

GENERAL TIPS ON BACK CARE

Many people don't pay attention to their posture. When we maintain a certain position for a long period of time, poor posture often becomes worse, stretching and possible tearing of fibres in the soft tissue around the spine can then occur. This is where back pain starts or increases. Good balance should be your primary goal or objective.

STANDING

Many of the tasks we do at work every day involve standing.

Tips to remember when you stand:

1. Always stand with your body weight equally distributed between your legs... When one leg carries more weight, our necks and backs curve and in the long run this position may cause injury.
2. Avoid standing for a long period of time with your feet on different levels. Standing with one foot on a step for a long period, causes the neck and shoulders to curve.
3. Stand with your legs slightly apart for better balance. In this position the body weight is more evenly spread and less effort is required to maintain the position.
4. Stand facing the work surface. Never work at the corner of a bench because it is difficult to get close to the job you have to do, causing you to bend forward, placing increased strain on the lower back.
5. Wear comfortable, well-fitting shoes, with good foot support, suitable for the job that you have to do. For example, wear boots with good grip when you work in a wet environment, e.g. cold storage areas - and well-fitting, undamaged safety boots when you work on a construction site. Give attention to how you put on your shoes - instead of bending down to the floor; rather kneel on one knee to maintain a good posture. Take good care of your shoes and repair or replace them when they are damaged.
6. Stand on a cushioned surface if possible.
7. Elevate or incline the work surface for precision work.
8. Keep work up at a comfortable level.
9. Change positions frequently.
10. Vary your activities regularly.

REACHING

Some of the activities you do during the day might require reaching.

Tips to remember when reaching:

1. Take great care when reaching above your head, either to retrieve something or place an item on a high shelf.

When reaching up in this position, our balance is disturbed and our posture is unstable therefore it is easy to fall over or strain some soft tissues.

In this position a lot of strain is placed on the back, shoulders and neck. Because of the twisted posture, this can cause a potentially serious injury. One can also overstretch the arm in this position.

Working with the arms above the shoulders increases the load on the heart, increasing blood pressure as well as the work rate of the heart.

Get as close to the item as possible and use one hand for support.

2. Avoid working with your elbows above mid-chest height.

3. Take good care when reaching down. This increases the static load on the back muscles.

Use "the golfers lift" to retrieve items: keep your back in a balanced position. Bend at the hips while raising one leg behind you. Hold onto a solid object for support.

4. Reduce the dimensions of the work surface.

5. Tilt the work surface to suit your needs.

6. Provide cut-outs into the work surface.

7. Make use of containers with removable sides, chutes and hoppers, spring loaded bins, etc.

8. Avoid repetitive movements.

9. Maintain a wide stable base. Stand with your legs slightly apart.

10. Vary your activities regularly.

Should you need to work at a higher level, consider the following:

Use a sturdy object that can support your full body weight to stand on.

You might need a set of steps or a wooden crate to do this.

Make sure that the object you are standing on cannot slip out from under your feet.

LIFTING

When injuries occur while lifting, it is always due to one of the following:

1. Accident e.g. losing your footing, or the object falling on you
2. Overexertion e.g. picking up a load that is too heavy for you or
3. Cumulative damage occurs due this damage over time from poor working posture over a period of time.

Often the injury is caused by a combination of all three.

A lot of bending and lifting is not good for the back, however, that is the job that many of us have to do every day.

Even if our jobs do not involve picking up heavy items, we all still pick up objects during normal daily activities. A person is always inclined to bend forward when picking up items, and this causes strain on the lower back.

Why is bending and lifting from a forward bending position so bad for our backs?

- During bending and lifting the strain and tension increases on the discs between the vertebrae in our backs.
- If twisting is also part of the lifting, the pressure increases even further!

Tips to remember when reaching:

1. Plan ahead.
2. Keep your back in the neutral position.
3. Stand with one leg in front of the other.
4. Point the feet in the direction you are going.
5. Keep your abdominal muscles stabilised.
6. Bend your knees and not your back.
7. Test the weight of the object before lifting it. Ask for assistance before it is too late!
8. Keep the object close to your body.
9. Don't turn at the same time you are lifting an object. Rather move your feet and change direction.
10. Alternate lifting with other activities.

