As published in the May 2008 issue of Indianapolis Woman magazine



# MANAGING ARTHRIS

Don't let this chronic disease curb your enjoyment of life.

Take control of your health — exercise, maintain a healthy weight,
protect your joints from injury and seek early, effective medical treatment.

Start today!



Presenting Sponsor:







## Arthritis, with more than 100 distinct conditions, affects Hoosiers of all ages

### Dear Reader,

ore than 1.3 million adult Hoosiers are affected by some form of arthritis— the most common cause of disability in the United States today.

Chances are if arthritis is not an issue for you now, it may affect you in some form as you age. And oftentimes, it doesn't wait until the late adult years to surface and "attack" vulnerable joints and tissues. Actually, the majority of people with arthritis (64 percent) fall within the ages of 18 to 64, representing a critical part of the workforce.

Nationally, arthritis costs employers \$7.11 billion in lost productivity alone. Of that, \$5.11 billion is attributed to "presenteeism" or lost productive time while at work. Between the pain and lack of mobility, the impact of this condition on the quality of life of those who have been diagnosed with arthritis, as well as their families, can be significant.

Arthritis is more than achy joints. With more than 100 forms of the disease, arthritis causes pain, stiffness and swelling in joints and other supporting structures of the body. Some forms also can affect internal organs. Left untreated, certain types of arthritis can be life threatening, though most forms have the potential to impact normal daily functioning.

Unmanaged arthritis also can put you at risk for other health-related issues. Pain is the most common reason people ages 55 and older curtail their physical activity. So when pain and stiffness from arthritis keep you from being physically active, other serious conditions like heart disease, obesity and type-2 diabetes can threaten your future.

The good news is there are things you can do to reduce the pain, disability and lost productivity caused by arthritis. Participating in moderate physical activity, managing a healthy weight, protecting joints against injury, and seeking early and supportive medical care can help you be healthy, independent and able to take part in the things you love to do.

We are pleased to provide you with the latest on osteoarthritis, rheumatoid arthritis and fibromyalgia as well as a section on children and arthritis.

I invite you to read the personal stories of three incredible women who manage their condition daily and live very engaged and full lives. I am certain the information and personal experiences captured in this edition will provide support, encouragement and hope to all those who are touched by this disease.

# Judy Monroe, M.D. State Health Commissioner

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# **DEFINING ARTHRITIS**

#### Understand the common terms associated with the disease

ore than 100 diseases and conditions collectively are known as arthritis. The most common forms include osteoarthritis, rheumatoid arthritis, juvenile rheumatoid arthritis, fibromyalgia, bursitis, lupus and gout.

Though their causes may vary, these diseases often occur in one or more joints or the tendons, ligaments and muscles that support them. Some forms of arthritis are systemic and can affect the internal organs.

The major forms of arthritis include:

> Osteoarthritis: The most common type of arthritis, osteoarthritis is estimated to affect 21 million Americans. It sometimes is called "everyday" or "wear and tear" arthritis. A slippery material called cartilage covers the end of each bone and acts as a shock-absorbing cushion.

In osteoarthritis, cartilage breaks down and the loss of the rubbery cushion causes bone to rub against bone. This leads to symptoms of pain, stiffness and swelling in the knee, hip, spine, feet, thumb or fingers.

> Rheumatoid arthritis: Often called RA, this condition affects an estimated 2.1 million people in the United States. It occurs more often in women and frequently is diagnosed during a woman's child-bearing years. Rheumatoid arthritis is a systemic, autoimmune disease, characterized by

inflammation of the fluid lining the joints called synovium.

The inflammation causes pain, stiffness, fatigue, redness, swelling and warmth in the area around the joint. Over time, the inflamed lining can damage or deform the joint.

> Juvenile arthritis: Currently affecting 300,000 children in the United States, juvenile arthritis is characterized by joint inflammation, stiffness and muscle weakness. The severity of symptoms can vary from mild to more persistent and can cause joint and tissue damage.

> Fibromyalgia: This syndrome affects the muscles and is characterized by diffuse pain, fatigue, memory difficulties, disturbed sleep and specific tender points. It affects about 5 million people in the United States, mostly women.

However, children, the elderly and men also are diagnosed. The cause is unknown, but experts believe that the nervous system processes pain differently in people with fibromyalgia than in those who do not have this condition.

Many people with fibromyalgia associate the onset of their symptoms with physical or emotional trauma.

Source: Indiana State Department of Health

### Arthritis Quiz

1.	Osteoart	hritis i	is a	cond	ition	that
aff	ects only	older	peo	ple.		

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aging	ç. 🗆	True		F	alse		

3.	Early	y diagnosis	of rheur	natoid artl	ıritis
is v	very i	important 1	to avoid	joint dama	ige.

	_	
1 1	<b>True</b>	 -alca
	IIUC	 aise

4.	Fibromya	lgia is	easily	diagnosed

**5.** Moving a joint with arthritis causes more damage to the joint.

	 ASIC

**6.** Moderate exercise is helpful for people with arthritis and fibromyalgia.

#### ☐ True ☐ False

**7.** People with rheumatoid arthritis should reduce or modify their exercise program when they are having a "flare-up." 

True 
False

8. Losing a modest amount of excess
weight can reduce arthritis pain
significantly.   True False

**9.** Children with juvenile rheumatoid arthritis should not play sports.

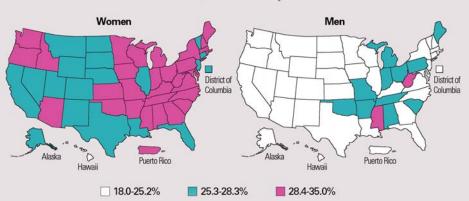
#### ☐ True ☐ False

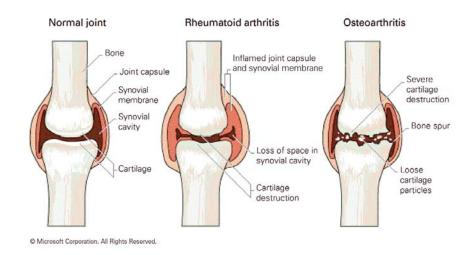
**10.** Parents, teachers and caretakers should be aware that there is considerable variation in how children with JRA feel from day to day. □ **True** □ **False** 

(Answers on page 9)

# Age-adjusted population prevalence of doctor-diagnosed arthritis, by sex, 50 U.S. states, Washington, D.C. and Puerto Rico.

