

Whether it's peeling an orange, threading a needle or writing a sentence, we rely heavily on our hands for most things.

The hand is a complex tool. It has 19 bones: five metacarpal bones extend beneath the palm from wrist to knuckle, and there are a total of 14 phalanges bones in the fingers and thumb, with joints between them all. The wrist has another eight bones, which join onto the forearm bones. Closing the hand requires the contraction of 35 muscles.

'My hands are probably the most obvious place I'm affected,' says Kate Llewelyn, 35, of her rheumatoid arthritis (RA). 'My fingers are misshapen and my knuckles are quite deformed. It hurts all the time, but sometimes it can be excruciating.' Kate has severe problems in her hands, but the effects of arthritis can depend on the type of arthritis.

In RA, inflammation of the joint lining damages cartilage and bone. 'We often see the knuckle joints inflamed in RA, and it also affects the middle joints of the finger,' says Dr Andrew Bamji, consultant rheumatologist at Queen Mary's Hospital, Sidcup. Swollen tissue can also stretch the surrounding ligaments and tendons in RA. 'You can get something known as an ulnar



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Getting a handle on arthritis

Every aspect of our lives involves using our hands. **Eleanor Bird** looks at what to do if arthritis affects your hands

drift pattern, where the fingers begin to distort sideways towards the little finger. This makes the hand painful and difficult to use,' says Dr Bamji. Inflammation of the tendon sheath, the tubes in which the tendons move, can lead to swelling across the back of the hand or in the palm. 'The tendon can also stick in its sheath, causing trigger finger, where you can't open your hand. A tendon can even snap – your fingers will droop, which will need correcting within two weeks.'

In hand osteoarthritis (OA), joints nearest the tip of the finger, at mid-finger and at the base of the thumb are most often affected. In severe cases, a bump at the base of the thumb develops, caused by cartilage wear and new bone formation around that joint. 'Early osteoarthritis often shows as bony swellings in the finger joints, which are painful, red and shiny,' explains Dr Bamji. 'If we do a bone scan, the bones show red hot because the bone-building cells are active. That's

what makes the fingers lumpy.'

Psoriatic arthritis can also manifest itself in hand pain, which is caused by the membranes around a joint becoming inflamed. Post-traumatic arthritis can develop when there's been an injury, which caused stress on a joint.

Sue Venters, 61, has polyarthritis, but believes the arthritis in her right hand began after she caught her middle finger on a wallpaper scraper. 'The knuckle joint became immobile. Now all the knuckles on

Exercises for hand arthritis

FINGER BENDS

Relax your hands first. Hold your hand up straight with fingers close together. Slowly and smoothly, bend the end and middle joints of your fingers down, keeping wrist and knuckles straight. Return to the starting position. Repeat several times if you can.



MAKE A FIST

Start with fingers straight and spread out wide. Make a gentle fist, wrapping your thumb around the outside of your fingers. Don't squeeze. Return to the starting position and repeat.



OPEN YOUR HAND WIDE

Spread your fingers apart as wide as you can and hold. Slowly relax your fingers and bring them together. Return to the open hand position. Gradually increase the number of repetitions.



FINGER TIP TOUCH

Straighten out your fingers and thumb. Bend the thumb across your palm, touching the thumb tip to the pad of your hand below the little finger (or stretch as far as you can in that direction). Spread your thumb back out.



the back of my hand can look quite swollen. It affects me day to day – lifting the kettle, carrying things, gardening, preparing food – my husband has to peel the spuds.'

Accepting how your hands look

'I have arthritis in the third finger of both hands, and my right thumb,' says Mary Phillips. She is 57 and has OA. 'It's not a pretty sight – my bad fingers are twice the size of the others. I used to have slender and

dainty hands, and I liked wearing rings. I can't even wear my wedding ring now.'

This kind of change can be distressing. 'People ask about getting distorted finger joints replaced,' says Dr Bamji. 'They worry about looks, but we have to balance this with function. Sometimes replacing a joint might look better, but it may not work as well.'

Cathy Ball, research occupational therapist and hand therapist at Charing

Cross Hospital and the Kennedy Institute, recommends learning about your condition, which can help you feel in control. She also suggests talking to others with similar problems. 'It doesn't have to be a group meeting, just chatting to someone else at a clinic or getting support through an internet chat room can help.' Try talking to others with arthritis on the discussion forum on Arthritis Care's website or for a confidential chat call

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Arthritis Care's free helpline (0808 800 4050, 10am-4pm weekdays).

If your hands are contributing to you feeling depressed, you could ask your GP to be referred to a counsellor, who could help you come to terms with your problems.

It can simply be about acceptance. Kate takes a defiant attitude to the deformity of her hands. 'People usually stare at my hands. But I wear bright nail varnish – it's partly a statement, and putting varnish on is good for keeping my fingers dextrous.'