Some practical applications:

- When unpacking a carton of items, pack them on to the shelf one by one rather than lifting up the full carton to the shelf.
- When lifting a light object, don't bend down from the waist, but rather pretend to be taking a long step forward. Bend the front knee, put one hand on the bent knee and pick

up the object with the other hand.

· Another way of picking up a light item is the golfer's way: Bend at the hip and swing one leg backwards, balancing your bodyweight with your hand on the opposite knee. By doing this, one maintains good back posture and the strain on the lower back is minimised.

CARRYING OBJECTS

Shopping, bags or briefcases

When you carry your shopping bags, try to carry similar loads on both sides. Make a number of journeys, rather than trying to carry too much at one time. Consider the use of a shopping trolley. Use your body weight to push the trolley rather than pulling it along. Carry only the items that are required for each particular day. Avoid a heavy purse, tote, bag, etc. worn over one shoulder only. If you use a bag with one strap only, make sure the strap is wide and padded. If possible, place the strap over the head to have the bag resting on the opposite hip slightly to the front.

Backpacks or schoolbags

Choose a backpack made from a lightweight material
The shoulder straps should be adjustable, wide as well as padded.
A backpack with a waist/hip strap is preferable.
This distributes the pack's weight more evenly.
The bottom of the pack should rest in the curve of the lower back, not lower than 10 cm. below the waistline.
Pack the heavier items close to the back.
Distribute the contents in such a way that it does not move about in the backpack.
The weight of the backpack should not exceed 15% of the body's weight.
Lift the backpack onto a table before hoisting it onto the back.

SITTING

When we sit down to take a rest, we also have to be aware of our posture. One can also injure your back by sitting in a poor postural position. Sitting increases the compression in the lower discs by at least 50%. Sitting incorrectly increases this percentage even more!

Tips to remember when sitting:

1. Sit up straight with your back firmly supported – do not slouch!
2. Sit right back in the chair with your back up against the backrest.
3. Your chin must be tucked in and not poking forward. Your head and shoulders should be in line with your hips.
4. Your feet must be firmly on the floor or on a footrest.
5. Avoid too low or too soft chairs!
6. If there is only an unsupported stool to sit on, sit up straight.
7. When getting up from a seat, move to the edge of the seat, place one foot in front of the other and push off the back foot.
8. Always sit facing the work surface, desk, table, computer, television etc. directly.
9. If sitting at a desk or table, sit close to avoid slumping forward. Support the fore-arms on the work surface.
10. Avoid crossing your legs.

The body is designed for movement, but in modern society we find ourselves in the sitting position more often than not: either at desks, counters, check-outs or conveyor belts – and in more cases than not, there is a computer screen in front of us.

What happens when we sit in a fixed position for prolonged periods of time?

The pace at which new demands have come to make on our bodies, has far outstripped the speed of our evolutionary change. When you sit at a keyboard, we adopt a fixed posture. Whilst sitting there, you are keeping muscles which should be moving, in a fixed or still position. Muscles become fatigued and start aching as the blood supply slows down and fails to deliver sufficient oxygen to the soft tissues and also slows down the removal of waste products from the system.

A continued fixed posture can lead to contracted, statically loaded muscles, constricted blood vessels, immobile joints and compressed nerves, causing neuritis (inflammation of the nerves) or neuralgia (pain in the nerves).

It becomes a vicious circle – the more the postural stress, muscle fatigue & reduced blood flow, the more muscle pain. Furthermore, this can lead to chronic muscle fatigue/pain, chronic inflammation of soft tissue, anxiety, stress and often depression.

Don't dismiss your aches and pains as normal – you can do something about it! Of course we all have periods being in our work situation pressure when we have to work longer hours than usual. This will make us more tired than usual, but a few simple stretches can make a big difference in increasing blood flow, reducing body tension and general fatigue.

How to avoid a static posture: an airline hostess was asked by a passenger why she was not smiling that famous "air-hostess smile". "Ok" she said, "you smile". The passenger

did so – a nice friendly grin. “Right”, said the air-hostess, “now hold that for 8 hours”! This illustrates what is meant by static posture. Of course one would notice if you had to smile for 8 hours a day, that your face would get tired and the muscles around your mouth would ache.

Have you ever thought about how you hold tension in different parts of the body for hours every day? In your mind, compare the person who sits in front of his computer all day, to a monkey swinging freely through the branches in a forest. Which body do you think would function longer? Remember our bodies are designed to move, and movement encourages a healthy body!