Behavioral Risk Factor Surveillance System, 2005





### **OSTEOARTHRITIS**

Joint damage from the disease can be minimized if caught early

by Suzanne Hancock, Arthritis Program Manager, Indiana State Department of Health

steoarthritis occurs when cartilage, the gristly material between bones, becomes worn or damaged, resulting in pain and swelling in the joint.

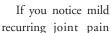
Occurring frequently in knees, hips, shoulders, fingers, neck and spine, it often affects joints asymmetrically in the body. For instance, one shoulder may hurt, but the other does not.

"Arthritis is notable because of its sheer prevalence. Most of us will have to confront this disease at some point," says Douglas McKeag, M.D., chairman of the Indiana University Department of Family Medicine and director of the IU Center for Sports Medicine. "By and large, arthritis does not find an answer in medicine. There is no cure, and medications have substantial side effects. It is much more important to treat arthritis conservatively and incorporate movement into any treatment program."

The onset of osteoarthritis is slow and often starts in middle age. In the earliest stages, you may notice chronic joint pain, but your activities are not limited. In advanced cases, the pain may be severe, the muscle mass around the joint decreased, and joint mobility seriously reduced. In this stage, anxiety, depression, fatigue, tense muscles and sleep disturbances are common and can exacerbate pain.

Studies show women and older people are affected more frequently by arthritis. People with excess body weight, which puts extra pressure on joints, have increased risk. Others at risk include people with joint injuries, congenital bone and joint conditions, and inflammatory joint diseases. As with

many chronic conditions, people with lower incomes and lower educational levels have greater risk for arthritis.





Douglas McKeag, M.D.

with no other symptoms, ask yourself these important questions: Do I weigh too much? Am I exercising properly? Do I overuse or "abuse" my joints? What makes my joint pain decrease? What makes it worse?

The answers will provide the basis for your initial treatment or self-management plan. If pain does not improve with your initial plan, the next step is to talk with your primary health care provider.

There is a direct link between the severity of arthritis and quality of life because pain affects movement.

"If movement becomes restricted, the human body enters a state it is not meant to be in - immobility. From here, many other organs, like the heart or the pancreas, can be affected," McKeag says.

For mild or moderate osteoarthritis, your primary health care provider may recommend exercise, weight loss, medication for pain or physical therapy to help strengthen muscles and improve flexibility. If your osteoarthritis becomes severe, you may be referred to an orthopedic surgeon for possible joint replacement.

Physical and occupational therapy after surgery will help you regain strength and modify daily activities to accommodate your new joint.



### Managing **Osteoarthritis**

Take steps to stop the cycle by Deb Wezensky

he benefits of exercise and weight loss are vital to the successful management of osteoarthritis.

Knee pain leads to inactivity, which leads to not maintaining a healthy weight, adding stress to already painful joints. It's important to talk to your physician about a plan to add exercise to your treatment of osteoarthritis.

Here are some tips for sticking with your exercise program:

- > Be aware that starting and maintaining an exercise program to help manage your osteoarthritis is challenging. But when approached with the advice of your physician, it can be enjoyable. Exercise wisely, and your quality of life with osteoarthritis can be greatly improved.
- > Start small so you stay motivated. Don't go from not exercising to trying to exercise too long and too often. Otherwise, you may get discouraged. Make a plan to do what you can comfortably: Start with a 15-minute walk each day or five minutes of leg exercises. Then add a little more each week.
- > Listen to your body. When you can't go "full speed," slow down. If you experience pain, stop or slow your pace. Avoid hills. Do whatever you can to tweak your

workout to fit your energy level. After a few days, step up your exercise to the next level by increasing your speed or walking one moderate hill.

➤ Make a fun lifestyle change. While walking, listen to music or an audio book. You don't have to do set exercises. Think "movement." Think outside the box. Try gardening, ballroom dancing, parking further from the store to allow for a brief walk or playing with your children or grandchildren. Discover what you enjoy. ▲

### Arthritis in Indiana

- > More than 29 percent of Hoosier adults — more than 1.3 million residents — reported doctor-diagnosed arthritis in 2005.
- > More than 64 percent were working adults, ages 18 to 64 years old.
- > Women were more likely to have doctor-diagnosed arthritis than men (32.4 percent vs. 25.9 percent).
- > Obese adults were more likely to have arthritis (38.6 percent) compared to those who were neither overweight nor obese (21.7 percent). In 2005, 27.2 percent of Hoosiers were obese.
- > A greater percentage of low-income Hoosiers had doctor-diagnosed arthritis than those with higher incomes (36.1 percent with incomes less than \$15,000 vs. 22 percent with \$75,000 or more).
- > People diagnosed with arthritis were 4 times more likely to report poor health (9.8 percent vs. 2.3 percent) and more days per month with limited activity (6.1 vs. 2.7 days).
- > 29.7 percent of Hoosiers with arthritis reported fair or poor health compared to only 11.2 percent of those reporting no arthritis.



# **EDUCATING HOOSIERS**

Sue Hancock teaches others about the benefits of exercise — from personal experience

ndiana State Department of Health Arthritis Program Director Sue Hancock knows first-hand the reality of the condition that afflicts many Hoosiers.

She has osteoarthritis in both knees — a condition she has had since age 35.

"All the women in my family had some type of arthritis," she says. "My mother used to talk about my grandmother crawling up the stairs because her knees hurt so badly. I feared that might happen to me."

Exercising to prevent arthritis pain and disability was not part of mainstream discourse 20 years ago.

But Hancock discovered, as many people with arthritis do, exercise strengthens muscles, keeps tendons and ligaments flexible, and reduces pain.

She has been a fitness enthusiast for most of her adult life.

"I believe exercise has provided me with many health benefits, including slowing the progression of my arthritis," she says. "As Arthritis Program Director, I start Arthritis Foundation and Enhance Fitness exercise programs throughout the state. This is very gratifying to me, because I know from personal experience how people can benefit."

**Movement is Medicine** is an easy-to-read booklet of exercises developed by the Indiana State Department of Health and produced by the Clarian Human Motion Program. These exercises were reviewed by doctors, physical therapists and other exercise professionals to ensure their safety and effectiveness for people with arthritis. For a copy of *Movement is Medicine*, call (317) 962-2533 or send an e-mail to alacey@clarian.org.