Everyday living

Hands are key in all everyday tasks – with a bit of ingenuity, you can find a way around most things. For example, you can wrap cutlery or saucepan handles in tape or put a sponge or rubber handle over them, so they are easier to grip. Use a gripper for opening lids, and apply pressure with your palm on the top of the lid, and twist with your whole hand. Organise things so they are within your reach, and don't store heavy

Hands are key in all everyday tasks – with a bit of ingenuity, you can find a way around most things

objects too high or too low. Kate supports her elbow with her other forearm to cope with lifting weight.

Adapt how you do things. Sue says: 'At the supermarket, I ask for help to pack, and I can manage one bag by cuddling it to me.' If you are making changes to your home, factor in your arthritis: 'I made a lot of effort when we had the kitchen redone to get things like taps and drawer handles right,' says Mary.

Read Arthritis Care's booklet *Independent living and arthritis* for more ideas on adapting how you carry out tasks. See the box for how Kevin Fleisch has adapted to life with OA and a repetitive strain injury in his hand.

Caring for your hands

If you have pain in your hands, act early to get it diagnosed. Your doctor will examine you and ask if you have similar symptoms in other joints, and will look at your hands to see if they show any characteristic changes. They may order an X-ray, and might give you a blood test if they suspect RA to look for the rheumatoid factor.

ADAPTING YOUR LIFESTYLE

Kevin Fleisch has OA and a repetitive strain injury in his hand

'To help me get dressed, I use shoes with Velcro fastenings, coats with zips not buttons, and I wear T-shirts. I'd get magnetic buttons if I needed to wear shirts for work. You have to put some effort into thinking about it.

I've usually got the right gadget. I use a voice-activated computer. I use a dishwasher instead of washing pots. I have four sets of thick-handled cutlery, so I don't keep running out. I use an adapted tin opener, soap dispensers – not fiddly soap – an extra long shoe-horn, things to hold books and thick pens. I have a microwave with oven and grill so I don't need to bend low. Even if things do cost, it's worth it.'

Treatment can start when a joint first becomes painful. This is not just about taking medication – there is plenty you can do to care for your hands. Speak to your healthcare team about the options available.

Just as important as taking medication is reducing or changing any activity that triggers pain, and resting regularly.

Overuse can make a joint inflamed, while underuse will make it stiffen up and cause the muscles to waste. A physiotherapist, occupational therapist or hand therapist can advise on exercises to rebuild and protect the range of motion of your hands and build strength. They can also advise on ways

of approaching tasks without pain and on equipment that can help. Speak to your GP about being referred.

Hand therapist Cathy Ball suggests doing daily range of motion exercises to help maintain flexibility by flexion (curling the fingers) and extension (opening the hand). Range of motion exercises involve taking joints through their full range of movement and then gently easing them just a little further. 'Arthritis shouldn't take over your life, but if you can fit these exercises in once or twice a day, they can keep your hands flexible.' Warming your hands in warm water before stretching can help. See the box on page 11 for some exercises you could try.

According to Cathy if you have RA it is important to build up hand exercises slowly. 'With RA inflammation, lots of exercise is not helpful – doing everyday things is enough. But you can gradually build up, starting with range of motion exercises. You can then use different levels of resistance and build up the repetitions,' she says.

'In OA, it's the same – you rest a painful joint so the inflammation can go down.

But then you build up exercise. If you've had arthritis for a number of years, you can still get some flexibility and strength back by exercising the muscles,' says Cathy.

Kevin Fleisch does hand exercises regularly. 'I want to keep the hand moving to make sure the strength stays.' He is learning to play the piano one-handed. 'I'm not sure I'll be world famous or in the hit parade,' he chuckles, 'but it'll keep my left hand exercised, and I try and play chords right-handed to keep my bad fingers stretched.'

Some people find it helpful to use a splint to support their hands. Resting splints support a joint so you can rest it, perhaps overnight, and working splints are worn for daily tasks. Cathy recommends using a splint when a joint is very inflamed, particularly with RA. 'Wrist splints are very effective – you can get them at the chemist or hospital. They have a metal bar in the palm which positions the joint correctly.' If you prefer something more stylish, Kate has found that Wristeasy supports are available in different colours, and really help.

Surgery is not necessary for most people with hand arthritis, but it can help some whose pain has not been reduced by other methods. There are a variety of surgical techniques including reconstructing or replacing joints, or fusing small bones to make one stronger bone. Realignment or tightening of ligaments and tendons is also an option. Sue Venters developed 'trigger finger', where she could not bend or straighten her finger or make a fist. 'It was very painful. But surgery has sorted it,' says Sue.

Kevin has learned to accept his limitations. 'I'm painting a wall at the moment. Fifteen years ago, it'd have taken me a few hours, now it'll probably take a few days, because I do 10 minutes, then rest, then do another 10. I've learned to be patient.' **an**