Make a conscious effort to get out of your chair more often. You might not realise it, but one of the easiest thing you can introduce to your office routine is a “screen break”. This only needs to last one minute. Make sure to take a screen break at least once every hour. The more intensive the task, the more mini breaks will be needed. After 2 hours of intense keyboard work, mistakes become more frequent. Take regular breaks to increase your efficiency.

Get up, walk around and do some stretching during your break. Perhaps get something to drink. Getting away from your desk will also give you the chance to focus your eyes on something different. Don't feel guilty about taking a break – it also gives you a chance to take a “mind” break

Do some stretching exercises at least once every hour to release the tension in your muscles caused by sitting in the same position for too long. Make these exercises part of your daily routine at work.

Tips for efficient rest breaks:

1. Take breaks away from your desk.
2. Take breaks before needed.
3. Take short and frequent breaks.
4. Avoid doing similar activities during your break.
5. Avoid similar visual tasks (i.e. writing, computer games).
6. Do regular stretching exercises.
7. Set your cell phone alarm as a reminder to take a break.
8. Alternate your activities.
9. When talking on the telephone, get up from the sitting position and stretch.
10. Alternate between using the keyboard and the mouse

Tips for organizing your desk:

1. Sit facing a straight desk edge.
2. Position the monitor and the keyboard squarely in front of you.
3. Adjust distance of screen away from your eyes in such a way that it is comfortable to read. (45-70cm).
4. Provide sufficient wrist support, preferably padded.
5. Enough space to use mouse comfortably!
6. NO obstacles under the desk!!
7. Place the objects that you use the most, closest to you, placing lower priority items further away.
8. Avoid direct glare from the window onto your screen, or into your eyes.
9. A place for everything and everything in its place.
10. Make use of a hard copy holder close to the monitor.

Tips for organizing your work:

1. Control the speed at which you work.
2. Maintain a constant level of work.
3. Perform tasks away from the computer at regular intervals.
4. Spread any work that you do away from the computer throughout the day.
5. Vary work done away from the computer.
6. Plan evenly distributed rest breaks.
7. Never clutch the telephone between your ear and your shoulder while continuing to work!
8. Plan your day.
9. Limit stress!
10. Work smarter not harder!

COMFORT

What is comfort?

Comfort is a state of mind where there are no intrusions to let us know that we are not comfortable e.g. we do not notice our clothes unless they are too tight, too long or get in the way of something we want to do.

The intrusive sensations which lead to the perceived discomfort may be due to the distribution of pressure on the body's supporting surfaces or to the loading of soft tissues surrounding the spine and hips.

Let us look at the sensations we experience when sitting on too high a chair. If our minds are not occupied our minds, we might notice feelings of pressure under the buttocks and the upper parts of the thighs. To ease the mild discomfort, we fidget e.g.

cross and uncross the legs - this changes the distribution of pressure beneath the buttocks. It also helps to restore the blood flow to the areas of compressed tissue. If your attention is engaged elsewhere, you will not be aware of this fidgeting. With time the sensations of discomfort will increase and the fidgeting will bring less relief until, No matter how you sit, you will still feel uncomfortable. Eventually you have to get up and walk around to relieve the symptoms. Experiments have shown that people fidget more when they find the chair uncomfortable.

We have all experienced the pleasurable sensation when sinking into a soft armchair - particularly when we are tired. The relief of tension or discomfort is accompanied by a wave of pleasure. The pleasurable sensations in these circumstances are a poor predictor of whether the chair will be comfortable in the long run, as the chair fails to provide postural support.

In the minds of people there are chairs that are "good for you" and chairs that are "comfortable". This perception is untrue, as it results from not being able to distinguish between temporary and long-term comfort. In general, a chair that supports your body, especially the upper body, adequately, will be comfortable in the long run. The easiest way to find out whether this is true is to see how long you can sit in it without feeling uncomfortable.

