

ENERGY CONSERVATION ACTIVITY PACING

THERAPIST'S MANUAL

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INTRODUCTION

This manual has been written to support a randomized control trial evaluating the effectiveness of two different activity pacing interventions; one based on operant learning and the other on energy conservation models of pacing (Nielson, Jensen et Vlaeyen, 2012). Activity pacing is widely used in chronic pain (CP) management both as a stand-alone treatment and as a component of multimodal treatment programs. The present therapist manual focuses on the energy conservation approach, which emphasizes management of participant energy expenditure, and seeks to achieve a balance between accomplishing important day-to-day activities and resting in order to reduce or avoid pain and fatigue (Hammond, 2004).

The development of this manual has been influenced by a number of sources including Cox *et al.* (2004), Packer *et al.* (1995) and the *U.S. Department of Health and Human Services* (1985) descriptions of energy conservation-based treatments for individuals with chronic pain and chronic fatigue syndrome/myalgic encephalomyelitis. An extensive literature search has also been conducted to retrieve articles on energy conservation approaches, which also served as a theoretical basis for the development of our treatment package. We also based the present therapist manual on a recent comprehensive review paper by Nielson *et al.* (2012) that provided a clear definition of activity pacing and described the components that should be included in both energy conservation and operant learning interventions, based on their theoretical assumptions.

This manual includes a total of 10 group sessions (duration: 2 hours each), two booster sessions at 3 and 6 months post-intervention (duration: 1 hour each) and a 1 follow-up session at 12 months post-intervention (duration: 1 hour). The 10 group sessions are held on a weekly basis for the 2 first months, and every 2 weeks for the 3rd month. In the research project using this manual, we will include approximately 10 individuals per group and use a closed (vs. open) group format to teach these skills as each session builds on preceding knowledge. Questionnaires will be administered periodically during the intervention to measure both clinical changes and aspects of the treatment process. All sessions have been developed using the same format from session to session in order to make the learning process easier for participants. The contents of each session are as follows:

- Group sessions:
 - Objective
 - Material
 - Review of homework
 - Teaching session
 - Group Exercise
 - Homework for next week
- Participants' Handouts
- Participants' Homework

This manual has been developed for the general chronic pain population. The examples provided in the therapist manual can be adapted for specific chronic pain conditions. Therapists will notice that we have put an equal emphasis on pain and fatigue. This is because most chronic pain patients also experience significant fatigue.

We hope that this therapist manual will serve as a useful clinical resource beyond its purpose in our study. We encourage you to contact us if you have any further questions or are interested in collaborative research on activity pacing.

Sincerely,

The Activity Pacing Program Team

ABOUT THIS MANUAL

This manual is meant to provide an outline of energy conservation based activity pacing for experienced therapists. By *experienced*, we mean health care professionals who have formal training in operant conditioning procedures and have worked with patients who have chronic pain. It is not a “scripted” manual in the sense of following a rigid verbatim treatment. Rather, we provide an outline of content to be covered in each session, very specific goals for each session and homework material to accompany these sessions. Without sufficient background and experience, including the ability to form therapeutic alliances with group members, the procedures described in this manual may not be effective.

The presentation of energy conservation techniques requires a high degree of clinical acumen. Many patients who have chronic pain have been treated badly by others (including some health professionals!) and may already feel “invalidated” and sensitive regarding the legitimacy of their pain. It is particularly important that patients understand that these pacing strategies are meant to help them lead a more satisfying and rewarding life. In order to accomplish these general goals, patients should understand that pacing is not an activity avoidance strategy. It is meant to be used to reach a balance between activity and rest in order to increase the ability of achieving important life goals. Some pacing concepts may seem somewhat abstract and may be difficult for patients to understand. Considerable care must be taken to explain these concepts in a clear, accurate and supportive manner. The energy conservation approach is most likely to be properly understood by patients if the therapist presents these concepts by asking them to reflect on and provide examples from their own lives. For example, to help patients understand the consequences of overdoing activities the therapist might ask, “What happens when you push yourself to complete all of your household chores in a single day?”, “What happens to your energy level the next day?”, or “What is the impact on your ability to function?” In the final analysis, in order for this treatment to be effective patients must expect that they will benefit from it.

