

Living with OSTEOARTHRITIS



Patient Workbook

NAME: _____

Welcome to the “Living with Osteoarthritis” patient workbook.

This is a workbook designed to be used over 6 weeks. We hope that by using the workbook people will learn more about osteoarthritis and develop self-management skills for living with the condition. Using this workbook is not about sitting and reading or listening. In order to get the most out of this course you will be asked to share your experiences, you will need to set goals and share those goals with others and you will need to take part in activities. This workbook is NOT a substitute for any other medical care that has been recommended for the treatment of your condition but an addition to see if it helps you in any way.

You will benefit most from this workbook if you commit yourself to completing all the sessions within a 6 week period of time. Scientific research tells us that these courses are of great benefit to people living with chronic diseases such as diabetes, arthritis and HIV/AIDS. But to benefit from the course, using the workbook regularly over 6 weeks and participating in activities is essential. The workbook is divided into six sections:

- **Week 1: Osteoarthritis, Self-management and Exercise**
- **Week 2: Managing common symptoms**
- **Week 3: Stress Management**
- **Week 4: Eating Well**
- **Week 5: Medication and disease-related problem solving**
- **Week 6: Continuing as a successful self-manager**



Your course leader is _____. She is a qualified physiotherapist and has been trained in all the information you will be going through in the discussions. She is also an expert in safe ways to exercise and relaxation techniques.

Week 1: Osteoarthritis, Self-management and Exercise

What is Osteoarthritis?

What is osteoarthritis? It is a degenerative joint disease which we often call OA. In simple terms, it is the breakdown of previously healthy joint surfaces, causing the two bones that make up the joint to rub against each other. This wears away the bone's surface (the cushioning of the joint) and can become painful.

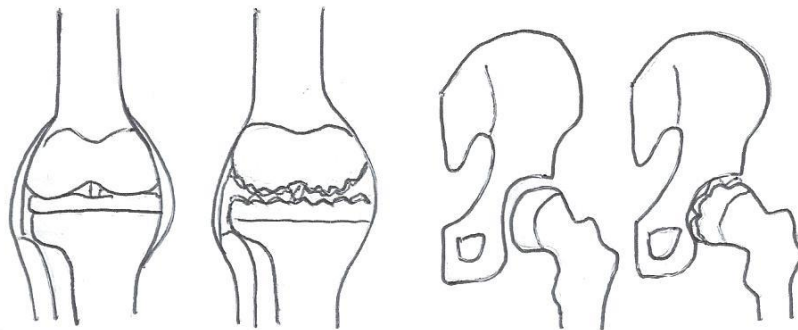


Figure 1 Normal knee. OA of the knee. Normal hip. OA of the hip

OA is different in every person and the way it progresses differs for each person too. Usually, as a person ages the condition progresses until in some people there is a lot of joint damage with deformities. **In others there can be joint damage and deformity with no or little pain.** OA is most common in the hips, knees and hand joints. The cause of OA is very seldom due to one factor alone, but rather a combination of things acting together usually brings about this condition. Known causes/risk factors for OA include but are not limited to:

- age
- inherited or genetic predisposition to developing OA, especially in the hands
- gender – females are seen to have OA more commonly than males
- obesity and being overweight
- faulty alignments or having poor posture
- certain occupations/ sports/ repeated stresses on the joints
- previous trauma

Diagnosis:

It is fairly simple for a doctor to make a diagnosis of OA. The doctor makes the diagnosis by examining you and by taking a history of the main symptoms. X-rays can help in correctly diagnosing OA, but these are not always necessary or a true reflection of pain related to the degeneration seen. Changes which we look for on the X-rays include narrowing of the space between the two bones, evidence of wear and tear of joint surfaces and small bony areas forming.

People who have OA mainly complain of:

- pain in the affected joint or limb
- stiffness, particularly in the morning for less than two hours
- muscle weakness
- difficulties in performing daily tasks like walking or climbing the stairs

Management options:

Scientific research shows that **educating** people about their condition in order that they may understand it better and manage it better, is the best way to treat it and that this works well. People are advised to become more active by **exercising** and balancing this with rest.



Physiotherapy, which focusses on education and exercise has been shown to help. There are also medicines that your doctor will can prescribe for you to treat your pain or inflammation. Different surgical methods can also be used to treat this condition, the most effective being a joint replacement. Joint replacements are big operations though, so they are only done when the OA is advanced and in some cases patients may still complain of pain afterwards.

Now that you know a bit more about what the condition is, we will go through what we mean by self-management.

What is meant by “self-management”?

Self-management does not mean that you are expected to look after your health on your own with no help. No, someone who is a successful self-manager takes responsibility for their health. This means that they choose to work with the health team, with their medication and with themselves to live a healthy life (just like a manager in a business – they don’t do everything themselves, they work with a team).

There are lots of things you can learn to do which will help you to be a successful self-manager. First of all it is important to understand osteoarthritis. This is what we have just covered briefly. You need to understand what the condition is, why it happens, how it changes and how it impacts on your life. You also need to know about the ways to treat it and medications which may be used.

The next step in being a self-manager is being able to think about this information in terms of how it affects you. The final step in being a self-manager is to think about what it is that you want to be able to do, decide how you are going to do it and then to learn and practice the skills you need to be able to do it. Some of the things you will learn about and practice every day when you do this course include exercising, relaxation techniques and healthy eating.



By using this workbook you will learn about exercise and its benefits, in the second section you will learn a bit about the common symptoms of osteoarthritis and how to manage these. The third section will focus on stress management, the final sections focus on eating well and medications. Some people using this workbook may already know a lot about these topics, others may not know very much. It is important to share information and make sure that everyone has the knowledge they need to become a self-manager, even if you think you know a lot about these topics it is still worth your going through the workbook to make sure you have not missed out on any information. Scientific research tells us that people

who are well informed about their health manage better and have a better quality of life. Using this workbook, you will also learn about and discuss the steps that are needed to become a good self-manager. Let's look at these steps here.

Self-management steps

Step 1:

To be good at self-management you need to learn and practice several skills which you will practice through using this workbook. The first step is to **decide what it is you want to be able to do**. This can be the hardest step to think about. For example you might be feeling very sad and depressed. First you need to think about why you are feeling that way. Perhaps one of the reasons you are feeling that way is that you have lost touch with your friends. Your first step might be to decide that you need to reconnect with your friends or to meet people and make friends. This will help you to feel less sad and depressed.



Write down here three things that you **want to be able to do**:

- 1) _____
- 2) _____
- 3) _____

Step 2:

But deciding that you are going to meet people and make friends doesn't mean it will happen. You have to make it happen. The second step in being a self-manager is to decide **how you are going to do it**. Sometimes the thought of doing something new can seem too much and we don't even try. If you want to meet people to make friends you need to think about all the different options you have to do this. For example you could invite your neighbours for tea, or you could decide you would meet people by going to church, by joining a support group or an exercise group. **Never assume that what you want to be able to do is impossible**. Always look for every option and look at it from every angle.

Write down here three different ways that you **could try to achieve what you want to do**:

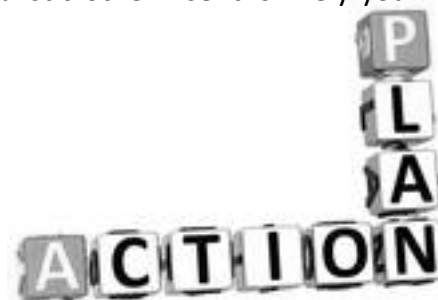
1) _____

2) _____

3) _____

Now that you have decided on *how* you can try to achieve what you *want*, **you need to make an action plan**. It is important that this plan is realistic otherwise it is likely you will not succeed. How do you do this?

- First decide what you are going to do *this week*
- Now make a *specific plan*



Action plans, goal setting

Saying that this week I'm going to try to meet some people is NOT a specific plan. To be specific, the plan must have different parts. It is useful to ask yourself some questions to help develop a specific plan. Questions like:

- *What?*

Exactly what are you going to do? For example you could decide that to meet people you are going to invite your neighbour for tea.

- *How much?*

Then you must decide how much you are going to do. For example are you going to invite one neighbour for tea or are you going to invite lots of neighbours over. Lots of people are much more tiring than one person. Or do you want to invite your neighbour for lunch? But lunch means a lot more preparation and time and will make you more tired. So you have to decide how much you can do.

- *When will you do it?*

Then you must decide on exactly which day you are going to do the activity and at what time of the day. Maybe it is better to invite your neighbour for tea in the morning because you get tired in the afternoon. Or if you feel sick in the morning from your medicines maybe it is better to invite your neighbour for afternoon tea. Or maybe your neighbour works and you need to invite them for tea at the weekend.

- *How often?*

This is always the hardest part. We all would like to be able to do more things every day. But we are human and this is not always possible. When people want to start exercising, we often say we are going to do it every day. But this is often just not possible and if we then miss a day we feel that we have failed and we give up. How often will you invite your neighbour for tea? Not every day but maybe once a week. You know that you won't become friends immediately and that it will take time.

- *Is it a good plan?*

To test whether you have come up with a good plan you need to ask yourself this question:

"If I give myself a score from 0 -10 for how confident I am that I will achieve my plan this week, where 0 is not at all confident, and 10 is totally confident. What score will I give to show how confident I am that I can complete this plan?"

If your answer is 7 or more out of 10 then this is probably a very good plan. If your score is less than 7 you need to think about why you are not confident. What are the problems or barriers? Can you change the plan or solve the problems to make yourself feel more confident?

Step 3:

Now, you need to **write your plan down and put it somewhere you will see it every day.**

There is an action plan form at the end of this section and more in this book. Use them every week while you are using this workbook. You can always draw more of them to keep working on your plans in the future.

A good action plan is:

- Something I want to do
- Something I can expect to do this week
- Is specific
- Answers the questions: What? How much? When? How often?
- I am confident that I can achieve with a score of at least 7 out of 10.

Now you need to carry out your action plan. If it is a good plan then doing it is usually fairly easy. It helps to tell family or friends what your plan is and to report back to them on how you are doing. On this course you are going to make a plan every week and record how you get on. It helps to report back on things because you can then have an idea on how well you are doing. If you haven't been able to keep to the plan you can discuss the problems you might have had and make plans to cope with them.

Step 4:

Always check your results and give yourself a reward for having achieved your plan. Also think about how achieving your plan is making you feel. In the example we talked about, you could congratulate yourself for having invited your neighbour for tea, you would also think about how you now feel. Is the plan helping you to achieve what you want?



What happens if something doesn't go according to plan?

What if your plan doesn't work? Are you going to give up and decide you had a bad plan?

There are seven steps to solving problems. These are:

1. Deciding what the problem is (you might need friends and family to help here)
2. List ideas to solve the problem
3. Select one idea to try
4. How did it go?
5. If it didn't work, try another idea
6. If your ideas don't work, ask friends, family, counsellors, professionals for ideas
7. Finally you might have to accept that you can't solve the problem now.

At the end of each section and at the back of the workbook there are "Action Plan Forms". Use these forms to plan what you want to do and how you are going to do it. We are now going to discuss exercise and we are going to use the "Action Plan Form" at the end of this section to plan what exercise you are going to do this week.

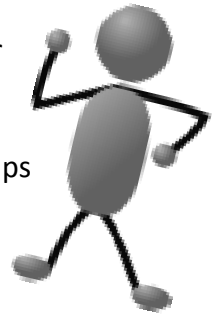
A successful self-manager is someone who:

- Sets goals
- Makes a list of ways to achieve those goals
- Makes action plans to achieve the goals
- Carries out the action plans
- Checks on their progress every week
- Can change the action plan if there are problems
- Gives themselves a reward for achieving their goals



Exercise dos and don'ts

Exercise is a very important way to keep healthy. Scientific research tells us that **exercise has a lot of good effects on our bodies** like helping our digestive system absorb and process food; it trains our hearts so that they are strong and healthy and keeps our lungs working well. Exercise makes our muscles and bones strong and our joints flexible so that we can keep moving. Exercise also helps to make us feel happy, improves concentration and memory, improves sleep and exercise helps to decrease the chances of developing chronic illnesses like high blood pressure and cancers.



In the past, when people became ill with a chronic illness like high blood pressure or diabetes or arthritis, medical care focused on helping them when their symptoms became worse. Treatment focused on using medicine and people were often advised to rest or decrease their activity. Today we know that if we teach people who develop chronic

illnesses about their disease and encourage them to do the right exercise **we can prevent a lot of the problems** which used to be treated with medicines. We also know that exercise can help to treat a lot of the symptoms which people with chronic diseases develop. Symptoms which may be caused by the disease or by the drugs used to treat the disease.



Exercise is good for:

- Improving mood
- Strength
- Improving sleep
- Concentration and memory
- Heart and lung health
- Decreasing body fat
- Digestion
- Increasing confidence to self-manage chronic illness.