The purpose of a seat is to provide stable bodily support in a posture which is:

- Comfortable over a period of time
- Physiologically satisfactory
- Appropriate to the task or activity which is to be performed

Tips to remember when choosing a chair:

1. The height should be such that the feet can rest comfortably on the floor.
2. The knees should be bent at right angles (90°)
3. The hips should be at the same level as the knees or slightly higher.
4. The backrest should provide support from the head and neck down to the lumbar region. Adjustable lower back and/or neck support can be advantageous.
5. The angle of the backrest should range from slightly beyond upright (95° to 120°) Further inclination could be of benefit for relaxation or resting.
6. The seat should provide stable support.
7. The seat should be deep enough to support the upper leg up to just behind the knee.
8. The seat must have a well rounded edge and can be slightly tilted forward.
9. Adjustable armrests that are at elbow height when the elbows are bent.
10. The chair should have a stable base. If the chair has casters, 5 casters are preferable as it improves the stability.

SLEEP

Sleep is an essential nutrient for our bodies. How we sleep can make all the difference. If you are having trouble sleeping or find that you awake in the morning more tired than when you went to bed, you need to take a good look at where and how you sleep. The correct sleeping position, as well as getting in and out of bed correctly, are very important aspects of your back care.

Tips on sleeping:

1. Use a good mattress that maintains the same natural spinal alignment that you have when standing.
2. Don't sleep on your stomach. Sleep on your side or back.
3. When lying on your back, place a pillow/ night roll under the knees.
4. When lying on your side, place a pillow between slightly bent knees. This will help to keep the spine straight.
5. Oversized cushy pillows look inviting, but do not benefit your spine!
6. Use a pillow that aligns the head with the rest of your body.
7. Before getting up out of bed, turn onto your side.
8. Swing your legs of the bed, while at the same time pushing your upper body upright by using your hands.
9. Straighten from the sitting position. Avoid bending forward from the waist.
10. Stretch yourself to your full length, stand with a good posture. Promise yourself to maintain a good posture during various activities for the rest of the day!

ACTIVITIES OF DAILY LIVING

Childcare

Children tend to perform sudden, unsuspected movements. This might interfere with your ability to handle the child safely and places you and your child at an increased risk. Avoid changing your child on the floor. The child must be as close to your body as possible before you begin to lift. Bend your knees and tighten your stomach muscles. Limit the amount of lifting you do. Avoid carrying a child on one hip only.

Car Maintenance

Squat or kneel close to your work. Avoid bending forward from your waist. When you must work at lower levels, keep the weight of your upper body supported with one arm and bend at the hips, not the waist.

Sweeping and vacuuming

Perform these tasks as if the vacuum or broom were attached to your body.
Move your feet and legs rather than bending or reaching forward from your waist.
Do not twist your back.
Bend in your knees and hips while keeping the back straight.
Alternate between activities.

Mowing the lawn

Do not twist your back.
Pivot your feet.
Always face your shoulders and hips in the direction you are heading.
Keep tightening your stomach muscles while mowing.
Stretch your back regularly to reduce the stress in your back.

Using the washing machine or dishwasher

Place the load as near to the machine as possible.
Go down on one knee to load the machine.
Keep your back straight at all times.
Divide the loads into smaller loads.
Use support when you return to the standing position.

EXERCISES

All of us need exercise – sportsmen and women warm up before competition, as should all workers. The lack of activity e.g. like working in the same position each day, places strain and demands on the postural muscles and can cause fatigue and injury. A well-rounded and effective exercise program is within the reach of all of us. These exercises are easy to do and we can exercise for fun as well health, for reasons. Choose a programme that suites your lifestyle, personal ability & pace.

Tips to remember when exercising:

1. Start out easily and slowly.
2. Gradually increase the number of exercises.
3. Exercise regularly.
4. The abdominal stabilizers must be incorporated into your daily exercise programme. They are the "engine room" or "foundation" of all movements and are very important in injury prevention.
5. Movements must be smooth and rhythmic – don't jerk!
6. Relax, take your time and enjoy the exercise!
7. Avoid unnatural movements.
8. Regular exercise will improve your circulation, strength and stamina.
9. A little discomfort while exercising isn't bad, you should feel the muscles and joints stretching and working.
10. Exercises should not cause pain that lingers after you have stopped exercising.

Exercises at work are aimed at enhancing flexibility in our muscles and joints, improving circulation and helping us to relax.

"Pause exercises" at work are aimed at preventing static posture and stressful activities, so do these regularly – it only takes a few minutes!

When in doubt, check with your physiotherapist.

To find a Physiotherapist, visit the official website of the South African Society of Physiotherapy www.physiosa.org.za