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Take Charge of your Health

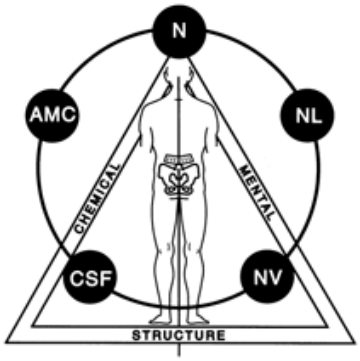
Teenage boys and weight

A report in the *New England Journal of Medicine showed that teenage boys who were overweight were 7 times more likely to have heart disease by their mid-30s.*

This study was done on 37,000 Israeli soldiers who began their military career at age 17.

When these males were examined at age 34, it was found that they had averaged 33 pounds of weight gain and had developed cardiovascular disease.

The study concluded that the individuals had begun the process of narrowing and hardening of the arteries during their over weight time in their teen age years.



Arthritis

Today, it is estimated that over 65 million Americans suffer from chronic arthritis. It has become the number one cause of disability,

Arthritis is only one of the many conditions that affect our joints. At the base of all of these joint conditions is inflammation.

There are two basic types of arthritis. One is inflammatory and one is degenerative. Inflammation is actually the basis of the degenerative type as well.

Degenerative arthritis is commonly called osteoarthritis. It is caused by repetitive stress on the joints.

This repeated stress causes low levels of inflammation which slowly causes alteration in the joint like roughening and breakdown of the cartilage.

The inflammatory arthritis family includes conditions like rheumatoid, lupus and gout among. Here the inflammation is much more severe causing greater breakdown of the joints.
If we take a broader view of arthritis, the two types are the same. It is just that one is more severe than the other and is caused by different conditions.

In both groups, there is a change in the underlying bone of the joints, changes in the synovial membranes causing swelling of the joint and finally the formation of bone spurs around the joint as a result of the chronic inflammation.

When the joints of osteoarthritis are examined, it is found that they contain chemicals of inflammation called cytokines.

The major site of damage in arthritis is in the cartilage that lies in the center of the joint. Cartilage is composed of cells called chondrocytes. These special cells produce the matrix of the cartilage which consists of collagen and proteoglycans.

When excessive pressure is applied to the joints, destructive free radicals are produced in the cartilage that triggers inflammation. The free radicals slowly kill off the chondrocytes and the joint deteriorates, as the proteoglycans are no longer produced.

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Triad of Health Publishing

Treatment Options

What you can do!

There are a number of things you can do to help your low back.

First, keep the supporting muscles strong. If you walk with a long stride and move your shoulders you will help to maintain much of the strength that you need.

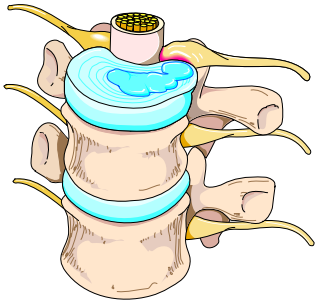
Proper walking will also help keep your back flexible. Properly instructed, you can do simple stretching exercises to help keep this flexibility.

You will also have to keep your pelvis and back properly aligned. If you pelvis is not level with the ground, you will have an imbalance in the muscles that support your back.

This will lead to shortening of one group of muscles and weakening of others. This sets the stage for a severe injury or at least degenerative arthritis.

To find a qualified doctor using applied kinesiology to help you - go to www.icakusa.com

Low Back Pain has many causes



There are many structures in the lower back that can have severe pain. These include muscles, ligaments, tendons, bones, joints and the discs. The outer rim of the disc can be a source of significant back pain due to its rich nerve supply and ease of injury.

During our development, there is a great deal of overlap of nerve supply to all of these structures. This makes it nearly **impossible for the brain to distinguish between injuries to one structure versus another. For** example, a torn or herniated disc can feel identical to a bruised muscle or ligament injury. This is where an examination into the cause of the pain is important because each of these structures may need a different type of treatment to resolve your pain.

