Choosing a chair and chair accessories

DLF Factsheet

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INTRODUCTION

If you spend many hours in a sitting position it is vital you have a chair that is tailored to meet your individual needs especially if you wish to maintain comfort and independence. Your size, degree of mobility and any existing pain are examples of some of the factors which can influence the choice of chair.

The aim of this factsheet is to provide basic information for you to consider before buying, replacing or adapting an arm or lounge type chair. It outlines key chair dimensions, different chair features, and the various types of lounge chair to help you decide what is suitable for you. It also reviews several types of accessories and adaptations if you do not wish to buy a new chair.

Lounge chairs are designed mainly for relaxing. You also need to bear in mind all the activities you wish to do (e.g. transferring, socialising, watching television, reading, phoning, writing, drinking, eating, knitting) before buying or adapting. Different activities require different postural positions, degree of support, level of comfort and room to move in and around the chair. Remember it is healthy to move regularly throughout the day. If possible ensure there are other chairs you can use safely.

Move to sit at the dining table to eat or use a perching stool in the kitchen if you have a surface with knee room underneath. Consider using a perching stool in the bathroom to wash if you find standing difficult. If your chair needs raising you may find you need a grab rail on the wall by the toilet, a raised toilet seat or a seat and frame over the toilet.

For up-to-date information about products and suppliers, please contact our equipment helpline which is open Monday to Friday from 10am to 4pm - tel: 0845 130 9177(calls charged at local rate); textphone: 0207 432 8009 (standard rate). Alternatively, you may wish to write to our letter enquiry service at the address on the front cover or contact us via email: advice@dlf.org.uk.

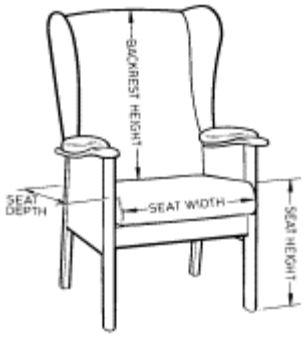
Whether writing or telephoning, please tell us about the difficulties you are experiencing. If possible give us some idea of the type of chair you are looking for so that we can send you the most appropriate information.

Our helpline can also tell you where to find your nearest Disabled Living Centre. There are several of these centres around the country where you could go for impartial advice. You would also have the opportunity to try out a range of chairs before deciding which one to buy.

For advice for people who need pressure relief whilst sitting in an armchair refer to DLF factsheet: *Choosing pressure relief equipment.*

CONSIDERATIONS WHEN CHOOSING A CHAIR

IMPORTANT DIMENSIONS



The internal dimensions of the chair – seat height, width and depth, and backrest height - need to match the size of the user to ensure adequate support. It is also worth bearing in mind the overall dimensions of the chair if space is limited., Remember, if the chair is going to be reclined regularly, make sure that there is sufficient space behind the chair for the backrest to move into. It is advisable to try out a range of chairs before buying one because slight differences in the slope and angle of the backrest or the position and style of armrests can make a big difference to individual comfort.

Seat height

The height of the seat can determine how easy it is to get in and out of the chair. A high seat will make it easier to stand up and sit down, particularly if you find it difficult to push up using your arms or if you have any pain or weakness in your legs.

However, if the seat is too high, your feet will not touch the floor and it may feel uncomfortable under your thighs.

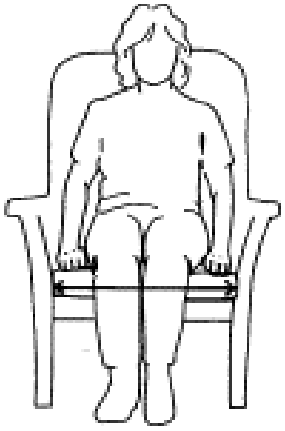
A seat that is too low will be more difficult to get out of and will direct pressure towards the pelvis rather than distributing it evenly along the thighs.

The correct seat height can be calculated by measuring the distance from the floor to the crease at the back of the knees. When seated, the hips and knees should be at right angles whilst your feet are flat on the floor.

Most high seat chair manufacturers have a range of chairs with a seat height between 46 - 59 cm (18 - 24 in). Some will make other heights to order.

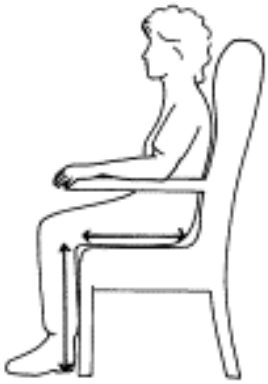
If you need a very high seat to make standing easier but need support for the feet when seated, try using a footstool but make sure you can push it out of the way easily before standing up.

Seat width



The seat should be wide enough to allow you to sit comfortably whilst reading, writing or knitting, but narrow enough to enable you to make use of the armrests. Ideally, it should be the width of your hips plus a clenched fist on either side.

