

# **FLEXEZE NEWS Osteoarthritis is 10 X more likely to affect women than men & high heels may lead to joint degeneration & knee osteoarthritis, study finds**

Submitted by: Elava PR

Wednesday, 15 September 2010

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Revolutionary, award winning natural health product Flexeze Fortify™  
Reverses Cartilage Damage & Regenerates Tissue for the female population

Every year more than 10 million adults (6 million women and 4 million men) consult their GP with arthritis and related conditions.

Osteoarthritis is the most common form of arthritis. It usually develops gradually, over time. Several different joints can be affected, but osteoarthritis is most frequently seen in the hands, knees, hips, feet and spine. It is estimated that osteoarthritis causes joint pain in 8.5 million people in the UK (1 in every 7 people).

Osteoarthritis cannot be cured and there is no known cause. Studies have shown that it is more common among women and although osteoarthritis can develop at any age, it occurs more frequently in older people. Injury to a joint can also trigger osteoarthritis, even many years later.

A recent study from ScienceDaily (Aug. 2, 2010) — found that although women have been making a fashion statement in high heels for years by wearing trendy stilettos, wedges, pumps and kitten heels – there is recent concern about what those heels may be doing to their knees and joints over time.

A new study by an Iowa State University kinesiology master's student has found that prolonged wearing of and walking in high heels can contribute to joint degeneration and knee osteoarthritis.

Danielle Barkema, the ISU student who is originally from Cedar Falls, recently completed her thesis research studying the effects of high-heeled walking on forces acting on lower extremity joints. Kinesiology professor and department chair Phil Martin assisted her in the study,

"Obviously with research like this, you can't say with any certainty that if you wear high heels regularly you will develop osteoarthritis. We don't know that," Barkema said. "There are probably people [high heel wearers] who do and those who do not. However, based on this information, wearing high heels puts individuals at greater risk for developing osteoarthritis. And it seems to be that the higher the heel height, the greater the risk."

Testing three heel heights

Barkema selected three different heel heights -- flat, two inches, and 3.5 inches-- and had each of the 15 women in her study complete walking trials. She measured the forces acting about the knee joint and the heelstrike-induced shock wave that travels up the body when walking in heels. Using sensors, accelerometers and lab equipment such as a force platform and markers/cameras, she was able to capture motion and force data and translate them into results that could change the way millions of women select their footwear.

While previous studies have examined the effect of high heels on joints, the ISU researchers found that heel height changes walking characteristics such as slower speeds and shorter stride lengths. And as the heels got higher, they also saw an increase in the compression on the inside -- or medial side-- of the knee.

"This means that prolonged wearing and walking in heels could, over time, contribute to joint degeneration and knee osteoarthritis," Barkema said.

"I think Danielle's exactly right. Wearing high heels regularly puts a person at risk and the higher the heel, the greater the risk," Martin added. "The loading that's being produced in the joint with every step that they take is higher -- or at least, these data suggest that. These are not direct measures of loading within the joint, but they're an alternative way of looking at that kind of loading."

"Visually, it's quite apparent that somebody's posture is altered when wearing high heels," she said. "We noted those changes in posture [in the study], as well as various joint angles, such as the knee and ankle angle. The most dramatic change occurs at the ankle."

### Osteoarthritis – Women VS Men

Women have osteoarthritis, the most common form of arthritis, at much higher rates than men. Before age 55, more men tend to have osteoarthritis, but after age 55 the number of women with the condition far surpasses the number of men.

Joints affected by osteoarthritis also tend to vary by gender, says Alexander Shikhman, MD, PhD, founder of the Institute for Specialized Medicine in Del Mar, Calif., and medical director of Restorative Remedies. Men are more prone to experience arthritis in their hips, while women tend to have it in the knees or hands, he says. There are several reasons why these differences occur. They include:

#### - Biology

Women's bodies are designed to give birth, and that means the tendons in their lower body are more elastic than men's. "As a result, the joints probably move around a little more," says Yusuf Yazici, MD, a rheumatologist at New York University Hospital for Joint Diseases in New York. When the joints have less stability, they're more prone to injury.

