# HOME MODIFICATIONS



Changes to the home environment for cats with muscle/joint pain or mobility problems: a guide for caregivers

If your cat has been diagnosed with muscle or joint pain, such as osteoarthritis, or a mobility problem, small adjustments to the home environment can, in combination with the use of pain relief medications, play a key role in improving their comfort and quality of life.

REG CHARITY 1117342 (ENGLAND AND WALES)
PLACE FARM, CHILMARK ROAD, TISBURY,
WILTSHIRE, SP3 6LW, UK
© 2024 INTERNATIONAL CAT CARE.



Image source: Adobe Stock

# Introduction: why cats may be struggling

## Muscle and joint pain

Muscle and joint pain are common in older cats, just as in older people, with studies suggesting that osteoarthritis (also called degenerative joint disease) affects around 60% of cats over 6 years old. As cats continue to age, the proportion increases, with up to 90% of cats over 12 years old being affected. Osteoarthritis is a disease that affects the cat's joints, especially the elbows, stifles (knees), hips and spine. Being degenerative in nature, the joints become more damaged and less functional over time. Most cats do not have an obvious underlying cause for their osteoarthritis, although age-related 'wear and tear' is likely to be a contributing factor. Certain breeds of cats, such as Scottish Folds, Maine Coons, Abyssinians and Burmese, may develop osteoarthritis at a young age due to underlying joint problems, and cats may also be affected after an accident or surgery.

Other causes of pain affecting muscles, bones and joints include nerve (neuropathic) pain and some cancers.

## Other mobility problems

Cats may struggle with their mobility for other reasons – they may have lost a limb due to a trauma, or may have a neurological (brain and nerve) problem affecting their balance and coordination. Older cats may develop cognitive dysfunction syndrome, similar to dementia in people, and struggle to navigate their environment. Young cats, too, may show coordination problems, as well as tremors; these can be caused by viral infections contracted in the womb that affect the kitten's brain, and are present from birth.

## Recognition of pain or mobility problems

Any cat with pain or mobility issues can benefit from changes to the home environment to improve their quality of life. Recognition of the problem is very important for successful management and, as cats can hide signs of pain, caregivers should be vigilant for changes in normal habits and behaviours (see box on page 3). Caregivers can download a free 'mobility checklist', which can help to determine if a cat is showing signs of osteoarthritis and can also be used to monitor for improvement or deterioration in signs.

## Investigating muscle/joint pain and mobility problems in cats

A diagnosis of osteoarthritis or other cause of pain is commonly made

by a veterinarian based on a clinical examination (assessing for painful, swollen, thickened or other joint changes, and/or neurological problems), as well as a history of changes observed in the cat's behaviour or movement at home.

Cats may move differently (or be reluctant to move) in the clinic. It can be extremely helpful to bring or send in videos taken by phone of your cat moving, climbing stairs, etc, at home to show the veterinarian.

If you are concerned that a cat under your care is showing one or more signs of pain and/or mobility issues, it is important to have them checked by a veterinarian.

Osteoarthritis is a painful condition, and an appropriate treatment plan must be put in place whenever it is diagnosed.

## Signs of muscle/joint pain and mobility problems

## **Reduced mobility**

- Reluctance or difficulty jumping up or down from a height (eg, a windowsill)
- Difficulty going up or down stairs (cat appears stiff or slow)
- Difficulty using the litter tray and/or toileting
- Stiffness in the legs, especially after sleeping or resting
- Lameness or limping
- Difficulty or hesitancy using the cat flap

## **Reduced activity**

- · More time spent resting or sleeping
- Sleeping in locations that are easier to access (lower levels, unusual places)
- Reduced tendency to hunt or explore outdoors
- Less interest in play or interacting with family or other pets

## **Altered grooming behaviour**

- Less frequent and shorter periods of grooming
- Matted/knotted and/or scaly, dull coat (Figure 1)

- Overgrooming of painful joints (creating bald patches)
- Overgrown claws due to reduced activity levels (eg, less tendency to sharpen claws/ use scratching posts)

## Temperament (personality) changes

- Reduced tolerance of being handled, touched or stroked (when previously enjoyed)
- Avoidance or less tolerance of interactions with family or other pets
- More time spent alone

## **Altered toileting habits**

- Toileting outside the litter tray (urine or faeces)
- Difficulty passing faeces (straining, vocalising, passing hard stools)
- Urinating or defecating in the house (cats that previously toileted outdoors)

## Other changes

- Eating less or becoming fussier with food
- Reluctance to lower head towards the food or water bowl
- Not sleeping or resting in a normal relaxed, curled-up position, but instead hunched and appearing uncomfortable (Figure 2)







Figure 2: A senior cat resting in a hunched position, rather than curled up and relaxed. Source:

Further tests performed as part of the veterinarian's assessment may include:

- Radiography (x-rays) of the affected joint(s) (Figure 3);
- Blood and urine tests (to assess general health and guide the choice of medication).

