The fine art of beating arthritis

- Obesity and osteoarthritis
- A taskforce to take fatigue seriously
If you have trouble getting in and out of the bath and the thought of bathing has become a daunting prospect, discovering that there is a simple, affordable solution that will fit your own bath will already make your day.

And that solution is a Willowbrook Aqualift. It's the most convenient and cost effective way to enjoy full depth bathing without having to change your bathroom.

There's no need for expensive alterations and you won't lose value on your home from removing your bath. You won’t even need builders or plumbers as our trained fitters will fit the Aqualift completely free of charge.

With a fitting time of less than 2 hours you’ll be back bathing in no time. And it couldn’t be simpler.

Just sit on the Aqualift and at the touch of a button you’ll be smoothly and gently lowered into the bath.

Aqualift is a quality system designed to last and shouldn’t be confused with quick fix solutions and allows you to regain bath time independence at a fraction of the cost of walk-in baths.

Discover the Willowbrook Aqualift for yourself with a free home trial and rediscover the pleasure of a relaxing bath.

Aqualift

The simple solution that fits your own bath

• No need to change your existing bathroom
• No building or plumbing alterations required
• Free installation in less than 2 hours by our trained fitters
• Fully guaranteed

And is easy to use

• Lowers and raises you at the touch of a button
• Retracts to allow normal bath use by others
• The perfect solution at a fraction of the price of walk-in baths

For a brochure or a free home trial Call 0800 028 2802
Welcome to the autumn edition of Arthritis Today. In our obesity-obsessed society, the link between being overweight and developing osteoarthritis is often overlooked. On page ten, we examine how just carrying a few extra pounds can have an impact on our joints, and you can find out how to access our new online report on osteoarthritis and obesity. Similarly, the association between rheumatoid arthritis and the distressing symptom of fatigue is not something that the medical profession has traditionally had much time for. That is now changing, and on page 12 you can find how arc is playing a big part in this. Our cover star Jan Williams had never picked up a paint brush since school, but after anti-TNF therapy turned her life around, the rheumatoid arthritis sufferer and art student from Cardiff has never looked back. Read her inspirational story on page 15. World expert in osteoarthritis David Felson outlined his plans for Arthritis Today earlier this year. On page 30, find out about this research in more detail. And staying with osteoarthritis, you can find an update on our major genetics study, arcOGEN, on page 4.

Jane Tadman,
Editor, Arthritis Today
Ambitious osteoarthritis genetic study “well on target to meet its aims”

The Arthritis Research Campaign’s ambitious study to identify the risk factors for osteoarthritis is well on target to meet its aims, two years on.

The first findings from the research are due to be submitted for publication in a major scientific journal this autumn, with further publications to follow in 2010.

The arcOGEN project, launched in October 2007, is the biggest single grant ever awarded by arc and marks the beginning of a large programme of research to understand the causes of osteoarthritis, and also provide scientists with an accurate “genetic blueprint” of the disease.

As well as identifying genetic risk factors, researchers aim to identify those patients who may be at most risk of developing the condition, and reveal new targets for new treatments.

Led by Professor John Loughlin at Newcastle University, in collaboration with other genetics groups around the UK, scientists are analysing the DNA of over 8,000 patients with osteoarthritis, and comparing the differences with DNA from a similar number of healthy people.

They are studying single nucleotide polymorphisms (SNPs): tiny differences in DNA that may increase an individual’s risk for developing osteoarthritis. The researchers expect to find between ten and 20 SNPs associated with the disease, but there may be more.

With staff working in a network of 11 sites around the UK, DNA from 3,200 samples from the first group of osteoarthritis patients have been analysed at the Sanger Institute in Cambridge, for around 5,000,000 SNPs across the entire human genome.

With the help of statisticians, scientists hope to discover which of these SNPs may be associated with osteoarthritis; a handful of promising SNPs has already been identified.

The next step is to expand the study to the target figure of 8,000 patients and to confirm or replicate the findings in a second, larger group of osteoarthritis patients and healthy individuals. Sample collection for this larger group is nearing completion, and laboratory analysis is now underway. Four thousand, two hundred and fifty new patients have been recruited, and DNA from 3,360 of these has already been genetically analysed at Cambridge.

To boost the power of this study even further arcOGEN’s scientists are currently comparing their findings with those of a similar large European osteoarthritis project, and plans are also under way for a comparative study with an Asian osteoarthritis project.

“For the first time, scientists will have an accurate genetic blueprint of this common disease, and the next step is to understand how this blueprint translates into actual changes in the joint tissues that may increase an individual’s risk of developing osteoarthritis,” explained Professor Loughlin.

NICE guidelines on osteoporosis drugs receive further criticism

A leading osteoporosis expert and arc grant holder from the University of Aberdeen has criticised the drug approval system in England and Wales, claiming that thousands of patients with the bone-thinning disease osteoporosis do not get the treatment they need.

Speaking at the British Science Festival in Guildford in September, Professor David Reid explained that many patients do not tolerate alendronate, the standard treatment for osteoporosis.

“The oral bisphosphonate drug, which costs less than £50 per patient per year, can result in unpleasant gastro-intestinal side-effects and is ineffective in about a quarter of patients.”

There are alternative treatments for osteoporosis; however, these are more expensive and the National Institute for Health and Clinical Excellence (NICE) – which issues guidance for the NHS on prescribing treatments – does not believe they are cost-effective in most cases.

Because of this, Professor Reid, who heads arc’s clinical studies group into research into metabolic bone diseases, said that many patients in England and Wales do not receive the treatment they need to slow down the progression of their osteoporosis and prevent life-threatening fractures.

“If you don’t tolerate this drug (alendronate) and go back to your GP the GP may well have to say your risk isn’t high enough and you can’t have the next drug,” the professor said.

“Frankly, that’s just bad medical practice. You don’t say to a patient ‘I have something I could give you but you can’t have it’. That’s unnecessarily restrictive. It defies logic.”

A spokesman for the Arthritis Research Campaign commented that despite many new drugs coming on to the market, many people at serious risk of fracture remain undiagnosed and untreated, and the lack of availability of effective treatments was a major cause for concern.
1000th patient to arc’s UK-wide statin trial

A UK-wide statin trial co-funded by the Arthritis Research Campaign has reached a significant milestone by recruiting the 1,000th patient.

The TRACE RA trial aims to find out if taking statins reduces the risk of heart attacks and strokes in rheumatoid arthritis (RA) patients. People with RA have an increased risk of cardiovascular complications compared with the general population. Statins are long proven to reduce cardiac events and death in ‘at-risk’ populations but it is not known whether this benefit occurs in a highly inflammatory condition like RA, as people with the disease have been excluded from previous statin trials.

TRACE RA is jointly funded by arc and the British Heart Foundation, and is the largest academically-led trial to ever be conducted in RA patients in the world.

The trial’s chief investigator Professor George Kitas, of the Dudley Group of Hospitals, said: “We congratulate and thank Addenbrooke’s Hospital, Cambridge, led by Dr Frances Hall, is part of a UK collaboration of around 100 hospitals which are working together to recruit a total of 4000 patients to the trial by the end of next year.

The 1,000th patient is Barry Barber, aged 64, from Cross Green, Wicken, in Ely. He said: “Even though I’ve had RA for several years, I didn’t know previously of the link between the condition and cardiovascular disease. I wanted to take part in the trial because I hoped it would help in some way, as it’s obviously a hugely important study which could have great significance to the way people with RA are treated.”

Dr Hall said: “We are delighted to have recruited the 1000th patient in this ambitious trial, which, we hope, will guide our future management of the risk of cardiovascular disease in patients with rheumatoid arthritis.”

The trial is seeking participation from RA patients over the age of 50 or with RA for more than ten years irrespective of their age, who have not been judged eligible for statins as per their hospital’s local routine practice. They will be given either a statin or a placebo, in addition to any other treatment they require for their arthritis and will all receive advice on how to reduce the risk of heart disease by exercising, eating healthily and stopping smoking. They will be followed up for around five years.

Further information can be found at the TRACE RA trial website: http://www.dgoh.nhs.uk/tracea or by contacting the TRACE RA Manager, Hawys Williams on 0161 2755 639.

Impact of cannabis on bones changes with age, study finds

Scientists investigating the effects of cannabis on bone health have found that its impact varies dramatically with age.

The study has found that although cannabis could reduce bone strength in young people, it may protect against osteoporosis, a weakening of the bones, in later life.

The team at the University of Edinburgh has shown that a molecule found naturally in the body, which can be activated by cannabis – called the type 1 cannabinoid receptor (CB1) – is key to the development of osteoporosis.

It is known that when CB1 comes into contact with cannabis it has an impact on bone regeneration, but until now it was not clear whether the drug had a positive or negative effect.

Researchers, funded by the Arthritis Research Campaign, investigated this by studying mice that lacked the CB1 receptor. The scientists then used compounds – similar to those in cannabis – that activated the CB1 receptor. They found that compounds increased the rate at which bone tissue was destroyed in the young.

The study also showed, however, that the same compounds decreased bone loss in older mice and prevented the accumulation of fat in the bones, which is known to occur in humans with osteoporosis. The results are published in Cell Metabolism.

Osteoporosis affects up to 30 per cent of women and 12 per cent of men at some point in life.

Stuart Ralston, the Arthritis Research Campaign Professor of Rheumatology at the University of Edinburgh, who led the study, said: “This is an exciting step forward, but we must recognise that these are early results and more tests are needed on the effects of cannabis in humans to determine how the effects differ with age in people.

“We plan to conduct further trials soon and hope the results will help to deliver new treatments that will be of value in the fight against osteoporosis.”
Why pay more?


Call free for a brochure
0800 988 2898


Riser Recliners

• Deal direct with the factory and save £££
• Huge range of styles and fabrics including leather
• Matching sofas and therapy massage systems
• Custom sizes are our speciality • Unbelievably comfortable

Never beaten on quality, never knowingly beaten on price


Bathing Solutions

Replace your old, uncomfortable bath
with one of our easy entry showers
so bath time’s a pleasure again

The Elegance our most popular easy entry shower
Aquarius Wet Room the ultimate easy entry shower
The Finesse stylish design with the convenience of a no-door easy entry shower

For our 28 page brochure and to arrange for a free, no-obligation survey and quotation, call free on
0800 783 1912

Please quote offer reference ATAS09

I said goodbye to bathing difficulties when I had my new easy entry shower installed by Bathing Solutions."

Aquarius Wet Room

The Finesse

The Elegance

Features

• Low threshold trays
• Easy clean wall panels
• No tiles and messy grout to clean
• Anti-slip shower tray
• Grab rails for extra support
• Fold-up seat for added comfort
• Fully guaranteed

 Autumn SALE

UP TO 25% OFF
selected showers

Please send me a brochure on your range of easy entry showers and walk-in baths, or telephone me to make an appointment for a free, no-obligation survey.

Name

Tel No.

Address

Postcode

Bathing Solutions and other group companies may send you information and offers in the future. Please tick box if you do not wish to receive information from us or third parties in the future.

Post coupon to: Bathing Solutions, FREEPOST SWC3136, Ledbury, HR8 2ZZ

ArthTodayAUTUMN09.indd   6 17/9/09   12:27:36
Researchers investigate causes of artificial hip joint loosening

Researchers at Wrightington Hospital near Wigan are planning to assess the causes of loosening in artificial hip joint surgery, which is widely performed in patients with severe osteoarthritis.

Although more than 65,000 people successfully undergo hip replacement surgery in the UK every year, a small percentage can fail due to loosening.

One of the main causes of loosening is believed to be a local tissue reaction to particles that wear away from the joint as the patient moves around. The implanted joint becomes loose as the bone surface next to it gets absorbed.

The first successful hip replacement was developed at Wrightington Hospital by Sir John Charnley in the early 1960s. This consisted of a plastic socket and a steel ball attached to a stem that was inserted into the top of the thigh bone. He pioneered the use of polyethylene sockets, but, in recent years, sockets made of a new type of polyethylene have been brought on to the market.

Now a team at the Centre for Hip Surgery at Wrightington Hospital, led by senior research fellow Dr Brian Derbyshire, has been awarded funding of more than £90,000 over two years by the Arthritis Research Campaign to develop a computerised x-ray image measurement system for accurately measuring the wear of these new types of socket.

In laboratory tests, this new material wears much less than the standard type of polyethylene, but this needs to be confirmed from measurements of patients’ x-ray films.

“Different designs and materials are being investigated by researchers around the world in order to tackle this problem of loosening,” said Dr Derbyshire. “There is an urgent need to assess both the clinical and cost-effectiveness of the different types of sockets that are presently available.

“The advantage of this new type of polyethylene socket is that it is relatively inexpensive compared to other designs, but its performance in patients needs to be rigorously assessed over a number of years. The outcome of our study could be a system that would enable researchers around the world to carry out that assessment very accurately.”

Scientists to use embryonic stem cells to treat osteoarthritis

Scientists in Manchester are hoping to test the effectiveness of human embryonic stem cells in repairing cartilage worn or damaged by osteoarthritis.

A team led by Dr Susan Kimber will perform a series of laboratory experiments to test whether embryonic stem cells can generate the cells needed to repair cartilage in joints. Their research could have enormous potential in treating osteoarthritis, which affects millions of older people in the UK.