Women's hips are wider than their knees, their knee joints are not aligned as straight as men's, Dr. Yazici says. The alignment of a woman's body leads to a higher rate of knee injuries, and injuries can lead to osteoarthritis later in life.

Experts have found that women who play soccer, for instance, have at least three to four times the number of knee injuries as men who play soccer, Yazici says.

#### - Genetics

Osteoarthritis seems to run in families, and there appears in particular to be a genetic link among women. Women whose mothers developed osteoarthritis will probably find that they will develop it in the same joints at around the same age as she did, Yazici says. Researchers have found that hand and knee osteoarthritis have specific genetic links.

## - Hormones

Researchers believe that female hormones have an effect on the cartilage that sits between the bones of the joints and cushions the bones to prevent pain and allow the joints to move about smoothly. In laboratory studies of cells that form cartilage, experts have found that the female hormone estrogen protects cartilage from inflammation, Dr. Shikhman says. Inflammation can lead to osteoarthritis. But after menopause, when women's estrogen levels go down, they lose that protection and may have a higher risk of developing osteoarthritis even if they are on hormone-replacement therapy (HRT).

### Treatment for Osteoarthritis:

Flexeze Fortify™ (<http://flexeze.co.uk/flexeze-fortify.html>) is the first product that helps support the natural regeneration of joint cartilage. Whereas Glucosamine is thought to slow down the effects of joint wear and tear, Flexeze Fortify™ actually helps reverse the process. Put simply – it is a joints supplement which actually helps rebuild and repair cartilage, usually damaged by wear and tear or osteoarthritis. It contains an award-winning ingredient\* called Fortigel that is made up of a patented collagen hydrolysate. Fortigel helps build up Collagen which is the key component of cartilage.

Yoga is also widely used to ease the symptoms of osteoarthritis. Yoga's gentle movements can keep build strength, flexibility, and balance and reduce arthritis pain and stiffness. A pilot study conducted by the University of Pennsylvania School of Medicine examined one type of yoga, Iyengar yoga, for people with osteoarthritis of the knee. After an 8-week course of weekly 90-minute beginner classes, there was a statistically significant reduction in pain, physical function, and mood.

(<http://altmedicine.about.com/od/healthconditionsdisease/a/osteoarthritis.htm>)

More recently - a brand new survey, conducted by Vivo Healthcare (<http://www.vivohealthcare.co.uk>) with 500 women found the following:

- 42% of women over 50 missed at least one yoga session in the last year through joint pain
- 27% of women over 50 missed 4 or more yoga sessions in the last year through joint pain
- 54% of women questioned felt joint pain inhibited their ability to exercise to their full potential

### Scientific Evidence that Flexeze Fortify™ works:

A double-blind, placebo-controlled study, jointly undertaken in America by Harvard Medical School and Tufts Medical centre in Boston evaluated patients over the age of 48 with arthritis of the knee. The 30 patients were divided into two groups, a control group and a study group. Half of them took collagen hydrolysate and the other group a placebo. The MRI scans taken after one week, 24 weeks and 48 weeks, showed patients had significant re-growth of damaged cartilage.

The year-long trial reported that while the cartilage in the placebo group deteriorated over the weeks, the groups taking the supplement collagen hydrolysate (Flexeze Fortify™) experienced regeneration in cartilage.

The cell-study results compliment those of researchers at the Kiel- based Collagen Research Institute who reported to the congress of the Osteoarthritis Research Society International (ORSI) in Montreal.

They noted that the bioactive collagen peptides formulation in Flexeze, were found to stimulate cell metabolism in knee-joint cartilage and promote the regeneration of cartilage tissue.

Dr Andrew Carson, a GP who is Associate Dean, GP Education, Birmingham and Solihull and Medical Advisor to the NHS Executive in the West Midlands said:

“These two studies show real promise. I am not aware of any other product which has been shown to regenerate articular cartilage.”

“The best that other products have achieved in the past is a reduction in the speed of disease progression and a subjective improvement in pain sensation.

“The improvements seen in the growth of the articular cartilage in the study group achieved statistical significance.

“I would recommend anyone taking glucosamine and chondroitin to consider this option which is a natural product with no known side-effects.”

What exactly is Flexeze Fortify™?