## How to help affected cats

The best way to help cats with muscle/joint pain is to follow your veterinary team's recommendations, which are likely to involve a combination of approaches. Often, use of medication(s) and changes to the cat's home environment, sometimes along with other therapies, is more effective in reducing discomfort and improving the cat's quality of life than one treatment alone. Therapeutic approaches include:

 Pain relief medication Non-steroidal anti-inflammatory drugs (NSAIDs) are commonly recommended, but other analgesic



Figure 3: X-ray of an elbow joint of a cat with osteoarthritis. Radiography is not always needed to make a diagnosis of muscle or joint pain – observing the cat moving may be sufficient to identify a problem. Source: Sam Taylor



(pain relief) medications may be used. See International Cat Care's Cat Carer Guide to 'Treating chronic (long-lasting) pain with NSAIDs' (available at icatcare.org/advice/cat-carer-guides) for more information;

- **Dietary supplements** These contain ingredients such as essential fatty acids or glycosaminoglycans (eq. glucosamine);
- **Weight loss** Cats that are overweight will benefit from weight loss (excess weight is likely to exacerbate pain of osteoarthritis);
- Physiotherapy If well tolerated by the individual cat, and carried out in a cat friendly manner by a qualified specialist in the field, physiotherapy and/or other rehabilitation therapies (eg, acupuncture) may have a helpful role to play.



Figure 4: A step placed outside makes the cat flap easier for the cat to access: note the potted plant positioned close by to shield the area. Source: Sam Taylor

## Creating a cat friendly home

There are many simple changes you can make to your cat's environment to improve their quality of life after being diagnosed with

Every cat has their own unique preferences and may choose certain options over others. The aim is to adapt your home to what your cat finds most comfortable. osteoarthritis or a mobility issue. The aim of home modifications is to facilitate access to the resources the cat needs, such as food, water, bedding and preferred resting places, as well as to help them feel safer and less painful moving around their space. The remainder of this guide is devoted to discussing

cat friendly home modifications; these are summarised in the infographic on page 4.

### The cat flap

If your cat enters and exits the home via a cat flap, make sure they continue to feel safe and comfortable doing so. The cat flap should open easily, with little resistance, and be big enough for the cat to move through with minimal effort. For cat flaps that are raised higher off the ground, steps can assist access (Figure 4). In some cases, it may be helpful to tie the cat flap door open during the hours the cat normally has access. Placing potted plants around the door can help shield an outdoor entry point from unwelcome visitors!

### The litter tray

Cats with muscle/joint pain or mobility issues often struggle to reach places they previously accessed with ease. Even for a cat that currently prefers to toilet outside, litter trays should be provided indoors to make sure there is always easy access to a place to toilet.

Litter trays for cats with osteoarthritis should:

- Have at least one low side (Figure 5);
- Be located on all floors of the home for accessibility;
- Be large enough to allow the cat to move around comfortably (minimum



Figure 5: Litter tray adapted for an arthritic cat. One side has been partially cut out for easier access. Source: Sheilah Robertson

1.5x the length of the cat from nose to base of tail);

- Be positioned in a quiet place, to avoid disturbance and help the cat to feel safe;
- Always be kept as clean as possible.

Cats with joint pain may well have sore paws and a softer substrate (eg, small granular clumping litter) may be preferable to hard pellets, so try different options to see which type of litter your cat prefers. Litter tray liners are best avoided as claws can easily become caught on these. There should be a minimum of one litter tray for each cat in the household, plus a spare; a home on multiple floors may require more, so that a tray is always in easy reach. To learn more about making toileting cat friendly, click here.