You may be wondering if it is safe for you to exercise when you have osteoarthritis. Research tells us that **exercise has been shown to be beneficial** in people with osteoarthritis, as well as in those who need a joint replacement. Exercise assists with pain relief! Exercise can help slow down the degenerative processes that happen with arthritis when you aren't exercising. Exercise can also help you to lose weight which helps with osteoarthritis of the legs as there are less forces through the knee joint. We know that people who are physically fit get fewer colds and take fewer days off work because of illness. One of the biggest benefits of exercise is that exercising regularly makes you feel more in control of your life.



Although exercise is good for you and safe for you to do, **sometimes your body will give you clues that you need to postpone your exercise** for the day. If you have a fever, feel dizzy, have vomiting or diarrhoea, if your joints have suddenly become swollen, or if you have a pain which is new and you are not sure what is causing it, it is better to miss an exercise session until you can speak to a doctor or physiotherapist.

Do not exercise if:

- You have a fever
- You are dizzy
- You have been vomiting
- You have diarrhoea
- Your joints have suddenly become swollen
- You have a new pain which you don't know the cause of

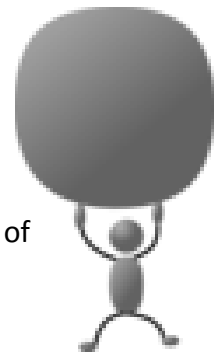
Miss one exercise session if you have one of these problems until you can speak to a nurse or doctor. This does not mean you should never exercise but you need to make sure you are not becoming ill.

- **Types of exercise**

You do not have to join a gym or a club to get exercise. There are lots of ways of exercising like jogging, playing football or netball or playing tennis but these might seem quite advanced for some. **Walking, cycling and swimming are very good ways to exercise for OA.** Any activity which makes your heart beat faster and makes you breathe a little harder is exercise. Dancing is exercise, walking up the stairs is exercise, gardening is exercise. There are lots of ways that we can exercise every day without having to go to a class or join a club. You could walk a little further before catching the bus or the taxi or you could play with your children or grandchildren!

There are three general kinds of exercise you can do.

1. **Endurance exercise:** like walking, dancing or swimming. Endurance exercise is sometimes called aerobic exercise which means that you will be breathing faster and your heart will be beating faster too. We know that this kind of exercise is very important to keep healthy and we need to do 30 minutes of this kind of exercise three times a week to keep healthy.
2. **Strengthening exercise:** this kind of exercise focuses on making us stronger. To make muscles stronger we have to do exercises which make the muscles work hard against a resistance, like weight training but you can also do strength training by working with heavy bags of shopping!
3. **Stretching exercise:** this focuses on keeping us mobile and flexible.



Types of exercise:

- **Endurance exercise** which makes you breathe harder (sometimes called aerobic)
- **Strengthening exercise** which makes you stronger
- **Stretching or flexibility exercise** which makes you more mobile and supple

We know one of the hardest things about exercise is not doing it once, but doing it again and again. There are several steps we can follow to make sure that when we start to exercise we stick to it. We all make lots of excuses why we can't exercise. Let's look at the most common excuses.

"I don't have time"

It doesn't take a lot of time to start exercising. Five minutes a day is a good start. We make time to take medicine because we know without it we would become ill. Exercise is as important as medicine to help us remain healthy (remember it can never replace your drugs). If we know that it is that important we can make time for it.



"I'm too tired"

When people become ill they often become less active. As you become less active, your body loses fitness and you become weaker, you may feel stiffer and you tire more easily. This means that exercising might feel harder and so you exercise less. This often results in a downward spiral of activity and people often get to the point where even walking down the street to visit the neighbour can feel like too much. Being active or doing exercise when you are feeling tired will give you more energy and make you feel less tired.



"I'm too sick"

You may be too sick to undertake very vigorous exercise but you can still aim to be more active. You can even break your exercise into one minute sessions which you repeat several times through your day. The fitter you get, the better you will be able to cope with your illness



“I get enough exercise already”

You may be getting a lot of exercise already in your job or simply walking around doing your daily chores. But for most people if we add this time up, it still isn't enough exercise to keep them fully fit. This kind of exercise also doesn't include one of the most important components that make exercise good for us – fun!



“Exercise is boring”

You don't have to do the exercises that everyone else does if they are boring. Choose something that is fun, exercise with a friend or with your favourite music or listen to the radio. You can also keep your exercises fun by changing them regularly.

“Exercise is painful”

Exercise may be uncomfortable but it shouldn't be painful. If you have pain before you start to exercise, it should not get worse while you are exercising. If you do not have pain before you start to exercise and you start to feel pain while you exercise you need to stop exercising and evaluate your pain using the guidelines in Week 2. If you have muscle or joint pain for more than two hours after you exercise then you have probably done too much. Next time do a little less, either exercise for less time or less vigorously.

“It's too dangerous, it's too hot, it's too cold”

There are always reasons like this not to exercise. Remember that exercise can be done anywhere and anytime. You can put on music in your home and dance, if it's too hot you could walk around shops which have air-conditioning. Finding a group of people to exercise with will not only make it safer but also more fun!



“I know I won’t stick to it so there is no point in starting”

First review the steps we discussed on how to be a successful self-manager. If you set your exercise goals using these steps you have more chance of sticking to your exercises. Remember too, the important step of rewarding yourself for achieving your goals; this makes it easier to move on to your next goal. We are now going to have a look at the important steps to take to be successful at putting your exercise plan into action.

Steps to success with exercise:

- Set a clear goal using the steps outlined in “How to be a successful self-manager”
- Choose exercise or activity that you want to do and that is fun
- Set a specific time and place to do your exercise
- Decide how long you are going to stick to the plan before you think about changing it (6 to 8 weeks is a good time to work on things)
- Keep an exercise diary to keep track of how you are doing (there is one at the back of this booklet for you to use)
- Keep track of your progress using the exercise diaries in this workbook.
- Start – don’t wait, start now. Begin gradually and proceed slowly
- Revise your programme. At the end of the 6 – 8 weeks make a new plan for the next 6 weeks
- Reward yourself. It is a reward to feel better and healthier but also give yourself a reward for achieving your goal, like eating a favourite meal, or visiting a friend or taking a walk somewhere special.

- **Your exercise programme:**

An exercise programme should include the three different types of exercise; remember they were endurance, flexibility and strength exercise.

Following the steps in the box “Steps to success with exercise”, you need to decide on what you want to be able to do and what exercise you would like to do. Now that you know what exercise you are going to do, you need to decide how much to do. The amount of exercise you are going to begin with will depend on a lot of different things. If you have not done any exercise for a long time or have been feeling unwell, have had difficulty breathing or been short of breath, if you have had stiffness or pain or weakness that interferes with your daily activities then you need to start your exercise slowly, best to check with your health professional that it is a good time to start. You can begin slowly by starting with some flexibility and strengthening exercises. Do these exercises every other day for 5 minutes. Once you can do that comfortably and without feeling stiff or sore the next day, increase it to 10 minutes.

Once you can do 10 minutes comfortably, you can start doing the exercises every day (when we say exercise every day, we usually mean exercise for 5 days of the week; it can be very hard to keep a routine to exercise on weekends when activities are different). Once you can do at least 10 minutes every day then you are ready to begin endurance exercises. Choose your exercises from the ones set out in the sections below. Follow the instructions in the box to make sure you get the most out of the exercises and do them safely.

From there you can progress to 20 – 30 minutes a day. This is said to be the recommended dosage in order to begin reaping the benefits

Getting the most out of your flexibility and strength exercises:

- Move slowly and gently. *Do not* use jerking or bouncing movements as these will make your muscles shorter and tighter.
- Stretch to the point of *tension* in a muscle and hold for 20 seconds before you relax
- Don't push until it hurts, *stretch to tension not pain*
- Start off with 5 repetitions of each exercise. After one week increase it to 7, after another week increase to 10.
- Always do the *same number* of exercises on the left side and the right side of your body
- *Keep breathing*; do not hold your breath when you exercise. Think about breathing out as you move to make sure you do not hold your breath.
- Use the *two hour rule*. If you have increased symptoms (like pain) for more than two hours after you exercise you have probably done too much. Don't stop doing the exercises but decrease how much you do next time.
- If you find an exercise difficult this does not mean you should not do it at all. You should adapt it, do it as completely as you can.

Flexibility Exercises:

Remember, these exercises are aimed at improving your ability to move. There is a long list of exercises that could be included here and you might not be able to do them all every time you exercise. Try to ensure that you do flexibility exercises at least once a week.



Strengthening Exercises:



You do not need to go to a gym to do strength exercises, the exercises described here can be done at home. To make muscles stronger you must make the muscles work against a resistance or a force – they have to push or pull. You should not do strength

exercises every day, rather they should be done every second day. Your muscles need a day of rest to adapt and get stronger. To make a muscle stronger you need to repeat each exercise 5 times to start with. Once you can do an exercise 10 times you will not get stronger by doing more exercises. Now you will need to add more resistance to the exercise to get stronger.

Endurance Exercises:

The most difficult thing for most people is deciding how much exercise to start with. The easiest starting point is to ask yourself the question: “how much do I think I can do without suffering for it tomorrow?” If you feel you can do 5 minutes, then do 5 minutes. Remember that any exercise is better than none. You don’t have to do 30 minutes from the first day. It is important to start slowly and increase very gradually. It is better to start off by doing less than you think you can and increase it from there.

There are three things you need to think about when you do endurance exercise. These three things are *frequency* (how often am I going to do this exercise); *duration* (how long am I going to exercise for when I do exercise) and *intensity* (how hard am I going to work when I exercise).

Frequency:

Try to do endurance exercise 3 or 4 times a week. By doing this you can rest every second day and allow your body to recover. All athletes have at least one day a week when they rest. Rest does not mean that they lie in bed all day though, it means that they do not do their exercises.



Duration:

How much can I do without suffering for it tomorrow? That is your starting point. If you are starting with just a few minutes you can gradually increase it over time until you can do 30 minutes at a time. The easiest way to increase the time is to use intervals of exercise. For example to walk hard for 3 minutes, then walk slowly for 2 minutes, then walk hard again for another 3 minutes. Slowly over time cut down the slow walking and increase the hard

walking. You could also break your exercise into separate sessions. You could walk for 10 or 15 minutes in the morning and do it again in the evening. This would still count as 30 minutes of exercise.

Intensity:

How will you know that you are exercising hard enough to be doing some good? How will you know if you are exercising too hard? When doing endurance exercise the easiest way to check the intensity is to use the “Talk Test”. When you are doing moderate intensity exercise you should be able to talk comfortably, but if you tried to sing it would be a little difficult and you would have to stop singing to take bigger breaths. Moderate intensity means you should feel that you are breathing a little faster and a little harder but you can still talk. It may take you a while to find the right intensity for you for the whole of your exercise session. This is normal; take your time to get to know how your body will respond.

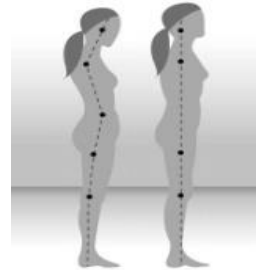
How will you know you are improving in your exercises? For the flexibility and strength exercises it is easy to feel the improvements as you will feel that moving is easier and you are stronger and can lift heavier items. For some people it is harder to know if you are improving with the endurance exercises. One way to see if you are improving is to do a test. One of the easiest tests to do is a timed test. Decide on a route that you can walk near your home. Walk this route at a moderate intensity and time how long it takes. After several weeks of exercise walk the route again and time it again. You may see that you can walk the same route faster within 4 weeks, but it may take 8 to 12 weeks before you see that you can do the route in a faster time. The goal is to complete the same route faster or in the same time but at a lower intensity (breathing much easier).

Use the exercise diary at the end of each section to record your goals and your progress in achieving them.

- **An exercise routine**

This is a 20 – 30 minute exercise routine which is safe for people living with osteoarthritis. This routine includes exercises which make you stronger (strength exercises), more flexible (stretching exercises) and fitter (endurance exercises).

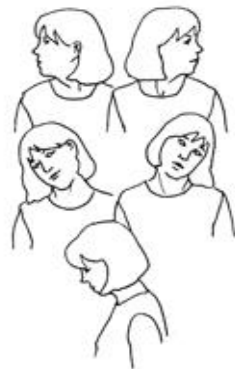
1. Start by standing up straight and tall, feel your weight across your feet, relax your shoulders and open your chest, hold your head straight. Take a deep breath in and breathe out.



2. March on the spot for 2 minutes. March at a steady pace – that is a pace which you can maintain for 2 minutes. Do not start fast and get slower or start slowly and get faster. Pace yourself, start and finish at the same speed. You should be marching so that you can feel you are breathing a little bit harder than normal, you should be able to talk but not be able to sing.



3. Now stretch your neck – keep your shoulders relaxed and turn to look over your right shoulder – hold it for 20 seconds. Bring your head back to the middle, then turn to look over your left shoulder – hold it for 20 seconds and then bring your head back to the middle. Now put your left ear on your left shoulder - hold it for 20 seconds and then bring your head back to the middle. Repeat to the right. Now put your chin on your chest - hold it for 20 seconds and then bring your head back to the middle.



4. Roll shoulders forwards 5 times, then roll your shoulders backwards 5 times. Then stretch your arms by stretching your right arm across your body to the left and holding for 20 seconds and then repeat with the other arm.