Seat depth (front to back)



The seat needs to be deep enough to support the full length of the thighs.

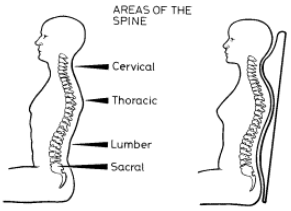
If the seat is too deep, you will have to lean back to provide support for the shoulders. This may cause you to slump in the chair and the cushion may rub behind your knees. A deep seat may also cause your bottom to slide forwards in the chair.

If it is too shallow, your thighs will not be supported properly and after a while you may be uncomfortable.

To calculate the correct depth, measure the distance from the back of the hips, along the thighs to approximately 3 cm (1.5 in) behind the back of the knees. When seated you should be able to place two fingers together between the edge of the seat and the back of the knee.

A greater depth should be allowed if you require additional back supports or cushions.

Backrest shape



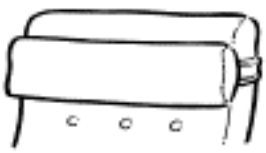
Comfort is often determined by the shape of the backrest. It should be gently curved to match the natural curves of the spine and provide good support, particularly around the small of the back and the head.

Many older people have a rounded back and shoulders which make it difficult to get the correct support unless special cushions are used. People with a marked curvature of the spine may find a softer, canvas or angled backrest more comfortable.

Backrest angle

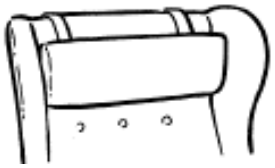
The backrest should be angled slightly backwards. If it is too upright, it can be tiring as you will constantly be trying not to lean forwards. However, if it slopes too far back, it may force you to slide forwards on the seat.

Headrests



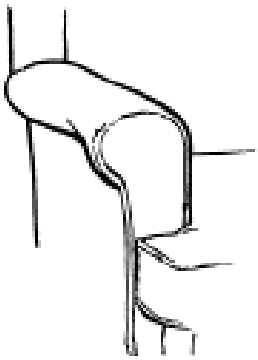
Adjustable headrests can be positioned where the support is most needed. They should be easy to adjust and be secure when fixed. Some wrap around the back of the chair and the height can be adjusted. Others are on bands which lie over the top of the chair back and are fixed behind.

Headrest wings



These do not have any real functional purpose so it is down to personal preference whether you choose a chair with wings. They may help to support your head if you have a tendency to fall asleep in your chair. However, whenever possible it is better to lie down on your bed to have a proper sleep rather than to catnap. Even if the wings can provide some support for your neck, the position still puts a great strain on the muscles and ligaments in your neck and this can lead to pain and stiffness. As the wings can block your sideways visibility you may have to lean forwards to see round them; however, they may offer some protection from draughts.

The armrests



These should provide side support, and help you to stand up. They should be wide enough to support your forearms when relaxing. Padded armrests provide more comfort.

To help you stand up, the ends should be easy to grip and level with the front edge of the seat. Those made of bare wood with rounded ends are ideal. Armrests that have padded or scrolled ends may be more difficult to grip; square fronts may be painful to push down on.

The armrests should be at least the same length as the seat. If they project further forwards to give more support when standing, the front legs should be splayed.

Drop-down or removable armrests can help you get in and out of the chair from the side, e.g. from a wheelchair.

Filled in armrests may be warmer and exclude draughts, and small objects such as TV remote controls are less likely to fall onto the floor. However, smokers should be aware that lighted cigarettes if dropped will get trapped and be a potential fire hazard.

The seat

Usually chair seats have springs or are foam filled. If the seat is too hard, it may feel uncomfortable to sit on; if it is too soft, the chair frame may protrude through the cushion. Chairs should be made of good quality foam so that the air can flow freely within them. Cheaper foams give good support initially, but may sag after only a few months.

Some suppliers now incorporate special pressure relieving features in the standard seat which may be worth considering if you find it difficult to adjust your position or sit for long periods.

The legs

These can be splayed or straight. Splayed legs offer greater stability, especially when someone is pushing down on the armrests. However, if they stick out too far, they may get in the way. Cabriole legs are a feature of traditional Queen Anne style chairs.

If the front legs are joined by a cross bar or are filled in with upholstery you may not be able to position your feet under the chair. This could make standing up more difficult.

The upholstery

Ideally, this should be warm and slip-resistant. If possible avoid materials that cause sweating. Manufacturers offer a wide range of upholstery including tweed, Dralon, velvet, and tapestry in a variety of colours and designs. Some companies will also allow buyers to send them their own choice of fabric.

Although vinyl can be cleaned easily, it tends to be slippery and can cause sweating. A sheepskin cover is soft and warm and will absorb moisture; it also allows the air to circulate so that you do not become too hot. For people who have continence problems, there is a choice of upholstery that that is waterproof and has an attractive finish.