ENERGY CONSERVATION SESSION 1

INTRODUCTION TO THE CONCEPT OF PACING: GROUP SESSION

SESSION 1 OBJECTIVES

At the end of this session the participant will be able to:

- Understand the impact of chronic pain on fatigue and energy levels
- Understand activity pacing as an energy conservation principle
- Listen to the body's warning signs
- Understand more about how pain and fatigue levels (increase and fluctuation) work through a typical day
- Start pre-planning rest and relaxing activities throughout a typical day

SESSION 1 MATERIALS

- Name tags
- Activity Pacing group agreement
- Session 1 handouts
- Flipchart

INTRODUCTION

The therapist should introduce him or herself to the group:

- Name and experience with the chronic pain condition (e.g. fibromyalgia syndrome (FMS))
- Reason why you have decided to participate in the Activity Pacing (AP) program
- What does participation in a group intervention entail?
 - Being active in the activity pacing discussion
 - Sharing personal experiences about pacing with other participants
 - Sometimes working in small teams to do exercises

Icebreaking activity

- Ask the participants:
 - Their names.
 - Where are they from?
 - What do they expect in coming to this activity pacing group?
 - Two random facts about themselves?
 - What is their favorite hobby or pleasurable activity that they are still able to engage in?
- First ask if there are any volunteers, and if not, use a clockwise approach

Activity pacing group agreement (Handout 1)

- Review the activity pacing agreement with the participants and make sure everyone signs it and returns the copy to you.

TEACHING SESSION 1

What is pacing? Make the following points:

- *Activity pacing is the regulation of activity level and/or rate in the service of an adaptive goal or goals.* (Nielson, 2012)
- Activities can be very different in nature; most activities require physical (e.g. emptying a dishwasher) or mental (e.g. using your concentration to read a book) effort. They involve many of the things that participants may feel they need to accomplish throughout their day.
- The present activity pacing program will teach participants how to better balance their valued activities and rest. They will learn ways to regulate their activities and to alternate activities with rest periods in order to avoid energy depletion. In this way, activity pacing will permit them to do the things that are most important to them.

Pacing with a chronic pain condition: a shift of baseline energy levels

- Briefly describe the chronic pain condition. For example: fibromyalgia syndrome is a neurosensory disorder that is characterized predominantly by symptoms of chronic widespread pain and debilitating fatigue.
- State that many people with chronic pain try to continue their daily activities at the same level as they were able to manage before they had pain. This way of coping can cause increases in pain and fatigue. This can result in discouragement and cause them to give up on their favourite activities after many unsuccessful tries.
- Explain that their chronic pain condition has brought a change or a shift in their baseline energy level. Tell them that “Activity pacing tools could help you to better deal with this new reality.”
- Discuss and encourage the group to share which changes they have observed in their energy level when they are doing activities since they started suffering from their chronic pain condition.

GROUP EXERCISES – LISTENING TO THEIR BODY (Handout 2)

- Form small groups of 3-4 participants. Ask them to take 10-15 minutes to answer the following:
 - Identify which typical activities drain their energy the most.
 - Do they notice any increase in their fatigue or pain level at that time, throughout that day or for a few days after?
 - Do they feel body warning signs when doing a tiring activity? If yes, which ones?
- Bring the group back together and ask them to share and briefly discuss the most common challenging activities that they identified as potentially taking a lot of their energy.
- Use a flip chart to write down the body warning signs participants experience when they are doing a tiring activity. We will refer to this chart later in the group.

* 15-MINUTE BREAK *

TEACHING SESSION 1

Pacing within your energy envelope limits (*adapted from* (Collinge, 1993 ; King *et al.*, 1997 ; Pesek, Jason et Taylor, 2000) **(Handout 3)**). Make the following points:

- Everyone has a certain amount of energy in their personal “envelope”. By keeping their daily activities within their envelope limits, they might avoid an exacerbation of their pain and fatigue levels.
- When a person’s energy use exceeds their available energy by overdoing activities, their body will let them know by increasing pain and fatigue. The same is true when they underuse their available energy by doing too little activity during the day. Their body might tell them that they need to be more active. They may show signs of depression, low mood, and decreased energy.
- The energy envelope principle suggests that if they stay within their limits, their pain and fatigue symptoms will improve with time as they let their body slowly and naturally recover.
- Ask the participants to share a time or an activity during their week when they think they have exceeded their energy envelope.