5. March on the spot for another 2 minutes – 30 steps normal, 30 steps lift your knees up as high as you can. Keep changing every 30 steps.
6. Stretch your quadriceps muscles by bending your right leg backwards and holding your foot if possible below your buttock. You will feel the stretch down the front of your thigh. Hold it for 20 seconds and then do the same on the left.

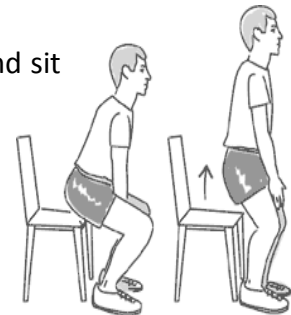


7. Stretch your hamstring muscle by putting your right heel on the ground and pulling your toes upwards, put your hands above your knee and lean forward to feel the stretch behind your knee. Repeat on the left for 20 seconds too.



8. Sit on a chair – make both your knees straight and then bend again. Do this 30 times. This works your front thigh muscles.

Then with your arms folded on your chest, stand up from the chair and sit down again. Keep sitting down and standing up for 2 minutes. Do this at a steady pace – that is a pace which you can maintain for 2 minutes.



9. March on the spot for 2 minutes – 30 steps normal, 30 steps lift your feet up as high as you can (try to kick your buttocks). Keep changing every 30 steps.

10. Stand on one leg at a time for 30 seconds each: use support by putting your hand on a wall or chair if necessary but try balance without holding on. Do this twice on each leg



11. Step ups: Step onto and off of a low step for 2 minutes. Start with the right leg and then step up with the left leg and alternate. This works both your front and back legs muscles as well as your hip muscles.

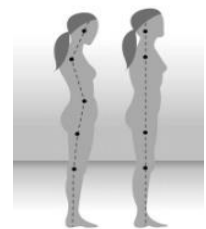


12. March on the spot for 2 minutes – 30 steps normal, 30 steps lift your knees up as high as you can. Keep changing every 30 steps.

13. End off the session by stretching your trunk: Slide your hands down the front of your thighs to see if you can touch your toes. Bend sideways by sliding your hand down the side of your leg. Hold this for 30 seconds and then do it to the other side.



Finish by standing up straight and tall, feel your weight across your feet, relax your shoulders and open your chest, hold your head straight. Take a deep breath in and breathe out.



Action Plan Form - Exercise

Use this form to develop an action plan on exercise. What exercise would you like to do?

Be sure your action plan includes:

What you want to do

How much you are going to do

When you are going to do it

How many days a week you are going to do it



For example: This week, I will walk (*what*) around the block (*how much*) before lunch (*when*) three times (*how many*).

This week I will:

_____ (*what*)

_____ (*how much*)

_____ (*when*)

_____ (*how many?*)

How confident are you that you can complete this action plan?

Not at all | | | | | | | | | | Totally

confident 1 2 3 4 5 6 7 8 9 10 confident

Keep a record of how you did:

	I Plan to.....	I did.....
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		

Week 2: Managing common symptoms

Osteoarthritis is known to greatly affect a person's quality of life, with **pain** being the most common reason for seeing a doctor or physiotherapist. Other symptoms which are often present are:

- **joint stiffness** (especially following a period of rest or early morning stiffness for less than two hours),
- **swelling** and problems moving the joint through the whole range of motion
- **difficulty** in performing daily tasks
- **Fatigue**
- **Frustration, isolation, depression**

We will look at what each of these are and how you can manage them at home if you experience any of the above.

What is pain?



To answer this question you need to understand something about **PAIN PATHWAYS** and **Acute Pain**. The pain signals that go to the brain are not a simple one way system; there is a complex system of nerves involved.

"Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in term of such damage. Pain is subjective."



So basically that means that pain is something we feel physically and emotionally and that it is related to damage to the body, potential damage or described as if there was damage to the body. And everyone has their own pain; no one can tell me what my pain feels like.

As a child we learn that hurt means harm, and the more harm there is, the more it hurts. For instance you know that stepping on a thorn is less painful than cutting your foot open on a piece of sharp glass. In other words, there is a direct relationship between pain and the extent of the damage.

- But how would you explain phantom pain (where pain is felt in a part of the body that has been amputated)?
- Why, when a child falls over and scrapes his knee he only starts crying once he has looked at his knee and sees the blood?
- Why can a rugby player play a game with a strained ankle?
- Why do some people feel pain long after the body has healed itself?

What is acute pain?

Acute Pain is a normal sensation triggered in the nervous system when nerves in the body are stimulated. Acute pain comes on suddenly (e.g. after trauma or surgery), and lasts for a few days or even weeks while the body heals itself. Once the body is healed, there is no more pain. For Example: If you twist your ankle, it is sore for a few days but slowly the pain decreases and finally disappears.

Acute pain can also be a survival mechanism to warn you about possible injury. For Example: When you put your hand on a hot stove you feel the pain and you withdraw your hand quickly so as not to burn yourself. In this case you may feel the pain but there is no damage if you were quick about moving your hand.

Pain pathways

When we feel acute pain, there are a number of events and pathways the pain signals travel through to get to the brain in order for us to feel pain.

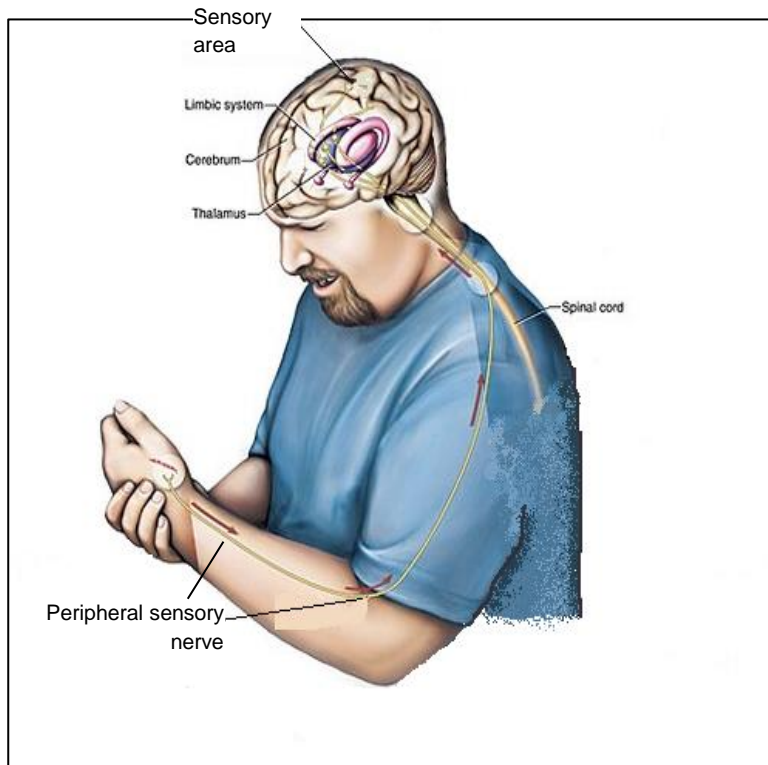


Diagram 1

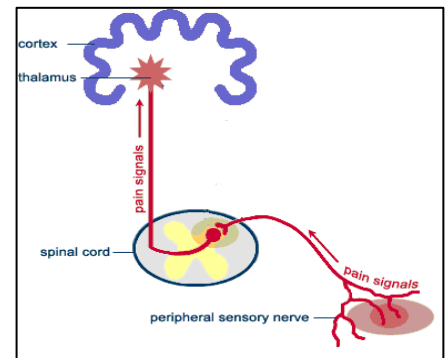


Diagram 2

Events at the Periphery

The man in diagram 1 has cut his hand. This damage will stimulate the *Peripheral sensory receptors* in the skin and body tissue of his hand. These receptors turn this stimulus into pain signals which get passed along the *peripheral sensory nerve* into the Spinal cord.

Events at the Spinal Cord

The *Peripheral Sensory Nerve* stimulates another nerve (diagram 2) in the spinal cord which takes the pain signals to an area of the brain called the *Thalamus*. The second nerve (spinal nerve) not only responds to pain messages but to movement messages too.

Events in the Brain

The *Thalamus* (which acts like a switch board) decides if the information coming through is important. It can choose to listen to the pain, or turn the volume down of the pain signals. If the Thalamus decides the information **is not** important it will turn the volume down on the pain signal, so there will only be a very soft signal coming through. If the Thalamus decides the information **is** important it will turn the volume up on the pain signals. The louder the signals are, the more pain will be experienced.

The Thalamus then passes the pain signals to other areas in the brain to give meaning to the pain signals so we know exactly where the pain is coming from and it allows us to select an appropriate response to pain. Messages are even passed to the “emotional centre” of the brain (Limbic System which is associated with the Thalamus). That is why when you feel pain; you may feel different, moody and miserable. Your personality might also change; you may become withdrawn and distance yourself because of your pain.

BUT...

In a person who has Chronic Pain, structural and functional changes occur in these pain pathways resulting in abnormal or unusual experiences of pain.

I have pain all the time and nothing seems to be helping. Are you telling me there is nothing I can do for my Pain because of these changes? Do I have to live with this pain forever?



No, to combat your pain **YOU** need to work **WITH** and be part of a multidisciplinary team who will help you manage your pain. You can learn to gain control of your pain, rather than letting it control you.

What is chronic pain?

Chronic pain is pain that persists after the normal time expected for an injury to heal. It can also be described as pain that lasts longer than 6 months.

This happens because of structural and functional changes that occur in the nerves (that receive messages about pain), spinal cord and brain.

Peripheral Changes/Sensitisation (i.e. Changes at the Pain Receptors sites)

Pain Receptors

Silent or inactive Pain Receptors can become active. Meaning that some pain receptors usually lie dormant but they can wake up and start functioning. These changes result in a greater number of Pain Receptors; therefore more pain receptors can become stimulated than usual which results in more Pain Signals going to the brain. More signals results in more pain.

Threshold Changes

A certain amount of stimulus is required at a pain receptor for the receptor to make pain signals. This is called the *Threshold*. When there has been prolonged inflammation, this threshold is lowered; therefore a much smaller amount of stimulus is needed for the pain receptor to make pain signals (Like when a tap is dripping; the longer you listen to it the louder it becomes). This results in Allodynia, which is pain caused by a stimulus that is not usually painful.

In this way, people with Chronic Pain can become very sensitive to pain stimuli and other stimuli, this is called hypersensitivity (when a sensation is more painful than it should be) or allodynia (when a sensation that normally is not painful, is painful).

For Example: If a person without chronic pain was to rub one hand against the other, they would feel pressure, friction and heat of one hand on the other but probably would not feel pain. However a person who suffers from Chronic pain, might feel pain when they rub their hands together because of the peripheral changes that have taken place resulting in increased sensitivity.

Central Changes (i.e. Changes in the Spinal cord and brain)

The recurring activity of the peripheral sensory receptors can result in changes in the Spinal Cord and Brain.

Changes in the Spinal Cord

Threshold Changes

Similar changes occur in the spinal cord as they do at the periphery. The threshold of the nerves receiving the pain signals from the Peripheral Sensory nerve is lowered. Therefore it takes a smaller amount of pain signals to stimulate the spinal cord nerve. This leads to hypersensitivity (when a sensation is more painful than it should be).

Amplification of Pain Messages

The ongoing messages coming to the spinal nerve due to the peripheral changes result in more spinal nerves listening to the pain message. Therefore the more nerves that are listening, the more messages can be carried to the brain, the more pain will be felt. For example, if two people are talking at the same time, it is not as loud as when there are 20 people talking at the same time.

Confusion

The Spinal cord nerve responds to both pain and movement messages. Because of the changes at the periphery, pain signals are coming to the spinal cord all the time. The Spinal cord nerve gets used to listening to the pain message all the time and it forgets about the movement messages. When a movement message comes through, the spinal cord gets confused and sends the wrong message, a pain message. It is similar to the broken telephone game children play. Therefore when a person with chronic pain exercises it is painful because the movement messages are getting turned into pain messages. Therefore there is more pain when you move or exercise.

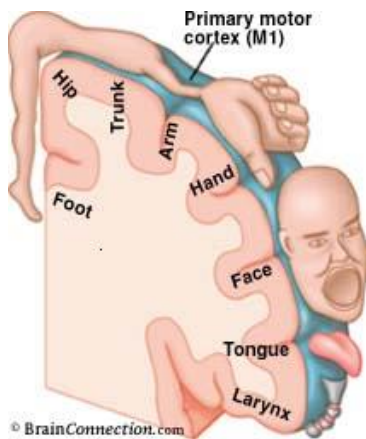
Changes in the Brain

Threshold Changes

When someone experiences pain, you remember that one of the events that occur in the brain is that pain messages get passed from the Thalamus to other parts of the brain. During an experiment scientists could see on a MRI scan that these areas of the brain light up when a person experiences pain, and it takes a certain number of pain messages to set off these areas in the brain. They also discovered that in people with Chronic pain it took much fewer pain messages to set off these areas i.e. their threshold is lowered and they become more sensitive.

