Obesity: equipment for people who are very overweight (bariatric)

Like the rest of the western world, a significant percentage of the Australian population is overweight or obese. The term frequently used today for people who are exceptionally large, clinically severely obese or extremely overweight is *bariatric*.

People may be bariatric in size due to a medical condition, an unhealthy diet and/or insufficient physical activity. Bariatric individuals are at high risk of hypertension, heart disease, stroke, Type 2 diabetes and kidney failure. Other risk factors include gall bladder disease, osteoarthritis, degenerative joint disease, sleep apnoea, incontinence and some forms of cancer (eg colon cancer).

These medical conditions combined with being extremely overweight may cause a person to tire quickly, be short of breath, experience joint or back pain, have restricted movement of arms and legs and have difficulty with mobility. This greatly limits a person’s ability to participate in household and community activities and makes daily-living activities such as dressing, toileting and showering very difficult.

Added to this, the person may suffer from low self-esteem, depression, anxiety and social isolation.

**Range of equipment**

There is a range of commercially available equipment specifically designed for the person who is bariatric.

Items include:

- Manual and powered wheelchairs
- Mobility scooters (gophers)
- Powered equipment to assist moving manual wheelchairs or beds and chairs on wheels
- Walking frames
- Static and mobile shower chairs
- Toilet seat raisers and commodes
- Weighing devices for ambulant and non-ambulant people
- Mobile and ceiling track hoists (lifters) and slings
- Electrically operated beds
- Pressure mattresses
• Chairs
• Lounge chairs with electric lift
• Aids to transfer person lying horizontally or from floor to sitting or bed height
• Aids to assist with turning in bed or getting their legs onto bed
• Stairlifts.

**Suitability of equipment**

The equipment needs to support the person’s current weight and also allow for any possible increase in weight. The weight the equipment can support is called *load capacity* and this is specified by the manufacturer/supplier. It’s also important to consider that people of bariatric size also vary in height, size and body shape and this also needs to be considered when selecting equipment.

Frames (of wheelchairs, shower chairs, walkers and so on) are strengthened by a variety of methods including reinforcement of tubing and/or joins, use of a stronger metal (usually steel rather than aluminium) and/or use of thicker tubing. Rigid frames are usually stronger than frames that have moving parts such as folding frames.

Not only the frame but also all components of the piece of equipment need to be able to support the person’s weight (for example, with a manual wheelchair, in addition to a stronger frame, the seat material and the screws that hold it in place also need to sustain the person’s weight).

**Points to consider**

More space will be required in rooms due to the size of the equipment, the bariatric person’s size, the additional number of carers and the area required to work around the equipment. Doorways, hallways and turning spaces will need to be larger than standard.

The load capacity of floors, including upstairs and the shower alcove need to support the combined weight the equipment, the bariatric person and the carers.

As bariatric equipment is larger and is reinforced, it is generally heavier than standard equipment. Combined with a person’s weight it can be heavy for a carer to push or use (for example a manual wheelchair, mobile hoist, mobile shower or over toilet chair). Therefore, additional carers may be required.

Bariatric items such as wheelchairs, toilet seat raisers and four-wheeled walkers often feature wider seats and therefore also wider arm rests, handles and push rims. It’s important to consider whether the user can still adequately reach and operate these.

**Hoists and slings**

To reduce the effort required by carers to move a bariatric client in a bariatric mobile hoist, consider a power-assisted hoist. There are ceiling hoists suitable for bariatric clients that provide powered horizontal movement along the track as well as the normal powered vertical lift. Although these powered options are more expensive they may require less carers and potentially reduce carer injuries.

When using a bariatric hoist, consider a spreader bar with four attachment points, rather than the usual two, as it allows the user to be lifted in a more comfortable
position. Bariatric slings often have reinforced stitching and additional padding and there is a design to accommodate large thighs.

**Mobility equipment**

Powered conversion kits can be added to a manual wheelchair to provide a carer with more power to negotiate ramps, hills and other gradients. It may be worth considering purchasing a powered wheelchair instead of a manual one. However, powered options decrease the activity level for the user and this may contribute to weight gain and muscle weakness.

Although there are mobility scooters suitable for bariatric people there are a number of factors that hinder their viable use. These scooters are very large and wide and therefore require a considerable space to turn and would obstruct a footpath. Also, the combined weight of the scooter and the bariatric person may be above the maximum weight capacity of a ramp used to lift the person onto public transport.

**Equipment with more than one function**

Consider equipment with more than one function. For instance, a mobile shower chair that can be used in the shower, over the toilet, or as a bedside commode. Also beds that can be adjusted into a seated position.

Having equipment with more functions means:

- Less equipment to fit into a space
- It may reduce the expense
- Fewer transfers may be required.

**Around the home**

If reaching is difficult, there are long-handled dustpans and brooms, pick-up reachers, long-handled personal sponges, toe wipers, dressing sticks, sock aids, long-handled shoe horns, hand-held shower hoses and bottom wipers. Bidets that wash and air dry a person after toileting are available with a load capacity suitable for some people of bariatric size.

**Custom-made equipment**

Due to the increasing demand for bariatric equipment the range of commercially available items is increasing. However, bariatric equipment is still specialised and suppliers frequently do not have equipment in stock and will have to order it.

Where commercially available equipment is not suitable manufacturers may be able to custom build equipment to suit an individual’s requirements (that is, customised for the person’s size and/or weight). Custom-built items include walking frames, shower chairs, chairs, over toilet seats and wheelchairs.

Bariatric equipment is generally more expensive than similar equipment with less load capacity, especially if it is custom-made.

**Hiring equipment**

Some bariatric equipment can be hired, but rental is more expensive than similar items with a lower load capacity. When deciding whether to buy or hire, consider the length of time the equipment is required, purchase versus rental cost, where the equipment will be stored and ongoing cleaning and maintenance requirements.
For further information on bariatric equipment including product and supplier details of suppliers who sell or hire the bariatric equipment please contact the Independent Living Centre.

Contacting the Independent Living Centre

For further information or to make an appointment to visit the display please contact the Independent Living Centre. The Independent Living Centre offers free advice on equipment and techniques to help you with everyday tasks.

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Accessible off street parking is available.
Bus services run nearby. Call 8210 1000 for timetable information.