#### Food and water

Access to food and water is a basic requirement for all cats, and taking the time to make these resources easier to reach is extremely important for cats with pain or mobility issues. Food and water stations should be provided at ground floor level, where possible. If placed at higher levels of the home, or at a raised height (eg, to avoid dogs eating the cat's food; Figure 6), they should be easily accessible using stairs or steps. Multiple food and water stations are required in multi-cat households to reduce stress and competition, and are also a good idea in single-cat households to allow choice as to where the cat eats or drinks.



Figure 6: Steps up to food and water help to keep the cat's resources away from dogs, while avoiding the need for the cat to jump up to a height. Source: Sam Taylor

Cats with osteoarthritis or reduced mobility often prefer a food or water bowl that is raised off the ground, as it can be painful to crouch down on their elbows or to lower their head. Try providing:

- Stands for food and water bowls (Figure 7a). A plastic box or similar placed underneath a bowl (Figure 7b) can also work well. Note that food and water bowls should be separated, as water is easily contaminated with food;
- Water in a tall plant pot or nonbreakable tumbler.





Figure 7:
Adaptations
to facilitate
comfortable
feeding. Use
of a stand (a)
and a plastic
box (b) to
raise the food
bowl off the
ground.
Source: Chloe
Little (a)
and Sheilah
Robertson (b)

The use of puzzle feeders (slow feeders)

– which are mentally stimulating
alternatives to the traditional bowl – can
encourage gentle exercise, which may
be beneficial for affected cats.

The importance of avoiding dehydration in cats that are being given medications for pain relief is discussed in International Cat Care's Cat Carer Guide to 'Treating chronic (long-lasting) pain with NSAIDs'.

For suggestions of ways to increase the amount your cat drinks, see International Cat Care's Cat Carer Guide to 'Encouraging your cat to drink'. Both resources are available at icatcare.org/advice/cat-carerguides.

### Safe places and soft beds

Cats prefer a familiar territory and require a sense of control in their environment – which means they need to be able to reliably seek out safe places to hide and to rest, as well as to perch while they watch the world go by. Cats with muscle/joint pain or compromised mobility may struggle to climb up to their favourite safe places, and jumping up to and down from a height only puts additional strain on the joints. Small steps (or ramps) up to their chosen resting and vantage points (Figure 8), such as a sofa, bed, cat tower, windowsill or top of a piece of furniture, can help cats to feel comfortable and confident reaching their safe places. Chairs or stools can also usefully provide a step up to or down from a high surface, making life easier.

Note that slippery floors can be challenging for cats with osteoarthritis or mobility problems, and the use of rugs, runners or non-slip gym/yoga mats can be extremely helpful. Stairs and ramps should likewise be covered with non-slip materials, such as carpet or rubber.

Cats with muscle/joint pain will benefit from soft beds located in quiet and easily accessible places, away from draughts. Many older cats prefer an 'igloo' style bed to keep them warm and secure (Figure 9). A source of warmth is also often appreciated, with beds placed near radiators being popular options (Figure 10). Make sure that there is no direct contact between the cat and the heat source. to avoid burns.







Figure 8: Modifications to allow easy access to safe places and soft beds. (a) A ramp (covered with non-slip carpet) up to a favourite bed on the sofa. (b) A cat learning to use a ramp (again covered in carpet) to climb up onto the bed. (c) A step up to a favourite resting place. Source: Sam Taylor (a), Chloe Little (b) and Sheilah Robertson (c)



Figure 9: A senior cat in an igloo cat bed.
Source: Laura Watson



Figure 10: A cat enjoying a 'radiator bed'. Steps may be needed to assist access to such resting places.
Source: Alex Taylor

## **Scratching posts**

Scratching is a natural behaviour for cats that serves multiple purposes. Cats tend to scratch the same places repeatedly, and while this helps with the wear and sharpening of claws, it is also believed to be an important means of visual and scent communication. All cats should have opportunities to engage in scratching behaviour, but scratching on a tall vertical post can cause pain for some cats, so try offering a horizontal scratching surface instead (Figure 11).

### **Grooming**

Cats will spend around an hour a day keeping their haircoat in good condition. Grooming removes dirt and other contaminants from the coat, as well as external parasites such as fleas. A healthy and clean coat also helps to maintain its important functions, such as the regulation of body temperature. Unfortunately, many cats with joint pain or neurological problems will struggle to carry out this natural behaviour due to stiff and uncomfortable joints or lack of coordination. This can lead to a scaly coat and matting of fur; in severe cases, mats may need to be removed (clipped) under sedation by a veterinarian.