The Brain's Map

In your brain there is a map of your body. When you give yourself a tiny paper cut (or injure yourself in any way), the pain messages travel up to the spinal cord and then to the Thalamus in the brain and are then passed to this map. The messages are sent to the map, so you are able to tell exactly where on your body this tiny paper cut is.



If you have had pain for a long time the part of the map that represents the painful area will get bigger. For instance if you have had lower back pain for a long time, the area on the map that represents the lower back will get bigger. This can result in you starting to feel pain in a bigger and bigger area as the map in your brain gets bigger, you feel the pain over a bigger area.



All these CHANGES are happening in my brain! Am I going MAD?!



No, it definitely does not mean you are going mad! All the changes that happen are to the NERVES in your body and in your brain. Your pain is not imaginary pain.

It is important for you to understand what pain is and what type of pain you may experience with OA in order to manage your symptoms.

Here is the take-home message about pain:

- **Hurt does not always mean harm.** There can be pain without injury or something being wrong due to the changes that take place in the nervous system.
- There are physiological reasons why there is pain without injury.
- Your pain is **NOT** imaginary or in your head or psychological.
- Chronic pain is **NOT** the same as acute pain.
- Chronic pain is **NOT** a sign of ongoing damage
- Chronic pain cannot be “switched off.”
- Non-pain messengers (e.g. stretching or pressure) may send pain signals rather than Stretching or pressure messages to the brain.
- An increase in your pain (with or without exercise) does not mean a new injury.

Flare ups of pain

It is possible to have both pains (acute pain and chronic pain) at the same time; this can confuse the picture. Although a person with OA may have chronic pain, pain is not necessarily present at all times and you can experience periods of less or worse pain. When pain becomes worse this is called a flare up. This means you will have acute pain at this time and there are ways to deal with this. It is important to note what causes such a flare up so you know what and how those activities can be modified in an attempt to reduce the flare up of pain again.

Common signs of a flare up are:

- a sudden increase in pain
- redness
- a warm or hot joint
- swelling



What can I do about pain in a flare up?

A flare up can be managed by taking a short time to rest from whatever has caused the flare up to allow it to settle. We don't want to rest TOO much either as then your joints can get stiff. It is helpful to take painkillers as prescribed by your doctor if your pain gets worse but we will talk about medication later on too. Putting ice onto the joint can also help to settle the flare up. Use ice for no more than 10 - 20 minutes at a time on the painful area. You can use a small bag of ice wrapped in a towel, a gel-filled ice pack or wrap a towel around a bag of frozen vegetables. Don't put ice directly onto bare skin.

- **What is stiffness:**

Stiffness is when your joints feel like they aren't able to move easily or they feel stuck. This is common in the morning just after waking up as your joints have not been moving much while you sleep. The joints get used to being in the one position and then when you try to get up and start moving it feels difficult to move (stiff).

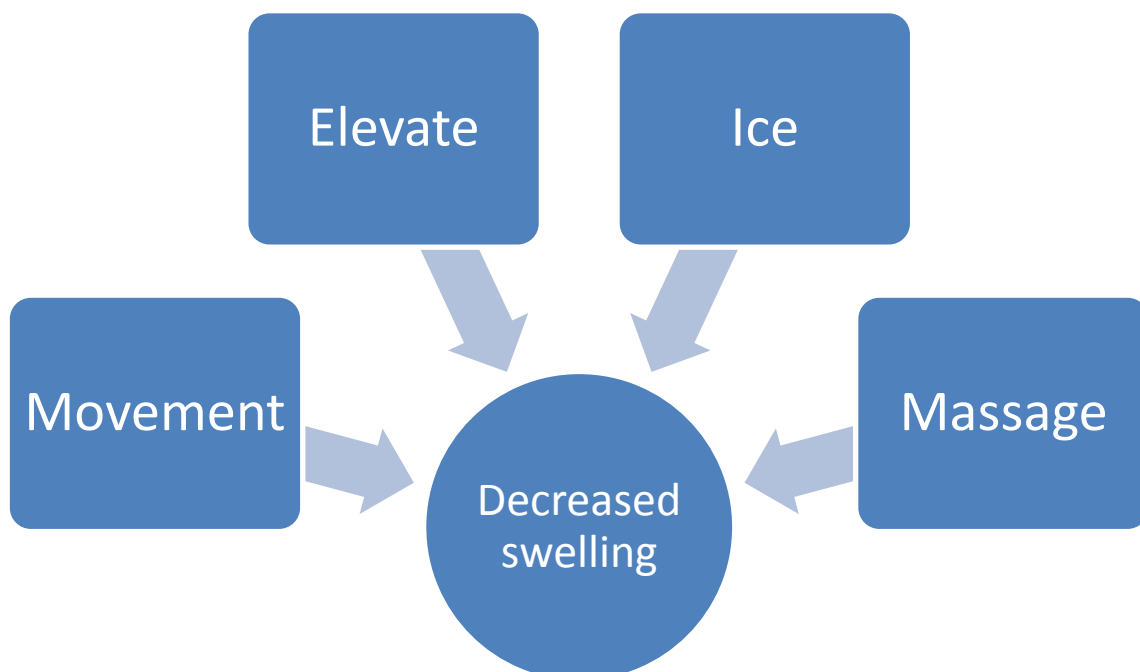
What can I do about stiffness?

After such a period of rest/sleep or limited movement the joints need to slowly get moving in order to get used to moving again. So before getting out of bed in the morning move your ankles up and down 20 times. Then bend each knee up and down 20 times and open and close your legs 20 times to get the joints warmed up. Warmth also helps the muscles around the joint to relax so a warm water bottle before rising or a warm shower in the morning will help get you moving. Make sure you can feel the warmth but it should not be directly on your skin or too hot that it will burn you. It's like the parts in a machine that need oil to work well; we need to "oil" our joints first before they work without being so stiff.

- **What is swelling?**

Swelling is a common symptom of a flare up or may be a regular symptom experienced during OA. Swelling is caused by a build-up of fluid in the tissues in and around the joint. This causes the area to feel bigger than usual, hard, painful and it's difficult to move the swollen area.

What can I do about swelling?



Movement is the best option to deal with swelling as it causes blood (rich in oxygen) to flow to the area and flush out the build-up of fluid and waste in the area of swelling. Staying in one position is probably the worst thing for swelling so we want you to start moving. You can also move your feet up and down and bend your hips and knees while sitting/lying down and go for a walk to get your body active.

- It can help to **elevate the area** when sitting or lying so that gravity can help move the fluid back to the body instead of collecting in the leg. You can put your leg up on a small chair or two pillows when in a chair or the bed.
- **Rubbing/ massaging the area** from the furthest point towards the body can assist the fluid moving back to the body too. Normal body cream or baby oil will make it smooth to rub with your hands around the area. Never push the swelling downwards.
- **Putting ice on the affected area** for no more than 10 - 20 minutes at a time also helps with swelling, as explained above.

Difficulties doing certain activities:

Sometimes you may feel that you are unable to do a specific task at home or outside of the house. You may feel too stiff, weak or sore to do a certain activity. You may just need to “warm up” in the morning before trying something or you may be having a flare up and then you should follow the management tips as given above. It is alright to ask for help from a family member if you are struggling with something in the home but be careful not to be asking for your family to do everything for you.

What can I do when I am struggling with doing an activity?

First try and think about WHY you are struggling with a certain activity and then how you might be able to deal with this. There are some ways to help yourself when you feel like there are certain activities you are struggling with:

1. Joint protection, assistive devices

To reduce the weight and stresses through the joint, an assistive device such as a walking stick, crutch or walker can be very helpful to protect extra strain on your



joints. This allows your arms to bear some of the weight of your body when stepping on the affected leg. Using one stick or crutch gives you a little support and allows one of your arms to take the full weight of your body off your leg but also allows your



other arm to be free to use during activities such as preparing food or

carrying items. Two crutches or a walking frame uses both arms to push through and gives more support but often take up more space while walking and both hands are being used on the device instead of being able to use them for daily activities. Try and start with the least supportive if you do feel like you need something like this.

Activity modifications:

There are certain things that can be changed in the way you do activities in order to protect the joint.

- Avoiding certain activities that put a lot of strain on the joint, like kneeling or climbing steps can be done.
- Use a padded pillow under your knee if you insist on kneeling for certain reasons
- Sit on a chair instead of kneeling
- If you struggle to stand up after sitting for some time then try sitting on a harder chair so you are not deep in the chair.
- Using a chair with armrests makes it easier to stand from.
- Avoid sitting on a low chair as it is more difficult to stand up from a lower chair than from a higher one.
- Walking up a ramp or using the elevator is better than struggling to climb steps if this is available.



- Wheelchairs are useful to use if you are going to be doing a lot of walking at one time. Like going to the shops or taking a day's outing somewhere. This may just be too much walking at one time for your joints. Most big shopping malls have wheelchairs that you can borrow for the time you are there. Or another option is hiring a wheelchair or buying one from a pharmacy if you have the money. It is important to not rely on the wheelchair for everyday activities in the home if it's not necessary but just to use it for pacing or long distances if needed. Remember we want to keep you as able as possible.

Wheelchair hiring contact details:

Orthocare Medical Hire and sales (Bellville) 021 946 1717

Solutions Medical (Goodwood) 021 592 3370

M-Kem pharmacy (Bellville) 021 948 5706

St Giles 021 689 8328

Medical Hire 021 425 2012

2. Pacing and activity/ resting cycles:

During exercise and daily life, you need to learn to pace yourself. When you finish an activity/exercise you need energy at the end of it for your body to recover easily to enable you to carry on for the rest of the day. Exercise should not cripple you for 2 days after you do the exercise. When you start an activity you need to pace yourself at a speed at which you can maintain throughout the activity without getting faster or slower. At the end you should still have energy left over to be able to do more.

How to pace?

- Pace your activities during the day so that they are spread out with adequate rest periods in between so you don't tire yourself out in one session of too many activities.
- Find a balance between completing a task and resting. You should not do an activity for too long that you feel exhausted afterwards and you should also not rest too long so that you feel too stiff to get moving again.

For instance if you have washing and cleaning and ironing to do in a week, instead of doing all three on one day, spread them out over three days or if needed, with a day in between. Or while exercising or if you have a long day of shopping ahead of you, start exercising or walking with the trolley at a pace that you know you can keep the same until the end, without stopping or slowing down. If you find you are too tired then you must start slower or do less at one time and find the balance.

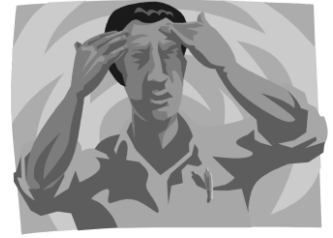
- **What is fatigue**

If too many activities are attempted at one time or in a short time without break periods of rest, your body will feel extremely tired and you will experience fatigue. It is important to slowly start small activities and short times of exercise to allow your body to adjust accordingly. If you do experience fatigue then it is wise to stop the activity and rest for a short while (1-2 days) until you have recovered from this tiredness. This does not mean you need to lie in bed for this time; you can continue with your day but take a break from the exercise and then once you begin again, listen to your body and look for signs of doing too much in one go. This could be getting short of breath or your muscles feeling weak or shaky, your legs feeling like they want to give way etc and slow down.



- **What is frustration/ isolation / depression**

It is common for people living with osteoarthritis to become frustrated and to have feelings of isolation/depression. This could be due to not being able to do everything as they could before, being reliant on others for normal tasks, not being able to participate in activities amongst friends that leads to feelings of being alone and often useless/ a burden on others.



Frustration:

As we said above, try to understand why you struggle with a certain activity and use the tips to try and help yourself in these situations before feeling frustrated or useless and giving up. It's important to look at your situation positively and see how you can solve a problem instead of feeling frustrated about it.

Isolation:

Don't stop seeing your family or friends in social gatherings because of your condition. As we mentioned, there are ways to still be social (like using a walking device or a wheelchair when necessary) and having OA should not cause you to be alone or lose your friends.

Depression:

People with chronic pain can also be depressed due to the large effect such a condition can have on daily life. This is often not picked up by the nurses and doctors at the clinic. It is important for you to tell your nurse or doctor if you think you have depression. Depression is an illness; it is not simply being sad, scared, lonely and stressed feelings. Depression develops over a few weeks and is a general feeling of depressed mood which happens with physical symptoms. This is caused by an imbalance of chemicals in the brain.



See the depression checklist below – if you think you have depression and you have many of these symptoms then you probably have some degree of depression. This can be treated with medicine and psychological support. It is not something to be ashamed of. Go to the clinic and tell the nurse or doctor how you are feeling so that they can start you on treatment.

Depression Check List:

- Do you feel down most of the time?
- Do you lack enjoyment with fun things like music, soccer or chocolate?
- Do you try to find peace by overeating?
- Or do you lack appetite and lose weight?
- Do you sleep badly at night?
- Do you struggle to get up in the mornings?
- Do you feel angry and agitated very quickly?
- Do you feel very passive?
- Do you lack energy every day?
- Do you struggle to concentrate?
- Is it difficult to make decisions about simple matters?
- Do you feel guilty?
- Do you feel worthless sometimes?
- Do you think of death a lot?
- Do you think of killing yourself?