### What Arthritis Costs

- > More than \$610 million was spent for arthritis hospital admissions in 2005, up from \$291 million in 2000, a 110 percent increase in five years.
- > Hospitalizations for osteoarthritis accounted for nearly 84 percent of arthritis hospitalization costs more than \$510 million.
- > Of 21,000 hospital procedures for arthritis in 2005, more than 16,000 were for osteoarthritis. Of these, 11,000 were knee replacements, and 4,000 were hip replacements.
- > Most arthritis care does not involve hospital admissions, so the real cost of arthritis from lost wages, doctor visits, medications and rehabilitation is much higher.
- > Nationally, arthritis costs were \$128 billion (\$80.8 billion in direct costs and \$47 billion in indirect costs) in 2003. (Centers for Disease Control, 2008)
- > Arthritis costs U.S. employers an estimated \$7.11 billion per year in lost productive work time with 71.9 percent \$5.11 billion explained by reduced performance while at work. (Ricci et al, 2005)
- > Of the top 20 most expensive conditions treated in U.S. hospitals, osteoarthritis ranked No. 7 most expensive overall at \$26.2 billion, No. 6 most expensive billed to Medicare at \$15.4 billion, and No. 5 most expensive billed to private insurance at \$9.3 billion (Healthcare Cost and Utilization Project, 2007).

Sources: *Indiana 2005 Arthritis Burden Report* (2008), Centers for Disease Control and Prevention Arthritis Program Web site (2008), Ricci et al, (2005), Health Care Utilization Project Statistical Brief # 42 (2007).



# RHEUMATOID **ARTHRITIS**

Women suffer from the disease more often than men

heumatoid arthritis is a chronic disease mainly characterized by inflammation of the lining of the joints. It can start in any joint, but it most commonly begins in the smaller joints of the fingers, hands and wrists.

Because it is a chronic disease, and because it is systemic, it can affect other organs in the body, according to the Arthritis Foundation. RA can lead to long-term joint damage, resulting in chronic pain, loss of function and disability.

RA affects 1.3 million Americans. It can affect anyone, including children, but 70 percent of people with RA are women. Onset usually occurs between 30 and 50 years of age. While women are more likely to get RA than men, men tend to be more severely affected when they have rheumatoid arthritis.

The effects of rheumatoid arthritis can vary from person to person. Common physical symptoms include fatigue, stiffness, weakness, flu-like symptoms, lumps of tissue under the skin and muscle pain.

Diagnosing rheumatoid arthritis is a process. There's no definitive test that can positively identify RA. Instead, a diagnosis is made from a medical history, a physical exam, lab tests and X-rays. Doctors rely on a number of tools to help determine the best treatment for symptoms.

The cause of RA is unknown, although the following several factors are being researched:

#### **Immune system**

The body's immune system plays an important role in rheumatoid arthritis. In fact, RA is referred to as an autoimmune disease because those who have it demonstrate an abnormal immune system response.

#### Gender

Women are two to three times more likely to have rheumatoid arthritis than men. Typically, RA goes into remission when women become pregnant. Researchers are trying to understand the effects female hormones might have in the development of RA.

#### **Genetics**

Most researchers believe genes are involved in the development of RA. The specific genetic marker associated with RA, HLA-DR4, is found in more than two-thirds of Caucasians with RA, though it is found in only 20 percent of the general population.

Source: The Arthritis Foundation, Indiana Chapter

### All About Rheumatoid Arthritis

Get answers to your most common questions

by Christopher Wu, M.D., rheumatologist, Arthritis Care Center, Clarian Health Partners



Christopher Wu, M.D.

#### Q. What is the best way for someone with rheumatoid arthritis to manage pain?

A. If a patient is having pain related to their RA, then the underlying disease itself should be more aggressively treated. Medications prescribed most often include DMARDS (disease modifying anti-rheumatic drugs), non-steroidal anti-inflammatory drugs, local

steroid injections, oral steroids and biological response modifiers. Also, physical therapy, splinting, massage, exercise and diet can be helpful in the right circumstances.

#### Q. What medications are available for patients with RA?

A. Over the last 10 years there has been an incredible growth in the treatments. A newer class of drugs known as biological response modifiers or "biologics" are derived from living organisms. RA patients will hopefully achieve a clinical remission and any joint damage will be halted with the use of these "biologics." Medications for RA target inflammation and the immune system. Typically, patients will start treatment with drugs DMARDS: methotrexate, sulfasalazine, hydroxycholoroquine (Plaquenil) and leflunomide (Arava) and others. Additional appropriate treatments include oral steroids such as prednisone and NSAIDS/Cox-2 inhibitors. When treatment with DMARDS does not effectively stop joint damage, the next treatment course would likely be biological agents, including Enbrel, Remicade, Humira, Orenica or Rituxan.

#### Q. How important are diet and exercise in managing your RA?

A. Diet and exercise play a significant role in maintaining joint health for everyone. Obesity is linked with increased progression of degenerative arthritis and perpetuating inflammation. Healthy diets are low in refined sugars and high in antioxidants, fiber and whole grain. Most people with RA do not require any specific diet plan, although there are reports of patients whose arthritis is flared by 'night shade vegetables' (potatoes, tomatoes, red and green peppers and eggplant). Exercise is important to reduce joint discomfort, maintain muscle strength and promote circulation. It also can reduce the risk of heart disease, the main cause of mortality in RA patients.

#### Q. What alternative treatments, if any, would you recommend?

A. Alternative treatments should not be used as initial or sole therapy for patients with RA because improperly treated RA can have devastating effects. Delay of appropriate treatment by as little as 12 weeks has been shown to adversely affect the long-term outcome of the disease. There is not enough evidence to clearly recommend any one alternative treatment. Small studies have looked at fish oil, ginger, Thunder God Vine, gamma-linolenic acid and glucosamine/ chondroitin. If a patient is interested, I support the use of fish oil. An additional alternative approach to RA is the incorporation of acupuncture.

# NEVER GIVE UP

Winnie Ballard has a personal prescription for overcoming rheumatoid arthritis

by Deb Wezensky

t first, Winnie Ballard didn't think a great deal about her diagnosis of rheumatoid arthritis. Before she married Indianapolis Mayor Greg Ballard in 1983, she had not heard of or seen of a person affected by this disease.

But that all changed when she met Greg's father who suffered from rheumatoid arthritis. Her father-in-law had nodules on his knuckles, wrists and elbows and was in tremendous pain. The disease had left him disabled despite knee and hip replacements.

At age 27, Ballard thought her future with rheumatoid arthritis looked grim.

Her diagnosis took place over time. Fluid had started to build up on both of her wrists, so Ballard's family doctor referred her to a rheumatologist. Once it was determined she had rheumatoid arthritis, cortisone injections into her painful joints afforded some relief — but for only a few weeks at a time.

Waves of fear and depression washed over Ballard when she realized anew that rheumatoid arthritis is chronic and incurable. She thought, One day, I will be unable to perform even the most basic tasks without assistance. Bumps and nodules appeared on Ballard's knuckles, and the disease affected her elbows, shoulders and knees.