The larger/smaller user

If you are very small or very large you may find it difficult to get a chair which is the correct size. However, some suppliers will make modifications such as reducing the seat width and depth for a small person or reinforcing chairs for someone who is heavier. Always check the capacity of the chair if you are not sure it is strong enough.

Made-to-measure chairs

If you have a chair adjusted to your particular needs it may cost 25 - 75% more than buying a conventional high seat chair. A custom-made chair will be even more expensive. The manufacturer will arrange for a home assessment; but remember that, although these companies employ highly trained reps, most of them do not have a medical background and you are therefore advised to ask a therapist to be present at the assessment.

BRITISH STANDARDS

All upholstered furniture that is intended for private use in a house needs to conform to the Furniture and Furnishings (Fire)(Safety) Regulations 1988. Within each standard there are several parts with tests of increasing severity. Check with suppliers which parts have been met.

PROVISION OF CHAIR EQUIPMENT

Standard chairs and chair accessories are generally regarded as daily living equipment. If you need to change your chair because of a disability your local authority may provide one on loan after an assessment by an occupational therapist (OT) or trained assessor. However, budget constraints make it impossible for many authorities to provide this sort of equipment so it is important to ask what you may be entitled to in your area.

The department to contact is social services if you live in England or Wales, the social work department if you live in Scotland, and the health and social services boards or Trusts if you live in Northern Ireland.

Provision may include:

- chair raisers
- high seat chairs
- back supports

- footrests.

Another source of advice is a disabled or independent living centre. To find a local centre ask the Disabled Living Centres Council (see 'Useful organisations').

People with complex seating needs are sometimes referred to a specialist seating clinic through the strategic health authority. Such clinics will carry out an assessment and provide advice on seating in chairs and wheelchairs. For information on the strategic health authority covering your area contact the NHS Direct Helpline on 0845 4647 or via www.nhsdirect.nhs/uk

Since April 2003 if you are offered equipment from social services you have the right to ask for a direct payment of money instead. For example, if there is another chair you would prefer to buy that would meet your needs, rather than accepting the chair offered by the council, you can ask for a direct payment of money instead.

FOR PEOPLE WHO FIND IT DIFFICULT TO STAND UP OR SIT DOWN INDEPENDENTLY

Many people find it difficult to get in and out of a chair, especially if it is a low sofa type. Reasons for difficulty include painful or stiff joints, muscle weakness, slow reactions or impaired balance. If you are finding it difficult, the various options that can be considered to make it easier include reviewing your technique, raising your chair, using a standing frame, using a riser cushion or exchanging your chair for a high seat chair or riser chair.

TECHNIQUE

First, it is useful to look at how you are standing up and sitting down. Ask for an assessment by a physiotherapist or OT if you are uncertain of the technique.

The following sequence of actions may help you to stand up:

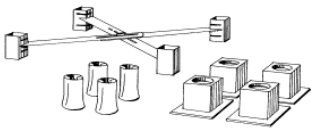
- place your hands firmly on the front of the armrests;
- lean forwards away from the back of the chair;
- move your bottom to the edge of the seat, either by shuffling forward by transferring weight from one buttock to the other, or by taking the weight through your arms and lifting your bottom;
- make sure your feet are apart, one foot below the knee and the other slightly back towards the chair (you will find this difficult if you have not moved to the edge of the chair and the chair has been filled in or has a rail between the legs);
- bring your head and shoulders over your knees (nose over toes)
- push with both arms and legs until you are in an upright position;
- slight rocking may help you stand. Use the verbal prompt - saying the words in time with the rocking - "Ready, steady, stand" (standing up on the word stand).

Similarly, this sequence of actions may help with sitting down:

- feel the front of the chair seat with the back of your legs;
- spread your weight over both feet. Slightly bend at the hips and knees, lean forwards and reach down for both armrests. Keep feeling for the seat with your legs as you sit down gently;
- you should not need to move your bottom back if your knees maintain contact with the front of the seat cushion. However, if you do need to move your bottom back, use the technique that is best for you (shuffling or lifting back), until you are supported by the back of the chair.

If you use a walking frame, remember to use the arms of the chair for standing up and sitting down. Do not be tempted to hold onto the frame, especially when standing up, as it may tip towards you. Hold onto the frame handles once you are upright.

CHAIR RAISERS



The next option to consider is raising your existing armchair using chair raisers. These increase the height of the legs, thus increasing the seat height so that you can stand up and sit down more easily. (Do not be tempted to raise the height of the seat by adding more cushions - this has the effect of lowering the armrests, so that they offer less assistance.)

Chair raisers are bought in sets of four and are placed under or clamped onto the legs of a chair. Some sets come as four individual blocks, others are connected by adjustable length cruciform arms. The latter tend to be more stable. Chairs that are placed on blocks can be quite difficult to move. Always ensure that the appropriate shape or model of raiser is used for the shape of the chair leg.