Identifying their pain and their fatigue warning signs before it is too late

- Use the list of the body warning signs that the participants had previously identified within the small group exercise (e.g. started to feel tension or tiredness in my body). Bring up the flip chart here so that everyone can see the list of warning signal signs – add any new signs if the group has identified any new warning signs.

- Present (**Handout 4**) the 0 to 10 scales for pain level (0 = no pain and 10 = pain as bad as I can imagine) and fatigue level (0 = no fatigue and 10 = fatigue as bad as I can imagine).
- Explain the **rule of the 2 points**: An increase of 2 points on the pain scale or the fatigue scale should be a good indication (warning) that the participant should slow down or stop the activity they are doing.
- Explain to the participants that it is also important to keep in mind during their day: how much energy they have expended and how much is still available to them. A good way to do this is to check their energy level before and after they do an activity. That will allow them to predict how much energy that specific task usually requires from their energy envelope. They need to listen to their body to find a comfortable level of activity that doesn't increase pain or fatigue.

Activity pacing using energy conservation principles: The importance of balancing activity and rest (**Handout 5**)

Make the following points:

- Activity pacing is about managing their energy throughout the day. To be able to do this within one's limited energy envelope, one needs to start adding and pre-planning some rest/relaxing times during the day.
- Because it is easy — with all the demands in one's life — to not rest properly, one needs to start pre-planning rest periods and take time to stick to their rest schedule. A good way to start is to pre-plan rest times that participants think will be restorative for them. Pre-plan rest periods in morning, afternoon and evening.
- Choosing the amount of rest time should be based on their personal energy envelope and by listening to their body's needs and warnings. This means that the amount of time spent resting will be different for different participants.
- Ask the participants to discuss and share the ways they like to rest or relax. Did they feel refreshed afterwards? Write down the different ideas on a flip chart that the group indicates to help them to rest or relax. It will be helpful for the participants to see what others do to rest or relax as it may give them some new ideas to incorporate rest or relaxation into their daily routine.

HOMEWORK INSTRUCTIONS

- Introduce the activity pacing diary as homework to the participants. Explain to them how to use the diary throughout their day.
- Highlight that this first step serves as a tool:
 - to identify their baseline energy envelope.
 - to detect warning signs before it is too late.
 - to start pre-planning rest time during the day.
 - to monitor their pain and fatigue level.

- Go step by step through the diary with them.
- Explain in more details what you mean by physical and mental rest periods. Example: taking a hot bath, reading newspaper, etc. Highlight that the activity must not be physically or mentally demanding. Example: talking to the phone to a friend could be mentally demanding or writing emails to your boss could be physically and mentally demanding. Help the group participants to discriminate these differences for more tricky activities such as TV. Does watching a particular TV show make them more relaxed or is it mentally demanding (e.g. sports, news, sad movies, etc.)?
- Specify that to reduce the burden of keeping a diary they should describe their activities in a more general way (e.g. shopping, work, house chores, and social activities). Suggest that if there is an unusual activity during their week they might want to include more details (e.g. leaving the office for a meeting across town).
- Remind them of the importance of doing their homework, as the treatment will be more effective in improving their pain and fatigue.

ENERGY CONSERVATION SESSION 2

PLANNING AND MANAGING PRIORITIES: GROUP SESSION

SESSION 2 OBJECTIVES

At the end of this session the participant will be able to:

- Prioritize important activities over less important activities in their weekly schedule
- Pre-plan and balance energy consuming activities and less energy consuming activities in their weekly schedule
- Pre-plan using energy conservation principles without being tied to their weekly schedule

SESSION 2 MATERIALS

- Session 2 handouts
- Envelopes with activities enclosed for end of session activity
- Flipchart
- Weekly energy conservation group progress chart
 - On a large piece of cardboard or with presentation software, use the following example to construct your own chart.
 - Add an activity pacing scale asking the participant if they feel they have used activity pacing to manage their energy level in their week, 0 = not at all and 10 = always.