"Find what works best for you ... then follow it. Your dedication and persistence will eventually pay off."

Refusing to be beaten by the condition, she tried all sorts of medication to help relieve the pain, stiffness and deformity. But nothing worked. Just before being relocated to Okinawa, Japan, Ballard's rheumatologist suggested she resort to a gold injection. It seemed to be the last hope for her. Her husband opposed the suggestion because the effects of the gold injection were irreversible. His father refused the treatment as well, so they decided not to pursue the treatment.

Though Ballard dealt with the realities of living with a chronic disease, she needed the support of family and friends. Since her father-in-law had rheumatoid arthritis, he genuinely understood how she suffered from this painful disease.

"He was my biggest support, and he helped me conquer my RA," she says. Unfortunately, due to the couple's military travels, her friends and the rest of her family had to offer their help and support from afar. So she took matters into her own hands.

While in Japan, Ballard went to the library and checked out every book she could find about rheumatoid arthritis. Her first big breakthrough in managing rheumatoid arthritis began when she read Dr. Colin H. Dong's book *New Hope for the Arthritic*, which relies on diet, exercise and acupuncture.



Based on the advice of Dong's book, Ballard made drastic changes in her lifestyle to combat the debilitating pain and stiffness of RA. She stopped eating all processed foods. She ate fresh fruits and vegetables. She drank only tea and water. Over a six-month period, she saw an acupuncturist for treatments that started twice a week then tapered off to one visit a month.

Additionally, Ballard faithfully exercised six days a week. Her routine included cardio exercise, weight training and running. As a result, she was able to run the 1997 Marine Corps Marathon.

Her extensive research and willingness to make life changes to better manage her arthritis paid off. After six months on the new diet, she was completely free of medications, including daily cortisone.

Ballard, now First Lady of Indianapolis, still works hard to control her rheumatoid arthritis. Though it's in remission, she continues to watch her diet, exercise five to six times a week and maintains a healthy weight.

She still has days when her fingers swell slightly and her wrists mildly ache. Fortunately, she still does not have to take medication to relieve these symptoms.

A strong faith in God and a desire to live a normal life has buoyed her ability to manage her disease. She advises anyone suffering with RA to "not give up."

"Find what works best for you ... then follow it. Your dedication and persistence will eventually pay off. I truly believe there is a solution to every problem. Never quit," she says.

# **UNDERSTANDING FIBROMYALGIA**

The confusing condition often is difficult to diagnose by Deb Wezensky

ibromyalgia is an especially confusing and often misunderstood condition. Because its symptoms are quite common and laboratory test results generally are normal, people with fibromyalgia once were told their condition was "all in your head." However, medical studies have proven fibromyalgia does indeed exist.

Identified as a syndrome, fibromyalgia is characterized by long-lasting widespread pain and tenderness at specific areas of the body when pressure is applied. Those areas include the back of the head, upper back and neck, upper chest, elbows, hips and knees.

The pain generally persists for months at a time and often is accompanied by stiffness, according to the Arthritis Foundation. The term "fibromyalgia" means pain in the muscles, ligaments and tendons. Although not defining characteristics, sleep disturbances and fatigue also are symptoms of fibromyalgia.

Other common signs and symptoms include depression, numbness or tingling sensations in the hands and feet; difficulty concentrating; mood changes; chest pain; dry eyes, skin and mouth; painful



menstrual periods and dizziness, according to the Mayo Clinic.

The typical fibromyalgia patient is a woman between the ages of 30 and 50 years. Studies indicate that fibromyalgia affects about 3 percent to 5 percent of adult women and about one-half percent of adult men in the United States. The prevalence of the disease increases with age, but the syndrome also is seen in children.

No one knows what causes fibromyalgia. However, most agree the central nervous system in people with fibromyalgia does not function properly. Most patients attribute the onset of fibromyalgia to a stressor, such as an acute injury, an illness with fever, surgery or long-term psychosocial stress like childhood abuse.

Diagnosing fibromyalgia is difficult because no clear-cut test exists to determine the condition. No evidence of the disease appears on X-rays or in laboratory test results. No diagnostic markers appear in the blood. Instead, fibromyalgia is diagnosed by the identification of symptoms



Kate Nicholson

# **COPING WITH** CHRONIC PAIN

Kate Nicholson finds ways to deal with debilitating fibromyalgia by Deb Wezensky

magine having trouble doing even the simplest of tasks like walking your dog because of a condition that has no known cure.

Fibromyalgia is difficult to diagnose and can be fairly debilitating. But Kate Nicholson doesn't let fibromyalgia control her life despite dealing with some "ugly" symptoms.

With each day, Nicholson's condition brings new challenges: painful hands, exhaustion, muscle weakness, an irritable bowel flare up or another migraine. So, Nicholson and her doctor teamed up to develop a tool kit of resources like a heating pad and tips from her therapists to keep up with her symptoms. She takes several medications daily and has additional medicine for flare ups. Two physical therapists and a massage therapist keep her "tuned up."

Nicholson had trouble carrying groceries from the car to her kitchen, so she bought a cart. She wanted to continue walking her dog, so she uses her dog's backpack to carry water and her phone. She has trouble sitting at a computer for more than 20 minutes at a

time, so every 20 minutes she get up and moves around.

"It's not about what you can no longer do; it's about doing what you can with some adjustments," she says.

Since puberty, Nicholson experienced a constantly upset stomach, "growing pains" and irritable bowel syndrome. Throughout high school and college, those health issues remained with her. But no one linked them as symptoms of an overall condition.

These health issues all came to a head while Nicholson worked 10 hours a day at a computer. She developed a migraine that continued for six weeks. Her doctor tried several migraine treatments, but nothing worked. She then developed muscle stiffness and weakness, terrible insomnia and short-term memory loss.

As a result, Nicholson became depressed, but she refused to let these symptoms be written off to stress. Instinctively, she knew it was more than that.

She read online journals and articles to discuss her condition with her doctor. Unfortunately, a diagnosis of fibromyalgia is very difficult to make. There isn't a simple blood test or scan that can detect the condition, Nicholson says.

Her migraines initially pointed to a neurological problem. When that was ruled out, immune and thyroid issues were examined.

Fortunately, Nicholson's family doctor collaborated with specialists and through a process of elimination doggedly pursued a definitive diagnosis. Eventually, she was diagnosed with fibromyalgia, and the search for effective treatments began.



Michael Stack, M.D.

and the exclusion of other conditions. There is currently no cure.