STANDING FRAMES

The length and width of these metal frames can be adjusted so that they fit around a chair or settee. They have two handles which extend upwards from the base to provide support for you to push against when standing or sitting. The version for use with a settee has fold-down handles, which allow you to turn and put your feet up onto the sofa if you wish.

HIGH SEAT CHAIRS AND SETTEES

If you are unable to raise your existing chair or use a standing frame you will probably consider buying a high seat chair. These lounge or fireside chairs

have a high, firm seat, stable armrests and a high supportive backrest. They are available in a wide range of designs and colours.

More clinical looking hospital armchairs are also available which may be cheaper than the wooden framed domestic models. Although they have metal frames and vinyl covers they can be comfortable and easy to get out of.

MANUAL SEAT RISER CUSHIONS AND CHAIRS

With all riser cushions and chairs consider any risk that the mechanism may trap a part of the user's body , his/her clothes, , or items such as walking sticks. Consider also the risk of entrapping other people, especially children, or pets.

If you have difficulty getting out of a high seat chair you could consider getting a manual seat riser cushion or riser chair. These have a spring or hydraulically operated mechanism which, when activated, tilts the seat forward to assist you to get out of the chair. The mechanism can be adjusted according to your weight.

Most of the cushions only have a tilting seat, but the more sophisticated chairs have a combination of seat lift and tilt which provides a better position for standing. The following points should be considered.

- It is important that the lifting mechanism is adjusted according to your weight. The seat will not work if
- you are too heavy or, if you are too light, it could spring up with such force that it propels you forward suddenly. Some risers are ordered pre-set from the factory; others are adjusted in the home.
- Manual riser cushions or chairs are hazardous in an environment , such as a residential home, where someone other than the intended user may sit in the chair. It is potentially dangerous if that person is lighter than the person for whom the chair or cushion was originally set.

- You need hand control to release the lock and enough arm strength to lift your body slightly from the seat in order to trigger the mechanism. You also need the strength in your legs to keep your knees back as the seat rises.
- Other than in exceptional circumstances choose a seat with a locking mechanism that locks the cushion/seat in the down position. This stops the seat springing up unintentionally, e.g. if you lift your weight reaching forward. The lock should have a label clearly indicating the on and off positions.

SEAT RISER UNITS

These units are used in a standard chair and may suit you if your need is only short term. The riser unit is either placed directly on top of the seat cushion (which will add to the overall height of the seat) or the chair cushion is removed and the riser cushion placed on the base of the chair. As riser cushions tend to be smaller than the dimensions of most seats they may be uncomfortable to sit on for any length of time. Anybody s at risk of developing a pressure sore should seek the advice of an OT before purchasing one. One advantage is that the units are portable so that they can be used when visiting friends or for going out; some even have a carrying handle. There is a limited choice of colours and the covers are usually vinyl or fabric.

POWERED RISER SEAT UNITS OR CUSHIONS

A few powered portable lifting seat units or cushions are available. They tend to have a larger seat than many manual riser units and, as a result, are slightly more comfortable. One advantage of a powered unit is that the lifting action is not weight specific, although you need to check your weight is within the maximum capacity of lift. Another advantage is that the units are more controllable and you can stop the rise or lower at any pint.

A disadvantage is that the units come with handsets on leads and separate batteries. These are charged using mains electricity and need positioning on chairs near a suitable socket if used in one position for any length of time.

Manually operated riser chairs with seat locking mechanism

Manual riser chairs have seats that are hinged at the front edge. When the lock is released a gas or spring operated mechanism tilts the seat forward to help you stand up.

It is important that users have the ability to bring their weight forward and to initiate a push on the armrests. It is also essential that

they can position their feet correctly before the seat starts to rise up.

Manually operated riser chairs without seat lock mechanism

Very few of these chairs are still available and they should only be used in exceptional circumstances, e.g. if the user is unable to operate a locking mechanism due to painful or weak fingers.

POWERED RISER CHAIRS

As with manual riser chairs there is a risk that the mechanism may trap the body or clothes of the user. Also many powered chairs do not have an automatic cut-off if an item is trapped underneath the moving parts. This can present a serious risk for users and especially for children.

Powered riser chairs use mains electricity and need to be placed within easy reach of a socket. They also tend to be larger than other chairs and take up more space. Check with the companies whether they can make a chair with smaller dimensions if needed. Less effort is required to stand up from these chairs than from manual seat lift chairs, but the action tends to be much slower.

It is important you have the ability to re-organise your position as the chair rises. If your feet are not positioned correctly you may lose your balance when the chair is in the raised position.

The control handset for powered chairs usually has push buttons or rocker switches. The latter are easier to use if you have limited hand function. The more buttons or switches there are the more complicated they are to use. Where appropriate it is probably wise to have a chair with fewer functions and benefit from the simpler controls.