With funding of £190,000 over three years from the Arthritis Research Campaign, Dr Kimber and a team from the Faculty of Life Sciences at the University of Manchester will build on earlier work that developed the basis for generating cells capable of repairing cartilage, known as chondrocytes, from embryonic stem cells. Now they want to take their method a stage further in the lab, moving a major step forward to treating patients with osteoarthritis.

Current treatment for osteoarthritis, the most common form of arthritis which occurs when cartilage wears away at the end of bones, leading to pain, stiffness and swelling, is limited to pain relief or ultimately joint replacement.

Cells taken from patients are already being used to repair small areas of cartilage damage but the procedure is very expensive. Using embryonic stem cells would enable much larger scale production of cells, making it cheaper and more applicable to larger numbers of patients.

“Stem cells offer an attractive source of cells as they can form all the different cells in the body. “The challenge is to understand how stem cells can be guided to form cells that repair cartilage, called chondrocytes, to make this into an efficient and controllable process, and to deliver cells for clinical treatment for patients.”

The Manchester team believe the methods they have developed to do this are more successful than approaches achieved by other researchers, and they are confident that with some refinement, they can produce cells suitable for repairing cartilage.

They now plan to grow human embryonic stem cells with specific proteins to produce the chondrocytes needed for cartilage repair that will grow into cartilage when implanted into model systems. They will also establish that the cells are not genetically altered or have the ability to form non-cartilage cells or tumours.

Ultimately their research could lead to chondrocyte production being scaled up for use in patients. “Preliminary work has shown these aims to be feasible,” added Dr Kimber.
Patients with ruptured Achilles tendon given chance to try new study

People who rupture their Achilles tendon are being given the chance to take part in a new University of Warwick study aimed at improving recovery and rehabilitation.

Thirty patients being treated at the University Hospitals Coventry and Warwickshire NHS Trust will test the effectiveness of different types of orthotics (walking boots) containing heel wedges to see which work best.

Research physiotherapist at the University of Warwick Medical School, Rebecca Kearney, has been awarded more than £124,000 by the Arthritis Research Campaign. The four year project will investigate ways of improving treatment of this common condition that affects over 110,000 people every year in the UK.

Rupture of the Achilles tendon usually occurs in men aged between 30 and 40 years who play sport intermittently, but it can affect men and women of any age, during normal activities such as walking down the stairs.

Traditionally people with a ruptured Achilles were treated in a plaster cast from knee to foot and were unable to bear weight on the cast for up to three months.

Rebecca Kearney said: “This allowed the tendon to heal but resulted in wasting of the muscles in the lower leg. Nowadays special boots called orthoses are more often used, as research has shown that it is safe to put the full weight on the healing tendon without damage – and with reduced muscle wasting.”

Mrs Kearney will now investigate which is the best and most effective type of orthotic boot: a plastic rigid boot with wedges in the heels worn for up to eight weeks, or a more flexible and less cumbersome version.

Ultrasound and gait analysis techniques will be used to measure the results. Her work will lead to a clinical trial comparing various types of orthotic boots.

She said: “Hopefully this research will allow patients to return to their normal work and leisure activities as quickly as possible, with the least chance of further injury to the tendon. Accelerated rehabilitation techniques are increasingly being used for sportsmen and women, but there is no reason why these same techniques can’t be applied to members of the general public who sustain similar injuries.”

New ultrasound study of knee osteoarthritis

A new Nottingham-based study looking at the detection of inflammation in osteoarthritis of the knee could determine if it is linked to painful symptoms.

Up to six million people in the UK suffer from osteoarthritis in the knee, which leads to pain, stiffness, swelling and disability.

Now 200 patients from GP practices around Nottingham are to take part in new research into the condition led by research physiotherapist Michelle Hall from the University of Nottingham.

With a three-year training fellowship from the Arthritis Research Campaign of £192,000 over three years, Mrs Hall will use new ultrasound techniques to identify how common inflammation is in the knees of people over the age of 55, whether inflammation can be linked to osteoarthritis as shown on x-ray, and if it is linked to pain, stiffness and problems with mobility.

At the moment osteoarthritis can only be identified by x-ray, which is limited to revealing changes to bones and degeneration of cartilage. It does not show up any changes or inflammation to the surrounding soft tissue or joint lining, which may also contribute to pain and stiffness and may, in fact, be a precursor to osteoarthritis.

Osteoarthritis is known as a “wear and tear” condition in which cartilage wears away, leaving bones rubbing together, leading to pain and stiffness. But recently scientists have shown that inflammation in the joint lining, similar to but less serious than that found in rheumatoid arthritis, may also play a role in its development.

Now the team from the University of Nottingham’s physiotherapy education and academic rheumatology departments aim to find out if people with knee pain and/or knee osteoarthritis also have inflammation in their knees.

Patients will attend the Clinical Sciences Building at the university for the ultrasound scans which will be repeated after three days and then three months later to chart the progress of the inflammation to see whether this correlates with x-ray changes or with increases in pain. A control group of healthy volunteers will also undergo ultrasound on their knees as a comparison group.

“It has been shown that people who have inflammation as shown on ultrasound may develop more severe and progressive osteoarthritis and experience greater pain and disability,” explained Mrs Hall. “The presence of inflammation could therefore be important in terms of prognosis and selection of certain treatments.”
**Try Granny's Delicious Old-Fashioned Recipes**

The 'Nostalgic Cook Book' reveals all the delicious, healthy, inexpensive and forgotten recipes of yesteryear!

I miss my grandmother for many reasons... but one thing I often reminisce about is her delicious meals. She didn't have a lot of money but we were always well fed and really well -- every day she cooked delicious healthy dishes, no ready-made meals in those days! Before my grandmother passed away at the grand old age of 94, and having hardly suffered a serious day's illness in her life, she made sure that I received all her secret recipes. My husband and I use these recipes every week and it's no wonder that we have a very healthy family with children who refuse to eat junk food and tastesless supermarket prepared foods. They're even learning to cook! I wanted to make sure that granny's recipes lived on so I decided to write this book. I did extensive research and added a number of other traditional recipes to those of my grandmother, and compiled 'The Nostalgic Cook Book' -- the ultimate book of old-fashioned recipes including many wartime recipes that kept our workforce both happy and healthy, and our soldiers fit to fight in the battlefields!

Here's just a selection of recipes to whet your appetite:

- **Potato Jane** -- extremely filling... so traditional!
- **Fish Stew**
- **Corned Beef Hash**
- **Cutlets** -- delicious oven made cutlets covered in breadcrumbs!
- **Cheese and Vegetable Cutlets** -- delicious oven made cutlets covered in breadcrumbs!
- **Savoury Potato Cakes** -- tender potato & fish cakes
- **Savoury Meat Pudding** -- with syrup and breadcrumbs!
- **Mock Oyster Pudding** -- soft roes in breadcrumbs and mixed with nuts! Not an oyster in sight!
- **Soused Herring** -- with onion and mixed pickled spices... simply fantastic!
- **Stemmed Cut Pudding with Jam** -- cooked to just melt on the tongue!
- **Stemmed Chocolate Pudding** -- with syrup and breadcrumbs!
- **Bacon Turnovers** -- traditional fried chopped bacon... made from the bacon scraps!
- **Bread & Butter Pudding** -- as soft as it gets... the best around, beats any ready-made pudding any day.

The 'Nostalgic Cook Book' is packed with hundreds of delicious traditional British recipes that are quick and easy to prepare. This book comprehensively covers every meal of the day from breakfast to dinner and even has a huge list of desserts. Wonderful home made meals taste much better and are much healthier than all those high salt, sugar and processed foods on your supermarket shelves!

The recipes are inexpensive, tasty and guaranteed to provide at least five fruits and vegetables per day that every healthy body needs.

Due to the obvious shortages of the war and post war economy the recipes were easy to prepare and above all healthy -- providing all the vitamins, proteins and carbohydrates required! And what's more, the recipes were easy to prepare and incredibly tasty!

It was a diet low in sugar, fats and salt high in essential minerals -- the best diet for a healthier longer life! ‘The Nostalgic Cook Book’ makes it all so simple with advice on seasonal produce making it so easy for you to know exactly what to shop for the whole year round.

Buy locally! Buy British! ‘The Nostalgic Cook Book’ encourages you to buy from your local and national suppliers. Britain has a wonderful range of some of the finest foods in the world.

Learn how to use your leftovers -- ‘The Nostalgic Cook Book’ shows you how to make the most of all the food in your kitchen -- all those unused packets and tins in your cupboard and all the leftover meat, fruit and vegetables.

The 'Nostalgic Cook Book' provides a basic, simple and easy to follow step by step guide that enables even the most inexperienced of cooks to make the finest and tastiest of meals.

This book is obviously designed to keep you and your family happy and healthy whilst reducing your costs... but already we've had many comments from readers saying that these 'nostalgic' meals have proven immensely popular when cooking for friends or having dinner parties -- a great talking point all round!

Due to the obvious shortages of the war and post war economy that grandmother came flooding back when I read these recipes. They are delicious and easy and cheap to make... and it's no wonder she lived until 91!"

Mrs J Dowar, Hertfordshire.

All orders received within 7 days of this announcement will be sent with a **FREE BONUS**

**Old Fashioned Cleaning Tips**

My granny was a proud woman and would pride herself on having a clean kitchen and a gleaming parlour — some of her best cleaning tips are included in this book. How to have your brass and copperware coming up like new with three household ingredients, Deteriorated carpets cheaply and effectively in just 10 minutes. The trick is to use sodium bicarbonate. Need to unblock your drains? In 15 minutes it will be all clear. Learn all these amazing secrets and more.

---

**The 'Nostalgic Cook Book'**

- SAVE £5.00

---

**100% Cast Iron Guarantee:**

We are so confident that you will enjoy the book that we are more than happy to offer a risk free home trial. If you are not completely satisfied, all you have to do is return the book and you will receive a full refund.

---

**Order Now!**

Visit www.windorproducts.com/WTC79

---

**LINES OPEN**

- 8.30am - 5.30pm, Mon-Fri

---

**FREE**

- Post To: Windsor Health, Derby, WTC79, Emery House, Greatbridge Road, Romsey, Hampshire SO51 6AD

---

**Please charge my:**

- Mastercard
- Visa
- Switch
- Delta
- Maestro

---

**Save £5.00**

- Two copies for £8.75 + £2.95 insured p&p.

---

**Save £11.00**

- Three copies for £12.85 + £2.95 insured p&p.

---

**Additional copies**

- £6.95.
OBESITY AND RA

Obesity is bad for your joints

We’ve known for a long time that obesity is bad for us, but a new arc report reveals that very overweight people are a staggering 14 times more likely to get osteoarthritis of the knee than those within a healthy weight range. Jane Tadman reports.

ram conductor Dean Collier was forced to give up work five years ago after starting to suffer from severe pain in his knee, diagnosed as osteoarthritis.

Tall at 6ft 2ins, but at 17 stone Dean was also classed as overweight.

As the pain from standing for long periods of time became unbearable, Dean was moved to driving the trams and later to an engineering role but when the pain got so bad Dean had to give up work, and was treated for depression.

But an appointment with a nurse at his local GP surgery signalled a new start when Dean, from Nottingham, was advised to attend a local exercise programme. The one-hour circuit training classes were held twice a week at his local leisure centre, and combined with regular swimming, and cutting out fizzy drinks, chocolates, sweets and cakes, he soon lost a stone.

"It was difficult at first, but after a few weeks the exercise and good diet came naturally. It was a complete lifestyle change and the change was incredible," says Dean, now 42. The pain in his knee reduced, became less stiff and aching, and more flexible.

Dean is just one of millions of people in the UK for whom weight is a serious issue. The rise in obesity and the resulting increase in the number of people suffering from osteoarthritis – particularly of the knee – as a result, has prompted the Arthritis Research Campaign to produce a new online publication to warn the public of the hitherto little publicised dangers to their health and quality of life of obesity.

In fact, obese people are four times more likely to develop osteoarthritis of the knee as they are to develop high blood pressure or type-2 diabetes.

Worn cartilage cannot currently be repaired

But whereas high blood pressure and diabetes may be substantially improved on losing weight and are relatively easy to control with therapy, the changes resulting from osteoarthritis are irreversible, as worn cartilage cannot currently be repaired.

However, according to Professor Alan Silman, arc medical director, there is good news for obese and overweight people whose knees become painful due to osteoarthritis as a result of their weight. "Research shows that losing weight, however modest, when combined with exercise, is a panacea at every stage," said Professor Silman.

"Achieving a healthy weight reduces the risk of developing the disease in the first place, relieves existing symptoms and helps to prevent further deterioration. And weight loss with exercise has been shown to achieve the same level of symptom relief as joint replacement surgery."

Osteoarthritis has been, if not ignored, then certainly underestimated

The medical research charity is concerned that while rising rates of obesity have been linked to a number of serious disorders and health concerns, the risk of potentially crippling osteoarthritis has been, if not ignored, then certainly under-estimated.

The true impact of obesity in the development of knee osteoarthritis has only recently become clear, said the charity, pointing to a study which revealed that at the most extreme, very obese people with a body mass index (BMI) of 36 or more have a 14-fold higher risk of knee osteoarthritis compared with those in the healthy BMI range.