"The whole process of fibromyalgia appears to be the amplification of normal nerve impulses into much more painful impulses," says Michael Stack, M.D., Ph.D., rheumatologist, Diagnostic Rheumatology and Research, and

associate clinical professor at the Indiana University School of Medicine.

"There is now a new FDA approved drug for the treatment of fibromyalgia called pregabalin (Lyrica)," Stack adds.

The prescription drug often shows effective relief of pain within two weeks. The medication works inside the spinal cord to stop the intensification of pain signals coming from the back, neck and extremities. This medication suppresses hyper-sensitivity so normal pressure to the body no longer is experienced as painful, he explains.

"Once the diagnosis of fibromyalgia is made, the patient is relieved to have a diagnosis and know that there is an effective treatment for their condition," says Stack, a nationally recognized expert on fibromyalgia. "The most common co-morbidity is hypothyroidism. Also, inflammation must be ruled out through a blood test."

A conclusive diagnosis, accompanied with a now effective medication, is comforting to patients and eliminates the need for continuing expensive testing. "Along with medication, exercise is the single most effective thing you can do to help your arthritis or fibromyalgia," Stack says.

If you have been dealing with depression or insomnia in connection to your condition, your doctor will be able to treat these coexisting conditions as well.

Ten months later, Nicholson's symptoms were under control. Though many articles and online support group entries told of debilitating symptoms and pain that kept others with fibromyalgia from living fully, she was determined that would not be her experience.

Nicholson says she promised herself she would manage her condition. She frequently relies on what she calls a fantastic support team — her family doctor, co-workers, an understanding employer, friends and family. Even her dog helps.

Living with fibromyalgia is not easy, Nicholson says, but she strives to maintain a can-do attitude.

"I still have many moments where I am frustrated, sad and angry," she admits.

Nicholson sometimes finds herself working through negative feelings like, Why do I have to deal with this?

"I don't look ill or hurt," she says. "I look the same as everyone else, therefore, many people don't think there's anything wrong. They think I'm making things up ... When people express that, it's easy to feel alone and hurt."

But Nicholson is one woman determined to sail past those doubts. "I choose to live with fibromyalgia, not let it dictate who I am and what I do," she says.

For other sufferers of fibromyalgia, Nicholson gives this advice: "You need to be your own advocate ... If your treatments aren't working, find something that does. Find a doctor that believes you and will help you make modifications."

### Quiz Answers: (From page 3)

- **1. False.** Arthritis affects people of all ages even children. Most people with arthritis are working age, 18 to 64. The percentage of people with arthritis is higher in the 65 and older age group — more than 55 percent.
- 2. False. Almost half of older adults never get arthritis. Some risk factors for arthritis, such as obesity, physical inactivity and joint injury, are preventable. Reducing these risks can lower one's chances for arthritis.
- **3. True.** Drug therapy for rheumatoid arthritis has improved dramatically over the past decade. With early diagnosis and treatment, joint damage can be halted and disability avoided.
- 4. False. Fibromyalgia is difficult to diagnose. No screening or blood tests are available for this condition. Physicians sometimes arrive at this diagnosis through a process of elimination. People with fibromyalgia must be patient but persistent in getting the care they need.
- **5. False.** Moving an arthritic joint maintains range of motion, strengthens muscles that support the joint and preserves healthy cartilage. However, it is important to use caution and not put excess strain on the joint by over-doing it.
- 6. True. According to the Arthritis Foundation Self-Help Program, exercise is the single most important thing you can do to reduce pain, maintain health and feel
- 7. True. Curtailing your program until the inflammation recedes is advisable.
- **8. True.** The Framingham health study found that losing as few as 11 pounds could cut joint pain and stiffness in half.
- 9. False. According to the Arthritis Foundation, exercise is an important part of treatment for JRA. Sports participation helps children develop confidence in their physical abilities. Contact sports are not recommended, but soccer and basketball are possibilities for children with JRA. Joint protection and strong muscles, developed through regular exercise, are the keys to safe participation in sports.
- **10. True.** Severity of symptoms varies greatly between children and in the same child over time. Responsible adults need to be flexible and understanding. Children with JRA look "normal" even when they are experiencing arthritis symptoms.

# JUVENILE ARTHRITIS

### Families learn to cope with an incurable and progressive disease

by Deb Wezensky



Suzanne Bowyer, M.D.

t is challenging to be a parent. But having a child who suffers from a chronic illness such as arthritis can cause many parents to feel helpless and overwhelmed.

Arthritis in children is called juvenile idiopathic arthritis. Even infants have been diagnosed with this chronic disease.

"We simply don't know what causes arthritis in children," says Suzanne Bowyer, M.D., Indiana University School of Medicine, Riley Hospital for Children.

Diagnosing arthritis requires a thorough physical examination of your child by a physician. You may start to notice signs and symptoms with your child that are not normal for a young person. Upon waking in the morning, your child may be stiff, unable to move freely or not wanting to use an arm or leg. A particular joint or joints may be swollen, or he or she may limp. Bowyer says arthritis often affects children's knees.

Upon physical examination, medical tests can help make diagnosis conclusive. Tests can indicate higher levels of inflammation in the blood.

Recognizing inflammation can be difficult; toddlers often have chubby knees and hands. Usually it's the repeated presence of pain and grumpiness that alerts you to seek the advice of your family physician. Your child may experience flares when arthritis gets inexplicably worse. He or she may experience fevers, rashes, increased pain and may even be unable to eat.

## **Unexplained Pain**

### Medical experts urge parents to seek treatment early to avoid further complications

Seeking immediate, effective treatment for pains that may be symptomatic of juvenile arthritis is important, medical officials say.

"We are able to more effectively manage arthritis through treatment with newer prescription drugs," says Suzanne Bowyer, M.D., Indiana University School of Medicine, Riley Hospital for Children.

"Kids affected by arthritis who are compliant in taking their methotrexate prescription show a reduction of symptoms nearly 70 percent of the time," she adds. "Kids are fairly resilient. Early diagnosis and effective treatment of arthritis allows children to 'remodel' more than an adult would.

"But once a child loses cartilage, and the joint is bone on bone, they have degenerative arthritis," Bowyer warns. "Then, the only recourse is joint replacement."



#### Arthritis affects daily living

It may take more time for your child to prepare for the day: more time to shower, loosen up and take medications before attending to usual morning routines.

In addition to planning for time away from school, you may need to allow for longer travel time - only four rheumatologists in Indiana diagnose and treat more than 6,000 children with arthritis.

Raising a chronically ill child brings up other related issues, Bowyer says. How do you discipline him or her? Is your child simply acting like a child, or is his or her behavior due to illness? And dealing with medications can be challenging, for example, monitoring any side effects.

