNATIVES®

ISSN# 0893-5025. Published monthly for \$69.99/yr. by Mountain Home Publishing at 7811 Montrose Road, Potomac, MD 20854. Editorial Office: 7811

Montrose Road, Potomac, MD 20854. Periodicals postage paid at Rockville, MD and at additional mailing offices.

POSTMASTER: Send address changes to *Alternatives*, PO Box 2050, Forrester Center, WV 25438. Copyright © 2005 All rights reserved. Photocopying or reproduction is strictly prohibited without permission from the publisher.

Author: Dr. David Williams; Publisher: Robert Kroening; Editor: Bill Todd

The approaches described in this newsletter are not offered as cures, prescriptions, diagnoses, or a means of diagnoses to different conditions. The author and publisher assume no responsibility in the correct or incorrect use of this information, and no attempt should be made to use any of this information as a form of treatment without the approval and guidance of your doctor.

Dr. Williams works closely with Mountain Home Nutritionals, a division of Doctors' Preferred, Inc. and subsidiary of Phillips Health, developing his unique formulations that supply many of the hard-to-find nutrients he recommends. Dr. Williams is compensated by Doctors' Preferred, Inc. on the sales of these nutritional supplements and health products, which allows him to continue devoting his life to worldwide research and the development of innovative, effective health solutions.



NEWS TO USE FROM AROUND THE WORLD

If You Have to Smoke...

HONOLULU, HAWAII—While I'm certainly not an advocate of smoking, I'm sensitive to the fact that there are a lot of people addicted to the habit who have found it difficult to break. There are also those who choose to accept the associated health risks. If you, or someone you know, fall into either of these categories, there's at least one simple step that can be taken to help reduce the risk of developing lung cancer.

Researchers at the University of Hawaii's Cancer Research Center found several years ago that a particular enzyme in the liver (known as CYP1A2) activates specific cancer-causing chemicals found in tobacco smoke. (*Cancer Causes Control* 03;14(4):339-46)

They've also found that certain flavonoids can have a protective effect against tobacco smoke. One of the flavonoids is quercetin, which I've written about many times in the past and have suggested taking. In these particular studies, the researchers found that diets higher in onions (one of the better food sources of the flavonoid) resulted in a substantial decrease in the activity of the CYP1A2 enzyme mentioned above. (*J Nat Cancer Inst* 00;92(2):154-60)

Their latest research shows that naringenin, another flavonoid found in grapefruit, can also provide protection.

A six-week study was conducted on 49 smokers, who averaged 10 cigarettes a day but who were otherwise generally considered to be in good health. Partway through the study, the smokers were told to drink 6 ounces of grapefruit juice three times a day but continue their other smoking and eating habits. Within a matter of days the levels of naringenin had increased significantly. Additionally, there was a corresponding decrease in the activity of the liver enzyme CYP1A2.

For smokers, the regular consumption of grapefruit juice and onions, the stronger the better, certainly appears to trigger events that could help prevent the formation of lung cancer.

Kids Love Colored Foods

URBANA-CHAMPAIGN, ILLINOIS—Dr. Brian Wansink at the University of Illinois has found that if parents want their young kids to eat more vegetables they should mix them up.

Using jelly beans, he found that the more variations in color children were presented, the more they ate, even though all the beans tasted the same. The same thing happened when he mixed different colored vegetables. The children consumed more when there was a colorful mix—like carrots, peas, and corn—than when presented with just a single vegetable.

Salads and Calories

UNIVERSITY PARK, PENNSYLVANIA—Researchers have found a very simple way to reduce your overall caloric intake without going hungry.

Dr. Barbara Rolls and her colleagues at Pennsylvania State University engaged 42 women in a study to see the effects of eating a salad with every meal. In the first part of the study the women began every meal with a salad as their first course before a lunch of pasta. Later they skipped the salads and went right to the main pasta course. Regardless of whether they consumed a salad they were allowed to eat as much pasta as they wished.

When compared to skipping the salad and starting with the pasta, women who started with a low-fat salad (without a high-fat dressing and cheese) actually consumed 12 percent fewer calories throughout the entire meal. When the calories in the salad were raised by increasing the amount of food and adding a higher-fat dressing and cheese, the women actually consumed 17 percent more total calories throughout the entire meal.