There are three different types of powered riser chairs: one with a mechanism that raises the seat only; one where the seat and the armrests rise; and one where the whole chair rises - seat, armrests and backrest.

Most powered riser chairs are now of the type where the whole chair rises and the seat tips forward. To use these chairs safely it is important you have sufficient strength and control of your trunk and legs. There is a risk you may slip down as the chair rises if your legs are too weak.

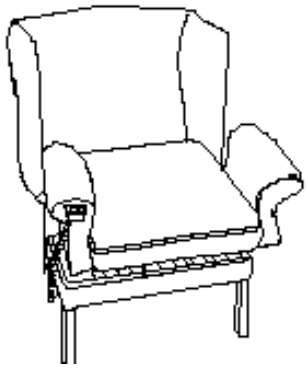
Electrically powered riser chairs with a seat rise only

As the seat rises, this type of chair leaves the back and armrests behind. When the chair is in its up position the armrests are not at a convenient height to push against and the person has no back support. However, this kind of chair may be useful to someone who is transferring into an adjacent wheelchair, as the seat rises above the armrests so that they do not impede the

transfer. However,,tansferring back into the chair from a wheelchair may not be any easier, And another disadvantage is that objects such as TV remote controls can disappear into .

a gap between the seat and backrest.

Electrically powered riser chairs with seat and armrest rise



These chairs have a mechanism that lifts both the seat and the armrests up and forwards so that the user is still able to push down against the armrests when standing up. However, there is no back support when the chair is in a raised position.

Electrically powered riser chairs with seat, armrests and backrest rise

Usually, these chairs have a mechanism that lifts the whole chair, including the seat, the backrest and the armrests up and forwards. They provide users with all round support when in a semi-standing position as well as making it possible for them to push down against the armrests enabling them to stand up more easily.

To use these chairs safely it is important you have sufficient strength and control of your trunk and legs. There is a risk you may slip down as the chair rises if your legs are too weak. This is worth considering or monitoring if you are aware your condition is changing.

A few chairs have a seat that rises vertically without tipping forward. This is safer for people who need to remain secure for longer and need more time to adjust to the higher position. It is also easier if you use a level sliding transfer especially when the arms of the chiar drop down or can be removed. Some companies offer the vertical rise as an option to the standard rise and tip forward.

Riser unit

Sometimes it is possible to fit a riser unit under an existing armchair. It is electrically operated and lifts, or lift and tips, the chair forward to help the person stand up. Riser units are still quite expensive and it is often better to replace an existing chair with one that is more suitable.

FOR PEOPLE WHO NEED TO RECLINE IN A CHAIR

RECLINING CHAIRS

Reclining chairs enable you to alter your position during the day. These are useful if you have a back problem; if you need to relax or sleep during the day; or if you have muscle weakness and find it difficult to support your head.

Reclining chairs generally have leg rests that lift up to support your calves. You need to take care not to trap your legs underneath the leg rests or between the top edge of the leg rest and the chair cushion.

The leg rest on many recliners operates simultaneously with the backrest, which is ideal if the person only uses the chairs for sitting or lying. However, on some models the backrests and leg rests can be operated independently. These may be more suitable for people who need to elevate their legs while sitting up.

If the user needs to recline the backrest without elevating the leg rest he/she may tend to slide forward on the seat. In this case, a chair with a tilt-in-space mechanism (where the seat and backrest tilt backwards maintaining a 90° angle between them) may be the best option (see later).

If the chair may be used as a bed (although this is only advised in exceptional circumstances) it must be possible to recline it to a horizontal position. If the backrest only reclines partially, it is difficult to maintain postural alignment and this may lead to stiffness and pain in the joints.

When fully reclined with the leg rests elevated, these chairs take up a great deal of space, so ensure that there is enough room behind and in front of the chair so that it can be operated safely.

Manually operated reclining chairs

A lever or wheel is used to recline the backrest on these chairs, or the user must have the ability to push back against the

backrest while pushing forwards on the armrests. Some can be operated by the user while seated in the chair, others have to be operated by someone else. Ensure that the backrest can be reclined and repositioned when the user is in the chair. If you are buying a chair with a built-in foot rest make sure that you are able to place your feet under your knees when standing up. Some footrests prevent you from doing this when they are lowered.

Electrically powered reclining chairs

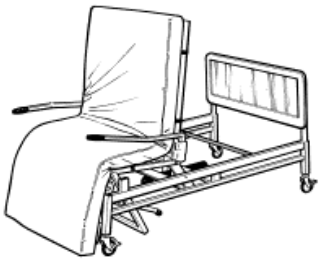
Most of these chairs have a fairly high seat, and tend to be wider and more padded than fireside chairs. Because they need a power supply they must be positioned near to a power point to avoid the hazard of a trailing flex.