Older teens may face different challenges. As your child becomes more socially active, the unpredictability of arthritis makes planning activities difficult.

"The major challenge for older children dealing with arthritis is that while they look 'normal' their arthritis makes them 'different,' and that's not a welcome thought," Bowyer says. "Having to take regular medications can provide an opportunity to express teen rebellion by not taking them."

#### Managing your child's arthritis

You may feel alone in dealing with your child's special health needs. Arthritis in children is somewhat rare; it affects 1 in 1,000 children in Indiana. So you are not likely to see other children with arthritis at your child's school. But you are not alone.

Your child's arthritis can be managed. Through medication, the ongoing counsel of your pediatric rheumatologist and proper diet and exercise, your child can live a fuller, healthier life. Act as your child's advocate by writing down questions to ask during your doctor visits.

Events sponsored by arthritis organizations, hospital or physician groups provide opportunities to better understand arthritis. Families gather to support one another by sharing experiences and ideas that help others better manage this disease. Learning about research findings and the most recent medications gives hope for a better tomorrow.

"If you look around a room of children who have been properly treated, you can't tell who suffers from arthritis," Bowyer says.

### **Treating Your** Child's Arthritis

The goal for arthritis treatment is to control symptoms, prevent joint damage and maintain your child's freedom of movement. Your health care team can help determine which medication and lifestyle changes will best help your child.

If your child has arthritis in a single joint, a steroid similar to cortisone may be injected into the joint or oral steroids, such as prednisone, may be used for specific amounts of time and in certain situations under your doctor's advice.

Your doctor may prescribe an anti-inflammatory drug, such as ibuprofen or naproxen, in the appropriate dose for your child.

If your child's arthritis remains active despite taking ibuprofen or naproxen, your doctor may prescribe disease-modifying drugs. The drugs may include methotrexate (Rheumatrex), sulfasalazine (Azulfidine), or newer drugs called anti-TNF agents, such as etanercept (Enbrel), infliximab (Remicade) and adalimumab (Humira).

The rheumatologist will monitor your child for effectiveness of these treatments and side effects.

### Susie's Poem

I thought it would all be fine However that was not the case. Doctors believed it to be growing Though my joints felt they were being dragged by chains. After a long time without much rest I had to take medicine When I finished test after test My patience was wearing thin. I wanted to just escape far away

Excerpt from the poem *I Remember That Day* by Susie Bickel, about the pain of living with arthritis

But still, I remember that day.

# YOUNG WITH ARTHRITIS

Susie Bickel finds it's not just an "old person's disease" by Deb Wezensky

usie Bickel, a petite junior at Cardinal Ritter High School, looks like a healthy teenage girl, but she has had to grow up a bit faster than her peers. Starting at age 9, she learned to manage systemic juvenile rheumatoid arthritis, a chronic disease, daily.

At track practice, Bickel had fallen and injured her wrist. Despite continued pain, an X-ray revealed no break or sprain.

Then she limped and couldn't recall injuring her leg. Again, X-rays revealed nothing wrong. Things got worse. Loss of appetite and fevers came and went.

Bickel's parents, Bill and Flor, once again took their young daughter to the family doctor. With a fever over 104, she was admitted to Riley Hospital for Children for a weeklong observation and diagnostic tests.

The diagnosis: arthritis.

Upon hearing the word "arthritis," Bickel's first reaction was, "Isn't that what old people get? I was so shocked. I couldn't believe I had arthritis."

Her parents echoed the same disbelief. Denial stepped in with soothing thoughts like, If we change what Susie eats, she's going to get better. They so much wanted their daughter to get back to her "normal" life.

Bickel also admits she didn't always tell her parents about the pain she felt. She struggled with wanting to do things like her friends.

It took a while to adjust to the idea of living with arthritis. Unmanaged, her arthritis not only can affect her joints but her internal organs as well. The pain, she says, feels like chains dragging her down.

"When I was around 11 or 12, I was in a wheelchair," she says. "I just couldn't get up. My mom had to dress me in the morning."

Friends didn't understand why their classmate had to take the elevator at school. Bickel looked perfectly healthy.

Living well with arthritis requires being disciplined. Bickel manages her arthritis by taking three pills a day and exercising



according to her physician's advice to keep her joints mobile. Walking is one exercise she has come to enjoy.

Rather than sitting around feeling sorry for herself, Bickel changed her activities to things like reading and writing: "I always had these ideas and I thought, Put them on paper."

Learning about arthritis has helped Bickel know she is not alone in living with a chronic disease. With the Arthritis Foundation, she made a trip to Washington, D.C., to raise awareness about arthritis by speaking to legislators about signing the Arthritis Prevention, Control and Cure Act. Bickel has appeared on television to encourage participants to join the Arthritis Walk and Jingle Bell Run.

Bill and Flor have gained a great deal from attending sponsored events to learn about their daughter's arthritis.

"Hearing the doctors speak, we know that Susie needs to live her life as a normal kid," Bill says with a smile.

"It's so easy to want to become overprotective when your child has special needs," Flor adds.

Bickel flashes a bright smile, showing her appreciation for the support her family has received. After all, she will be the one that manages her arthritis so she can enjoy her future as a linguist who travels the world without a wheelchair.



# **PRESCRIPTION** FOR PAIN

Medication can be a part of arthritis treatment

edications are the keystone of an arthritis treatment plan. Without the reduction in pain, swelling and stiffness certain treatments afford, sufferers may not be able to get the exercise they should or the sleep they need.

Without medications to slow disease progression, people with arthritis also could risk life-altering joint destruction and disability.



Gordon Hughes, M.D.

There are many kinds of arthritis medicines. The drugs usually fall into three categories:

- > Drugs that relieve pain
- > Drugs that reduce inflammation
- > Drugs that slow down the disease process and limit further joint

If you suffer from arthritis, your physician will work with you to determine which medications works best to treat your condition and symptoms. Following your treatment plan closely is important for managing your arthritis.

#### Step by step

Several factors must be considered when trying to obtain the best results from your arthritis medication, according to the Arthritis Foundation.

First, take your medicine as prescribed. Never change the amount you take on your own. Second, give your medicine time to work. Find out from your doctor how much time it will take to show the desired results.

"Some will work in a day or two, and some will take as long as four months," says Gordon Hughes, M.D., rheumatologist at Medical Consultants in Muncie. "No one drug will be enough to treat the aggressive types of arthritis, so we're constantly adjusting the medications to get the maximum benefit. It can take six to nine months to find out what the best combination is for any given patient."