If you answer yes to many of these questions, then you may have some degree of depression. Speak to the doctor or nurse at the clinic about how you are feeling.

If you answer yes to one or two of these questions then you may have depressed mood which you can manage with some of the techniques described in the section on stress management.

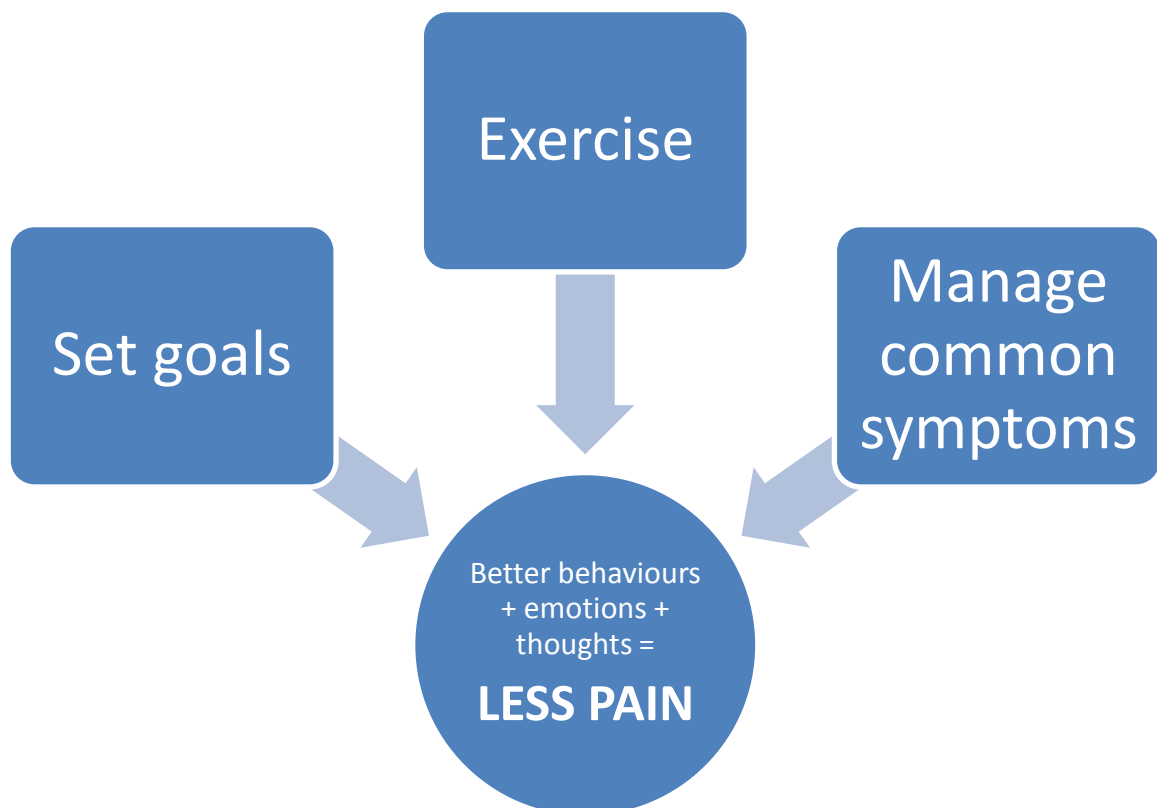
Home treatment for Depression:

There are many things you can do to help manage depression. Make sure that you get help straight away if you feel like hurting yourself or someone else. Often talking to a person who understand or to a health professional will help you through this mood. Cut back on alcohol, although it might make you feel better in the short term. In the long term it affects the way your brain works and you will not be able to escape the depression. Keep active, make you sure you get up every day, get dressed and get out of the house. Even if you don't feel like doing things, it's important to keep active, visit friends, and join a group. If you start to lose contact with people and withdraw your mood will only get worse. Make plans for the future, for tomorrow, for next week, for next month. Make sure you do 20 to 30 minutes of exercise every day. As we said in Week 1, exercise is very important to keep us healthy and help our moods. Depression feeds on depression, when you believe that things will get better, they will start to change. Use the suggestions in the section on Week 3: Stress Management to help you manage your symptoms.

Recap: What happens when you have pain and other symptoms?



What to do to manage with this?



Action Plan Form – Managing common symptoms

Use this form to develop an action plan on exercise. What exercise would you like to do?

Be sure your action plan includes:

What you want to do

How much you are going to do

When you are going to do it

How many days a week you are going to do it



For example: This week, I will use an assistive device (*what*) like 1 crutch (*how much*) when walking outside (*when*) at least three times (*how many*).

This week I will:

_____ (*what*)

_____ (*how much*)

_____ (*when*)

_____ (*how many?*)

How confident are you that you can complete this action plan?

Not at all | | | | | | | | | | Totally

confident 1 2 3 4 5 6 7 8 9 10 confident

Keep a record o

	I Plan to.....	I did.....
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		

Week 3: Stress Management

- **What is stress?**

In our society, we talk about stress a lot. We might say that it is stressful to live in South Africa. That it is stressful to worry about our children or our families, it is stressful to worry about money or it is stressful worrying about getting a job or coping with my job. We use the word stress a lot, but what does it mean? Stress is a feeling; it is a combination of feeling tense and worried. When we feel stressed we may be irritable, and find it difficult to concentrate or remember things, stress can affect our sleep, our appetite and our relationships.

The most common reason why we feel stressed is a lack of control. We tend to feel that things are stressful if we don't have any control over them. We feel stressed if we are going to be late for work because the trains are late – this is out of our control. We feel stressed about where we live if we don't feel safe there – those who commit crimes against us are also out of our control. In the same way, we may feel stressed when we have a chronic illness like arthritis or diabetes or high blood pressure. If you feel that your illness is out of your control and there is nothing you can do to affect it, this makes you feel stressed.

Stress is not always bad. We know that stress can be useful too. For many people if we feel some stress, we might feel under pressure to perform better. You might feel stressed because your family is coming to visit, but this stress makes you tidy up your home – a good effect of the stress. Students who are studying will only complete their studies if there are exams and deadlines for assignments, without the stress of the deadline, the students would not complete the work.



Sometimes we wish for a “stress-free” life. But, we know that if there was no stress in our lives, if we did not have to do anything all day long, this would not be good for us either. If I lay in bed all day and did not do anything, my muscles would get weak, my joints would get stiff and I would become ill. We need some stress in our lives to keep us healthy. The important thing is to keep the amount of stress at a level that we feel we can manage. This is why we talk about stress management, not stress elimination!

It is important to understand that stress can be a modifier for chronic pain. That when someone is stressed, often they experience pain or more pain than normal. Again this explains the role of the nervous system in the pain experience. Experiencing more pain when someone is stressed is a clear way to show that the pain felt is very often not related to the joint/ part of the body itself but rather outside factors that can heighten pain.

- **Managing stress**

There are many different things we can do in our lives to manage stress. The first step is to understand why we are feeling stressed. There are usually three things which affect how stressed we feel.

1. The stressful situation:

Usually the less you expect the situation and the less familiar you are with a situation, the more stressful it will be. If you needed to take the train to work but you knew the day before that the trains would be late, this would be less stressful than finding out after you have got onto the train that it is going to be late. If you think about having pain, if you know the cause of the pain is it more or less stressful? If you don't know what is causing your pain and you are worrying that there is something seriously wrong, is this more or less stressful?

2. How you see the situation and how you cope with it:

If the situation you are in is not important to you, you are likely to feel less stressed about it. If you are on a train which is going to be late, but you are going shopping on your own, then

you are likely not to get so stressed about it. If you are on a train which is going to be late and you are going to work this might be more stressful, but if you have a cell phone with you and you have airtime on the cell phone and you telephone your boss to explain why you will be late, then this might be less stressful. Your ability to cope with the situation, affects the amount of stress you feel. While it is stressful to live with a chronic disease like arthritis, diabetes or high blood pressure, if you thought you could cope with it and it would not interfere with your job and your life, would it be more or less stressful? Having knowledge about your condition allows you to think about it in a different way and will change the way that you cope.

3. Support from family and friends:

Friends and family who understand and support you will affect your levels of stress. Feeling alone and like you have no support will probably make you feel more stressed. If you think about living with osteoarthritis, would it be more or less stressful if there were no one to support you? But, we do need to be careful about support from family and friends. If they take over doing everything for us (because they care about us and are trying to help), we might feel useless and like we don't have a purpose. Supporting me does not mean doing everything for me.



Stress is not just the things that happen to us. The amount of stress that we feel depends on a lot of different things which can change every day. There are many different things we can do to manage stress every day.

- **Dealing with the cause of the stress**

The first step in dealing with stress is to identify why you are feeling this way. Use the self-management steps to help you identify the problem. Once you know why you are feeling this way then you need to decide what you can do about it. Sometimes dealing with the things that stress us is easy, if you are friends with your neighbours and the noise from their television is irritating you, it might be easy to ask them to turn down the volume. If you are

not friends with your neighbours, or you are very shy, it might be quite difficult to ask them to turn down the volume. Sometimes we can identify the things that stress us and do something about it. But, often we either cannot deal with it or it is out of our control. If you cannot deal with it or it is out of your control, the next step is to change the way you are looking at the problem.

Look at the problem in a different way

Think about how you are feeling. Are your thoughts and feelings about the problem inaccurate? Maybe you are very worried about your health, this is stressing you. Are you worried that you will be very ill and unable to work soon? Are these thoughts and feelings accurate? On what information are you basing these thoughts and feelings? Have you spoken to experts about your health or are you basing your thoughts and feelings and stress on poor information?

Plan your life

Do you get stressed by the same things over and over again? Or do you find yourself getting stressed because there are times when your life is very busy? If you are doing the same things over and over and getting stressed, you might want to look at how you are dealing with it and see if you can try a different plan. What about a busy life? This is also about planning, being very busy and having no time for ourselves, can be very stressful. Plan things over time carefully, make sure you have time to at least do some relaxation or exercise even when you are very busy. Do not leave things for the last minute.

Get help from family, friends and support groups

These are a great way to decrease stress. If we want support from people though, we have to tell them clearly what the problem is and what we would like from them. Often we do not communicate clearly and this might make the stress worse! If you find your family or friends are not very helpful or supportive, it might be worth sitting down with them when you are not feeling stressed to talk about these things. It might be that they see things differently to you, this does not mean they are right and you are wrong, or that you are right

and they are wrong. It just means that you see things differently and you can discuss how to handle things better. If having a discussion like this is difficult, it might be useful to ask a counsellor to help with the conversation. You can ask for assistance at a clinic or you can go to an organisation like FAMSA who specialise in family and relationship counselling.

Exercise

Exercise is a very effective way of managing stress. People who exercise regularly doing at least 20 to 30 minutes of exercise, 3 times a week have less risk of suffering from stress related illnesses. Go back to the section on exercise for more on how to exercise safely and effectively.

Exercise:

- Decreases stress
- Helps us sleep better
- Decreases pain
- Makes us healthy and decreases our chances of developing other illnesses

Relaxation skills

When we feel relaxed, we feel calm. Sometimes if we are relaxed and we are tired, we might feel sleepy. At other times we might feel relaxed and alert and be able to concentrate calmly on tasks. Relaxation can help us to concentrate and it can help us to unwind and go to sleep. Relaxation is a very useful way to manage stress and some of the symptoms of chronic diseases such as pain.

If we are stressed, this can make our muscles tense, our hearts beat faster and we breathe faster, if we are also feeling unwell and have pain we will feel worse. Relaxation can decrease the tension in muscles and slow down our hearts and breathing and help to make us feel better. If we are stressed we often become irritable and moody, relaxation helps to

calm you and make you feel more in control of your life. When we are stressed sometimes it is difficult to fall asleep as we are worrying about things out of our control, if you are also unwell, not sleeping will make you feel worse. Relaxation will help you get to sleep, this will help manage your stress and improve your health.

Just like learning to play a new sport or doing exercise, relaxation takes practice. The specific way that you relax doesn't matter; we are all different and might relax in different ways. The important thing is to practice it regularly. There are two different ways of relaxing described at the end of this section. You can do these at home in a quiet and comfortable safe place to begin with. But, once you get good at relaxation, you can relax in a crowded waiting room, on a train or a taxi. You can do relaxation anywhere!