Professor Silman warns there is a real concern that unless rocketing rates of obesity are tackled, the numbers of people needing joint replacement surgery would soar, which would have a considerable impact on the NHS.

"There are two major risk factors for developing osteoarthritis – ageing and obesity – and as both these factors are on the rise in the UK, it’s an obvious prediction to make that the outcome could be a massive cost to the health service," he adds.

Joint replacements are more likely to fail earlier in obese patients, and the heavier the patient the less likely it is that surgery will bring about an improvement in symptoms.

Very obese women are 19 times more likely to need knee replacement and four times more likely to need hip replacement surgery compared with women of a healthy weight.

arc's new online report into osteoarthritis and obesity
A series of studies has shown that even modest weight loss and exercise can help to reduce not only pain but also mobility and the ability to perform everyday activities.

Certainly Dean Collier can vouch for the difference exercise and weight loss have made to his quality of life – and to his knee pain. “I feel so much more positive, and I’m planning to carry on exercising and eating healthily – in the hope that I can lose even more weight,” he says.

arc’s report, Osteoarthritis and Obesity, can be accessed on its website at www.arc.org.uk or downloaded as a PDF.

Osteoarthritis and obesity is the second in a series of authoritative reports produced by the charity. The first, Complementary and alternative medicines for the treatment of rheumatoid arthritis, osteoarthritis and fibromyalgia was published earlier this year and is available on the arc website or from head office.

When Jim Dunwoody got to the age of 65 his increasing weight and decreasing fitness levels forced him to take drastic action.

At just 5ft 7ins tall, he weighed in at 16½ stone and he was feeling more and more pain in his left knee. “I was square and squat and I knew I was too heavy for my knees; the pain never stopped me walking but it was constant and nagging,” says Jim, a retired company director from Chipping Campden in Gloucestershire.

He finally decided to take action to lose weight and get fit in the New Year of 2008.

“The main reason was that my brother was found to have cancer of the liver but because it was operated on early it was a success,” he explains. “It was a huge relief but it brought me up sharp. I was 65, in the process of selling my house, my business and my boat; a whole life change. And here was I, coming into official retirement fat and unfit – it was ridiculous.”

Jim started to attend Slimmers’ World. “It was a catalyst for me – having to be weighed publicly every week and everyone in the group knowing if you have gained or lost pounds was my incentive. I found it worked very well for me.”

At the same time Jim started to exercise, starting at three miles a day, up to his current regime of eight brisk miles a day, at 5am every morning.

A year and a half after starting his weight loss and exercise regime, Jim has lost four stone and is now a trim 12½ stone. “It’s been terrific,” he says. “Losing weight and exercising worked well together – the one encouraged the other. As I lost weight the pain in my knee gradually reduced, and it’s practically gone now.

“I used to have a problem walking, especially going downhill, but now I’m pain-free. I’m also fitter than I’ve been for many years and have more energy – and my blood pressure has gone back to normal.”

There has been another benefit from his new healthier lifestyle – he has stopped snoring much to the delight of his wife. He adds: “I was a walking nightmare – now I’m a walking role model!”
**FATIGUE AND RA**

**Too tired to care**

Fatigue in rheumatoid arthritis, once ignored by the medical profession, is now something of a hot topic in research circles, with arc leading the way. Jane Tadman reports.

For 30 years Bev Davis has been living with the debilitating effects of rheumatoid arthritis (RA) – and particularly with the intense fatigue that is part of the condition.

“It’s absolutely draining, to the extent that all you want to do is to lie down,” says Bev, now 48. “Even reading is too much. You become mentally and physically blocked, and it’s all you can do to lie on the sofa and watch the telly. It brings you down so much because you can’t plan to do things.”

For Bev the fatigue is worse when her RA is in flare, and she has learned over the years to try to pre-empt its onset. “What I try to do is to pace and plan my day, and to allow myself rest periods. I try and conserve energy if I know I’m going to be doing something,” she explains.

Bev, from Portishead, near Bristol, had the worst time of it when her three now grown-up children were young. “Just taking them to school or doing the shopping was exhausting. Now they’re grown up it’s slightly easier to plan my life, but for 20 years just the thought of going out in the evening with friends was impossible. I’d make the tea then flop down on the sofa and that would be it. Fatigue has had a huge impact on my life and on my social life. I’ve talked about it with other people with RA and we have a term for when the fatigue is really bad – we call them ‘wipe-out days’ when you simply cannot do what you planned to do.”

**Attitudes are changing**

Attitudes to fatigue are now changing, partly because arc is taking it very seriously indeed. At a special workshop convened by the charity last year, experts from a range of related areas met to discuss the need to know more about fatigue in RA and as a result a taskforce has been drawn up looking at how it can be dealt with more effectively.

“A recent survey of rheumatology nurses showed that they want to treat fatigue better but the problem is they don’t know how to measure fatigue or how to manage it,” says Professor Hewlett, who is heading the arc taskforce. “What we are hoping to achieve through the taskforce is to identify and review the evidence for existing types of treatment and management of RA fatigue and then summarise the key questions that should be addressed by future research.”

**What causes fatigue in RA?**

One question that is bound to feature prominently is what causes fatigue in RA, although the answer is of course more complicated than the question. It’s likely that a combination of factors is responsible:
biochemical, as a result of inflammation and/or anaemia; physiological, due to muscle weakening or poor sleep; and psychological, linked to stress, anxiety, and depression.

“The causes might differ from patient to patient, but also between patients over time, so that one week it could be caused by inflammation, and another week it could be down to your psychological state of mind,” says Sarah Hewlett.

“Some of our research is identifying different types of fatigue which may provide us with some knowledge of the different pathways of fatigue and different predictors. So a short-term predictor might be how active your disease is today, and how well you slept; whilst in the long term, fatigue might be related to joint damage or a history of depression. Once we find out, we can develop some appropriate ways of dealing with it.”

**Managing fatigue better**

Experts stress that the aspiration is currently to manage fatigue, not to get rid of it entirely. Depending on the causes of an individual's fatigue, various options are available; drugs such as anti-TNF therapy drastically reduce fatigue in many patients with RA (but not back to normal levels and they are not a recommended treatment for fatigue), exercise, and cognitive behavioural therapy (CBT), which addresses thoughts and feelings and their link to behaviour, may be helpful. An arc-funded clinical trial in Bristol is currently looking at whether a six-week self-management course involving CBT is more helpful to RA patients than just handing them an arc leaflet on looking after joints and managing fatigue.

“During the course we talk to patients about difficulties they might have sleeping, which is a big issue for some people but not others, about stress, and we help them with achievable goal-setting and get them to list activities such as ‘drainers’ and ‘energisers’ – activities that tire them or give them energy,” explains research associate Celia Almeida. “Some activities, such as exercise or gardening, fall into both camps, depending on how people are feeling. Patients are encouraged to channel their frustration and anger into positive action, learn to establish some ‘me time,’ and how to set priorities for the limited amount of energy they have.”

The clinical trial is not due to finish until the end of the year, and results will not be published until next year, but Ms Almeida says that so far the informal comments from the patients receiving CBT has been positive. “There’s a sense that the course has been life-changing for a lot of people.”

Part of the benefit, she believes, is that the course acknowledges that fatigue is important to patients and is a major factor in RA, hitherto under-recognised by rheumatologists. However, according to Sarah Hewlett, that view is now becoming outdated.

**Taking it seriously**

“We’re getting there in terms of fatigue being taken seriously, and this has largely been driven by patients,” she acknowledges. The fact that an international consensus has now been reached that fatigue should now be measured in all RA clinical trials is a major step in the right direction, as unless ways are found to accurately measure fatigue it cannot be adequately dealt with.

Bev Davis agrees that rheumatologists are now more understanding of fatigue than in the early years of her disease. For the past eight years she has been a patient partner at Bristol Royal Infirmary, and her role is to give the patient’s view on all research projects that are being set up. She is delighted that fatigue in RA is being addressed. “It’s so debilitating,” she says. “It’s hard to explain to people that you’re not just being lazy, and to say to them: ‘hang on, it’s the illness; it’s not me.’”

arc's fatigue and RA taskforce is due to report back at the end of the year. Arthritis Today will bring readers news of the next steps.

carc's fatigue and arthritis information sheet is available from head office or at www.arc.org.uk
High Street or Online – compare our prices!

Glucosamine 1000mg

Our lowest priced ultra strength Glucosamine ever! And don’t think we’ve cut down on the quality – we still use only the highest pharmaceutical grade ingredients to ensure you receive all the benefits of this superior formulation. So don’t get ripped-off by outrageous High Street prices or pay more than you need to online! Order direct from EasyVit and you’ll receive nearly a year’s supply of 1000mg Glucosamine 2KCl for an amazingly low price.

Plus don’t miss these other great EasyVit deals:

Max Strength 1500mg Gluc 2KCl 360 £12.99
Omega 3 Fish Oil 500mg 360 £4.99
Omega 3 Fish Oil 1000mg 360 £8.99
Cod Liver Oil 570mg 360 £4.99
Ginkgo Biloba 6000mg 360 £9.44
Evening Primrose Oil 2000mg 360 £14.99
Odourless Garlic 2mg 360 £3.49

Return to: EasyVit, Freepost JE723, St.Helier, Jersey JE1 1AF

P&P £1.99
TOTAL £1.99

i enclose a cheque/PO for £ made payable to EasyVit
Please charge my VISA/MASTERCARD/MAESTRO/SWITCH/DELTA
Signature: ___________________ Expiry: ________ Issue No. ________ (Switch)
Card No: ___________________________ Postcode: __________
Mrs/Mr/Ms: ___________________________ Address: ___________________________
Tel: ___________________________ DOB: ___________________________

Please tick if you do not wish to receive information about future promotions. Your details will not be shared with any third party. *By supplying your e-mail address you are consenting for us to contact you via e-mail.

Call 24 hours a day, 7 days a week quoting offer code AT01 on

0845 130 4111 or order online at www.easyvit.com

Call cost the price of a local call.

E.Vit_AToday 14/9/09 16:55 Page 1
ArthTodayAUTUMN09.indd 14 17/9/09 12:28:00
Anti-TNF therapy has changed the lives of many people with inflammatory arthritis. For Jan Williams, the drug helped her discover a previously untapped talent for art — and set her on a fulfilling new life. Jane Tadman reports.

For Jan Williams, gaining a First Class Honours degree in Fine Art earlier this year was the happy ending to her incredible story of triumph over illness and disability. For years Jan, from Cardiff, was crippled by severe psoriatic arthritis. Frequently in and out of a wheelchair, she struggled to bring up her five children, and had to give up work in her 30s when her condition worsened. For several years her arthritis was not properly controlled and she had to live with constant pain and restricted mobility. In particular her hands were inflamed and deformed by the devastating effects of the disease.

But six years ago her life turned round. A new drug therapy transformed her life, enabling her to pick up a paintbrush for the first time since leaving school and enrol on a degree course in Fine Art at Cardiff School of Art and Design.

Jan’s salvation was a drug called infliximab, part of a new class of drugs called anti-TNF therapy. The drugs were pioneered and developed by the Arthritis Research Campaign whose Cardiff branch Jan has been a member of for several years. The drugs also known as ‘biologicals’, block the action of a protein called tumour necrosis factor (TNF), excessive amounts of which cause inflammation when they build up in the joints and bloodstream. Although not a cure, they control symptoms in many patients to such an extent that they can return to a near-normal life.

Now Jan’s hard work and artistic flair has been rewarded after she gained a First Class honours degree — and in the same week one of her paintings of her studio was selected from amongst all final year painting students for a £500 prize by the National Museum Wales. Her painting is now hanging at the Cardiff School of Art and Design Howard Gardens campus.

“My hands are quite twisted and deformed by arthritis so I wore gloves at my art school interview because I didn’t want to be treated differently,” says Jan. “The past three years have been brilliant. Going to art school and winning this prize has been a wonderful experience, but if I hadn’t had arthritis I would never have done it. Infliximab has made a complete difference to my life and enabled me to do things I didn’t know I was capable of.”

Jan was encouraged to take up the Fine Art degree by her consultant at University of Wales Hospital, Dr Sharon Jones, to boost her self-esteem, which was low after years of illness.

“I was inspired to do Fine Art through the stories of the Great Masters such as Renoir, Klee and Dufy, all of whom produced great and enduring works of art despite suffering crippling illnesses like mine,” explains Jan. “I also wanted to study art because I felt it would be a way for me to fight back and restore my self-esteem and independence.”

Jan Williams, centre, with Mike Tooby from National Museum Wales and Professor Gaynor Kavanagh, Dean of Cardiff School of Art and Design
ANTI-TNF THERAPY

Although she had not done any art since junior school, Jan sailed through the access course before applying to art school where she has specialised in painting interior scenes in oil on board and canvas.

In a way, gaining a degree has been the beginning rather than the end of her story because she is now studying for a Masters in Fine Art, and as a result of winning the prize she has been asked to produce paintings to hang in the rheumatology department at the University of Wales Hospital where she is a patient.

Director of learning and programmes Professor Mike Tooby, who selected Jan’s painting to win, said he was touched by the simplicity of her painting. “The one I selected for the prize was one of a group that Jan had painted of her studio. They were very beautifully achieved and very delicately judged,” he says. “There was a very clever use of light that filled the space, and crucially, the studio was empty – in contrast to many degree show paintings which tend to be very busy. In retrospect, now I know a bit more about Jan and her situation it makes the delicacy and light in her paintings really touching.”