Back pain can be divided into three large classifications. **The most common condition is known as axial or mechanical back pain.** The pain can run the gamut from very sharp to a dull ache. It may occur all the time or come and go. It also varies in intensity from very mild to extremely severe. One patient may say that their low back is only sore when they have been sitting for a time, or if they have to work in the garden. Another patient will have severe debilitating pain and need assistance to even walk or stand from a sitting position. While one patient will be perfectly straight, another will be bent over and locked in a crooked posture.

MECHANICAL PROBLEMS ARE THE MOST COMMON CAUSE OF PAIN

The one thing these conditions have in common is that the **pain is restricted to the lower back area.**

This type of problem, mechanical back pain, is the most common, and it is completely non-specific with regards to the injured structure or structures. Generally, the pain gets worse with certain activities or positions. The pain is usually relieved by rest or moving into a specific position. Usually you will feel better after you have been lying down for a while, but staying in bed too long can also aggravate this type of problem.

This type of problem **responds extremely well to conservative care**. At times, spinal manipulation alone is like a miracle and the person feels immediate relief. More often, the injury involves more than just a misalignment of a vertebra or of your pelvis. Nerves, muscles, tendons, ligaments and skin can all have an influence on the degree of discomfort that you have. Each of these may need to be addressed to attain relief. If you have multiple episodes of this type of pain, you will want to engage in

a rehabilitation program to help resolve the underlying causes of the problem. Here, the diagnosis goes farther than just finding out what is causing the pain, but additionally centers on what weakness or restriction you have that ultimately cause you to have your pain episode. Here, we function more like a coach. We have to find the cause or causes and help direct you into ways to avoid and limit future episodes.

The next most common type of back pain is known as **referred pain**. Here the person complains of having an achy, dull type pain that moves around. The discomfort comes and goes and varies in intensity. **This achy pain starts in the low back area and commonly spreads into the groin, buttock and upper thigh.**

The treatment options here are similar to those used in treating axial pain. Diagnostic and therapeutic measures are aimed at correcting abnormalities in the muscles, ligaments and small joints of the spine.

The last type of back pain is known as **radicular pain**. In this case, the pain is described as **deep and usually constant**. It follows the nerve down the leg and is often accompanied by numbness or tingling and muscle weakness.

The most common example of this type of problem is the sciatic pain that radiates along the sciatic nerve - down the back of the thigh and calf into the foot. This type of pain is caused by injury to a spinal nerve. Some of the possible causes of this are a disc protrusion – or bulge, arthritic changes or a narrowing of the opening that the nerve exits through.

While a few of these cases will require surgery, most respond to conservative care. **Here the care will consist of multiple therapies all designed to reduce inflammation, balance your posture, strengthen supporting structures, attain normal motion and improve the health of the nerve that is involved.**

In all of these types of back pain, your health habits are very important. For example, there are certain foods that are high in the fats that cause more inflammation. Limiting the intake of these animal fats and increasing your intake of the good fats that reduce inflammation may play an important role in your healing. Smoking is another health concern. Statistically, smokers are slow healers when it comes to back pain.

One of the most important areas in the management of chronic back pain is **the strength of your abdominal wall** and pelvic floor. There are three major abdominal muscles each with small subdivisions. Any weakness in one of these sections can be at the root cause of a chronic back problem. Weakness in these structures causes your back muscles to tighten and shorten. This adversely affects the lower back by causing compressive forces on the small joints and the discs.

An important element in prevention is keeping these muscles active and in good tone.

Omega 3 Benefits

There are many benefits of omega-3 fats:

- Prevent depression
- Used to treat bipolar disorder
- Prevent pre-eclampsia
- Reduce premature births
- Protect baby's brain
- Modulate anger, anxiety, fear
- Improve immunity
- Counteract autoimmune diseases
- Prevent and treat cancer
- Protect the brain
- Fight cardiovascular disease
- Prevent and treat arrhythmia
- Combat stroke

Monosodium glutamate

Monosodium glutamate is the sodium salt of glutamic acid. This is a naturally occurring nonessential amino acid. It is used commonly in Chinese cooking as a flavor enhancer.

It was originally made from wheat gluten but is now mostly produced from bacterial fermentation of carbohydrates. The major sources of the carbohydrates are the starch of sugar beets, sugarcane or molasses.