The lesson is very simple. Start your meal with a nice salad, but don't pile on the cheese, croutons, or calorie-laden dressing. This approach can be an easy and painless way to drop the calories you consume by over 10 percent, and may be one of the best weight-loss tools around.

I can remember having a salad at every meal when I was growing up, and we still do at most meals. This tradition is still very common in many households, but the difference is usually the dressing. I almost always eat my salad dry, but occasionally have a vinegar and olive oil dressing. Most of the people I know who eat salad flood it with dressing. And many people would never think of eating a salad that wasn't floating in ranch dressing. From the shocking degree of obesity in this country that's obviously not the way to go.

Soft Drinks Still Bad News

AUGUSTA, GEORGIA—Investigators at the Medical College of Georgia have found that soft drinks appear to be one of the leading causes of increased blood pressure in adolescents.

We have known for years about the detriments of high-sugar soft drinks and their contribution to childhood obesity, diabetes, ADHD, and other health concerns. This study monitored the diets of 159 adolescents with an average age of 16.4. They were categorized according to their overall intake of caffeine, mainly from soft drinks and a small amount from chocolate candy.

Not surprisingly, those with the highest caffeine intake also exhibited the highest levels of blood pressure, which was 10 points higher than what it should be for that age group. (The African-American children in the groups showed a more severe reaction to the caffeine when compared to Caucasian children.)

It was noted that soft drink consumption has increased more than three-fold during the last 30 years, and there has also been a trend of increasing blood pressure problems among American youth during this same period. (*Arch Pediatr Adolesc Med* 04;158(5):473-7)

I'm sure this study will be downplayed by the mainstream press and medical establishment, much like the other recent report showing the link between soft drinks and diabetes. (*JAMA* 04;292:927-934)

Researchers tracked the records of 91,000 female nurses for eight years, and found that soft drinks were linked to both weight gain and the risk of developing type 2 (adult-onset) diabetes.

When they compared women who drank less than one sugar-sweetened soft drink a month to those who consumed one or more a day, it was found that those consuming the most soda had an 87 percent increased risk of diabetes compared to those women drinking the least. And those who drank one or more soft drinks a day gained an average of 19.5 pounds during the eight-year period. It appears that those drinking higher numbers of soft drinks also had poorer overall health habits and tended to be less active, smoke more, and consume more alcohol. The beverage industry focused on these lifestyle habits and proclaimed that soft drinks and sugar have no relationship to diabetes or weight gain. But they failed to acknowledge that soft drinks have now become the largest single source of calories in the U.S. diet, and the rise in soft drink consumption

just happens to parallel the rise of diabetes and obesity in this country. I guess that's also just coincidental.

Acupuncture After Surgery

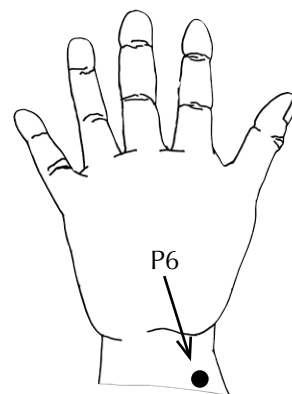
DURHAM, NORTH CAROLINA—Doctors at Duke University have clearly demonstrated that acupuncture is more effective than drugs at reducing nausea and vomiting following major breast surgery.

This is the type of information that should spread like wildfire through the medical community...but won't.

Using an electro-acupuncture device, an electrode was placed on the P6 acupuncture point just below the wrist. Two hours after surgery, 77 percent of the 75 women in the study experienced no post-operative vomiting or nausea, compared to 64 percent receiving drugs and 42 percent who received nothing. After 24 hours the results were 73 percent, 52 percent, and 38 percent, respectively. (*Anesth Analg* 04;99(4):1070-5)

The beauty of this study was that it actually used electro-acupuncture, which activates the acupuncture point without even breaking the skin. Compared to the normally prescribed drugs for nausea and vomiting, it is essentially cost-free and without any side effects. It's a technique that should be used in the recovery of all forms of surgery, not just those involving the breast.