Fred Johnson, area appeals manager for the Arthritis Research Campaign in South Wales, said: “Jan’s achievement is an inspiring one, which will help other people with severe arthritis to realise that the outlook for them is more positive than ever before. We are very proud of anti-TNF therapy as it has truly revolutionised treatment for millions of people with inflammatory arthritis not just in the UK but around the world.”

Anti-TNF therapy, developed by scientists at arc’s Kennedy Institute in London, is effective in many different types of severe inflammatory arthritis, including rheumatoid, psoriatic, juvenile idiopathic, and ankylosing spondylitis.

The therapy has generated arc more than £30m in royalty payments over the past nine years, and two new anti-TNF drugs, certolizumab pegol and golimumab, should soon be licensed for use in the UK.
When it comes to osteoporosis research, there are only three centres in the world rated higher than Sheffield University – the University of California, Harvard and Yale in the US – so it’s in exalted company.

Sheffield is unusual in that its clinical research spans bone diseases from the very young to the very old, encompassing not just osteoporosis but also the childhood form of brittle bone disease (osteogenesis imperfecta) and bone cancers.

Its clinical research, widely supported by arc in recent years, is underpinned by a basic biomedical research, which has now been brought together in a single unit and involving five departments within the medical school. The Mellanby Centre was opened earlier this year by two former alumni of the university renowned for their glittering careers in bone biology research, Professors Jack Martin and Graham Russell.

While the Mellanby Centre, with its labs and high-tech equipment, will concentrate very much on basic science, Professor Peter Croucher, joint centre director with Professor Richard Eastell, stresses that they want to develop new approaches to treating bone diseases, and to translate research discoveries via the new National Institute for Health Research-funded Biomedical Research Unit for Bone at the Northern General Hospital in the north of the city.

“Two of our main aims are to translate advances in research into benefits for patients, and to promote the profile of skeletal research in the UK,” he says.

“There are many good groups of people working in many universities, but the advantage of bringing them together under one roof is that they can talk to each other and share ideas.

“We want to bring together a lot of people with interests not just in arthritis and bone disease, but also in children’s bone diseases and bone cancers, and to try and learn the lesson from one disease and apply it to another. Sheffield is very strong on the bone cancer side and there are things we are doing in cancer research that can be applied to osteoporosis and osteoarthritis – there is a lot of potential for cross fertilisation, and we would hope that would be of interest to arc in the future.”

Three researchers at the medical school are already receiving funding from arc in pursuing very different research agendas. Dr Alison Gartland, lecturer in bone biology, is now based at the Mellanby Centre, and has a new project grant to investigate bone and cartilage loss in inflammatory arthritis.

**Special molecules in joints**

Currently, RA therapies designed to combat inflammation in RA aren’t always effective in all patients and can have serious side effects. These drugs typically block the inflammatory chemicals that destroy joint tissue but at the same time also shut off the body’s ability to fight infection. New targets and treatments are needed that utilise a more subtle approach to the problem and understanding the detail of the molecular mechanisms involved in inflammation should help to achieve this.

Dr Gartland explains: “We’re looking at a receptor called P2X7 that’s just one of hundreds of receptors present on the surface of cells all over the body. It’s present on bone and cartilage cells and may be important in regulating the joint tissue destruction that occurs in rheumatoid arthritis (RA).

“Receptors are special responsive areas that can be activated by chemical signals. Once activated, the cell starts to...
produce molecules that affect the way the surrounding tissue works. It’s a bit like pressing a button and switching on a production line inside the cell. In the case of P2X7, we know that it’s involved in inflammation but we don’t know what it does to the actual cartilage in a joint. We’re investigating how this receptor works in healthy joints so that we know what aspects of its activity are important for normal function.

**Genetic differences affect bone loss**

The P2X7 receptor also exists in different forms, or ‘polymorphisms’, depending on its genetic make-up. Dr Gartland and co-workers have found that in women with the normal fully-functioning P2X7, bone loss is less severe than in women with the polymorphic receptors.

“This suggests that the severity of disease may be linked to the polymorphisms,” she says. “If patients with polymorphisms experience more severe bone loss, we could screen for this genetic difference. Individuals who are positive for these polymorphisms could then be given treatments to prevent or slow bone loss at a much earlier stage, before irreversible damage has occurred.”

The test would be part of a profile of prognostic tests to help assess risk of disease development. Therapies are already available to inhibit these receptors and this test may be useful to predict which patients will, or won’t, respond well to therapy, and direct treatment accordingly.

As well as aiding prognosis and disease management strategies, the results of this research should benefit other musculoskeletal diseases such as osteoporosis and osteoarthritis.

**Epigenetics: a new approach to disease management**

The development of anti-TNF drugs represents a considerable breakthrough in terms of arthritis therapy. Tumour necrosis factor, or TNF, is an inflammatory chemical that’s normally produced to protect the healthy body against infection. However, in RA, TNF production is continuous, and chronic pain, swelling, and eventually joint damage results.

Professor Gerry Wilson, head of academic rheumatology in the School of Medicine and Biomedical Sciences, is investigating how ‘epigenetics’ influences TNF production.

**Switching genes on and off**

Epigenetics (meaning ‘over’ or ‘above’ genetics) is a rapidly advancing area of research that is changing the way we understand disease processes. We may be born with a set of genes that programme our bodies but the activity of these genes is influenced by epigenetic factors.

These factors often work as simple on/off switch mechanisms: all our cells carry the same genes but only specific ones are ‘active’ or expressed where they are needed. Pancreatic cells, for example, produce insulin but kidney cells don’t. The insulin producing genes are switched on in the pancreas but switched off in the kidney.

Dr Wilson comments: “Epigenetics plays an important role in the development of human disease, including arthritis and cancer. In RA it may influence how severe the disease is and how patients respond to treatment. But the system is very complex – there are hundreds of thousands of epigenetic variations that switch genes on and off in different combinations. If we can find out how epigenetics affects the production of chemicals like TNF we might be able to devise new therapies to regulate this, and dampen down the aggressive nature of the disease.”

**Predicting disease risk**

Epigenetic markers can be measured and by comparing them in healthy individuals and individuals with RA, the ones responsible for different effects, like the overproduction of inflammatory chemicals, can be identified.

“We’ve already found a small difference in one of these markers that is linked to the production of IL-6, a major inflammatory molecule,” says Dr Wilson, “and increased epigenetic markers are associated with higher TNF production.”

The epigenetic marks on the TNF gene change with age as does the risk of developing RA. Could this marker be a predictor for RA risk or severity? If so, this could be a very useful clinical test to help disease prognosis, guide treatment, and predict treatment outcomes.

**A ‘virtual tendon’**

Tendons are tough, flexible pieces of tissue that attach muscle to joints and convert muscle force into skeletal
movement. Damaged tendons lose their stretch and flexibility causing considerable pain and immobility. The healing process is difficult and lengthy because the underlying tendon fibres don’t always repair properly and patient quality of life is reduced.

Research aimed at improving tendon repair is difficult because studies rely on cell cultures grown in laboratory conditions and these don’t model the real life situation very well. However, a revolutionary new research tool is about to change the way that we view tendon repair.

Dr Dawn Walker, Research Councils UK Fellow and lecturer in the Department of Computer Science, is attempting to create a ‘virtual tendon’ using sophisticated computer simulation technology, with funding from an arc project grant.

Computer simulation – a valuable model

Dr Walker, a physicist by training, has extensive experience in the application of computer simulation technology to living tissue systems. She has successfully developed models for other tissue types and will adapt some of the software from these projects for use in the current project.

“Tendon isn’t the most popular tissue to research,” she says. “In the media, the heart or brain are much more interesting areas of development. The ‘virtual heart’ project hit the headlines some years ago and is now proving to be an extremely valuable model for cardiac research projects. However, tendon problems are very common and cause immense suffering – we really need to address this disease area and improve predictive outcomes and treatment methods.”

Modelling tendon damage

The project combines established knowledge of tendon structure and tissue dynamics with information from current laboratory research projects studying the effects of damage and repair in living tendon cells.

“All the data is integrated into the programme,” says Dr Walker. “We know how tendon is constructed in healthy tissue and what happens to it when it’s subjected to the stresses and strains of exercise, overwork and injury. It’s important that we develop the model by testing it at every stage against real laboratory data to be sure that our model mimics the real life situation and is relevant to patient outcomes.”

Once the model is up and running, any combination of parameters can be altered to represent different patient types and tissue damage, and the outcomes assessed. Eventually, the project aims to use the virtual tendon to inform therapy options and assess outcomes.

Special Travel Offers

German Christmas Markets
Departs Nov/Dec 2009
4 DAYS FROM £99PP

INCLUDES: Excursion to 2 Rhineland Christmas Markets • Hotel accommodation for 3 nights • Breakfast at the hotel • Visit to a wine warehouse (time permitting) • Return coach travel from your local area • Return ferry/ Eurotunnel crossings • Full services of a Phoenix Holidays Tour Manager in resort

BROCHURE HOTLINE: 01789 261 112
Order Your FREE brochure now and look forward to the holiday of a lifetime

Return address: arc Travel Club, Packwood House, Guild Street, Stratford-upon-Avon CV37 8AP

The Rules of Buying a Stairlift:

Make sure it comes with a 24 hour call out service.

• Regional engineers on call 365 days a year
• Our lowest price for 10 years
• 2 years’ free servicing and warranty

0800 715 372 stannahstairlifts.co.uk

Stannah
The Stairlift People
I’ve been using Simple Way shoes for over 20 years and I think they’re fantastic! I don’t know how fashionable they are but they’re very comfy and they’re also a very nice friendly company. Write to Simple Way, The Old Stables, 87 Derwent Street, Chopwell, Newcastle-Upon-Tyne, NE17 7HZ or go to their website at www.simpleway.co.uk or phone 01207 566100.

Mrs Quilty, South East England

Editor’s note: Thank you to all the many readers who wrote in suggesting comfy shoes. We have also had various letters to suggest discussing shoes on prescription with your GP.

Vitamin B12 for mouth ulcers?

Having read the Questions and Answers section in the Summer 2009 edition, I wonder if I may be able to suggest a potential solution to a question posed by Marilyn Masters from Southampton regarding troublesome mouth ulcers. I have also experienced problems with recurrent mouth ulcers over the past two years since, it seems, commencing methotrexate. I am on a smaller dose of 7.5mg once a week, but they still occurred, sometimes 2 or 3 at a time and lasting up to 2 weeks at a time making eating extremely painful. I sought advice from my dentist and rheumatology team, but to no avail apart from increasing my folic acid to daily except on the methotrexate day. I then read in a woman’s magazine about Vitamin B12 being a potential solution. I have been taking 25mcg daily for the last six months and it has worked wonders. When I stopped it for a month out of curiosity, the ulcers came back, so needless to say, I will not be stopping them again. There are different dosages available, but I have found this small dose successful.

Mrs Wendy Harrison, London

A comfortable night’s rest...

I have had rheumatoid arthritis for over 25 years with particular discomfort with my feet (swelling, deformed toes etc.). Recently I have found shoes supplied by Hotter to be absolute bliss. Their sizes are from 3-9 (6-12 for men), most in an extra wide fit if needed, are made of lovely soft leather and come in really fashionable designs; order over the internet and they are delivered within 5-7 days, sometimes sooner. They are not cheap, but you get quality and comfort. Also, Cosyfeet do an extensive range (a little more conventionally styled) and, sometimes, M&S Foot Glove range have proved suitable.

Anthea Hall, Stourbridge, West Midlands

Help to find comfy shoes

Please tell the lady looking for shoes to try “Hotter” shoes at www.hotter.com 0800 525 893 for a catalogue. I am about to order another pair as they are so comfortable and reasonably stylish, often coming in extra wide. There are some shops also around the country.

Mary Briscoe, Pinner, Middlesex

Opening jars made easy

In your summer issue a reader had difficulty opening jars. Lakeland have a catalogue with a whole range of items including two products for opening jars which I use. Go to http://www.lakeland.co.uk/ or call: 01539 488 100

S Wrigley, Oldham, Lancashire

Write in with your writing aids

If any of your readers, like me, have found writing in a painful experience, I can recommend a website called www.simplyhealthstore.co.uk On the section ‘Staying Active’ there is a section on reading and writing aids, including easy-grip pens. I would be interested to hear of any other useful aids to help me with my correspondence.