Participant names	Symptom	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Overall	Activity pacing
Miss X										
Week 1	Pain	8	6	7	6	5	7	5	6	8 out of 10
	Fatigue	3	4	2	3	3	2	3	2	
Week 2	Pain	9	8	6	7	6	6	6	7	8 out of 10
	Fatigue	5	4	2	2	3	3	3	3	
Week N	Pain	6	5	5	5	5	5	6	5	9 out of 10
	Fatigue	2	2	2	3	2	1	1	2	
Mister Y										
Week 1	Pain	3	2	3	3	1	2	3	2	6 out of 10
	Fatigue	8	9	9	9	8	7	10	9	
Week 2	Pain	3	3	2	2	2	2	3	2	9 out of 10
	Fatigue	7	6	6	8	7	7	7	7	
Week N	Pain	2	2	2	2	2	2	2	2	8 out of 10
	Fatigue	6	5	5	5	6	5	5	5	

SESSION 1 HOMEWORK: FEEDBACK AND DISCUSSION

Introduce the weekly group activity pacing chart to the participants

- When participants arrive, ask them to enter their overall pain and fatigue ratings for each day.
- Explain to the group participants that the chart is based on an honour system. Highlight that they won't be judged regarding their progress. If there are days in their week when they did not complete their diary they should just leave them blank.
- Ask them to provide honest ratings on the pacing scale. Do they feel they have used the activity pacing to manage their energy during the week? (0 = not at all, and 10 = always).
- When the charting is completed, take about 15-20 minutes to let the group participants discuss and respond to the following questions:
 - Have they successfully used energy conservation during the week? What is their most striking activity pacing success?
 - Have they tried but failed to use energy conservation strategies? In what specific situations? What happened?
 - What were the most common warning signs they observed when listening to their body? Did they use the "2 points rule" on their pain and fatigue scales as a way to slow down or stop activities?
 - Did they pre-plan their daily rest periods? Did they need a lot of additional rest time? If yes, what does this mean?
 - Were they more aware of their "daily energy envelope?"
 - Have they observed a positive impact on their pain and fatigue levels during the week?
- Take this opportunity to informally review week 1's activity pacing principles (pre-planning rest and relaxing activities, listening to body warning signs).

TEACHING SESSION 2

Banking and budgeting your energy (Handout 6)

- Tell the participants that the "energy envelope" could be thought of as a bank account where they deposit energy savings ("money") in it.
- Tell them that they will have to "bank" as much energy as possible in order to be able to spend it on their most valuable activities (e.g. bowling). One of the best ways to save energy is by planning enough rest time during their day. Throughout the next group sessions, they will also learn other tools and tips (e.g. slowing down, asking for help from others, etc.) to help them conserve their energy.

- In order to not “overspend”, they will have to plan a budget first. In their financial planning, they also need to keep some “money” in case of an unforeseen expense (e.g. car repairs). Another thing to keep in mind is the amount that they will need to save for larger expenses (e.g. buying a computer). It is the same for their energy account. They first need to pre-plan (i.e. budget) to determine the activities that they want or must spend their energy on during the week and how much energy each activity will cost them. For example, if they want to go to a friend’s late night party, they might want to save a lot by resting during the week prior to doing this activity as it might cost them most of their energy savings. Remember that resting/relaxing is like making a deposit into their account.
- When they don’t budget reasonably they overdraw their account and they will have to borrow some “money” usually with an “interest fee” attached to it. When they use more energy than they have in their savings, the payback is usually an increase in pain and fatigue at that moment or during the following days.
- They have a limited amount of energy to spend so they need to determine exactly what they want to spend it on. They will also need to keep some energy in reserve in case of an unpredicted need to expend their energy.