Tell your doctor about any side effects or unusual reactions you may have from the medicine.

"Educate yourself," Hughes advises. "These are complicated drugs with lots of side effects. The more you know about the drugs, the better you can help your doctor dial in the proper treatment."

The Arthritis Foundation publishes a drug guide listing the medications doctors recommend for treating arthritis as well as their side effects. For a copy, call (317) 879-0321 or log on www.indiana.arthritis.org.



### Pain Reliever

Physical activity is key in addressing arthritis aches

Take a walk. A bike ride. A swim.

Studies show 30 minutes of moderate physical activity three or more days a week can relieve pain and help you move more easily, according to the Centers for Disease Control and Prevention and the Arthritis Foundation.

If 30 minutes at once is too much, try 10 or 15 minutes a few times a day. To make it fun, invite a friend or family member to join you. Stick with it, and in just four to six weeks you could be hurting less and feeling better.

MYTH: "Running and other intensive physical activity cause arthritis." FACT: Studies on people who regularly put high levels of stress on joints have not been able to show a relationship between these activities and arthritis.

# USE YOUR BRAIN TO **OUTSMART PAIN**

The Arthritis Foundation's Self-Help Program offers life-changing advice

by Suzanne Hancock, Arthritis Program Manager, Indiana State Department of Health

iving with chronic pain due to arthritis or fibromyalgia is a day-to-day challenge. Chronic pain can mean losing sleep, feeling depressed, not being able to do things you love to do and even losing your independence. You may not feel in charge of your life anymore; it may seem as if your pain is calling the shots.

Fortunately, you can take back your life. It starts with the Arthritis Foundation Self-Help Program.

AFSHP was developed by Kate Lorig and her colleagues at Stanford University in the late 1970s. During the past 30 years, thousands of people have benefited from the program.

Research reveals AFSHP participants had less pain and lower health care costs than people who had not participated in the program for as long as four years later.

#### What is AFSHP?

It is a six-week, two-hour class taught by Arthritis Foundationtrained facilitators, one or both of whom have arthritis. Participants learn how depression, muscle tension, sleeplessness and difficult emotions interact to increase pain. They learn how nutrition, exercise, sleep hygiene, relaxation and effective communication with their health care provider can keep the disease at bay and improve their quality of life.

The course also teaches action planning skills, which are key to behavior change. At each class, participants are encouraged to develop an action plan they want to do - not what others think they should do. The plan should be achievable and behavior specific, and participants should feel very confident they can accomplish it by the next session. Through this process, they set themselves up to succeed and begin to feel they are in control, not their disease.

To learn how you can enroll in an Arthritis Foundation Self-Help Program, call the Indiana chapter at (800) 783-2342.

### MYTH: "Arthritis is an inevitable outcome of aging."

FACT: Research shows physical activity and losing excess body weight can improve mobility, reduce pain and may prevent some forms of arthritis.



# YOU'RE NOT ALONE

Face arthritis with the help of a team of professionals

o get the proper treatment for your arthritis, make sure you have the proper health care team.

If you suffer from osteoarthritis, you may get the care you need from your family practice physician. Since the onset of osteoarthritis is gradual, it is not likely that you will need several behavioral professionals to help you deal with your condition.

However, you most likely will benefit from learning relaxation exercises such as those taught through the Arthritis Foundation's Self-Help Program.

In contrast, the onset of some types of arthritis is fast. For example, rheumatoid, juvenile rheumatoid arthritis and lupus may seem to come out of nowhere.

This can be very traumatic for you or a loved one. When dealing with this type of health challenge, you often can benefit from social/psychological support. Your primary doctor for treating arthritis should be a rheumatologist, a physician with special training in this chronic condition, and other disease involving diseases of the bone, muscles and joints. Your rheumatologist will coordinate with your primary care physician.

Other team members possibly may include:

- > Physical therapist —Tests muscle strength and designs exercises that strengthen large muscles, such as the arms and legs, and keep joints flexible. A physical therapist also can help you regain lost coordination and movement.
- > Occupational therapist Teaches new ways to do daily activities, such as eating, combing hair and dressing, which may be more difficult for someone with arthritis.
- > Psychologist Teaches ways to mentally cope with the disease through pain-control techniques, such as deep relaxation.
- > Orthopaedic surgeon Treats problems affecting the bones and joints. This specialist may be consulted if arthritis problems require surgery to fix damaged joints.
- > Physiatrist Helps manage emotional and mental distress related to the disease.
- > Social worker Helps with the personal, emotional, family or financial problems that may occur with arthritis.

Learn more about these specialists in the Arthritis Foundation's Glossary of Health Professionals.

Source: The Arthritis Foundation, Indiana Chapter



## STAYING MOBILE

Exercise to manage your arthritis — and have fun while you're at it

by Deb Wezensky

articipating in aquatics classes with instructors certified through the Arthritis Foundation can help you better manage your arthritis or other special health needs. Participants enjoy health benefits, such as joint flexibility, improved range of motion and retention of muscle strength. Some people even experience a reprieve from debilitating pain and immobility.

An example of someone who manages arthritis successfully is Anne. She has visited the Arthur M. Glick JCC for more than 20 years, shares Sally Brindle, Aquatic Therapy and Rehab Industry Certified national trainer for the Arthritis Foundation.

"Originally, Anne came with her mom, who needed the exercise to manage her arthritis," Brindle says. "Then, she herself was diagnosed with MS and osteoarthritis. Anne was told she would be in a wheelchair within five years. But that was 18 years ago, and her consistent participation in the aquatics classes has helped to keep her MS and osteoarthritis at bay.

"Only in the last four years has Anne used a walker," Brindle adds. "And that's when she is tired or on uncertain terrain."

When other exercise options no longer are practical, the pool is a comfortable and safe environment that allows people with arthritis to move freely and without risk of injury.

Jewell LaRue, who has rheumatoid arthritis, benefits from attending aquatics classes. "This helps me to stay mobile. It's just easier to move in the water doing the exercises in this class. It's not too rigorous," LaRue says. Once an avid walker, she has found new ways to exercise when pain from her arthritis started to set in at age 76.

Rosie Meers, a certified aquatics instructor at the JCC says she really enjoys her classes. "We have a very social group; sometimes I have to talk over them," she says. "But we have a really good time when we all get into the pool and exercise in the warm water."