Most individuals think that MSG is only found in Chinese cooking but it is found in most fast food chains and in many prepared foods.

It is found usually in prepared stocks for cooking and in bouillon cubes. You will find it in almost all salad dressings and barbecue sauces.

Most canned, frozen and prepared foods will have it a component.

It is also found in fermented products like soy sauce and Worcestershire sauce.

Achilles Tendonitis

Signs or Symptoms

Achilles Tendonitis is an inflammation of the Achilles tendon. This tendon attaches the muscles in the calf of the leg to the back of our heel. The tendon is long and thick, and the contraction of the muscles that make up the calf pull the foot down, so that the toes are pointed to the ground. Common causes of inflammation include:

1. Over utilizing it. This can be caused by excess running, especially up or down hill.
2. Trauma, such as a kick to the tendon.
3. Shoe or boot pressure against the tendon.
4. Wearing high heels and then going to sandals. The muscle will tend to shorten when wearing the higher heel and then the structures are severely stretched when wearing no or a low heel.
5. Plantar fasciitis, an inflammation of the muscles on the bottom of the foot.

Description

The most common site of pain is from the heel bone up to about 3 inches above the heel. The diagnostic signs of this condition are:

1. Pain in the tendon when the foot is moved up and down.

2. Tenderness in the tendon when you squeeze it from the sides.

If you are unable to move the foot either up or down, or you have intense pain when trying to walk, you may have a tear of the Achilles Tendon, and you should see a doctor immediately. Also, if you have severe pain in the calf, with or without discolorations of the skin, you may have a blood clot, and this is a medical emergency; **see a doctor immediately**. If you do not fall into either of these categories then try the following suggestions:

Standard treatment

The basic treatment centers on reducing the stress on the tendon by using pads in the shoes, stretching, anti-inflammatory medications and rest.

Applied Kinesiology Approach

Muscle balance is the goal of the treatment. In this condition, abnormal stresses are applied to the tendon causing the tendonitis. To treat this condition, proper muscle function must be returned. This can involve many different muscle

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Proper Sitting

Sit down and be comfortable. The real question is are your spine and muscles comfortable. Sitting allows you to take the load off of your feet and legs when the stress is more on your pelvis and your back.

When you are standing, the weight should be equal on both feet and unless there is a postural imbalance in your lower back and pelvis, it is fairly even across the discs in your spine. When you slouch, even if it feels good to you, it places uneven forces on the discs and small joints in your spine. Those legs that are getting a break from your weight are now being stressed by sluggish circulation. Recently, the airlines have come under fire for leg thrombosis in long-haul flights due to having the passengers sit for too long in one position. You don't have to be on a long haul flight for circulation problems to occur due to prolonged sitting.

When you slouch, there are specific muscle groups that contract. These are very predictable and can easily be found by pressing on them. These are the muscles of your lower lumbar spine, the muscles between your shoulder blades, the muscles on the top of your shoulders and the front of your neck.

Proper sitting begins with the chair or car seat. If you are looking to buy a work chair, these are the features that you should look for:

1. There should be an adjustable back support. This support should be in the lumbar, low back area, or you can add one. More on this later.
2. The seat should be adjustable up and down to compensate for your leg length.
3. The seat should be adjustable forward and backward. This is the least important of the three.
4. The seat should be 25% wider than your pelvis. Molded seats are appropriate only for those people with a pelvis the size of the mold.
5. The front edge of the seat should not cut into your legs. This reduces the circulation in and out of your legs.
6. The chair should have armrests. These are used to rest your arms and aid in getting in and out of the chair.
7. The chair must be stable. If the chair can tilt backwards and has rollers, make sure it doesn't tilt back far enough that you fall over backwards.

If you don't have the ideal chair for you, then you will need to alter the chair or car seat to fit you. Many cars now come with adjustable front seats for the driver. Pity the passengers who don't have this option.

First, sit comfortably. Then palpate, rub, the muscles of your pectoral region for tenderness. If these are tender, place a pillow or lumbar support for your lower spine. Make sure that the support is in the small of your back,

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Mediterranean Diet Trial

A popular anti-inflammatory diet is called the Mediterranean diet because it emulates the traditional diet of southern Italy, Greece, and other countries around the Mediterranean Sea.