They are controlled by a handset which may have push buttons or a rocker switch. A person with weak hands may find the latter easier to use. Castors on these heavy chairs enable them to be moved more easily.

RISER RECLINERS

These recline in the same way as those mentioned above, but they also have a seat lift. On most models the whole chair rises which provides the user with support and leverage to get out of the chair.

CHAIR BEDS



Sleeping during the night in a standard electric recliner is not generally recommended. In exceptional circumstances if a person is unable to transfer from a chair to a bed using a chair bed may be an option. These look like a bed and can be electrically powered to lower the foot end and raise the head of the bed so that it assumes the shape of a chair.

FOR PEOPLE WHO NEED TO SIT WITH THEIR LEGS SUPPORTED

You may need to sit with your feet up, either purely for comfort or for medical reasons, e.g. if you have stiff or swollen legs. If your doctor or therapist has advised you to sit with your legs elevated you should ask him/her how your legs should be supported. For instance, if you have swollen feet or ankles you may need to have your legs supported to at least a horizontal position, if not higher to reduce the swelling effectively. If you have arthritis in your knee it may need to be kept as straight as possible. Therefore, before purchasing or hiring a leg rest or footstool ensure that it will be suitable for your particular needs.

LEG RESTS AND FOOTSTOOLS Ideally, a leg rest should support the legs from the chair edge right down to the feet although, in practice, many are rather short. A footrest only supports the feet and ankles and is usually lower than a leg rest. A footrest may not be suitable if you have a painful, stiff or weak knee, as your knee will remain unsupported. This can put strain on the ligaments behind the joint
and could lead to discomfort.

- Foot and leg rests with legs that are independently height adjustable or which have an adjustable angle top, will enable the supporting surface to be sloped downwards. This will provide a comfortable support and will distribute the pressure evenly down the leg length. Many are available with T-shaped legs and a slightly concave top.

- Fixed height foot and leg rests should be tried out for comfort before purchase as they cannot be adjusted to suit the individual user..
- Most are available with a choice of vinyl or fabric upholstery and wooden or metal frames.

- L-shaped rocking leg rests adjust automatically to the angle of the user's legs. Most have a long and a short support, and it may be possible to use them to bear the weight of either the legs or feet. Alternatively, they provide a downward support for the calves and another support at right angles under the soles of the feet.

- The weight of the footstool or leg rest needs to be considered as the footstool will need to be moved out of the way when you stand up and put back in place when you are seated.

LEG LIFTERS

Some people will find it difficult to lift their feet onto or off a footstool or leg rest.

Manual leg lifters comprise a strap with a loop at the end on which you place your foot.

It is a simple device to help you lift your leg onto or off a footstool or footrest. However, you need adequate strength and dexterity to carry out the task. Some people use the crook neck of a walking stick instead.

Mains powered leg lifters work in a similar way to the built-in leg rest on a reclining chair. The device is attached between the two front chair legs and is hinged at the top. It rises from a vertical down position, through a 90° arc to form a horizontal surface. The mechanism is controlled by a hand-held switch and may operate via a hydraulic mechanism or inflatable air bag
powered by a compressor.

CHAIRS WITH A BUILT-IN ELEVATING FOOTREST

A person using a chair with an elevating leg rest may risk getting his/her legs trapped in the scissor mechanism underneath or in the gap between the top edge of the legrest and the chair cushion.

Many reclining chairs have a built-in leg rest which operates simultaneously with the backrest. This is ideal if people are using the chairs only for sitting or lying. However, those who want to sit with their feet up while watching television, for instance, may find models with independently operating backrests and leg rests more suitable. These enable the leg rest to be raised, even though the
backrest is still up straight. Consider the amount of support that these types of leg rests provide, as some only support from halfway down the calves rather than from the edge of the seat.

Chairs with independent backrest and leg rest operation have two motors and more buttons to push. You may choose a chair with simultaneous backrest and leg rest operation because the controls are simpler.

FOR PEOPLE WITH MORE COMPLEX SEATING NEEDS

Many people are not able to maintain a stable and comfortable seated position either due to muscle weakness, joint pain, muscle spasm, loss of balance, pressure sores or joint stiffness. Any of these may result in the person sliding forwards in the chair, leaning over the arm of the chair, falling forwards in the chair or generally being uncomfortable. A stable sitting position is one that requires minimum effort to maintain. Being unable to keep a stable sitting position for any of the reasons already mentioned can be extremely tiring. A good deal of effort is expended when people have to stop themselves from sliding in the seat or falling forwards. It is essential that anybody who has a complex seating need should be assessed by an OT or

physiotherapist.

In many cases a standard high seat chair may be the answer as long as its dimensions suit the particular user. For example, a person may be sliding in the chair because the seat is to deep and not because he/she needs a more supportive chair.