As I've mentioned in the past, the P6 point is one you can use for all types of nausea, and it doesn't require specialized equipment or expertise.



Continued from page 146

X-Factor Gold is made by Green Pastures, 50932 872nd Rd, Page, NE 68766. They can also be reached at 402-338-5551 or on the Web at www.greenpasture.org. They offer a 10 percent discount on combination orders of one jar of butter oil and one jar of cod liver oil. Note that they are a small company, so please be patient if you call and can't get through right away.

Butter Is Still the Best

X-Factor Gold butter oil contains many of the components of whole butter, but I would also still recommend the use of butter. As I mentioned earlier, several components have been shown to be very beneficial in their own right.

In addition to the fat-soluble vitamins A, D, and E, numerous trace minerals, and the X-factor, butter from grass-fed cows is a source of CLA (conjugated linolenic acid), which has been shown to help prevent heart disease and cancer and build lean muscle instead of fat. It also contains the natural cholesterol emulsifier lecithin. It has stearic acid, a cardiovascular protector that also lowers LDL cholesterol levels, and butyric acid, which provides energy to cells in the colon wall and has been found to be very useful in the treatment of inflammatory bowel disease. Lauric and myristic acids are components of butter that increase HDL cholesterol (the good kind). The news certainly didn't receive much notice, but researchers found that individu-



MAILBOX

What to Do About the Flu

Question: After subscribing for several years I know your general thoughts on most topics, but as I get older I get more concerned about catching the flu. It seems to be getting worse every year. And although there's a shortage of flu vaccine this year, I'm thinking about getting the shot. Could you just update me on your feelings in this area? I know before you stated you didn't think the vaccines were very effective.

Robin K.
Danvers, Maine

Answer: Personally I think more people will be scared to death this year than the number of people who actually die from the flu. (The media reports that as many as 35,000 people die of the flu each year, but when you take a hard look at the statistics from the CDC (Centers for Disease Control) and remove the deaths from pneumonia, the real number is closer to 750. (Nobody knows just how many other problems are caused by vaccines that contain the mercury-laden preservative thimerosal. We do know, however, that mercury has been linked to increased risk of autism, Alzheimer's, and ADHD, just to name a few of the problems.) We also know that last year's flu vaccine didn't even contain the strains of pathogens that were

associated with most of the flu cases. It's too early to tell this year if they picked the right strains to include in the vaccine, or just how bad the flu season will be. One thing is for certain, however: with all the publicity surrounding the vaccine "shortage" this year, you can bet there will be even more guinea pigs lining up early for the shots next year.

Personally, I think your efforts would be better spent concentrating on your diet (avoiding sugar, fried foods, etc.), getting plenty of rest, drinking more water, taking your supplements, and exercising regularly rather than taking the flu vaccine.

In the midst of the flu season, regular hand washing and using alcohol wipes or plain 70-percent alcohol to wipe down things like the phone and other common items that get passed around can be very helpful. Dipping your toothbrush in hydrogen peroxide once or twice a week, or daily if you start to come down with a cold or flu, will often shorten the problem. And despite the nonsense about the potential dangers of vitamin E that hit the press several weeks ago, hundreds of studies have shown it provides enormous health benefits, including the ability to help fend off colds and other upper-respiratory infections.

A recent study found that when elderly individuals were given a multivitamin containing 200 IU of vitamin E, they experienced far fewer colds and respiratory infections during a one-year period than individuals given a multivitamin without vitamin E. (*JAMA* 04;292(7):828-36)

Don't forget the nasal wash Xlear, the herbal throat lozenges, and elderberry extract. These are stock items that every home should have on hand along with Mentholatum or Vick's.

I would also strongly suggest keeping some real eucalyptus oil around to use as an inhalant or in a vaporizer. In the past, I've recommended V-Vax Eucalyptus oil, and I still think it is a very good product. The only downside is its high cost. A two-ounce bottle costs about \$12 in the US, which isn't too bad unless you want to use it in a vaporizer. In Australia, I've done a considerable amount of research on eucalyptus oil, and it's possible to buy 8 ounces of extremely high-quality oil there for only about \$8 US.