It includes olive oil and nuts for monounsaturated fat. Fresh, cold-water fish high in Omega-3 fats are a staple. These types of fats actually help reduce inflammation in the body.

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The American Heart Association's Lyon Heart Diet was conducted to test the effectiveness of the Mediterranean diet.

The study followed 600 patients who had survived a first heart attack; half were given a Mediterranean-style diet (reducing butter and cream and increasing olive oil); the other half followed a typical American diet.

After a year, the Mediterranean diet group was doing so much better than the control group that the study was stopped so everyone could have the opportunity to change their diet. In a follow-up almost four years after the study started, patients following the Mediterranean-style diet had a 50 to 70 percent lower risk of recurrent heart disease.

This was accomplished by diet alone with no increase in exercise.

Nutrient: Curcumin or Tumeric

Possible Benefits of Tumeric

It is a natural antiseptic and antibacterial agent

With cauliflower, it has shown to help prevent prostate cancer and slow the growth of existing prostate cancer.

Is a natural liver detoxifier.

Slows the progression of Alzheimer's disease

Has been shown to reduce metastases in many forms of cancer.
Potent natural anti-inflammatory

Is a natural painkiller and cox-2 inhibitor.
Been used in Chinese medicine as a treatment for depression.

Natural treatment for arthritis and rheumatoid arthritis.

Boosted the effects of paclitaxel, a chemo therapy drug, and reduced its side effects.

Has been shown to speed up wound healing

Has shown positive effects in some cases of psoriasis and other inflammatory skin conditions

There is a spice from the Orient known as tumeric. Tumeric contains a number of compounds known as flavonoids. The most important one is called curcumin. This is the principle flavonoid in tumuric and gives it it's yellow color.

Curcumin has been shown to have many beneficial effects when taken with food or in tablets. It is been shown to be antimalarial, antibacterial, antiviral, acts as an antioxidant, antiseptic, and is an anticancer agent.

Studies have shown that it is also protective of nerve cells, lowers cholesterol, and will reduce atherosclerosis in blood vessels.

Curcumin has been used to enhance foods in India for centuries and has been shown to have little if no toxicity even in high doses. One of its major activities in the body is as an anti-inflammatory.

Over a decade ago, study showed that individuals who took low-dose anti-inflammatories like Advil, had a slightly reduced rate of developing Parkinson's or Alzheimer's disease. This appeared to be because of reduced inflammation in the brain. Inflammation in the brain can be caused by many sources. These include viral infections toxic metals like mercury and lead, minor strokes, TIAs, food allergies, concussions, and the inhalation of toxic gases.

This chronic low-grade inflammation slowly damages the brain by destroying the connectors between the brain cells. If this occurs over a long period of time, it results in death of brain cells.

The characteristic sign of Alzheimer's disease is the formation of a substance called amyloid plaque. Curcumin has been shown not only to reduce inflammation but also to slow and even stop the formation of this amyloid plaque. Used over time it has been shown to drastically reduce levels of this plaque.

As you can see, this substance can be very protective against brain problems but and it also helps reduce inflammation in the whole body. There is one problem with supplementing with this spice. It does not dissolve well in water but does in oil. If you take this in a powdered form you should take it on an empty stomach or with a meal with a high fat content or with supplements that are in an oil-base. This will dramatically increase the absorption of the curcumin,

Arthritis continued from page 1

When the cartilage degenerates, the bones begin to rub against each other changing the surfaces of the bones themselves. Even more destructive enzymes are produced due to this increased friction between the bones and there is more pain and destruction of the bones and the joint structures.

There are some natural substances that can reduce or suppress the production of these destructive enzymes. These include omega 3 oils, flavinoids, tumeric, grape seed extracts, and natural vitamin E.

Recent studies have shown that within the joints of patients suffering with osteoarthritis is a special form of calcium crystals. These are calcium phosphatate crystals.

Years ago, Selye, who gained fame for his work on stress, wrote a book on inflammation. He said that inflammation existing for a period of time any where in your body would lead to calcification.