Regular grooming by the carer will help to avoid this issue, with many arthritic cats actively enjoying the process. Try using different types

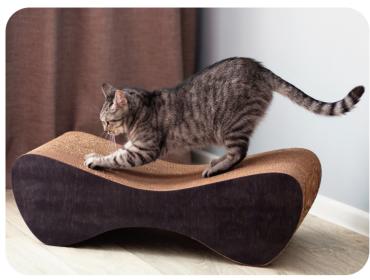


Figure 11: Cat using a horizontal scratcher.
Source: Adobe Stock

of brushes to determine which the cat likes best (eq, soft bristles or rubber; Figure 12), and remember always to go slowly over sore spots. Offering a favourite treat after a grooming session helps to make the experience even more positive. If your cat is not used to being groomed, start with very short periods of brushing, and build up to longer sessions, if tolerated; never restrain the cat heavily or force brushing. Some cats will require pain relief to make them comfortable enough to tolerate being brushed. Note that pulling of matted hair is painful, so if knots are present contact your veterinary team for advice and assistance.



Figure 12: Grooming using a soft rubber cat brush. Source: Sheilah Robertson

# Grooming checklist for cats with muscle/joint pain or mobility problems

- Ensure regular coat brushing
- Matted hair may need to be clipped (seek advice from the veterinary team)
- Trim claws, if overgrown
- Clean the cat's eyes and bottom with cotton wool dampened with warm water, if needed
- Continue to provide parasite preventive treatments regularly

Figure 13: Claws
can become
overgrown in cats
with muscle/
joint pain or
compromised
mobility, and
cause pain when
walking. Trimming
may be required.
Source: Richard
Murgatroyd



Cats with reduced mobility may need their claws trimmed regularly (Figure 13), as they tend to become overgrown and dirty as the cat engages in less activity and scratching behaviour. Overgrown claws can get caught on surfaces such as carpet or fabric, affecting how the cat walks and causing pain; worse still, they may grow into the cat's footpad. Claw trimming is a procedure your veterinary team can perform; this is also something you can learn to do at home if you feel comfortable and it is tolerated by your cat. If you are new to trimming a cat's claws, ask for a demonstration from a veterinary professional to ensure that neither you nor your cat are injured in the process. Cat friendly hints and tips for making claw trimming less stressful are available at icatcare.org/advice/trimmingyour-cats-claws.

### Play and exercise

Regular short and gentle play sessions can be highly beneficial for cats with mobility issues, to keep joints flexible and strengthen muscles. Play can also help to maintain a healthy body weight by providing regular gentle exercise. Moreover, the provision of mental stimulation through play can be beneficial in terms of feline brain ageing! While many cats actively enjoy playing, cats should always be allowed to choose if they interact or not. For some cats, appropriate pain relief is needed. As always, go at your cat's pace and start slowly. Other tips are provided in the box.

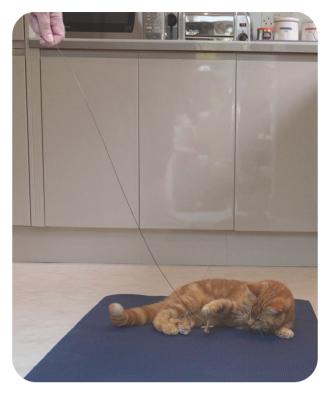


Figure 14: For cats experiencing muscle/ joint pain or mobility issues, a wand toy with a long handle is helpful for providing controlled play. Source: Claire Bessant

# Tips for playing with cats with muscle/joint pain or mobility problems

- Play regularly and keep sessions short – be guided by your cat, including their preferences with regard to toys and types of play
- Avoid slippery floors play on carpet or lay down rugs or non-slip gym/yoga mats
- Keep play low impact play at ground level to reduce jumping
- Try a wand toy with a long handle this allows better control of movement (Figure 14)
- Consult your veterinarian first make sure the type of play is appropriate for your cat's unique needs

## **Support our work**

Our free guides aim to share our expert knowledge with as many caregivers and professionals who work with cats as possible, to improve the lives of cats worldwide.

Our vision is a world where every cat is treated with respect, compassion and understanding. If you share our vision and would like to make a donation to support our work, please visit icatcare.org/support-us/donate. Thank you from everyone at International Cat Care.