Flexeze Fortify™ is the new revolutionary joint health product from Goldshield <http://flexeze.co.uk/flexeze-fortify.html> – and is the first product that actually helps support the natural regeneration of joint cartilage. This brand new natural collagen supplement is a collagen hydrosalate powder which is a specially processed form of collagen claiming to be more bio-available – i.e. that it is absorbed by our body more easily, than unprocessed collagen. Flexeze Fortify™ <http://flexeze.co.uk/flexeze-fortify.html> is the first product that helps support the natural regeneration of joint cartilage. Whereas Glucosamine is thought to slow down the effects of joint wear and tear, Flexeze Fortify™ actually helps reverse the process. Flexeze Fortify contains an award winning\* blend of Collagen Hydrolysate that stimulates the natural rebuilding of joint cartilage increasing flexibility and mobility whilst reducing discomfort.

Furthermore, people who suffer from constant or intermittent joint pain and related conditions such as osteoarthritis may also wish to use Flexeze Fortify™ over glucosamine just simply take action to address deterioration of cartilage in their joints either through age or exercise.

Flexeze Fortify™ - a revolution in joint health...

- Flexeze Fortify™ is a joints supplement which actually helps rebuild and repair cartilage, usually damaged by wear and tear or osteoarthritis
- It contains an award-winning ingredient\* called Fortigel that is made up of a patented collagen hydrolysate. Fortigel helps build up Collagen which is the key component of cartilage.
- Whereas Glucosamine mostly slows down the effects of joint wear and tear, Fortify helps reverse the process

- Fortify also contains vitamin C which helps keep joints and bones healthy
- Fortify comes in powder form, allowing the body to absorb more of the key ingredients in a single dosage than a capsule or pill
- Fortify is the next step forward in joint health - dealing with the root cause of joint problems, not just the symptoms

Customer and Dog Trainer, Patricia Jones, and user of Flexeze Fortify™ had this to say:

#### The Problem:

When I was in my teens I was very sporty and realised my sporting dreams by being chosen to represent Great Britain in the hurdles at the 1968 Mexico Summer Olympic Games. I've always valued being healthy and active and my work as a trainer of agility of dogs keeps me on the go all the time. Unfortunately my hip and knee joints are now paying the price and I have been diagnosed with arthritis.

#### The Solution:

I have been able to manage my condition through diet, exercise and a carefully controlled mixture of painkillers, anti-inflammatory drugs and injections. Despite this I have regularly suffered from bad flare ups, which would leave me in great pain and aching joints which severely limits my movement. I have now found extra support taking Flexeze Fortify.

#### The Impact:

It's really helping to ease the pain and help my joints feel stronger and more flexible. I've now stopped relying on painkillers and anti-inflammatory drugs. Hopefully I'll be able to enjoy life to the full for some time yet!

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For further information on Flexeze please visit: <http://www.flexeze.co.uk>

#### Notes to Editors:

Research from [http://www.alive.com/265a1a2.php?subject\\_bread\\_cramb=335](http://www.alive.com/265a1a2.php?subject_bread_cramb=335) goes on to highlights that:

- Osteoarthritis is the single most common cause of lost time from work and leisure activity
- Under the age of 45, osteoarthritis is more common in men but after the age of 45, it is 10 times more common in women
- Surveys have indicated that 80 percent of people over 50 have osteoarthritis
- The number of women affected by this disease increases greatly after the age of 45 (source [http://www.alive.com/265a1a2.php?subject\\_bread\\_cramb=335](http://www.alive.com/265a1a2.php?subject_bread_cramb=335))
- The prevalence of radiographic osteoarthritis is higher in women than men. The difference is most marked after 50 years of age

For hand and knee osteoarthritis:

- Knee Pain: About 20% of adults 45–64 years of age have osteoarthritic pain in the knee. About 35% of women of 75 years of age or more have osteoarthritic pain in the knee
- Disability: About 25% of adults of 50 years of age or more report disability from severe knee pain
- Hand - The hand is one of the most common sites of pain and osteoarthritic change in older adults.
- In the UK it is estimated that at least 4.4 million people have X-ray evidence of moderate-to-severe osteoarthritis of their hands
- Pain: About 12% of men and 19% of women of 45 years of age or more report hand pain.
- Hip Pain: About 12% of adults of 65 years of age or more have osteoarthritic pain in the hip [Cecchi et al, 2008]. [National Collaborating Centre for Chronic Conditions, 2008] Source: [http://www.cks.nhs.uk/osteoarthritis/background\\_information/prevalence](http://www.cks.nhs.uk/osteoarthritis/background_information/prevalence)

## Arthritis in the UK – key facts

The statistics detailed here have been derived from a number of different sources (all of which are outlined at the end of the document). All the figures detailed refer to the UK population unless otherwise stated.