Good times to practice relaxing are when:

- You feel you are getting tense or irritable or you are worried
- You feel you are in pain
- You want to go to sleep

Relaxation techniques:

Long relaxation:

- Find a comfortable position. Lie on your back or sit in a chair with your back supported.
- Place your hands at your sides, palms up. Close your eyes if you wish.
- Now begin to become aware of your breathing..... Focus on slowing down the rhythm of your breathing..... Your chest and tummy will expand outward with each breath, like a balloon gently filling with air....
- Imagine your ribcage moving out to the sides when you breathe in.... and gently inward as you breathe out....
- Slowly take a deep breath in.... Pause for a moment.... and then slowly breathe out. Let the tension melt away as you relax more deeply with each breath...
- Continue breathing slowly and gently....
- Now think about the top of your head. Feel the skin on the top of your head beginning to relax, and spreading slowly downwards....
- Even your ears are becoming relaxed and heavy.... Feel your eyebrows resting....
- Your forehead is becoming relaxed and smooth....all the lines on your face are becoming smooth..
- Let your jaw relax by allowing your mouth to be slightly open.... Allow your tongue to relax...
- Feel your throat relaxing.... relax your cheeks, nose, and eyes.... Feel your eyelids becoming very heavy.... and very relaxed.... more and more relaxed....
- Enjoy the feeling of relaxation you are experiencing.
- Now think about your neck.... allow a feeling of relaxation to begin at the top of your neck, and flow downward...
- Feel the relaxation as your shoulders become relaxed and loose.... Let your shoulders gently sink downward.... as they become relaxed.... and heavy.... very heavy.... and very relaxed.... deeper and deeper.... relaxed....
- Feel your collar bones becoming relaxed as your shoulders move gently back, and your chest widens slightly....
- Allow all the muscles in your shoulders to feel smooth... and relaxed.... as the muscles give up their hold completely...
- Notice your breathing once again... see how regular it has become... continue to take slow.... smooth.... deep breaths... Breathe in the feeling of relaxation... and breathe out any tension... your breathing allows you to become more and more relaxed.... deeply relaxed..... Now turn your attention to your right arm.....



- *Feel the relaxation flowing down from your right shoulder.... allow your upper arm to relax... your elbow.... lower arm... and wrist become loose and relaxed....*
- *Enjoy the feeling of relaxation as the muscles of your right arm give up their hold.... Feel the relaxation flowing into your hand... Let all the tension drain out of each finger tip and flow away.... the relaxation spreads to your thumb... index finger.... middle finger... ring finger... and little finger....*
- *Feel the relaxation flowing down your left arm... Let the muscles of the left upper arm relax.... Relax your elbow.... lower arm.... and wrist....*
- *Enjoy the feeling of relaxation you are experiencing.*
- *Let the tension melt away.... imagine the tension flowing right out of your finger tips... Allow your left hand to relax completely.... relax your thumb... index finger.... middle finger... ring finger... and little finger....*
- *Both of your arms are now totally relaxed... allow them to be free and limp... pleasantly relaxed...*
- *Enjoy the feeling of relaxation you are experiencing...*
- *Allow the feeling of relaxation to continue to your chest and stomach....feel the relaxation there... becoming deeper with each breath....*
- *Now turn your attention to your upper back... Feel the relaxation flow down your spine... Let all the muscles give up their hold.... relax your upper back... middle and lower back.... allow your back to relax completely..... Feel the relaxation in your whole upper body*
- *Relax more deeply with each breath.... more and more relaxed.... deeply relaxed and calm....*
- *Let your hip muscles relax.... Relax all the way from your buttocks (bottom), down the back of your thighs... relax the muscles on the front of your thighs...Feel the relaxation in your upper legs moving down to your knees... your calves and shins.... your ankles.... and your feet.... allow all the muscles to relax and go limp....*
- *Allow any last bits of tension to flow right out of the soles of your feet....Feel the relaxation flowing through your body... From the top of your head... down to the bottoms of your feet.... become more relaxed with each breath.... enjoy the feeling of total relaxation.....*
- *You are now as relaxed as you want to be.... Experience the feeling of deep relaxation... enjoy the feeling.... relaxed.... calm..... at peace*
- *Focus on the feeling of relaxation throughout your body.... Notice your breathing.... Your relaxed muscles.... Your calm thoughts... Memorize this feeling so you can re-create this relaxed state whenever you wish....*
- *Enjoy relaxing for a few moments more...*



- *When you are ready to return to your day, reawaken your body slowly... gently move your muscles... roll your shoulders slowly forward....then slowly backward.... lean your head gently to the left... return to centre.... lean your head gently to the right... turn your head...*
- *Wriggle your fingers and toes....Gently open your eyes.... Feeling alert... calm.... and full of energy.*

Short relaxation:

- *Deep breathing not only helps to cure anxiety and stress, it also triggers relaxation. Here's how to breathe deeply.*
- *Breathe in slowly to the count of four (count slowly; to the pace of one-one-thousand, two-one-thousand....). Pause to the count of three.*
- *Breathe out slowly to the count of five.*
- *The breathing process goes like this:*
- *Inhale... two, three, four...pause...two, three....exhale...two, three, four five....*
- *Inhale... two, three, four...pause...two, three....exhale...two, three, four five....*
- *Repeat for a minute or two.*



Sleep management

People with chronic illnesses often struggle to sleep because they are stressed and worried about their condition, they worry about what this means for them, for their family, for their future. People also often struggle to sleep because of the illness itself, perhaps you have pain, you feel sick or you may even be so tired you can't sleep. Some people find it difficult to get to sleep and only fall asleep very late at night, others find that they fall asleep but then wake up during the night and can't get back to sleep. Some people find it difficult to sleep at all at night and sleep during the day. People who don't sleep well report feeling more pain and as we have said above people who have high levels of pain don't sleep well – this becomes a vicious cycle.



Sleep is very important to keep healthy. We all need different amounts of sleep. Some people need 8 hours of sleep a night, some may need 10 hours and some people only need 5 hours of sleep. We are all different. We have been learning how to fall asleep and sleep well since we were babies. If you do not sleep well, following these steps will help you to learn how to fall asleep and sleep well. Remember that like learning anything new, this will take time. It might take up to 3 months to learn to sleep well if you have been struggling with sleep for a while.

Suggestions for Improving Sleep

1. Have a bedtime routine: try to go to bed at around the same time every night and always do the same things before getting into bed. A bedtime routine could be to lock the house, get undressed, wash your face, clean your teeth, get into bed and do a relaxation session.
2. You can't sleep because of worrying: write down your problems or the things that are worrying you, then write down the next step that you think could help sort out the problem. If you wake up during the night worrying about the problem, remind yourself that you've gone over it and you have a plan. If you wake up with a new worry, write down that problem to deal with in the morning. Practice your relaxation to take your

mind off the worry. If you still can't sleep, it may be better to get up and do something relaxing like reading, watching TV, listening to relaxing music or doing relaxation.

3. Your bed and bedroom are for sleeping: try not to use your bedroom during the day. Do not watch TV in bed. If you are not asleep within 30 minutes of going to bed, get up and do something else. Do not lie in bed and worry that you have not fallen asleep. This will only make you feel stressed and lessen the chance of falling asleep.
4. Have a morning routine: get up at the same time every day, even if you don't feel like it. Our bodies like to work on regular patterns to fall asleep and get up at the same time every day.
5. Avoid drinks containing caffeine for at least 4 hours before going to sleep (drinks like coke, tea or coffee).
6. Never use alcohol to help you sleep. It might make you feel relaxed at first, but once this wears off it is likely to make you feel jumpy and you are likely to wake up during the night.

Good sleep habits:

- Go to sleep at the same time every day
- Have a bedtime routine
- Do relaxation before going to sleep
- Use your bed only for sleeping or relaxing
- Get up at the same time every day
- Have a morning routine

Communication with your health carer

Anyone living with a long term health problem, whether it is arthritis or high blood pressure or diabetes will have to visit their clinic regularly. Visiting the clinic regularly can be stressful because it takes time, you have to plan ahead, you might not be sure how long you are going to have to wait, you might be worrying about what the health carers are going to tell you. One of the most important ways of managing the stress associated with visiting clinics and seeing health carers is to think about and plan how to communicate with them.

When visiting the clinic to see a health care practitioner it is important that you feel comfortable asking questions (any questions, even if you feel they are “silly” or “stupid” questions) and comfortable expressing how you feel. It is also important that you feel you can negotiate your treatment with your health care provider so that both you and the carer feel that you are receiving the best care for you. It is important that you not feel that your health care provider is ignoring you, “puts you down” or treats you like a child. We know that doctors and nurses have a lot of patients to see and they have little time to spend with each person. One helpful way to make sure that you get the most out of your appointments with the doctor or nurse is for you to take PART – Prepare, Ask, Repeat, Take action.

Take PART:

Prepare:

Before your appointment at a clinic it is important to prepare. Think about the reason for your appointment and whether there are any issues in particular that are worrying you. Write down your questions or the things that are worrying you. You need to be realistic about the list you write down, there will probably only be time to answer one or two of the things on your list. Make sure the most important problems are at the top of the list. Take your list with you to your clinic appointment, then when the doctor or nurse asks if there is anything you want to ask, you can use your list.

If there are particular symptoms or health issues you want to discuss, prepare for your appointment by writing down specific information the doctor or nurse will want to know. Things that are helpful are: when did it start, how long do the symptoms last, where are they in your body, what makes you feel better or worse, have you had a problem like this before and how was it treated; have you changed anything such as your diet, exercise, medicines. If you have already received treatment for a problem, be ready to report back on how well it has worked, or on whether it has not worked at all.

Be open about how you are feeling and about the things that are worrying you. The more open you are, the more the health care provider can help you. Finally, give feedback. If you don't like the way you have been treated you can tell the doctor or nurse. If you do not want to tell them directly then you can speak to someone else in the clinic or to someone in a support group. Remember too that doctors and nurses and other health care providers also appreciate being complimented. If you feel that you have been treated well and are happy with your treatment, it is acceptable to compliment the health carer.

Ask:

Another important step in having good communication and decreasing stress is to ask questions. Having good information is essential to you being successful in self-managing your health. Ask questions about your diagnosis such as what is wrong, what has caused it, is it contagious and what is going to happen now? Then ask questions if you have had tests, what is the test for; what if I don't have the test and what will the test involve? Remember to ask questions about your treatment options, what are the benefits of treatment and what are the risks and side effects? Finally ask questions about follow-up, when should you return to the clinic, what should you watch out for and what should you do next?

If you find you have difficulty remembering information it is a good idea to write things down during your visit. Or you could ask someone you trust to come to the appointment with you to help with remembering.

Repeat:

One of the important things to do to help with remembering things is to repeat it. So if the nurse or doctor explains something to you, repeat back to them in your own words what you have understood. This is very useful to make sure there are no misunderstandings.

Take Action:

At the end of your appointment, it is important that you know exactly what you will need to do next. It might be that you need to make another appointment, or that you need to go home and change something or get new medicine from the pharmacy. Make sure that you are clear about what you need to do next, and then do it!

Action Plan Form – Stress management

Think about one thing that is causing you stress. Use this form to develop an action plan for better stress management.

Be sure your action plan includes:

What you want to do

How much you are going to do

When you are going to do it

How many days a week you are going to do it



For example: This week, I will relax (*what*) using long relaxation (*how much*) at bedtime (*when*) at least three times (*how many*).

This week I will:

_____ (*what*)

_____ (*how much*)

_____ (*when*)

_____ (*how many?*)

How confident are you that you can complete this action plan?

Not at all | | | | | | | | | |

Totally

confident 1 2 3 4 5 6 7 8 9 10 confident

Keep a record of how you did:

	I Plan to.....	I did.....
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		

Week 4: Eating well

You are probably wondering why we talk about nutrition at this course. What has food got to do with osteoarthritis or the pain you are having? Well there are many good reasons for that, but if you think about it; if managing your pain is all about lifestyle changes and making decisions that are good for your health and body, surely wise food choices fit in to that as well. This section is not about weight loss – there are many people out there who are not overweight, but still suffer from terrible chronic diseases such as diabetes, high cholesterol and hypertension, on the other hand there are also overweight people, who exercise and eat a well balanced diet, but don't suffer from chronic illnesses. So it is really about how we are built and how our bodies burn what we decide to feed it. What is common for all, is the fact that when we eat a well-balanced diet that is good for us, we feel better, we have more energy and we are happier. We will try and explore why that is now.

An important factor to consider is consistency. It is important not to have periods where you don't eat for a very long time and then eat too much at once. We want to maintain a constant level of energy intake and output to avoid periods of hunger as this can have an affect of your pain, mood and ability to exercise.

The Diesel Diet

Think of the Human Body as a Diesel car. The Human body needs to work and chug along at a constant pace throughout the day; it can't be like a Formula One car that goes very fast for a short amount of time and then stops!

Therefore we must re-fuel our bodies constantly so we are able chug along for the whole day without running out of energy. But we also have to be careful about what kind of fuel we put into our bodies. It has to be diesel that will last us for a long time. If we give ourselves high octane petrol fuel it will give us a quick burst of energy but will run out quickly.

So, to make it easy for everyone, the “diesel” we need to feed our bodies is food that will keep us full for long and keep the body’s blood sugar levels steady. It is the high octane fuel we need to keep clear of. These are for example sugary and highly processed foods, such as cakes, pies, chocolates and any “quick fixes”; the kinds of foods which most parents know that if they gave it to small children would give them lots of energy to run around a lot before they collapsed exhausted!

Some helpful Guidelines:

- Bad (saturated) fat and increased fat consumption can increase your chance of having a Heart Attack, Stroke and Diabetes.
- Avoid hard fats such as butter, margarine and animal fats. Focus on olive oils, grape seed oil and oil from avocados, nuts and seeds.
- Steaming or microwaving food is better than frying food or eat it raw.
- Rather Grill meat than fry it or roast it.
- Use Olive oil rather than butter, Canola Oil or Lard.
- **Read the food labels and eat low fat food! The total fat should be less than 10g per 100g.**
- Use non-stick pans instead of oil.