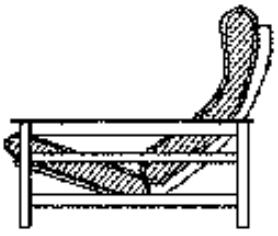
If the user does need a more supportive chair various adjustable chairs are available.

CHAIRS WITH ADJUSTABLE ANGLE SEATS AND BACKRESTS

These tend to be standard wooden framed high seat chairs that have an adjustable seat which can be sloped slightly backwards. Most also have an adjustable backrest that can be slightly reclined so that the overall seat/backrest angle remains at a comfortable 90°. This type of chair may be suitable for somebody who tends to slide or fall forwards in the chair or has difficulty holding his/her head up.

DEEP SEAT CHAIRS

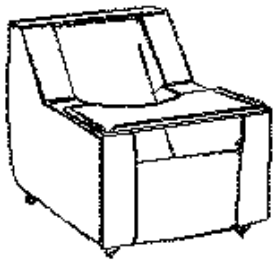
These chairs have a very deep, backward sloping seat that will provide stability for someone with weak muscles or who tends to go into spasm. Some have gate-opening armrests to help the user to get in and out.



However, it is important to consider the following points:

- the very deep, backward sloping seat
- can make it difficult, even for an independent person, to get out of the chair;
- the handling assessment will often indicate that it is essential to use a hoist to transfer someone who has little mobility into this chair;
- in order to maintain a comfortable angle of around 90° between a sloping seat and the backrest, the backrest needs to be angled back quite sharply. This can alter the user's line of vision so that he/she is forced to look towards the ceiling so that balance and spatial awareness are distorted. Some models have the headrest section angled forwards so that the line of vision of the user is directed forwards but this can put a strain on the user's neck.

CUBE SHAPED CHAIRS



These are foam filled angular shaped chairs which have a deep sloping seat, high sides and wide padded armrests. Most have vinyl or easy-to-clean covers. They do not offer much postural support and have a low back which does not support the head.

As the whole chair is made of foam it does not provide any rigid support, either for the user or the carer, when someone is getting in and out of it,. It would be advisable to use a hoist to lift someone in and out of these chairs but an overhead hoist may be the only option, as many of the chairs are wide and have insufficient space underneath to accommodate any other type of hoist.

MULTI-ADJUSTABLE DEEP SEAT CHAIRS

These are multi-adjustable wooden framed, padded chairs or metal-framed upholstered chairs that can be tailored to individual needs. The height, width, depth and angle of the seat on most of these chairs is adjustable, as is the angle of the backrest.. Some have a tilt-in-space mechanism so that the whole seat and backrest unit can be angled backwards to provide a deep seat, and then moved forwards again to a horizontal position to make it easier when getting in and out. They have additional side and head supports that can be fitted and adjusted according to the user's needs. These chairs are obviously more expensive than standard chairs and therefore are likely to be used only by people who have complex seating needs and who require additional postural support. If a hoist is used to transfer the user in and out of the chair, ensure that there is sufficient access for the hoist around or underneath the base.

MODULAR SEATING SYSTEMS

These tend to have a clinical appearance and are therefore mainly used for activities such as work or eating, rather than for lounge seating. They are multi-adjustable systems which may either be a basic chair onto which a number of components can be added (such as pommels or foot or head supports), or an individually moulded system placed on top of a chair frame.

Because most of these systems are made up of components, they can be replaced as the person grows or changes posture. Some systems cater for both children and adults.

CHAIRS WITH PRESSURE RELIEVING PROPERTIES

Some chairs come with built-in pressure relieving properties. They have an integral pressure relief system in the seat, i.e. gel or water chairs.

For further information on pressure relief, see relevant DLF factsheet*: Choosing pressure relief equipment.*

SAFETY STRAPS/HARNESSES

Supports and harnesses are available which may provide support and encourage a person to sit in a firm, stable position. However, they should not be used as a long-term solution and every effort should be made to provide support within the chair itself.

Restraining straps should only be used in extreme circumstances under guidance, when the person is at risk of severely injuring him/herself.

People with complex seating needs are sometimes referred to a specialist seating clinic through the strategic health authority. Such clinics will carry out an assessment and provide advice on seating in chairs and wheenchairs. For information on the strategic health authority covering your area contact NHS Direct Helpline on 0845 4647 or via www.nhsdirect.nhs./uk