### Osteoarthritis

- More than 6 million people in the UK have painful osteoarthritis in one or both knees.
- Prevalence increases with age with 1 in 5 adults aged 50–59 to almost 1 in every 2 adults aged 80+ having painful osteoarthritis in one or both knees
- More than 650,000 in the UK have painful osteoarthritis in one or both hips, three-quarters of whom are aged over 65.2 A further one and a half million have X-ray evidence of hip osteoarthritis (but may not have any symptoms)
- Osteoarthritis is most commonly found in the spine
- There are almost 8.5 million people with X-ray evidence of osteoarthritis of the spine in the UK. Unlike other sites, it is more commonly found in men than women (by a ratio of 3:2)
- Back pain is the most frequently occurring symptom
- More than 1 million adults\* consult their GP each year with osteoarthritis (\*adults: defined as people aged 15+ )

### Joint replacements

- A total of 58,952 primary hip replacements were carried out in England and Wales in 2006/7. Of these, 94 per cent were due to osteoarthritis and 60 per cent of these operations were carried out on women
- In Scotland over 6,000 hip replacements were performed in 2006/7
- A total of 62,150 primary knee replacements were performed in England and Wales in 2006/7
- Ninety-seven per cent were due to osteoarthritis and 57 per cent were performed on women
- In Scotland around 6,300 knee replacements were performed in 2006/7.

### NHS costs

- The average cost of a hip replacement is £7,350. The cost varies between trusts

### Rheumatoid arthritis

- There are approximately 20,000 new cases of rheumatoid arthritis in the UK every year
- There are around 400,000 adults in the UK with rheumatoid arthritis. Prevalence is more common in women

than men by a factor of 3:1.10

- Up to 4 out of every 10 working people with rheumatoid arthritis lose their jobs within five years, three quarters of these are for reasons directly related to their condition
- 1 in 7 give up work within one year of diagnosis
- There are around 400,000 adults in the UK with rheumatoid arthritis
- More than 6 million people in the UK have osteoarthritis in one or both knees

#### Economic costs

- 10 million working days were lost in 2006/7 due to musculoskeletal conditions, second only to stress, depression and anxiety
- The cost to the UK of musculoskeletal conditions is £5.7 billion annually
- Approximately 1 million people in the UK suffered from a musculoskeletal condition caused or exacerbated by their current or past occupation – equivalent to approximately 3 per cent of the working population
- Arthritis is the most common condition for which people receive Disability Living Allowance (DLA) (\* Disability Living Allowance (DLA) is a benefit for people who are so disabled, have personal care needs, mobility needs or both. Claimants must be under 65)
- The total number of people receiving DLA as a result of arthritis and other musculoskeletal conditions is more than twice that due to heart and chest disease and stroke combined
- Over half a million people receive DLA as a result of arthritis (representing more than 18 per cent of all DLA claimants) – that's more than the total for heart disease, stroke, chest disease and cancer combined
- Around 223,000 people receive DLA as a result of back problems and a further 220,000 people receive DLA as a result of muscle, bone and joint disease (representing 8 per cent and 7 per cent of all claimants respectively)

#### General

- More than one third of the population aged over 50 have pain at any site that interferes with their normal activities
- This becomes more common with age with 1 in 10 people aged 15–24 seeking a GP consultation each year with a musculoskeletal problem rising to 1 in 3 people over 75 seeking a consultation.<sup>5</sup> \* adults: defined here as aged 15+
- Arthritis is the most common condition for which people receive Disability Living Allowance (DLA)
- More than 10 million adults consult their GP each year with arthritis and related conditions

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