One of my favorite brands there is called Bosisto's Parrot Brand eucalyptus oil, made by the company Felton, Grimwade, and Bickford. This company has been distilling and selling eucalyptus oil since 1852 and makes a fantastic product. Although they don't sell directly into the US, there's a company called Eucolife here that imports Bosisto's under their own label. While their markup makes their products cost considerably more here than in Australia, it's still a bargain when it comes to clearing up colds, flu, and respiratory infections. They sell everything from 2-ounce bottles to 5-gallon drums. (I keep a quart around for our vaporizer and other uses, which will last me for years).

Eucolife is offering *Alternatives* readers a 15 percent discount, and free shipping on all orders. You can contact them toll free at 866-KOALATY (866-562-5289), at P.O. Box 2085, Branson West, Missouri 65737, or on the Web at <http://readers.eucolife.com>. (Note there's no www at the beginning. Also note that only this URL will give you the discount automatically.) I have no affiliation with Eucolife; I just think they have a great product at a good price.

als who used butter had half the risk of developing heart disease compared to those who used margarine. (*Nut Week* 91;21(12):2-3)

Butter also contains what has been labeled the Wolzen factor (an anti-arthritis, "anti-stiffness" compound discovered by the Dutch researcher Dr. Rosalind Wolzen).

If you routinely include fish (such as sardines, salmon, and other oily species) in your diet, along with butter, fish oil supplements, and additional vitamin D (either alone or in your multivitamin/mineral), then it may not be necessary to include butter oil in your regimen. If you suffer from dental caries (tooth decay), osteoporosis, or

other bone or calcification problems, then butter oil is certainly worth trying. As I mentioned in the September, 2004 *Alternatives* (Vol. 10, #15), it would also help to add 1/10 to 1/5 teaspoon of monosodium phosphate as recommended by Dr. Judd to help strengthen teeth and bones. He informed me that there are 33 enzymes that contain monosodium phosphate and it is essential for proper bone and tooth health.

(Monosodium phosphate is available from KV Vet Supply, at 800-423-8211, or on the Web at www.kvvet.com. Their product number is 44617. Keep in mind that this is a veterinary product, so please don't ask them for instructions. See your September 2004 issue of *Alternatives* for directions on how to use the product.)

The same company that sells the butter oil sells a high-quality cod liver oil that Dr. Price thought "magnified" the results. I would also suggest using butter oil for severe and unresponsive cases of psoriasis, with babies and young children to promote good dental health and bone growth, and for children who experience growing difficulties.

Equal Length Equals Strength

An astute *Alternatives* reader, Jonathan T., recently wrote in to ask about the value of isometric exercises. He was aware of the need for exercise as you age, and remembered that they had once been all the rage, so he wondered if I thought they were valuable.

Why You Need to Move

The reader is definitely right about the need for exercise and doing all we can to preserve muscle as we get older. It's one area that most people, even some of the most health-conscious individuals, totally overlook. And that's a huge mistake. Weightlifting or building/preserving muscle is something everyone needs to know about if they expect to maintain their ability to function.

Numerous factors contribute to muscle wasting, and many of these can start as early as our 30s or 40s. Our body's production of various hormones that promote muscle growth begins to wane. Our ability to digest the amino acids needed for muscle

repair and growth declines. And undoubtedly, one of the biggest contributors to muscle-loss is the lack of weight-bearing exercise.

By "age-related muscle loss," I mean more than just losing what might have been your toned, lean, youthful muscular appearance (which, however, can be somewhat preserved with the right exercises). For most people, I'm talking about losing the ability to perform everyday activities. I'm talking about the loss of joint motion and stability and the arthritis that will always accompany it. I'm talking about losing your sense of stability and balance.