J.A. Adamson, Worthing, West Sussex

Send your hints to Jane Tadman, arc, St Mary’s Gate, Chesterfield, Derbyshire S41 7TD.
The Most Comfortable Bra You’ll Ever Wear

OR YOUR MONEY BACK GUARANTEED

The secret of The Comfort Bra is in the material. It’s so soft you’ll soon forget you are wearing one. This special blend of Nylon and Spandex will adapt and change with every body movement. The comfortably wide, soft touch shoulder straps will provide constant support to prevent sagging and the easy-to-use front-hook fasteners make it one of the easiest bras to put on or take off you’ll ever own. No cup sizes – fits beautifully from A-DD, available in black, white or beige and is 100% machine washable.

| Comfortable wide shoulder straps | Easy-to-use front-hook fasteners | Expandable Spandex & Nylon | Easily fits A-DD | Soft and silky smooth | So comfy you’ll sleep in it! | Maximum breast support | Available in White, Black or Beige |

Satisfied Customers:
- “I feel I must join other satisfied customers in praise of your Comfort Bra. I have Osteoporosis and so have a slightly curved back, and have found it impossible to find a bra anywhere near comfortable for years. Congratulations and thanks” Mrs P. B., Brighton
- “The most comfortable bra I’ve ever worn” Ms L. M., Ayr
- “…so comfy I even sleep in one” Mrs Y. P., Downham Market
- “it’s so soft, smooth and sensual” Miss J. T., Stoke-on-Trent
- “I can’t believe it has taken me 45 years of painful, ill-fitting bras before I tried your Comfort Bra… God bless you, I’ll never wear any other kind of bra again” Mrs I. G., Blandford Forum

BUY TWO BRAS GET ONE FREE!

| Easy to Fasten Front Hooks | Comfortable Wide Back | Wide Comfort Straps |

Please send me one Comfort Bra for just £19.95 + £3.95 insured p&p.
BUY 2 GET 1 FREE – order two Comfort Bras for just £39.90 + £3.95 insured p&p – get a third FREE!

Lines Open 8am to 9pm Mon-Fri 9am to 8pm Sat-Sun
CALL 0871 224 0777
AND ASK FOR DEPT 239CB

Send to: Windsor Products, Dept 239CB, Emery House, Greatbridge Road, Romney, Hants SO51 0AD

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

INDICATE QUANTITY ORDERED UNDER SIZE & COLOUR:

<table>
<thead>
<tr>
<th>Colour</th>
<th>SM</th>
<th>32-34</th>
<th>34-36</th>
<th>36-38</th>
<th>38-40</th>
<th>40-42</th>
<th>42-44</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beige</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I enclose a cheque/PO for £______ payable to Windsor Products.
Please charge my VISA/MASTER/SWITCH/Delta/Maestro.

Signature

Visit www.windsorproducts.com/239CB

© 2009. Blakefield LLP, Hamilton House, 2 Station Road, Epping CM16 4HA

BUY TWO BRAS
GET ONE FREE!

OR YOUR MONEY BACK
GUARANTEED
DOES SITTING MAKE YOUR BACK ACHE?

The MEDesign Backfriend converts a seat which is bad for your back into one which gives you comfort. And that is what you are looking for.

600,000 people in 35+ countries use the MEDesign® Backfriend®.

• Light and portable, for use in any seat
• Height adjustable back
• Available in 7 colours
• 14 day home trial • 12 month guarantee
• Made by MEDesign® Ltd in the UK

CALL us on 01704 542373 or E-MAIL to at@medesign.co.uk

POST the coupon to MEDesign Ltd, FREEPOST, Southport, PR8 1BR

NAME:
ADDRESS:
POST CODE:

MEDISEN®

FREE TRIAL. FREE FITTING.

Rediscover the pleasure of soaking in a deep, war, relaxing bath, with Bath-Knight; the easier way to get in and out of the bath.

No mess. No clutter. The Bath-Knight Bath Lift can be installed in less than 3 hours and fits neatly in any bathroom.

90,000 satisfied customers tells you all you need to know. They love it and we’re sure you’ll love it too.

In fact, we’re so confident, We’ll even offer a free trial and free fitting. No obligation. No pressure.

Once you’ve tried the Bath-Knight, you’ll never want to be without it. Call today.

BKAT309

FREEPHONE 0800 1 690 690

FREE TRIAL. FREE FITTING.

• Free home trial
• Rent or buy
• Direct from the manufacturer
• Next day installation available
• Slimline fold-away design
• Safe and reliable
• Easy to use controls

CALL US NOW ON FREEPHONE

0800 19 19 19

FOR YOUR FREE INFORMATION PACK

GIVE YOUR LIFE A LIFT®

ACORN STAIRLIFTS
New national research centre initiative
Dr David Walsh, Academic Rheumatology, University of Nottingham, Clinical Sciences Building, City Hospital, Nottingham; The Arthritis Research Campaign Pain Centre, £2.5m, 60 months.

Programme grants
Dr Robert Cooper, Rheumatic Diseases Centre, Salford Royal Foundation NHS Trust, Clinical Sciences Building, Salford; what makes muscles become inflamed in myositis, and how can we best treat this inflammation? £453,715, 60 months.
Professor Tony Day, Faculty of Life Sciences, University of Manchester, Michael Smith Building, Manchester; further investigations into the protective effects of the molecule TSG-6 in arthritis – a basis for potential new treatments, £331,072, 60 months.
Professor Paul Emery, Section of Musculoskeletal Disease, University of Leeds, Chapel Allerton Hospital, Leeds; a more accurate classification of early arthritis to predict and prevent progression and to improve treatment selection and outcome for rheumatoid arthritis, £456,188, 48 months.
Professor Sally Roberts, Centre for Musculoskeletal Disease, University of Leeds, Chapel Allerton Hospital, Leeds; can the doses of tumour necrosis factor inhibitors be tapered in patients with rheumatoid arthritis who have responded well? £436,485, 36 months.
Dr Laura Coates, Section of Musculoskeletal Disease, University of Leeds, Leeds; controlling inflammation to improve the outcome of people with psoriatic arthritis, £515,736, 27 months.
Dr Anthony Redmond, Section of Musculoskeletal Disease, University of Leeds, Leeds; the effect of simple cushioned insoles on foot symptoms associated with scleroderma, £199,199, 35 months.
Dr Kimme Hyrich, arc Epidemiology Unit, University of Manchester, Manchester; safety and effectiveness of biologic treatments in children with rheumatistic disease, £519,684, 60 months.
Dr Duncan Porter, Department of Rheumatology, Gartnaval General Hospital, Glasgow; which biologic drug should patients with RA receive first? £993,924, 36 months.
Professor Mike Doherty, Academic Rheumatology, University of Nottingham, Nottingham; development of high quality of gout care: a randomised controlled trial Phase 1: preparatory work and proof of concept, £212,000, 24 months.
Professor Stuart Ralston, Rheumatic Diseases Unit, University of Edinburgh, Molecular Medicine Centre, Western General Hospital, Edinburgh; a long term trial of treatment in Paget’s disease, £94,340, 24 months.
Dr Jennifer Milner, Musculoskeletal Research Group, Newcastle University, Newcastle; the role of the ‘biological scissor’ matriptase in cartilage destruction – a new target for the treatment of osteoarthritis? £366,204, 60 months.
Dr Mariola Kurowska-Stolarska, Division of Immunology, Infection & Inflammation, University of Glasgow, Glasgow; a newly-discovered class of molecules; the micro RNAs, and their role in rheumatoid arthritis, £400,000, 60 months.
Dr Isabel Orris, Department of Cell and Development Biology, University College London; a greater understanding of the role of the ATP molecule in the formation and destruction of bone – new therapeutic possibilities for bone disorders such as osteoporosis, £400,000, 60 months.
Dr Helen Knowles, Nuffield Department of Orthopaedic Surgery, Botnar Research Centre, University of Oxford, Oxford; investigating bone destruction in rheumatoid arthritis, £360,561, 60 months.
Dr James Whiteford, Department of Microvascular Pharmacology, William Harvey Research Institute, Barts & The London, London; investigating the molecules that stimulate immune cell movement and new blood vessel formation in rheumatoid arthritis, £400,000, 60 months.

Clinical PhD
Professor Cos Pitzalis, Centre for Experimental Medicine & Rheumatology, Queen Mary University of London, The William Harvey Research Institute, John Vane Science Centre, London; is melanocortin receptor type 3 a new target for treatment of rheumatoid arthritis? £224,941, 36 months.

Experimental medicine grant
Professor John Isaacs, Musculoskeletal Research Group, Newcastle University, Newcastle; switching off rheumatoid arthritis by targeting T-cells, £451,292, 30 months.

Foundation fellowships
Mr Graham Wright, Centre for Rheumatology Research, University College London, London; can the ‘smart’ T cells that control the immune response be manipulated to treat rheumatoid arthritis? £230,833, 36 months.
Dr Claire Goodchild, Department of Psychology, King’s College London, London; developing a new psychological intervention to improve physical activity and sleep in rheumatoid arthritis, £165,217, 24 months.
Dr Sarah Snelling, Nuffield Department of Orthopaedics, Rheumatology & Musculoskeletal Sciences, Nuffield Orthopaedic Centre, University of Oxford; understanding the role of the protein Dkk3 in the development and severity of osteoarthritis, £202,250, 36 months.

Clinical trials
Dr Simon Bowman, Section of Musculoskeletal Disease, University of Leeds, Leeds; trial of rituximab (anti-B-cell therapy) in Sjögren’s syndrome (TRACTISS), £945,412, 60 months.
Dr David L Scott, Academic Department of Rheumatology, GKT School of Medicine, King’s College London, London; can the doses of tumour necrosis factor inhibitors be tapered in patients with rheumatoid arthritis who have responded well? £436,485, 36 months.
Dr Laura Coates, Section of Musculoskeletal Disease, University of Leeds, Leeds; controlling inflammation to improve the outcome of people with psoriatic arthritis, £515,736, 27 months.
Dr Anthony Redmond, Section of Musculoskeletal Disease, University of Leeds, Leeds; the effect of simple cushioned insoles on foot symptoms associated with scleroderma, £199,199, 35 months.
Dr Kimme Hyrich, arc Epidemiology Unit, University of Manchester, Manchester; safety and effectiveness of biologic treatments in children with rheumatic disease, £519,684, 60 months.
Dr Duncan Porter, Department of Rheumatology, Gartnaval General Hospital, Glasgow; which biologic drug should patients with RA receive first? £993,924, 36 months.
Professor Mike Doherty, Academic Rheumatology, University of Nottingham, Nottingham; development of high quality of gout care: a randomised controlled trial Phase 1: preparatory work and proof of concept, £212,000, 24 months.
Professor Stuart Ralston, Rheumatic Diseases Unit, University of Edinburgh, Molecular Medicine Centre, Western General Hospital, Edinburgh; a long term trial of treatment in Paget’s disease, £94,340, 24 months.
Dr Jennifer Milner, Musculoskeletal Research Group, Newcastle University, Newcastle; the role of the ‘biological scissor’ matriptase in cartilage destruction – a new target for the treatment of osteoarthritis? £366,204, 60 months.
Dr Mariola Kurowska-Stolarska, Division of Immunology, Infection & Inflammation, University of Glasgow, Glasgow; a newly-discovered class of molecules; the micro RNAs, and their role in rheumatoid arthritis, £400,000, 60 months.
Dr Isabel Orris, Department of Cell and Development Biology, University College London; a greater understanding of the role of the ATP molecule in the formation and destruction of bone – new therapeutic possibilities for bone disorders such as osteoporosis, £400,000, 60 months.
Dr Helen Knowles, Nuffield Department of Orthopaedic Surgery, Botnar Research Centre, University of Oxford, Oxford; investigating bone destruction in rheumatoid arthritis, £360,561, 60 months.
Dr James Whiteford, Department of Microvascular Pharmacology, William Harvey Research Institute, Barts & The London, London; investigating the molecules that stimulate immune cell movement and new blood vessel formation in rheumatoid arthritis, £400,000, 60 months.

Clinical PhD
Professor Cos Pitzalis, Centre for Experimental Medicine & Rheumatology, Queen Mary University of London, The William Harvey Research Institute, John Vane Science Centre, London; is melanocortin receptor type 3 a new target for treatment of rheumatoid arthritis? £224,941, 36 months.

Equipment grant
Dr Debbie Turner, School of Health & Social Care, Glasgow Caledonian University, Glasgow; an ultrasound machine to aid the understanding of foot and ankle pain in rheumatoid arthritis, £39,377, 12 months.

Career development fellowships
Dr Jennifer Milner, Musculoskeletal Research Group, Newcastle University, Newcastle; the role of the ‘biological scissor’ matriptase in cartilage destruction – a new target for the treatment of osteoarthritis? £366,204, 60 months.
Dr Mariola Kurowska-Stolarska, Division of Immunology, Infection & Inflammation, University of Glasgow, Glasgow; a newly-discovered class of molecules; the micro RNAs, and their role in rheumatoid arthritis, £400,000, 60 months.
Dr Isabel Orris, Department of Cell and Development Biology, University College London; a greater understanding of the role of the ATP molecule in the formation and destruction of bone – new therapeutic possibilities for bone disorders such as osteoporosis, £400,000, 60 months.
Dr Helen Knowles, Nuffield Department of Orthopaedic Surgery, Botnar Research Centre, University of Oxford, Oxford; investigating bone destruction in rheumatoid arthritis, £360,561, 60 months.
Dr James Whiteford, Department of Microvascular Pharmacology, William Harvey Research Institute, Barts & The London, London; investigating the molecules that stimulate immune cell movement and new blood vessel formation in rheumatoid arthritis, £400,000, 60 months.

Clinical PhD
Professor Cos Pitzalis, Centre for Experimental Medicine & Rheumatology, Queen Mary University of London, The William Harvey Research Institute, John Vane Science Centre, London; is melanocortin receptor type 3 a new target for treatment of rheumatoid arthritis? £224,941, 36 months.