The Arthritis Foundation Exercise Program has developed several

options specifically designed to help those affected by arthritis. Participants in exercise classes also have experienced decreased pain, stress and depression as well as improved sleep through regular exercise. The Arthritis Foundation Exercise Program is designed specifically for people with the condition. If aquatics don't suit your needs, consider these other options:

- > Walk with Ease may be an easier way to get started even for those who don't have a lot of time. A safe, personal walking plan allows you to manage pain and stay motivated. Routine walking also helps raise your energy level, reduce your stress and control your weight.
- > Tai Chi from the Arthritis Foundation® is designed to improve the quality of life for people with arthritis using Sun style Tai Chi. The program focuses on mobility in addition to breathing and relaxation. The movements don't require deep bending or squatting, which makes it easier and more comfortable to learn.



Aquatic classes at the JCC are a fun way for participants to exercise with friends

Class instructors undergo special Arthritis Foundation instructortraining workshops in order to conduct classes safely and effectively. However, it is important to note that these exercises should not be used to replace therapeutic exercises prescribed for you by a therapist.

Contact the Arthritis Foundation for more information. See Resources.

MYTH: "Arthritis is an older people's disease."

FACT: The largest number of people with arthritis is of working age — 18 to 64. People ages 65 and older have the highest percentage of arthritis and experience greater activity limitations.



# **EXERCISE CAUTION**

Manage arthritis with correctly performed exercises to avoid injuries

by JoEllen Vrazel, Ph.D., M.A., Director, Division of Nutrition and Physical Activity, Indiana State Department of Health

he benefit of exercise as a management and treatment method for many forms of arthritis is beyond doubt.

However, exercise that is overdone or done incorrectly can severely impair people with arthritis and cause what commonly is referred to as a flare-up. Unfortunately, the fear of experiencing a flare-up is what keeps many who have arthritis from participating in any form of physical activity.

Research with adults who have some form of arthritis reveals modifying the type, time, intensity and approach to exercise is the key to experiencing positive benefits and effectively managing arthritis. The studies show successful exercisers participate in a wide range of activities that help reduce the repetition and impact on any one joint. They also have learned to adapt their activity to allow them to exercise comfortably and safely.

Key factors to consider when exercising

> Steering clear of activities that are high

impact or that have rapid or repetitive movements.

- > Starting slowly and progressing gradually, especially if you are starting a new activity.
- > Making sure you exercise within the range of your joint mobility.
- > Participating in different activities, such walking, biking and/or swimming, to keep from overusing a joint and to allow for adequate recovery between exercise bouts.
- > If you experience a flare-up, reduce or modify your activity until the joint no longer feels inflamed. If exercise causes pain for more than one hour afterward, the activity needs to be modified. Do not push through the pain. For osteoporosis sufferers, icing and gently stretching the joint may be very effective for managing a flare-up.
- > Engaging in isometric exercises, which involve contracting muscles without moving a joint such as squeezing your thigh muscles while lying or sitting, may be a safe alternative when experiencing a period in which your joint feels stiff, swollen and achy. A



A certified professional can help develop an effective exercise routine

by JoEllen Vrazel, Ph.D., M.A., Director, Division of Nutrition and Physical Activity, Indiana State Department of Health

hen dealing with arthritis, it can be challenging to find the best exercise for your condition - not to mention, the activities you choose may need to be modified over time due to additional arthritic changes.

Chances are you have tried to get started before, but you experienced a flare-up and are afraid to try again. Or, you've heard exercise may help, but you don't know how to get started.

Getting qualified assistance from trained professionals is only a phone call away. (See Resources for additional information.)

Though your doctor or physical therapist can advise you on appropriate exercises for your condition, trained exercise professionals also can provide assistance with programs and information specifically designed for people with arthritis.

It is important to know that even though an exercise professional is certified, he or she may not have the specific training necessary to work with clients who have arthritis. Exercise professionals trained by the Arthritis Foundation are the most qualified. Other qualified professionals include those certified by the American College of Sports Medicine (ACSM) and the National Athletic Training Association (NATA).

# RESOURCES TO PREVENT AND TREAT ARTHRITIS

American Academy of Orthopaedic Surgeons provides information on orthopaedic conditions and treatments, injury prevention, wellness and exercise. Call (800) 346-2267 or log on www.aaos.org.

American Academy of Physical Medicine and Rehabilitation serves the needs of practicing physical medicine and rehabilitation physicians. Call (312) 464-9700 or log on www.aapmr.org

American College of Rheumatology provides resources and information on physicians rheumatologists and symptoms of rheumatoid arthritis. Call (404) 633-3777 or log on www.rheumatology.com.

**Arthritis Foundation, Indiana chapter** provides innovative programs, services and information. Call (317) 879-0321 or (800) 783-2342 or log on www.arthritis.org/chapters/indiana/

The Arthritis Helpbook: A Tested Self-Management Program for Coping with Arthritis and Fibromyalgia, a book designed to help people reach their health goals, by Kate Lorig. Available at bookstores.

**John Hopkins Arthritis Center** provides consumers and physicians with educational and research resources for arthritis. Log on www.hopkins-arthritis.org

**Arthur M. Glick JCC** offers exercise classes with certified instructors, including aquatics as well as T'ai Chi for Arthritis. Call (317) 251-9467 or log on www.jcccindy.org.

**Lupus Foundation of America** provides resources, studies and networking contacts for dealing with lupus. Call (202) 349-1155 or log on www.lupus.org.

National Fibromyalgia Association supports people with

fibromyalgia and other chronic pain illnesses. Call (714) 921-0150 or log on www.fmaware.org.

National Institute for Arthritis and Musculoskeletal and Skin Diseases provides information and resources for arthritis and other conditions in English and Spanish. Call (877) 226-4267 or log on www.niams.nih.gov.

**National Institute on Aging** provides support and research on the aging process and age-related diseases. Log on www.nia.nih.gov.

**National Osteoporosis Foundation** promotes awareness, advocacy, public and health professional education and research for osteoporosis. Log on www.nof.org.

**National Psoriasis Foundation** is a patient-driven, nonprofit organization that is the voice for the millions of Americans affected by psoriasis and psoriatic arthritis. Log on www.psoriasis.org.

**Scleroderma Foundation** provides information, resources and tools for people with scleroderma. Call (800) 722-4673 or log on www.scleroderma.org.

**Sjögren's Syndrome Foundation** provides patients practical information and coping strategies that minimize the effects of Sjögren's syndrome. Call (800) 475-6473 or log on www.sjogrens.org.

**Spondylitis Association of America** provides information and support for people coping with spondylitis. Log on www.spondylitis.org

**Strong Women and Men Beat Arthritis,** a book on the benefits of exercising, particularly strength training, by Miriam E. Nelson. Available at bookstores.

**Yoga For Arthritis**, a video developed with the Arthritis Foundation. Log on www.mobilityltd.com.

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