As the joint-stabilizing muscles begin to deteriorate and you lose overall strength, what were once normal activities gradually become very difficult, if not impossible. Getting out of a chair, or in and out of a car, becomes a problem. Inability to bend over to pick something up, climb a flight of stairs, carry grocery bags, grip small objects, and perform dozens of other everyday tasks gradually becomes a way of life. This decline doesn't have to happen, and shouldn't. If you've begun to notice such restrictions, the time for you to start exercising is way overdue. But it's not too late. By starting slowly and carefully, you can often reverse the situation I've described. And in the process, adding muscle can improve your cardiovascular system and help reduce your body fat and weight. It's important to keep in mind that the number-one killer in this country continues to be heart and vascular problems, and the heart is the one muscle that benefits the most from exercise.

The Isometric Tale

Isometrics are a useful part of an exercise program. Isometric exercise ("iso" means equal, or the same, and "metric" refers to length) involves tensing muscles either against other muscles or immovable objects, while the length of the muscle remains the same. For example, you might push hard against a wall for 10 seconds, and during that time the wall doesn't move and neither does your muscle. Research has shown that you can sometimes obtain amazing gains in both muscle size and muscle strength using these exercises. And isometric exercises can be valuable in certain instances. But they do have some downsides as well.

First, while all forms of exercise tend to increase blood pressure, isometric exercises cause the

highest rise of all. When a muscle contracts, blood is forced out of the muscle tissue and into the bloodstream, causing the increase. Holding your breath during the exercise will increase the blood pressure even more. If you already suffer from high blood pressure problems, or have an increased risk of stroke, isometric exercises might not be your best bet.

Secondly, any strength gains from isometric exercises are limited to the joint angle at which you train the muscle. Since the muscle doesn't change length during isometric exercises, the only area where your muscles will gain strength will be within 20 degrees of the joint angle you hold during the contraction. In other words the entire muscle isn't being exercised or strengthened during isometric exercise. In contrast, when you move weights the entire length of the muscle is required to work, and strength is gained throughout the whole muscle.

However, I don't mean to say the isometric exercises are useless, by any means.

Research has shown that, with reduced blood flow during prolonged muscle tension, numerous growth factors remain in the muscle tissue longer and actually stimulate muscle growth. It appears that more contractions increase strength, while longer contractions increase muscle mass (if you're looking to increase size).

The limited strength increases from keeping the muscle the same length can be somewhat compensated for by doing the isometric exercises in three different positions. First tense the muscle near the bottom of the movement, then in the middle, and finally at the top of the movement. For example, with the biceps the bottom means with the arm fully extended; the middle means with the elbow at an angle near 90 degrees; and the top means with your hand near your shoulder.

Other Choice Exercises

Isometric exercises have a legitimate place in exercise, and they don't require that you purchase exercise or gym equipment. However, there are other very effective exercises you can do anywhere, anytime, without equipment that might be even better suited to your needs. These are the same type of exercises that I use when I am traveling and don't have access to regular facilities or equipment.

Pushups

The overall best exercise for upper body strength is the pushup, and there are numerous variations that can make it easy enough for someone 100 years old, or extremely difficult for someone in their 20s. This one exercise will strengthen your arms, shoulders, and chest.

To increase the difficulty, you can elevate your feet on a foot stool, the bed, couch, etc. You can then suspend one leg in the air or one arm behind the back or both. These will take some work and practice, and just doing a regular pushup will be enough of a challenge for most to begin with.

If you can't do a regular pushup, or need to work up to it, then begin by using a wall and doing "pushbacks." Stand back from the wall a little further than arm's length, lean in, and put your palms on the wall at shoulder height and width. Slowly bend your elbows, lean into the wall, and repeat for 10 repetitions; gradually work up to doing this three times. It is more effective if you don't lock your elbows at the end of each pushback. (If you have stiffness or tightness between the shoulder blades, or have a problem with slumping shoulders, you can do a variation of this pushback by doing the maneuver in the corner of a room with your hands on either side of the corner. This variation will allow you to dip deeper during the pushback and perform a nice stretch between the shoulders.)