Equipment grant
Dr Debbie Turner, School of Health & Social Care, Glasgow Caledonian University, Glasgow; an ultrasound machine to aid the understanding of foot and ankle pain in rheumatoid arthritis, £39,377, 12 months.
Andrew Amis and Susan Brain explain their work in an ongoing series of questions and answers with arc-funded researchers.

Andrew Amis

What does your work involve?
I run a research group in orthopaedic biomechanics, concentrating on understanding how human joints work, and how to treat them when they are injured or affected by arthritis. As a professor I spend a lot of my time processing paperwork, particularly writing applications for funding for our new project ideas, and then research papers about our results, which are usually published in journals of orthopaedic surgery. I also have a full teaching load, which is mostly teaching engineering students about design and mechanics. An important part of my work is presenting the new findings to conferences for orthopaedic surgeons, to teach them the latest ideas about how to treat damaged joints. That activity involves a lot of international travel and time away.

How long has arc been funding you?
I was first funded by arc as a post-doctoral research fellow in 1977-8, working for Professor Verna Wright in the Rheumatism Research Unit in Leeds. It provided a vital link between being a research student and then getting a permanent job as a lecturer. Soon after that, I got my first project grant and have enjoyed a series of similar grants ever since.

What’s the most important thing you have found out in the past 12 months? And why?
Last year saw the end of a project in which I had a consultant orthopaedic surgeon studying the stability of the patella (the knee cap). He produced a mass of data about its behaviour and the effects of different surgical procedures. We think that this will have a big effect on the understanding and treatment of this very common problem. It is important because the patella sometimes does not move normally, and that can then lead to the joint wearing out.

What do you hope or expect to achieve as a result of your arc funding?
My present arc funding is a project which is studying the fixation of partial knee joint replacements to the bones. If we can design more effective fixations, then surgeons will be more likely to recommend their use, and so that should lead to patients having smaller operations than the total knee joint replacements used most commonly at present, hopefully also leading to better function after the surgery.

What do you do in a typical day?
I spend some days quietly at home, writing research papers, but most often I am at my office organising the research, being called into the lab to offer advice about an experiment, or looking at a computer model of a bone. Other times I may be at a hospital, advising surgeons in the operating theatre about how to use our latest invention, or studying the x-rays later.

What is your greatest research achievement?
I have done a lot of work on the function of knee ligaments, and how best to do the surgery to reconstruct them after they have been ruptured in injuries. As well as studies of their strength and function, I find that I am often asked to lecture about their functional anatomy. I hope that this work, teaching surgeons at a high level, leads to better treatment of their patients.

Why did you choose to do this work?
I have always been fascinated to find out how things work, and so I became an engineer, but then found myself designing aircraft engines for the Vietnam war, and questioned why I was doing that. I happened to meet a PhD student called Tony Unssworth (now an eminent Professor in Durham) who introduced me to his work on joint replacements in Leeds, and that seemed both fascinating and far more worthwhile. I find that this work is more interesting than conventional engineering because of the variability and complexity of our living structures and having materials which can mend themselves when damaged or adapt to the loads which we impose on them. At a different level, it is easy to be motivated by work which one hopes will be for the good of others with crippling disease.

Do you ever think about how your work can help people with arthritis?
Yes, all the time – that’s why we do it!

What would you do if you weren’t a scientist/researcher?
It’s difficult to imagine something where I’m not busy finding things out. Stepping completely outside of that, as a fantasy job, how about following in the footsteps of David Attenborough, being paid to go to interesting places and meeting amazing wildlife?

About Andrew

These relate to the fantasy noted above, because my wife and I love adventurous travel, particularly in deserts and rainforests, meeting the people and animals. My particular love is coral islands and underwater photography – I’d happily sell the house, buy a yacht and sail away to indulge in these things!

Andrew Amis is Professor of Orthopaedic Biomechanics at Imperial College London.
What does your work involve?
Our work involves studies of the biology of nerves that transport pain signals from the inflamed joint to the brain. We know that the activation of a mechanism called TRPV1 on pain-sensitive nerves is involved in arthritis. TRPV1 is stimulated by capsaicin, which is found in extracts from chilli peppers. Capsaicin has been used for many treatments, including rheumatism, in folk medicine. There are also creams available that include capsaicin and are applied to the skin to treat the aches and pains, but they are associated with a burning sensation. Our present project was designed to learn more precisely how capsaicin works to combat the effects of one of the best-known inflammatory substances, TNF-alpha, and in turn work towards the possibility that agents without the burning side-effects of chilli peppers may be useful in the treatment of arthritis. The TRPV1 channel works in a similar manner to a door lock. If the correct key (stimulant) is put into it the lock will open to allow entry of traffic (calcium in this case) into the nerves. This can act to start, amplify or prolong the inflammation and pain. We believe that blocking the actions of TRPV1 will act to combat the pain and hopefully reduce the swelling and tissue damage that occurs during the disease and its flare-ups. Indeed, TRPV1 blockers are in development for use as painkillers. However, we need to do more research to fully understand all the steps involved in the pain and inflammation as we now realise that other TRP channels may also be involved in arthritis.

How long has arc been funding you?
I have been funded via various grants since the early 1990s. Some have enabled me to combine my expertise as a pharmacologist with others such as biochemists and neurochemists.

What’s the most important thing you have found out in the past 12 months? And why?
We have recently obtained evidence that another TRP channel is highly likely to be also involved in mediating pain in arthritis. We need to understand how this new channel impacts on the disease and if interaction with TRPV1 occurs.

What do you hope or expect to achieve as a result of your arc funding?
This group carried out research at a pre-clinical level to learn more about the role of pain-sensitive nerves and their activity in inflammatory models. We aim to provide mechanistic evidence for feasible and relevant targets for new drugs in arthritis.

What do you do in a typical day?
My day starts by using the quiet time before I get to work to read and write. I travel by train and this provides excellent facilities, as long as I get a seat! Once I enter King’s my day revolves around research, teaching and administration. I like teaching and do my best to be an effective administrator by developing systems so that it can be done as swiftly as possible. This allows me to spend as much time as possible with my research group.

What is your greatest research achievement?
During the 1980s, the research team that I was working with were given a powder, an extract from the thyroid tissue of patients with thyroid cancer. I learnt that it had very potent effects on blood flow in tissues that include the joint. This small protein was CGRP. Excitingly, CGRP blockers have been shown to be beneficial in the treatment of migraine and these new drugs are now in the very last stages of clinical trials. Their role in arthritis is still unclear. However, our research with the TRP channels involves CGRP.

Why did you choose to do this work?
I went to university to do a joint biology and chemistry degree, but realised that I seemed to understand and do well in pharmacology. I spent a year of my degree working in a pharmacology department and from then I was ‘hooked’.

Do you ever think about how your work can help people with arthritis?
Severe arthritis, albeit in different forms, has affected several of my family and friends. I have no clinical training but I do have a good understanding of the treatments available and the help that is available from arc. Last year I was involved in trying to help a sufferer understand why their nurse wanted them to take a course of a different drug and what was meant by the literature that she was given to read. I feel strongly that better painkillers are needed. There is an urgent need to learn more about how the joints and nerves work together.

What would you do if you weren’t a scientist/researcher?
I believe that I would still be involved in the university system, either teaching or administrating. Even though the research is the thing that I love to do, I also enjoy some of the different types of challenges that these other parts of my job offer.

About Susan
I enjoy walking, gardening and generally being outdoors.

Susan Brain is Professor of Pharmacology at King’s College London.
I have had arthritis in both knees for nine years. My doctor thinks I am currently a long way off knee replacement but I am concerned about the future. The problem in my case is that no painkillers or anti-inflammatories can be prescribed because I have a hiatus hernia but more seriously, I have a potentially life-threatening allergy to egg and white meat and I also react to paracetamol. Inevitably as time goes on, things will get worse and I have no means of pain control. Should joint replacement be the only option I worry about how the anaesthetic and antibiotics will affect me. Are there any other options for people like me?

M Smith, Liverpool, Merseyside

Oh dear, what a mess. A hiatus hernia can cause indigestion and this can be made worse by anti-inflammatory drugs such as ibuprofen and diclofenac. Other types of painkiller do not usually have this side-effect. If you cannot take paracetamol there are other painkillers your doctor can try, such as codeine and tramadol. It is true that many other painkilling drugs also contain paracetamol but those suggested above do not. In addition, you could try locally applied drugs such as capsaicin, which is an extract of the pepper plant capsicum. Capsaicin works as a counter irritant and can be very effective. However, you have to be careful to wash your hands after using it as it can irritate the eyes and mouth.

As to the knee surgery itself, well it sounds as though it may never happen – the disease does not always progress to the point of knee replacement. Regular knee muscle strengthening exercises can improve the pain and help you walk better. If it does come to an operation I am sure that appropriate precautions about your potential allergies will be taken – this is one of the first questions asked when you are admitted to hospital.

I was interested in your remark on page 16 of the last Arthritis Today, namely that “it is best not to leave this condition [Dupuytren’s] too late.” I had the operation for Dupuytren’s on my left hand some years ago, and since then, I have developed the condition in my right hand. My GP seems keen to delay the operation (this also applied with the left hand), although I am not exactly sure why. He points out that the fingers have not yet bent over very far, which is true, and he makes the point about the need in many cases for the operation to be repeated after a number of years. It may be that my doctor is concerned about possible nerve damage. Is it better to get the Dupuytren’s dealt with quickly, or is it sometimes advisable to wait? (I am in no pain in my right hand, and there is as yet no inconvenience due to fingers pointing at strange angles).

David Bailey, Allestree, Derby

Surgeons will vary with the advice they give on the timing of the operation. No surgeon will want to operate if it is not bothering you but once it becomes troublesome many will argue that it is best not to leave it too late as this only makes the operation more difficult to do and reduces the chance of a successful outcome. Only very occasionally is another operation necessary and nerve damage is only a very rare complication of this operation.

What is your advice regarding swimming the breast stroke following a hip replacement? I have heard various opinions. Personally I do a modified version, ie not the whole movement of the hip/leg. Originally I was informed by my excellent orthopaedic surgeon: “yes, it’s OK to do this” but added: “the physios don’t like it”. I attend aquacise classes regularly and asked the instructor’s advice, but she doesn’t know either. We are both keen to hear your verdict.

Gillian Welton, Ipswich, Suffolk

I think any exercise for people with arthritis is good, and that includes people who have had joint replacements. Swimming is a particularly good exercise as it does not stress your leg joints in the same way as walking or running. However, certain ways of swimming are discouraged. Swimming breaststroke is thought to be bad for the knees, including replacement knees. There is mixed opinion on this topic following hip replacement and some health professionals will advise against it. Indeed, the arc booklet ‘A new hip joint’ discourages breast stroke after the operation. I think it is likely that timing may be the problem. I would advise avoiding breast stroke until the hip is healed and recovered fully – probably about six months after the operation. I would also give the following advice. You need to exercise to keep fit, keep your weight down and to reduce your chance of heart disease. Any form of aerobic exercise (that is, exercise that makes you out of breath) is good, including swimming.
Try and swim so that you don’t feel any pain in the hip and swim a relaxed normal breast stroke without exaggerated movement of the leg joints. Do also keep up with the ‘dry land’ exercises you were taught after the operation.

It sounds like you are a chemist! The whole business of giving a substance such as glucosamine is a little bit mystical. For example, why doesn’t the digestive tract reduce the glucosamine to its component parts? If it were absorbed ‘whole’ then the blood level of this substance would increase after taking it – it does but only a little (and even less gets into the joints).

Mr G R Ketley, Hertfordshire

You have been unlucky to develop two rheumatic conditions. It is not clear how long you have had polymyalgia rheumatica but I would expect that after your symptoms have been controlled by the steroids that a gradual but progressive reduction in dose will be made, aiming to get it down to about 5–7.5mg daily. At this dose there is little risk to you having the operation, although certain precautions should be taken at the time of the surgery. Your surgeon will be worried about two things – your ability to heal after the operation and the chance of infection in the new hip. At the dose of steroids I have suggested I don’t think there will be any great problem with the healing. However, there is probably a very slightly increased risk of infection. Your surgeon may want to counteract this by giving you antibiotics at the time of the operation and for a short while afterwards.

I am not quite sure what you mean by ‘NHS standard instructions’. The evidence of interaction between warfarin and glucosamine is far from clear. What is clear is that if you wish to take glucosamine and chondroitin along with your warfarin you should first tell your doctor. Secondly, if you and your doctor agree that it is acceptable to go ahead you should probably have more frequent blood checks for the first few weeks after you start taking the combination. If any changes in your blood tests occur, you can then make appropriate alteration to the warfarin dose, or stop taking the glucosamine.

Send your questions to Dr Philip Helliwell, 2 St Mary’s Gate, Chesterfield, Derbyshire S41 7TD.
Identifying the factors that influence arthritis development and treatment response is a tough challenge. But thanks to its excellent research base and a healthy research income, including core funding of £2.4m per annum over four years from arc, the dedicated multidisciplinary team of scientists at the arc Epidemiology Unit is unravelling the complexities of disease susceptibility and treatment outcomes and translating its findings into improved patient care.

Why are some people more likely to develop arthritis than others, what common factors influence disease development, and what determines how safe or effective treatments are for different individuals? The answer lies in epidemiology, the study of factors affecting the health and illness of populations.