What about drinking habits?

On all healthy diets we need fluids. Often when we feel hungry, it is the body telling us we are in fact thirsty. So we need to drink enough fluids and our main source of good fluid is of course water. We have some of the cleanest tap water in the world here in South Africa – and it is free! SO go ahead and have a free treat! But in all seriousness, why is it important to drink water and avoid some of the other choices of drinks out there? Let us explore:

Water

Why do we need water?

- Water makes up 50-55% of your body weight.
- Water and Oxygen are the most needed elements for life.
- Carries nutrients to, and waste away from cells
- Cools the body
- Necessary for proper body and organ function.



Where does the water come from?

- The fluid you drink
- The water in the food you eat
- Chemical reactions inside your body

How much do I need?

- We usually recommend that adults drink 6 to 8 glasses of water a day but this water includes the water in the food we eat so you don't have to be drinking a whole 8 glasses.
- If it is **very hot** or you are doing **lots of exercise** you need to drink **more** than 8 glasses.

Some helpful Guidelines!

- Drink when you are thirsty.
- Drink at least one glass of water/juice every morning with breakfast.
- Drink 2 glasses one hour before exercising and another after exercising.
- Caffeine (Coffee, tea & Coke) and Alcohol make you lose water. These are poor sources of water.
- Often when you take a lot of medication you lose your appetite and you might resort to coffee and tea with lots of sugar. Try to avoid this and stick to 1-2 cups per day. Also try and substitute normal tea with rooibos teas.
- Alcohol really doesn't go well with medication. But if you really enjoy it, women shouldn't drink more than 1.5 glasses per occasion and men 2 glasses. You should also know that alcohol has been shown to worsen the symptoms of osteoarthritis.
- In general, juices from supermarkets are highly processed and contain a lot of sugar even when labels say 100% fruit juice. If you have juice, one glass a day is plenty – and when possible, rather a piece of fruit and then a glass of water.

Losing Weight

Now that we know about healthy diet options, the question remains:

Why do I actually need to lose weight? There are several answers to this,

but first and foremost, not all of us need to lose weight. It is only when

you are heavily overweight or what doctors call obese, that your weight becomes a big problem. Remember when you first came to the hospital to do questionnaires and tests?

We also measured your BMI (Body Mass Index), which is a measurement of your weight according to your height. If you have a BMI of more than 25, you should be concerned. If

you don't know whether your weight is a problem, here is a way to calculate your BMI: Your weight in kg divided by your height in meters times your height in meters. To give you an example: If a person weighs 88kg and she is 1.70m tall, her BMI = $88/1.70 \times 1.70 = 30$. This person would be classified as obese 1 according to the table below.



BMI Class	Range
Underweight	<18
Normal	18-25
Overweight	25-30
Obese 1	31-35
Obese 2	35-40
Obese 3	>40

What we know from research is that osteoarthritis is closely linked to obesity and being heavily overweight. What this means, is that when you weigh a lot more than you should, there are added stresses and strains on your body's joints. In particular the big joints like the hips and knees. This means that when doing daily activities or exercise your symptoms of pain increase and the natural reaction is to stop being active. Therefore, if you are heavy, losing weight will improve your condition by decreasing the loading on your joints and it will feel a lot easier for you to move around, do exercise and daily activities. It is never too late to change your mind set and lose weight – and no matter how old, young, tall or short – it will make you feel good about yourself. There has also been research to show that fat tissue can have a role to play in inflammation throughout the body with can be related to OA pain.

Remember losing weight is not about starving yourself, but making sure that the food we eat, fills us up, gives us energy throughout the day and makes us shed the unwanted kilos.

What about those who's BMI is normal? Well, as we have already talked about – you can be thin or normal and still benefit from a healthy diet. It will still give you the improved energy and make you feel less fatigued and most importantly help with your medicine uptake (we will talk more about this in a later chapter).



Some excuses for not eating well

“I’m not hungry”

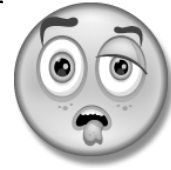
On the days when you do feel like eating, make sure you eat well to make up for days when you might not be eating so well. On the days when you do not feel like eating try to eat small meals more often, maybe 6 times a day. Eat in a relaxing place, maybe with a friend. Keep small snacks (healthy) with you in your bag or next to your bed so that if you wake up or suddenly feel hungry you can eat straight away. Make sure these snacks have lots of energy in them (are complex carbs). Make sure you have your favourite foods to eat, even if it’s just a little bit, it helps.

“I get full too quickly”

You might be trying to get all your food at one meal. Try to spread it out more by eating five or six times a day. When you do eat, make sure it is food with lots of energy and protein. Don’t eat foods without energy first and then feel too full for the important foods.

“Food doesn’t taste so good”

Medicines can change the way food tastes. Sometimes you may have a bitter taste or a taste of metal in your mouth. Try cleaning your teeth and your tongue before you eat. If you have a taste of metal in your mouth, try to drink orange juice or another tart drink.



“My mouth is dry”

A dry mouth might be a side effect of medications. You can help this by avoiding smoking and drinking alcohol as well as sugary drinks as these irritate your mouth and throat and make you even more thirsty. Eat softer food, if you mash your food or make soup as this will be easier to swallow. Try not to eat food with a lot of spices or drink fizzy drinks. Keep a bottle of water next to your bed so that you can drink during the night.

Action Plan Form – Nutrition

Think about your eating habits. Use this form to come up with a plan to improve **one** thing about your nutrition.

Be sure your action plan includes:

What you want to do

How much you are going to do

When you are going to do it

How many days a week you are going to do it



For example: This week, I will eat less simple carbs (*what*) by cutting out one (*how much*) during dinner (*when*) everyday (*how many*).

This week I will:

_____ (*what*)

_____ (*how much*)

_____ (*when*)

_____ (*how many?*)

How confident are you that you can complete this action plan?

Not at all | | | | | | | | | | Totally

confident 1 2 3 4 5 6 7 8 9 10 confident

Keep a record o

	I Plan to.....	I did.....
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		

Week 5: Medication and disease related problem solving



I am so tired of “popping pills” and I have no idea what it’s for! I don’t even think they are working!

Surely you can recognise the above? At this stage, “popping pills” is not an unusual occurrence to you. Unfortunately with a chronic condition like osteoarthritis, taking medication is a huge part of trying to keep the symptoms at bay. Unfortunately it often comes with a lot of physical negatives and unanswered questions. One of the most common experiences for OA patients is that after taking the medications for many years – they seem to lose their effect. Why is that? Also, many OA patients take many different kinds of medication, without always understanding how they work and what they are for – what is each medication meant to do? In this section we will look at the different kinds of groups of medications and try to understand it all a little better. There are a few things that research has found out as well, and that is if a patient understands the medication and its purpose, the medication becomes more effective.

Many kinds of drugs are used for osteoarthritis and its symptom management. The majority of them fall into one of 4 categories.

- Analgesic Drugs
- Anti-Inflammatory Drugs
- Anti-spasmodic Drugs
- Antidepressants and Antiepileptic Drugs.

Analgesic Drugs

The name is derived from the Greek word analgia: **an-**, "without", and **-algia**, "pain". In other words analgesic drugs are what we commonly refer to as "painkillers." The analgesic drugs act in various ways on the nerves. These are the nerves in our brains (the central nervous system) and our bodies (the peripheral nervous system) peripheral and central nervous system. There are 3 main types of analgesic drugs, let us have a look at them:

Mild Pain Killers

These painkillers don't treat the cause of the pain but they work on the nerves in the peripheral nervous system which are telling you that you are in pain. They basically tell the nerve to stop sending messages. ***I.e. they tell the nerve to shut up!*** This is exactly what is needed for people with osteoarthritis and associated chronic pain, because the painkillers decrease the number of signals in the peripheral nervous system – remember when pain has been ongoing for a long time, it often intensifies and "gets louder" even though your tissue is not getting more damaged. In other words the nervous system is malfunctioning and sending mixed up messages. The mild pain killers have very few side effects, which makes them attractive compared to some of the stronger medications. These medications are available over the counter. Examples of such drugs are: **Panado, Paracetamol, Grandpa, Disprin, Aspirin**

Strong Pain Killers - Opioid Analgesic Drugs (MORPHINE BASED)

These drugs are a lot stronger than the normal pain killers. They are similar to a hormone that the body produces, called Opiates...which is why we call them Opioid Analgesics. These drugs work straight on the nerves by blocking the messages in the brain and spinal cord. These medications need to be used carefully as there is a small chance that they can produce dependence, addiction and tolerance. Other side effects include drowsiness, decreased alertness (take care when driving a car), sedation, elation (sudden joy) or dysphoria (unhappiness). Respiratory side effects can include feeling short of breath and not coughing as much as you should. People with asthma or chronic obstructive lung disease should be careful when using these drugs. Other side effects from these drugs can be

nausea, dry mouth and vomiting, constipation and difficulty in passing urine and itching. If you take opioids for a long time, the effects often fade. Many oral opioids are used in the treatment of chronic pain. Combining opioids with other painkillers such as paracetamol and NSAIDs involves attacking the pain in the different areas of the nervous system. This often decreases your opioid requirements, which then leads to improved pain relief and a reduced risk of side effects. These medications require a prescription from your doctor. Examples of these drugs are: **Morphine, Fentanyl, Methadone, Pethidine, Tramaset, Tramadol, Codeine**

Medium Strong Painkillers + Codeine

These drugs are a combination between the Mild Pain Killers and the Opioid Analgesics. The dosage of codeine is much lower than the strong pain killers. They are stronger than the Mild Pain killers but weaker than the Opioid Analgesics. Anything with a “co” or a “codeine” added to the name will fall into this category. For Example: Panado Co. These medications are sometimes available over the counter and you need to be careful if you are taking these and one of the other mild or strong painkillers as you might be taking too much of one drug without realising it.

Anti-inflammatory Drugs

These drugs reduce inflammation. Inflammation is the body’s response to injury. For example when you twist your ankle, it will go hot and red and become swollen and painful. These are all signs of inflammation. Like pain, inflammation can be acute or chronic. Acute inflammation last only for a few days, whereas chronic inflammation lasts longer. Anti-inflammatory drugs treat both acute and chronic inflammation. Unlike analgesics they treat the cause; Anti-inflammatory drugs help to decrease the heat, redness and swelling. There are 2 types of Anti-inflammatory drugs.



Non-Steroidal Anti-inflammatory drugs (NSAIDs).

This group of drugs is effective against mild to moderate pain and inflammation. They are widely used for arthritis and pain conditions. “Non-steroidal” means that they are not steroids (i.e. they do not belong to the “cortisone” family). Steroids are very effective against inflammation, and the term NSAID is used to tell the difference between this group of drugs from the steroid family of drugs.

“Anti-inflammatory” means that they are effective against inflammation. Some are better against pain and some better against inflammation. It is also important to know that different people react differently, so that one product might work well for one person, but may not be as effective in another person. It is important you talk to your doctor about these issues.

Some of these drugs also have negative effects on the stomach and digestive system. They can cause constipation, ulceration in the stomach and even bleeding in the stomach. It is therefore important to take NSAIDs with or after food. If you have a sensitive stomach with these drugs your doctor will prescribe one of the new NSAID drugs which do not have the same effect on the stomach. With chronic pain it is important that you take these drugs regularly for them to be effective. Examples of NSAIDS are: **Ibuprofen, Brufen, Voltarin, Pyroxicam, Betacin, Naproxen, Ketoprofen** Sometimes doctors will combine anti-inflammatory drugs with Mild Pain Killers because they work better together than each on its own. Some pills come with them already together in one pill. E.g. (Mypradol).

Steroidal Anti-inflammatory Drugs

These drugs are made to mimic natural steroids that your body produces. They are very strong anti-inflammatories and are often used for arthritic conditions. However there are negative effects of short term and long term use. In the long term it can cause high blood pressure, high blood sugar levels, eye problems, fragile skin, osteoporosis and muscle wasting. Steroidal injections have fewer side effects than orally taken steroidal anti-inflammatory drugs and are used more often for arthritic conditions. Examples are: **Cortisone, Cortisol**

Anti-spasmodic Drugs

When a person is in pain, their muscles become very tense and can often spasm. These drugs are used to relieve the spasm. However they do come with severe side effects if taken for longer than recommend – especially if taken together with other chronic medication. It is therefore important to understand these when your doctor prescribes them. Commonly used antispasmodic medication used for chronic pain is: **Diazepam, Baclofen**

Anti-depressant & Anti-Epileptic Drugs

The brain is very sensitive to chemicals therefore, there is something called a Blood-Brain Barrier, which filters all the blood going to the brain to make sure there are no chemicals in the blood that would harm the brain. Because of this, drugs like mild painkillers cannot reach the brain. Antidepressants and Antiepileptic drugs are able to pass through the barrier and act on the brain. For this reason they are given to patients with chronic pain. You remember all the changes to the nerves that happen in the brain in a person with chronic pain. These drugs can help to normalise the pain signals in the brain. They are given to chronic pain patients in much smaller doses than they would be given to a clinically depressed person or a person who has epilepsy.