There are substances that act as calcium blockers. Another way to think of this is that calcium should be in certain places in your body. For example, it belongs in your bones not in arthritic spurs.

Natural calcium blockers include the omega 3 oils, magnesium and vitamin E.

First, you should not abuse the joints. They are designed to be used in a certain manner. For example, if your pelvis is not level, you can shift up to 65 – 70% of your weight on to the low pelvic side. This causes abnormal stress on the joints and leads to arthritic changes in the hip socket, knee and foot. Next, you need to maintain adequate muscle strength to support you and the daily activities that you perform. Think of these as the good physical things that you need to do.

There is little truth in “no pain no gain”.

Another positive thing that you can do is to eat a diet high in natural antioxidants and omega 3 essential fats. These are the colorful things you can put on your plate. Foods like tomatoes, red peppers, blueberries, and other colorful vegetables and fruits.

There are a few supplements that have consistently shown to help slow degenerative arthritis. These include things like glucosamine, chondroitin, and MSM. Glucosamine not only supplies the building blocks of cartilage, the glycans, but also has been shown to reduce inflammation.
There also are negative things like smoking that not only create excess free radicals but also diminish blood flow in the little capillaries around the joints.

Other harmful factors include things like running on hard surfaces, wearing shoes that are worn out, lifting too much weight, and working out until it hurts.

To summarize, keep your joints aligned so that proper weight distribution through them is maintained. Second, exercise but do it in moderation. Third, stop smoking. Fourth, look at increasing foods in your diet that are high in antioxidants and reduce inflammation.

If you already suffer with joint pains, consider adding in nutrients with a track record of slowing these natural degenerative changes.

Question?

I have heard of injections that increase lubrication in knee problems. What is this?

What is being injected is hyaluronic acid? It can be produced from a number of sources, the usual one being from chickens. You are usually told that the effects will last about a year.

For a period of time, it was felt that the dietary hyaluronic acid was a molecule that was too large to be absorbed through the intestinal wall.

However, studies using dogs showed that the locale was absorbed and found in the joints of the dogs.

If the molecule can penetrate the lining of the intestinal tract of a dog, it probably can get through the wall of humans.

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If you are the driver in a car, rub the muscles on the inside and outside of the leg just above the knee. Moving the seat forward or back can usually relieve tenderness here.

If you are working at a desk, place your arms at their working height. With your arms in this position, have someone rub the muscles on the top of your shoulders. If they are tender, lower your arms or raise the height of the chair until the tenderness decreases dramatically. If you have to raise the chair height to position your arms so that you can use a computer, you may have to add a support for your feet so that the fron of your chair does not cut into your legs inhibiting the circulation.

In the car, move your hands on the steering wheel until you find the position where the muscles are relaxed. Very seldom will you find it at the suggested 10 and 2 positions.

You should be looking slightly down at your desk. If you are reading, don't place the book flat on the tabletop, but prop it up. You can use a cookbook holder to support the book. If you are typing on a computer from paper material, purchase a hanger to come off of the CRT to hold the material. The idea is to be looking up not down. To find the correct angle, have someone rub the muscles on the front of your neck and look at what you are doing. If they are sore, try elevating the material until the muscles are soft.

Finally, plan frequent breaks. These should include some simple stretching exercises like shoulder rotations, head half circles both left and right, low back arching and leg and foot stretching.

Every hour you should get up and walk for 5 minutes. At the beginning of the walk, exaggerate your shoulder and arm swing.

If you have any problems checking these positions, please ask us about them. It is extremely important for you to be able to sit comfortably in you car, at home and at work. Slouching just increases the muscle tension and unnecessarily increases your discomfort and pain.

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therapies ranging from massage to changing the way you walk and run. Aside from wearing high heels, there is usually a weak, under functioning muscle that lies at the cause of conditions like these. Failure to find and correct the cause of the muscle imbalances cause this condition to return or need a lifetime of treatment.

In the end, proper walking with an adequate stride, proper foot support, a balanced pelvis and an even stride length are equally important for correcting this condition.

Next Month:

Aging and Glucose- Aspartame

Glycemic Index of Foods

Coenzyme Q10

Ankle Pronation

Heart Disease and the Mediterranean Diet

Shoulder stretching

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