At the arc Epidemiology Unit (EU) in the University of Manchester major studies to track the causes, outcomes and treatment of musculoskeletal disorders are yielding important findings that will advise clinical practice and inform new therapy developments.

This prestigious unit, part of the Research School of Translational Medicine within the Faculty of Medical and Human Sciences, is the largest independent epidemiology centre in the world. Established by the charity in 1954, it conducted the first UK population surveys of rheumatic disease and then evolved to investigate the predictors and outcomes of disease, and more recently the effectiveness and safety of treatments.

The EU is structured into four major divisions: inflammatory disease, non-inflammatory disease, genetics, and statistics and computing, the latter being hugely important to plan and handle the vast quantities of data that is generated by the studies. It is a multidisciplinary effort involving clinicians, geneticists, epidemiologists, healthcare workers, mathematicians and statisticians, and many more.

Genetics and environment: the risk factor studies

Professor Deborah Symmons, Medical Director and Head of Unit, describes the focus and complexity of its operations: "Modern epidemiology looks at all the risk factors that influence disease development and its treatment. We use blood analysis, patient questionnaires, and clinical assessments to monitor patients over several years. Our aim is to assess which factors are important and use this knowledge to identify and reduce the risk to individuals and to devise appropriate treatment protocols to minimise disease progression.

"We know that there is a strong genetic component to arthritis – the hereditary risk factor. We need to know which of the millions of genetic markers in the human genome are responsible for this. And it isn’t just one marker for one disease – multiple combinations of markers predispose an individual to developing disease. In addition, there are non-genetic, or environmental, factors such as lifestyle, diet, exercise and infection. All of these factors can interact and influence susceptibility to disease development and severity, and we need to follow thousands of study participants long-term to identify them."

Several major long-term studies are yielding results that will impact on patient care. The Childhood Arthritis Prospective Study (CAPS) has been recruiting and monitoring children with recent onset inflammatory arthritis at five centres around the UK since 2003 and is identifying risk factors for disease development and predictors of outcomes. The Norfolk Arthritis Register (NOAR) study is approaching its 20th year and has recruited over 4,000 patients with recent onset inflammatory polyarthritis since 1990. The study has established the benefits of early and effective drug
therapy and is yielding vital information on complications such as heart disease. The Non-Inflammatory division of the EU is involved in a large European Male Ageing Study (EMAS) that is providing information on the incidence of musculoskeletal pain and how genetic factors may influence susceptibility to pain.

The analytical challenge

Professor Jane Worthington, Scientific Director of the EU, describes how technological advances in genetic research have dramatically increased the size and complexity of the studies. “When the entire human genome (the total genetic material of our DNA) was mapped out, genetic studies were revolutionised. Now we can analyse all the genetic markers that exist, and for each individual this may be a million markers. Despite having sophisticated, rapid throughput analysers to do this, the workload and the volume of results is still huge. Consider taking one small blood sample from an individual and analysing all the markers, then multiply this by all the thousands of individuals in the survey. This provides us with such an amazing analytical capability but it’s still a formidable challenge.”

Studies have to be statistically robust; data has to be captured, stored and manipulated, and results analysed and evaluated. The capacity of the computer storage system has recently exceeded one terabyte, that’s 1012 (1,000,000,000,000) bytes of digital information!

Predicting susceptibility and outcomes

So how will this information be used to benefit arthritis research? Professor Worthington explains: “By understanding the genetic basis of these disorders, we can start to devise novel therapies to combat them. We’re not there yet but other disease areas are already starting to achieve this and we’re confident that the same thing will happen in arthritis research. Interestingly, the same markers are being identified in other inflammatory conditions, suggesting that they programme a common underlying mechanism. Establishing genetic risk factors for disease susceptibility will allow us to predict who is most likely to develop conditions and how severely. We’ll be able to treat people early to prevent tissue damage. Some of these genetic markers are linked to how well they will respond to certain drug therapies. If we can predict who will respond well, and who won’t, we can tailor treatments to the individual, avoid wasting time, resources, and unnecessary adverse effects, and improve patient outcomes by administering the most appropriate and effective therapies.”

Equally significant findings are emerging from non-genetic research. The British Society for Rheumatology Biologics Register tracks the progress of patients with severe rheumatoid arthritis and other rheumatic conditions who are taking anti-TNF drugs. This is the largest international register of its kind in the world.

“We have established that patients who respond to anti-TNF therapies have a marked reduction in the incidence of heart attacks during their first six months of treatment,” says Professor Symmons. “This has important clinical significance in terms of the links between inflammatory arthritis and the inflammatory aspects of cardiovascular disease. It’s likely that the same inflammatory mechanisms are contributing to these conditions and that both genetic and non-genetic factors are influencing their development. For example, we have found that smoking increases the susceptibility risk for arthritis and shown that a combination of smoking and specific genetic and immune factors increases the risk of cardiovascular disease in patients with inflammatory arthritis.”

It isn’t just the obvious lifestyle factors that influence disease progress. “Some patients don’t have a positive attitude to their treatment,” says Professor Symmons. “Psychology is a powerful factor influencing outcomes. If patients don’t believe that the drugs will work, they may not benefit as much. Many patients don’t take their tablets routinely and this non-compliance can be a major bias in the studies. We use psychologists and specially trained healthcare workers to design and administer questionnaires to take this into account.”

Co-operation and clinical involvement

Alongside the expertise of the multidisciplinary workforce, the cooperation of patients and clinicians is key to the success of this unit. “We are very fortunate in the UK,” comments Professor Symmons. “We have an excellent network for carrying out these studies, with enthusiastic clinicians and healthcare staff, and willing patients. The National Institute for Health and Clinical Excellence (NICE) and the British Society for Rheumatology’s advice that all patients should go on the Biologics Register has boosted our study population for this survey significantly and the introduction of NHS-funded research nurses has transformed the coordination of clinic involvement. As a result, we can generate more samples in some studies than the whole of the US or Europe.”
Varying skills take on different types of knee osteoarthritis

A new research programme into osteoarthritis led by world expert Professor David Felson is now underway in Manchester. *Arthritis Today* takes a closer look.

If there's an effective treatment just around the corner for the six million people in the UK currently suffering from osteoarthritis of the knee it is not likely to be in the form of an exciting new “magic bullet” type drug.

Nor is it probable that it will be a “one size fits all” solution either, now it is becoming increasingly accepted that osteoarthritis is not one disease but a heterogeneous disorder involving not just cartilage but bone, gait (the way we walk) and inflammation.

Researchers in Manchester, led by Boston-based world osteoarthritis expert Professor David Felson, are confident that their four-and-a-half year £1.8m arc-funded programme of work will ultimately result in real benefits for patients with this disabling condition.

As reported in *Arthritis Today* 144 earlier this year, the multi-disciplinary team is testing the effectiveness of different treatments (known as interventions) on groups of local patients with knee osteoarthritis. These treatments include steroid injections, special shoes and insoles, and knee braces.

While this research may be perceived to lack wow factor, nevertheless, for people with osteoarthritis who for so long have had such little effective treatment or hope of any, the Manchester team believe their approach could offer a real step forward.

What makes the research novel and of particular significance is that the groups of patients trying out these types of treatment have been specifically targeted as having three distinctly different types of osteoarthritis.
Rather than being classified as having, if you like, generic osteoarthritis of the knee, they are grouped into three categories: those who have patellofemoral osteoarthritis (affecting the knee cap), those with medial osteoarthritis (inside the knee) and those with so-called effusions of the knee, which causes the knee to swell up.

**Pinpoint accurate imaging techniques**

The other thing that marks out this programme as different to other UK-based osteoarthritis research is rather than using cartilage degeneration as a measure of disease severity or progression, the Manchester team is using pinpoint-accurate imaging techniques to establish if pain correlates with other important elements in osteoarthritis including bone marrow lesions (areas of bone damage which show up on scans as white blotches) and swelling or fluid on the knee, known as synovitis.

"The focus of our research is shifting away from cartilage, towards other targets for treatment studies which have shown to be linked to pain," explains Dr Terry O’Neill, rheumatologist and epidemiologist at the University of Manchester and one of the leaders of the team. "We hope to show that structural changes within the knee in response to a treatment correlate with changes in a patient’s pain."

**Treatments being tested offer attractive options to GPs**

Colleague Dr Michael Callaghan, physiotherapist and research associate in rehabilitation sciences at the university, accepts that insoles and special shoes, knee braces and steroid injections are hardly groundbreaking, but believes that they will be attractive options to GPs, who often have little practical advice to offer osteoarthritis patients other than weight loss, analgesia and exercise.

"We’re not looking at exciting new treatments, but existing treatments, and finding out how they work. General practitioners are happy to use these interventions,” he adds.

All three studies will take advantage of the latest in imaging technologies, using magnetic resonance imaging (MRI) which provides much clearer images of the joint than standard images.

Dr O’Neill is enthusiastic about the prospects for the osteoarthritis programme. “Our group is multi-disciplinary, with experts in biomechanics and engineering, radiology, clinical epidemiology, rheumatology and physiotherapy. With this assembled expertise we have a real chance of making an important contribution. This was a project almost waiting to happen, and David Felson was the catalyst who brought the group together.”

Colin Sydney, a 64-year-old osteoarthritis sufferer from Stockport, is a willing guinea pig for the knee brace study, and will be one of the first patients recruited. A former electrician, he attributes his knee osteoarthritis to a lifetime of kneeling and physical work, so that kneeling, going up and down the stairs and walking all now cause him pain.

"I’m very pleased to be taking part in something new and experimental, and if it helps me or others in the same boat then that’s the main thing,” Colin says. "I’m hoping the knee brace will make a big difference to me. Otherwise it’s back to the orthopaedic surgeon."

**The trials**

In total over 300 men and women will be recruited from the Manchester and Salford areas for participation in the research. They will be recruited from both local hospital clinics and from primary care.

Patients with osteoarthritis of the knee affecting the knee cap (patellofemoral) typically experience pain that is made worse by going up and down stairs, kneeling, squatting and prolonged sitting. The intervention being tested on these patients is a lightweight knee brace which is fitted around the knee cap to give support as the patient walks. The device will be worn by patients for a minimum of three hours a day for 12 weeks. "The theory is that as the brace gives a degree of support to the knee cap, it might also reduce pain and improve function," says Dr Callaghan.

Patients with medial knee osteoarthritis, the most common type, which affects the inside of the knee joint, between the femur and the tibia, will be asked to wear various insoles/shoes to see if they help their pain. They will be asked also to walk on a pressure platform that measures the pressure on their knees.

"Because of the way we walk we have constant loading on the inside of the knee joint, and this is linked with the progression of disease," says Dr Rich Jones, senior lecturer in clinical biomechanics at Salford University, who is leading the study. "We’re looking at how the knee moves and why it moves in a particular way, using 3D gait analysis to look at the hip, ankle and foot, as well as the knee."

A significant proportion of patients with knee osteoarthritis have inflammation (known as synovitis). In the third study patients with inflammation in their knees will have intra-articular steroid injections performed. The study will provide information about how steroids work in osteoarthritis and also the factors that predict a good outcome – in other words who will do best from steroid injections.

A key component of the research programme is the plan to study in detail the images obtained from the participants. Experts in the University of Manchester who are collaborating with the osteoarthritis team have developed computer-based tools which can examine images in detail and allow accurate and precise measurements of the component structures – the application of these tools will allow much more information to be gleaned than by simple visualisation of the images.
FUNDRAISING

Changes afoot in community fundraising

Earlier this year, arc’s new head of fundraising, Jacqui Manning, led a review of our community and events fundraising activities. The review considered how we work with our branch and event volunteers and the range of events and fundraising challenges we offer and how we promote them.

The review underlined the vital importance of the work of our 350 longstanding and loyal volunteer branches. It also showed that there was an opportunity for us to support our branches and volunteers to a greater extent by freeing up our area appeals managers from some of their non branch/volunteer related routine duties, which could be accomplished more cost effectively in other ways, and that we have an opportunity to provide enhanced support through our central team.

Says Jacqui: “This is a very exciting time for arc’s fundraising and with the continued support of our many loyal and valued volunteers and supporters, we can help make even greater strides forward in finding better treatments and ultimately a cure for arthritis”.

Also highlighted was the need for arc to be in a position to take advantage of recruiting and working with volunteers outside of a traditional branch structure, in the way that many other charities have, and of the need to raise the profile of our community and events fundraising opportunities, even further using ‘new media’ like the internet in addition to local press and radio. To help us to do this, we will be recruiting a community and events fundraising manager. Watch this space for further details.

Widow raises money for arc in husband’s memory

Sally Morris’s husband, Clive, died from complications of his rheumatoid arthritis two years ago, aged 49, leaving her with four children aged between 19 and seven. Since then Sally, from Coventry, has dedicated her life to raising money for arc. She recently organised a ball and a London to Paris cycle ride in her late husband’s memory, which raised more than £2,000. This is in addition to the £5,000 she raised for arc at her charity ball last year. Sally (pictured with her four children) is already planning her 2010 events which include another ball.

A Mini Noddy Walk

Pupils at the First Step Nursery School in Bristol put on their fancy dress costumes and walked round their playing field for a summer Noddy Walk. All the children were sponsored by family and friends and raised £479 for the arc Noddy Appeal.