It is important that these drugs are taken regularly and for at least 2 weeks before they begin to be effective. Side effects can include: Scratchy eyes, drowsiness, dry mouth, constipation and blurred vision. But these side effects usually decrease with time.

Examples of **ANTIDEPRESSANTS** are: **Amitriptyline, Doxepin, Desipramine, Imipramine.**

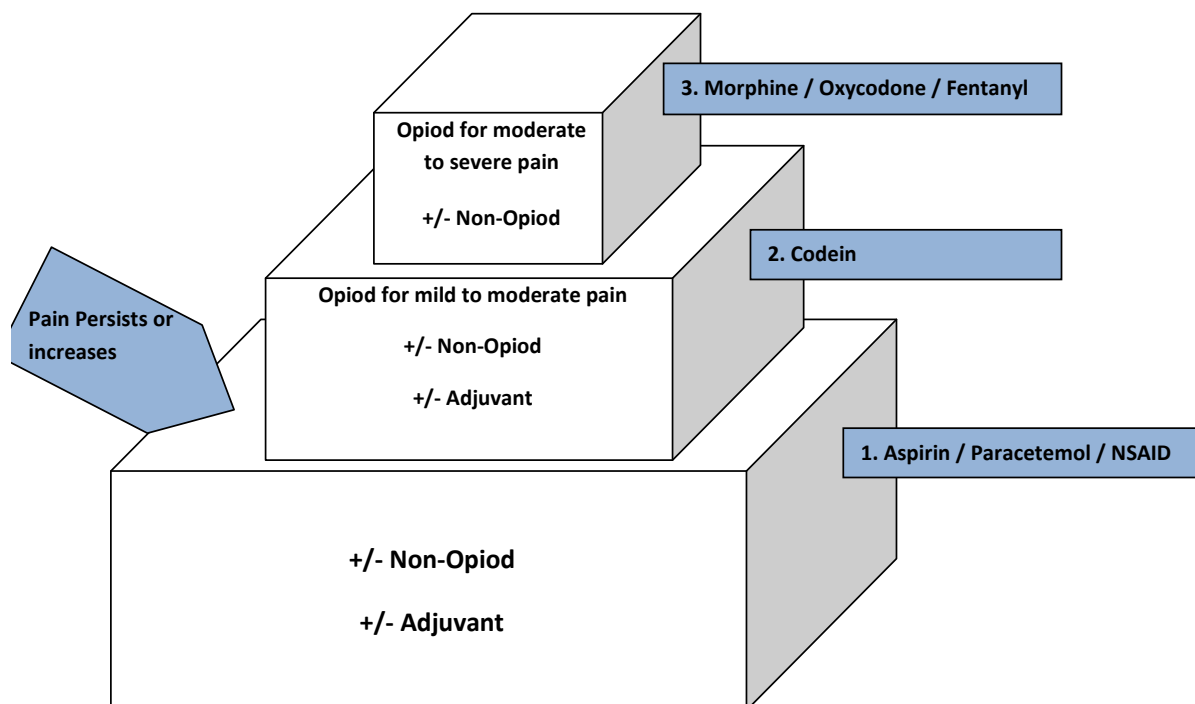
Examples of **ANTIEPILEPTICS** are: **Gabapentin, Topiramate, Vigabatin, Phenytoin, Oxcarbazepine, Sodium Valporate, Carbamazepine, Lamotrigine**



The Analgesic Ladder

The analgesic ladder was designed by the World Health Organisation (WHO) to assist the doctors when prescribing analgesic drugs by suggesting a logical way for managing pain in chronic conditions.

The ladder takes into consideration the analgesics we have already described earlier. At every step of the analgesic ladder non-opioid analgesics form the basis of the pain management. Paracetamol and NSAID should therefore always be prescribed with opioid analgesia (weak or strong). This is known as multi-modal analgesia and is the concept that pain is best managed, not by a single drug or therapy, but by combinations, with maximum effect whilst keeping side-effects low. Scientific research has demonstrated that when this happens pain relief is better, smaller amounts of pain killers are needed and fewer side effects occur.



Making informed treatment decisions

By understanding the medication you are being prescribed, it will help you to understand its action as well as why it is to be taken together with other drugs or at specific times. For example it makes sense to take NSAIDS with healthy food, as we have learned that they can be rather rough on the stomach. If you were to take the NSAIDS with coffee and or very acidic foods, you have a high chance of getting an irritated stomach and or heart burn. In relation to the stronger pain killers, which might make you drowsy, they can be taken at a time where you don't have to be so alert or have to drive.

By understanding the medication you are on, research has shown us that the medication actually works better. Knowing more about your medicines also helps you understand, why you might at times have new and strange symptoms, these being related to some of the side effects we have discussed earlier. In this way your conversations with your doctor can improve, as you will be in a better position to tell him or her what does or does not seem to work for you.

By understanding the medicinal options for osteoarthritis, it becomes easier for you to be part of the decision making process, when deciding on which treatment option to go for. You are slowly becoming your own expert.

Appropriate use of medications

What is really important to understand well, is the analgesic ladder. Here you can see how and why the different groups of medications are prescribed at what stage of your pain. Therefore you must make sure that whatever level you are on in terms of medication, that you don't go ahead and start "prescribing" your own medication. You have to make these decisions together with your doctor by understanding them and communicating with him or her.

Link between a healthy lifestyle, good nutrition and exercise

It is really important to understand that medication is "only" one of the ways in which we can try and control your OA. That is also why we are doing this course. By a combination of your medication, a healthy lifestyle with good eating and exercise, decreasing the stresses in

your life and maintaining your social life, you are on a good path to being the “manager” of your disease.

Healthy food helps the uptake of your medication – remember you have more energy, which in turns will help you handle the many side effects. Also by eating a fibre rich diet, the side effects of NSAIDS will be less.

By adding exercise, activities and social engagements to your life, you become happier – remember the body’s own production of endorphins (the happy hormone)? The more we can produce of these, the better we feel, the more we want to do and the less we think about the pain and the downsides to living with OA. Also, by becoming an active “manager” of our lives, we can decide which stresses we can do something about, and which we cannot do anything about. We make the choices and make sure that when life does become a bit too stressful and hectic, to take a step back and say: I need to take a break from that, and focus on myself. This ultimately makes us better at communicating with our surroundings.

Communicating effectively

If we understand ourselves better, we can communicate better – it is as simple as that. We will be able to explain what is going, we will be able to show we are in charge of our own body and mind and thereby condition. We will be able to say, that although we are making good lifestyle choices for ourselves, there are days and times when things aren’t that great, where the pain is really bad, but we can still communicate and get ourselves back on track when the next “good” day comes along. This makes is easier for our loved ones, friends and colleagues to help and support us. In this way, it becomes easier to say: I need a bit of space to cope, so I can get back on track again. Can you help me with this today? When they see you are making the positive changes, they are more willing to eager to help and understand.

Week 6: Continuing as a successful self-manager

Recap of key components of successful self-managing

Over the last six weeks you have learnt many skills which will help you to live positively with your condition. Research tells us that people living with any chronic disease who follow these steps have better quality of life, have fewer sick days and have better disease control. This is true for people living with high blood pressure, cancer or depression. You have learnt how to be a positive self-manager by being able to solve problems and set goals for yourself so that you can move forward with your life. You have learnt about the importance of exercise. How exercise can make you feel better, what exercises you should do and you have been doing those exercises too! You have learnt about the common symptoms that trouble people living with arthritis and you have learnt how to manage these symptoms. You have learnt about pain, what might be causing pain and how to treat and manage any pain you may have. You have learnt about food and eating well and how to make sure that your food is safe. With all of these you have also had the chance to practice doing things differently and to think about how this has made you feel.

- **Action planning for the future**

Now it is time to think about the future. People with long term illnesses often worry about what will happen if they get very sick, how they will manage their lives; how they will they look after themselves or their families. Worrying about these things can also make people feel sad, angry or depressed and helpless. These emotions may make everything feel even more difficult than they are. By working through this book you have already started to deal with these emotions. You have increased your knowledge and this is one of the main ways that we manage fear. If we are afraid of something, knowing more about it helps us to tackle the fear. If you know more about it, you can make a plan around it and making a plan helps us to get a sense of control over the very thing that we are afraid of.

Planning for the future means thinking about the things that might happen to you in the future and planning for them. You may never ever need to use the plan as the things that you worry about may not happen, but, having a plan will help you to worry less about these things and stay in control should they happen. You can use the action planning forms you have been using in this workbook to think about the things which worry you about the future. You can then start making a plan about what you want to do if these things happen. If you are not sure about making a plan, you may want to talk to different people who might be able to help you with this.

Step 1:

To be able to plan for the future, you need to decide what it is that you are worried about happening. This can be the hardest step to think about. For example you might be feeling very sad and depressed. First you need to think about why you are feeling that way. It might be that you are worried about not being able to look after your family if you become ill, or you may be worried about making someone else ill, or you may be worried about not being able to look after yourself, or you may be worried about dying. Once you have identified what it is that worries you and makes you feel sad, depressed, angry or afraid then you can start to make a plan to deal with it. This will help you to feel less sad, depressed, angry or afraid.



Write down here some of the things that might happen in the future that you worry about:

1) _____

2) _____

3) _____

Step 2:

Now that you have identified some of the things which worry you, you can start to think about different ways to manage these things. If you were worried about becoming ill and not being able to look after yourself, write down a list of things that you would need help with. Then write down who you could ask to help you with those things. The people who can help might be family, friends, social workers, counsellors, nurses, physiotherapists, occupational therapists or doctors. If you are not sure who could help you, you may want to talk to someone you trust to help you identify who could help.

Write down here three different things you could do to help plan for the things in the future that you worry about:



- 1) _____
- 2) _____
- 3) _____

There are many organisations and people who you can approach for help in planning for the future. These organisations include the Treatment Action Campaign (TAC), the Family and Marriage Society of South Africa (FAMSA), your church as well as the health care practitioners at your local clinic. The contact details for these organisations are included at the end of this section.

Once you have completed Step 2 and written down three different things you could do to help plan for the things in the future that you worry about, choose the one which seems to suit you the best (this might be one which is easier or is cheaper or you know has worked for someone else). Now use this action plan form to work out what you will do if the thing which you worry about happening should happen. ***You can use this method to plan for any of the things which worry you.***

Action Plan Form for Future Worries



I am worried that in the future I will not be able to:

My plan to manage this if it happens is to:

(what, who, how, when?)

How confident are you that you can complete this action plan? *(Remember you are aiming for 7 out of 10 on the confidence line)*

Not at all										Totally	
confident	1	2	3	4	5	6	7	8	9	10	confident

- **Reflection on changes**

Over the last 6 weeks you have learnt many things about how to live with a chronic illness like osteoarthritis. You have learnt about the disease and how to be a successful self-manager. This does not mean that you should be managing your health on your own. What it does mean is that you now have the ability to manage your health and your life as part of the health team. Remember you are not alone but are part of a team of people whose aim is to help you get the most out of life. We encourage you to keep using the skills you have learnt in this workbook to live positively. There are extra “Action Plan Forms” and “Exercise Diaries” in the back of the workbook for you to use. Try to keep using these forms to help you remain active and give you a sense of purpose and accomplishment in your life. Being active and involved, using the skills you have learnt in this workbook are important steps in helping you achieve the best quality of life you can. In the box write down some of the important changes you have made in your life over the past few weeks.

Changes I have made in my life:

[illegible]

Now, your final task is to think about changes you still want to make in your life. Remember, this is about getting the most out of life, increasing your quality of life. Are there still some things missing in your life, things that you would still like to be able to do? In the box below, write down some of the things that are still missing. You can use this list to keep working on your goals from now on.

[illegible]



You have now completed this workbook. By working through this workbook you made an important commitment to yourself. You have chosen to spend time looking after yourself and you have taken steps to overcome the many challenges that people living with osteoarthritis face. Do not put this workbook away; keep it somewhere safe where you will be able to review it from time to time. We all forget things at times and it is useful to be able to look back and

remind ourselves of things we may have forgotten. We can also look back and see how far we have come. We hope that the knowledge and the skills you have learnt by using this workbook will continue to have a positive effect on your life.



Exercise Diary

Start off by writing down your goal.

Write down here what you want to be able to do: _____

Now, what do you want to be able to do this week which will help you to reach your goal?

Remember from your action plan to include:

What you want to do

How much you are going to do

When you are going to do it

How many days a week you are going to do it

For example: This week, I will walk (*what*) around the block (*how much*) before lunch (*when*) three times (*how many*).

This week I will:

_____ (*what*)

_____ (*how much*)

_____ (*when*)

_____ (*how many?*)

	Exercise Planned	Exercise I did...	How did I feel? Do you need to change anything?
e.g.	<i>20 mins in a.m. after breakfast and in p.m. after supper</i>		<i>Very tired by the second session, I'm going to cut it down to morning only for this week.</i>
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			