Squats

The squat is undoubtedly the best exercise for the muscles of the lower body. The safest method is to use a sturdy, firm chair as a "safety net." Stand in front of the chair with your feet spread shoulder-width apart. Keep your back straight, and your arms extended in front of you. Slowly and steadily lower yourself until you almost touch the chair, hold that position for a couple of seconds (longer as you progress) and then slowly come to the upright position again. Do this exercise for 10 repetitions and work up to three sets. It will strengthen the muscles in your legs, knees, and buttocks. (If you have good balance, you can also strengthen your calves and ankles by rolling up on the balls of your feet when you stand and holding that position for a couple of seconds. If your balance isn't so good, then just wait and do this exercise separately while holding on to the back of the chair.)

If you want to make squats more difficult, you can use something lower than a chair, like a short stool or ottoman, or even work up to a full squat.

These exercises are simple, yet very effective. They are weight lifting without the weights. (Actually, your body provides the weight). When you combine these simple weight-bearing exercises with regular walking, moving every joint through its full range of motion each day, and routine stretching, you have a very simple program that can help keep you mobile and more independent for life.

Amino Acids for Muscle Mass

Earlier, I mentioned how aging increases the difficulty of digesting the proper amino acids needed for muscle growth and repair. This difficulty is another thing that most people tend to overlook. Research from the space program has shown just how important the addition of essential amino acids can be when it comes to preserving muscle.

Researchers at the University of Texas Medical Branch at Galveston have been trying to find ways to limit the muscle wasting that inevitably strikes astronauts during prolonged space flights. In one recent study, they were “astounded” to discover a very simple method that preserved muscle mass and strength without exercise.

To study the effects that weightlessness had on muscle loss in astronauts, their research was conducted on individuals exposed to conditions here on Earth that produce the exact same results: inactive individuals who have been forced to be bedridden or hospitalized for prolonged periods of time.

This study involved thirteen healthy men between the ages of 26 and 46 who were bedridden for 28 days. Seven of the men were given a protein powder drink containing the essential amino acids in addition to their regular diet. The other six men had the same diet but received a placebo powder.

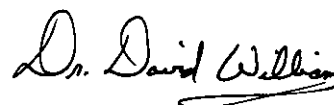
At the end of the 28 days, the leg muscles of all the men were tested using state-of-the-art real-time muscle-protein synthesis measurements, biopsies, magnetic resonance, x-ray imaging, and strength tests.

Individuals who took the daily protein drink retained all of their muscle mass, while those in the placebo group lost about a pound of leg muscle on average. Additionally, those on the protein drink lost only half as much muscle strength when compared to the placebo group. (*J Clin Endocrinol Metab* 04;89(9):4351-8)

A result like this is one of the very reasons that I continue to recommend the daily use of a high-quality protein drink supplement. This study shows it helps preserve muscle mass and strength—even in the absence of exercise. The addition of a simple exercise program would have even more profound effects.

Don't get turned off or intimidated by the thought of exercising, particularly exercising with weights. The exercises I've outlined above do use weights—your body weight. An exercise program doesn't have to be complicated or intimidating. Start slowly and stick with it. Unlike some other prevention programs where you may not actually “feel” a difference, you will feel a difference in your strength and flexibility. Best of all, it will translate into a significant and noticeable improvement in being able to carry out simple daily activities. If you just stick with it for a few weeks, the positive changes you experience will provide the motivation and incentive to continue and even expand your routine.

Take care,



If you have questions or comments for Dr. Williams, please send them to the mail or e-mail addresses listed to the right. Of course, practical and ethical constraints prevent him from answering personal medical questions by mail or e-mail, but he'll answer as many as he can in the Mailbox section of *Alternatives*. For our part, we'll do our best to direct you to his issues, reports, and products related to the subject of your interest.

Here's how you can reach us:

- For Customer Service matters such as address changes, call **800-527-3044** or write to custsvc@drdavidwilliams.com.
- To order nutritional supplements from Mountain Home Nutritionals (MHN), call 800-888-1415 or visit drdavidwilliams.com.
- If you are a licensed health professional and would like to learn how to begin reselling MHN supplements to your patients, please send an e-mail to practitionerinquiries@davidwilliamsmail.com.
- To order back issues or reports, call **800-718-8293**.
- To sign a friend up for *Alternatives*, call **800-219-8591**.
- Sign up for free e-mail dispatches at drdavidwilliams.com.

Service Code
45346S