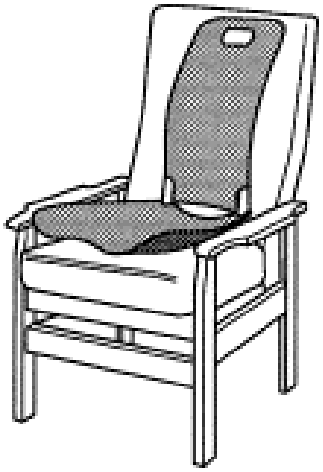
CUSHIONS AND ACCESSORIES THAT PROVIDE ADDITIONAL SUPPORT IN THE CHAIR

SUPPORT CUSHIONS

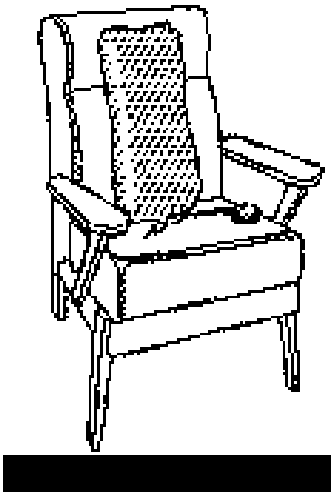
Many people can sit quite adequately in a standard armchair, but need additional support for a specific part of the body in order to feel more comfortable. The most common supports are back and neck cushions.

The following types of back supports are available:

- non-adjustable back supports - most are fibre-, foam- or bead-filled with a fabric cover and a rigid contoured base. The user should be sure that it provides enough support in the curve of the lower back, as they cannot be adjusted;



- back support with seat - these are similar in construction to those above, but have an attached, shaped seat;
- modular back supports - these have a firm, contoured backrest with an adjustable height pad which can be moved up and down to alter its position so that it provides the most comfortable support for the user;



- inflatable back supports - these can be inflated by means of a small hand pump and positioned to provide comfort and support;

- vacuum back supports - these contain small beads and are moulded to the shape of the particular user. A small hand pump is used to withdraw some or all of the air creating either a firm or semi-soft support.

NECK SUPPORTS

The following types of neck supports are available:

- bead filled - these are simple bead-filled supports that remain soft;
- foam or fibre filled neck supports - most are filled with a silicone coated fibre which is very soft;
- inflatable neck supports - these are inflated by mouth to provide support and comfort.

WEDGE CUSHIONS

These cushions can be used either with the thick edge at the front or back of the seat. Having the thick edge of the wedge at the front may be useful for a person who tends to slide forwards in the chair. The cushions can either be secured on top of or beneath an existing cushion or chair seat. Care must be taken that the cushion will not alter drastically the overall height of the seat and make the armrests less effective as a support. Different angled wedges are available.

- Alternatively a wedge cushion can be used in a dining chair or office chair with the thick edge at the back, to encourage a more upright posture when working at a desk or eating

FOR PEOPLE WHO HAVE CONTINENCE ISSUES

Although protection for chairs is available, it is best to try to solve the underlying problem first. Seek advice from a local continence adviser, or contact the Continence Foundation (see 'Useful organisations').

WATERPROOF COVERS

Many of the standard high seat chairs can either be upholstered with water resistant fabric or can be fitted with waterproof liners between the cushion and its cover. These look more attractive than vinyl covers and are not so slippery. Nor do they cause sweating.

WATERPROOF PADS

These are absorbent seat pads with a waterproof base layer. The pads are placed on top of the cushion cover or between the cover and the cushion to prevent urine from making the cushion wet. However, these are not an ideal solution, as they tend to crumple up. They can also lead to a loss of dignity if placed on top of the cushion.

SHEEPSKINS AND SYNTHETIC FLEECES FOR COMFORT

Sheepskins do not relieve pressure but can be helpful when used in conjunction with other pressure relieving support systems because wool fibres are naturally resilient and so help to reduce shear forces. They also help to maintain low humidity and temperature by absorbing water vapour and heat. Sheepskins come in three main forms.

Natural sheepskin

This wool fleece on its own leather backing is the most comfortable of the three and reduces shear forces most efficiently. However, great care must be taken when washing, and the fleece must be regularly brushed so that the fibres do not become matted.

Synthetic sheepskin

These skins are less resilient that a natural sheepskin and therefore do not reduce shear forces as efficiently. Also, they do not absorb heat and moisture so readily. However, they can be washed more easily and effectively.

Natural fleece on a fabric backing
Because it has been removed from its natural backing, the pile on this sheepskin tends to be shorter and therefore provides slightly less resilience. However, this type of skin is easier to wash, although it still needs regular brushing to prevent matting.

USEFUL ORGANISATIONS

Continence Foundation
307 Hatton Square, 16 Baldwin Gardens
London EC1N 7RJ
Tel: 020 7404 6875
Fax: 020 7404 6875
Textphone: 020 7831 9831
Helpline: 0845 345 0165 9.30am-13.00pm
Email: continence-help@dial.pipex.com
Website:
www.continence-foundation.org.uk

ASSIST UK (DLCC)
Redbank House, 4 St.Chads Street,
Manchester M8 8QA
Tel: 0870 770 2866
Fax: 0870 770 2867
Textphone: 0870 770 5813
Email: dlcc@dlcc.co.uk
Website: www.dlcc.co.uk

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Published by Jessica Kingsley Ltd ISBN 185302 985 8

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