Edinburgh Marathon

Tracey Kenyon, Alecto King, Catherine Moretti and John Shyne all completed the Edinburgh Marathon for arc. With the money still coming in from their sponsors, they estimate that they will raise around £1,000.

Fun for all

Forty children from Poyntington Playcentre near Sherborne in Dorset, their families and friends all enjoyed a “fun day” in June. Stalls, games, sponsored obstacle course, magic man and a picnic lunch all made for a happy time whilst raising a wonderful £1,317 for arc. Vivian Furmage, who suffers from rheumatoid arthritis, has been running the play centre for 27 years.
Garage sale boosts funds

For a second year, a garage sale held in Brantham, Essex has helped boost the funds of the local hospice and arc. The two organisers each chose their favourite charity and, assisted by lots of villagers and kind weather, over £2,000 was raised this year. Pictured here is arc fundraiser Yvonne Amoss who was delighted with the magnificent response from the local community.

Top triathlete

Friedlinde Weberle made a New Year’s resolution to set herself a new challenge, and the German-born psoriatic arthritis sufferer from Limehouse in London did just that when she completed the London Triathlon, raising over £2,300 for arc. She is pictured above left with friend.

Watery walk

Steve Cullen, from Frome in Somerset, is pictured planning his sponsored walk from Thatcham, Berkshire, to Bath along the canal towpath. His watery walk is to raise funds for arc in memory of his late father-in-law who suffered from rheumatoid arthritis for over 30 years.

Cox aloft!

The arc-angels Dragon Boat team lost first place at the Bristol Dragon Boat Festival by less than a second. Thirty six crews competed throughout the day at Bristol Docks in an event organised by the Bristol Breakfast Rotary Club, which chose arc as the main charity to benefit from the event this year. Not downhearted, the ‘angels’ raised Charlotte the cox aloft and determined to win the festival next year!

Full of birthday Joy

Joy Taylor decided to celebrate her 80th birthday in style and abseiled 100ft from the Malmaison Hotel in Newcastle raising over £800 for the charity. Pictured: Joy Taylor, Alan Dobson and regional fundraising manager Marion Reed.

Get your own copy of arthritis TODAY

Why not introduce Arthritis Today to someone who you think will benefit from reading it?

We know that the magazine is passed on from friend to friend. Why not invite a friend to obtain their own copy by completing the coupon? Note that the coupon applies to NEW READERS only. It is not a renewal form for existing donors and does not apply to branch members.

To: The Arthritis Research Campaign, PO Box 177, Chesterfield, S41 7TQ

Please let me have four issues of Arthritis Today. I enclose a donation of £13.50

PLEASE PRINT IN CAPITAL LETTERS

SURNAME

FORENAME

ADDRESS

POSTCODE

TEL.NO.

We sometimes share information with other charities with similar aims. If you do not wish your name to be included, please tick this box.

FREEPHONE 0800 515209

Winners of this year’s Summer Draw are:

1st prize of £5,000, Miss Sugrue of Middlesex

2nd prize of £1,000, Mrs Morgan of Teeside

3rd prize of £300 Marks & Spencer vouchers, Mr Smith of Orpington

4th prize of £150 High Street vouchers, Mrs Erridge of Uxbridge

Congratulations to all the winners and a very big thank you to everyone who sold or purchased tickets for our Summer Draw; your ongoing support has helped us to raise £114,000 from the raffle this year.
Across the moors for arc

Walking enthusiasts and supporters of arc Carol Howard and Sue Coates took to the countryside again this year and completed the Cleveland Way Walk raising a fantastic £650. The walk takes in 109 miles of beautiful countryside from Helmsley to Filey in North Yorkshire.

Rain or shine?

On a Sunday in flaming June, Felpham and Bognor Regis branch, in West Sussex, branch put on their biennial Jazz and Strawberry Tea at Westbourne House School in their beautiful grounds. It all looked fair in the morning, but just as the tablecloths were on and George’s Regis Band struck up, the rain began to fall. Stalwarts tried to stick it out (see above) but a decision had to be made and the 120 ticket holders and the band repaired to the hall nearby. Spirits were not dampened however and a delicious tea was served with the band playing on the stage. Bubbles Simmonds, chair of the branch, put in lots of hard work and was ably assisted by the happy group of helpers (see below). The event raised over £1,000 for arc.

Howlin’ success

The Annual DogStock Music Festival in Whittle Le Woods in Lancashire raised more than £1,000 for arc. Organiser John Holmes and supporters put on some great entertainment at the Dog Inn from bands and singers Holton, Get Real, The Imaginary Forces, Keith Taggart, Helen Walford, and the Guillotine Brothers.

Indefatigable Scott!

Running home to Mum may not sound much of a challenge but it is when you live over 200 miles apart. Even though 37 year old Scott Kennedy from Cockburnspath ran the equivalent of five marathons in six days in the Sahara Marathon des Sables in 2007 he was almost defeated by the run from the Borders to Manchester. Despite spraining an ankle on the second day Scott continued on foot for two more days but had to take a bicycle for the last 90 miles, adding saddle sores to his injuries. Mum Eleanor Bullen was delighted to have her son home safely. Scott’s ordeal raised £1,250 for arc to add to the £2,800 in 2007 and we’re wondering what he’ll think of next.

Arthritis Today Autumn 2009 www.arc.org.uk
Real Customers Praise Ampli-Ear Quality!

Problem Solved!
“My husband’s habit of losing his hearing devices on a regular basis is now solved, at only £17.95, he can simply buy another one if he loses it and it won’t break the bank.” – Mrs. L.B.

He Loves It!
“Yesterday afternoon my husband’s Ampli-Ear arrived and he loves it. The difference in his hearing is remarkable.” – Mrs. O.B.

What He’s Been Searching For!
“I have ordered other hearing devices for my father but they didn’t work for him. The Ampli-Ear is what he has been searching for. He really likes it.” – Mr. A.O.

Very Good!
“I like these a great deal. These are very good.” – Mr. G.S.

Troublesome Relief!
“I purchased one of your hearing devices some two or three months ago. I must say how thrilled I was with it. I have told many of my friends about your product!” – Ms. W.K.

The Darn Things work!
“I purchased two Ampli-Ears because it didn’t cost an arm and a leg. What I did not expect is – that at that price – the darn things work! I am not easily impressed and I usually don’t write letters. However with your sincerity (and care for the customer – something very rare these days) – I couldn’t help but write you and thank you for your continued great success.” – Mr. A.F. 

The Very Best!
Since the year 2000 – Ampli-Ear has been America’s No.1 selling hearing amplifier. With 750,000 units sold all across the United States – Ampli-Ear has proven itself to be one of the best, most reliable hearing amplifiers in the world today – and amazingly UNDER £18! Now, in 2009, the engineers at Ampli-Ear have developed an ALL NEW top of the line hearing amplifier... appropriately named the Mega Ampli-Ear 2009. All new circuitry – and the Enhanced Capacitor amplifies sound like never before and it’s now available in the UK! American Research Institute testing rates the new Mega Ampli-Ear 2009 a full 100 out of 100 points for clarity, amplification, and comfort! Yes! The NEW Mega Ampli-Ear 2009 is 100% adjustable (now designed to be adjustable for the smallest to the largest ear opening), fits both men and women – and is nearly invisible in your ear. So, end those embarrassing moments. Never apologise again for not being able to hear. Use Ampli-Ear amplifier to boost the volume of:
- Whispers / Phone conversations
- The TV – even with the volume on LOW
- Conversations in crowded rooms

Trust Ampli-Ear Quality
- Mega Comfort – 4 silicone ear tips
- Mega Discern – Super small size
- Mega Power – High-tech circuitry amplifies like never before!
- Mega Value – Amazingly this device costs just £17.95 and that’s with a 3-month risk-free home trial
- Mega Easy – Easy sound adjustment and easy battery changes!

Clinical research reveals how hearing with two ears (binaural amplification) is best. Not only intended to hear with both ears. We hear sounds more accurately, hear speech more clearly and our sense of balance and direction is better. Most people suffer hearing loss in both ears but usually one ear is worse and as a result, people wear only one device. This can put you at a distinct disadvantage, making it more difficult for your brain to understand and process the sounds you are hearing. With two hearing devices fitted, not only will you hear more clearly and improve YOUR quality of life.

Our Risk Free Guarantee. Easy. Simple. Honest. Ampli-Ear is a company that does business the old fashioned way – with pride and integrity. We take all the worry out of ordering. Try Ampli-Ear RISK FREE for 3 MONTHS and if you are unhappy for ANY reason... just send it back for a complete and immediate refund, no questions asked. In addition we include a 1 year manufacturers repair/replacement warranty. Ampli-Ear, with over 750,000 units sold, is the world’s No 1 hearing amplifier... and it will improve your quality of life. ORDER NOW.

CALL NOW 0871 224 0789

RISK FREE FOR THREE WHOLE MONTHS!
If you are unhappy for ANY reason... just send it back for a complete and immediate refund. No questions asked.

A Promise from the MD of Ampli-Ear
Thank you for letting me take a minute of your time. Look, I know you may be sceptical of a £17.95 hearing amplifier. I would be too since they can sell for hundreds of pounds. So how do I supply a good product at a low price? Easy. We have no middle men or mark up so that the customer – YOU – are charged a fair price. I promise you Ampli-Ear is a top quality product... that will make a real difference to your quality of life. With over 750,000 units sold, many testimonials, and factory direct pricing – I can say that you will be happy with your purchase. And if you aren’t – I will send your money back. Christopher England, MD, Ampli-Ear

Experience the benefits of TWO Ampli-Ears:

Our Risk Free Guarantee!
- Easy.
- Simple.
- Honest.

Ampli-Ear is a company that does business the old fashioned way – with pride and integrity. We take all the worry out of ordering. Try Ampli-Ear RISK FREE for 3 MONTHS and if you are unhappy for ANY reason... just send it back for a complete and immediate refund, no questions asked. 

In addition we include a 1 year manufacturers repair/replacement warranty. Ampli-Ear, with over 750,000 units sold, is the world’s No 1 hearing amplifier... and it will improve your quality of life. ORDER NOW.

CALL NOW 0871 224 0789

NEW, IMPROVED AND RISK FREE!

Now Direct From The Manufacturer To You!
ONLY £17.95

Send to: Ampli-Ear, Dept 38HA, Regis House, 23 King Street, Cambridge, CB1 1AH

D.O.B.

Please charge my VISA/MASTER/SWITCH/DELTA/MAESTRO:

QUOTE REF: 38HA

$2.00 insured delivery

BONUS DEAL – Extra 500 hours of batteries – only £4.95

WAX REMOVAL BRUSH To remove unwanted ear wax from my Ampli-Ear unit – only £4.95

10 YEAR DAMAGE REPLACEMENT WARRANTY – only £5.95

I enclose a cheque/P.O for £_______ payable to Ampli-Ear

Please also charge my VISA/MASTER/SWITCH/DELTA/MAESTRO:

Please send me 1 MEGA Ampli-Ear (including batteries) for £17.95 + £2.00 insured delivery

SALE £6.00 – 2 MEGA Ampli-Ears (including batteries) for £31.90 + £2.00 insured delivery

BONUS DEAL – Extra 500 hours of batteries – only £4.95

Please send me 1 MEGA Ampli-Ear (including batteries) for £17.95 + £2.00 insured delivery

Please charge my VISA/MASTER/SWITCH/DELTA/MAESTRO: 

Order now. Do not send to address in the UK. 

Please send special requests to: Ampli-Ear, Dept 38HA, Regis House, 23 King Street, Cambridge, CB1 1AH 

A Promise from the MD of Ampli-Ear
Thank you for letting me take a minute of your time. Look, I know you may be sceptical of a £17.95 hearing amplifier. I would be too since they can sell for hundreds of pounds. So how do I supply a good product at a low price? Easy. We have no middle men or mark up so that the customer – YOU – are charged a fair price. I promise you Ampli-Ear is a top quality product... that will make a real difference to your quality of life. With over 750,000 units sold, many testimonials, and factory direct pricing – I can say that you will be happy with your purchase. And if you aren’t – I will send your money back. Christopher England, MD, Ampli-Ear

A Promise from the MD of Ampli-Ear
Thank you for letting me take a minute of your time. Look, I know you may be sceptical of a £17.95 hearing amplifier. I would be too since they can sell for hundreds of pounds. So how do I supply a good product at a low price? Easy. We have no middle men or mark up so that the customer – YOU – are charged a fair price. I promise you Ampli-Ear is a top quality product... that will make a real difference to your quality of life. With over 750,000 units sold, many testimonials, and factory direct pricing – I can say that you will be happy with your purchase. And if you aren’t – I will send your money back. Christopher England, MD, Ampli-Ear

Christopher England, MD, Ampli-Ear
Choosing a wheelchair car?
phone 01935 872603 or visit our website
www.brotherwood.com

Fiat Multipla

From our entry level Peugeot Tepee at £1,829
advance payment on the Motability Contract Hire Scheme...

...to our class leading Kia Sedona

British conversions built to suit the needs of the wheelchair passenger

HOME DEMONSTRATION, NEW, EX-DEMONSTRATOR & SECOND HAND VEHICLES, SHORT AND LONG TERM HIRE