EXERCISE: MUST DO AND WANT TO DO (Handout 7)

- Take about 5-10 minutes to write down the things that you think you must do during the week. In the next column please list activities that you want to do in your week if you have the energy. Answer only the first three questions in **Handout 7**.
- After they have completed their lists, ask them to rank the priority of each specific activity (high, medium, low). Do the exercise separately for each of the *must* and *want* lists.
- Bring the group participants back together and ask them to share and discuss which activities are their priorities in each of their *must do* and *want to do* lists. Ask them to explain the reasons for their choices.

*** 15-MINUTE BREAK ***

TEACHING SESSION 2

Priorities 1, 2, 3 (Handout 8)

- Ask the participants how many priorities they think they can really manage in one day. (Let the group briefly share their thoughts).
- Suggest that, as a general rule they should include no more than three high level priorities (i.e. need to be done today), three medium level priorities (i.e. no rush, but has to be done this week), and three low level priorities (i.e. plenty of time, but has to be done this months) in their schedule each day.
- These rules can be very helpful when you are pre-planning your week, but they need to be used as follows:

- First, a priority is defined as a specific part of the task instead of a general task (e.g. doing *one load of laundry* versus doing *the laundry*). In the next group sessions, they will learn more about how to break tasks into pieces, how to simplify tasks, how to switch tasks, etc.
- Second, in the three high priorities each day, they should include a minimum of 1 want-to-do, and 2 must-do. These priorities can be tasks that are mentally or physically demanding.
- Third, they have to determine if their priorities are achievable within their limited energy account. They also need to ensure that their day activities fit in with their pre-planned rest time.
- Fourth, the three medium priorities (e.g. going to a pharmacy 5 min from home, writing an email to a friend, reading an interesting newspaper article) and the three low priorities activities (e.g. calling to reserve show tickets, preparing a receipt for taxes purposes, choosing the restaurant for a dinner with a friend next week) need to be carefully thought out. It might be tempting to do more when they complete their high priority activities. Before doing so, they should ask themselves whether they have enough energy left in their “bank account” before engaging in these activities.
- Remind the participants that even if they do have some energy left in their account, that doesn’t mean they necessarily have to use it. They could decide to save it for later. They have to always keep in mind that they need to keep a reserve amount of energy in their bank account in case something unplanned occurs during their week.
- Note that medium priorities can become higher priorities, and low priorities can become medium or even high priorities. A good example, is responding to an invitation to attend an event three weeks from now. By pre-planning they know what is coming...
- Accomplishing a maximum of three key activities and balancing them with adequate rest periods throughout the week will help them to better pace and live within their energy limits (i.e. envelope).
- When they have established their week priorities, they then need to determine how much energy each activity requires.

EXERCISE – MUST DO AND WANT TO DO

- Ask participants to take approximately 5-10 minutes to rate each activity from their *must do* and *want to do* lists according to whether they are high, medium, or low-cost energy consuming activities. (Handout 7 question 4)
- Bring the group back together. Have them share and discuss their activity choices. Ask them if they classified them as high, medium or low. Ask the group participants if they agree with the classifications that have been made.

TEACHING SESSION 2

Distribution of high, medium and low energy consuming activities

- Tell the participants that key activities during their week should also be distributed according to what each activity costs (high, medium or low energy consumption) in order to not overdraw from their bank account. For example, including two high-energy activities in the same day should be completely avoided. In fact, if they are planning a high energy-consumption activity, they might want to pre-plan longer rest periods prior to that activity. For example, going to a social event at night might require that they spend their whole afternoon relaxing, resting or napping.
- Tell them that they should learn to pre-plan in order to distribute their activity wisely during their week.

Learning how not to be tied by the weekly schedule

- It is important that participants don't feel tied to their weekly schedule as we want them to respect their energy levels when they are pacing. Schedules should be seen as a guide to help them manage their activities.
- The *maximum of three priorities* rule doesn't always apply when they feel they need more rest time.
- Sometimes they might not have planned enough rest or they may have to deal with an external unexpected demand (which is part of life).
- Encourage them not to give up their schedule - it just needs to be adjusted in response to the new demand. They have to increase their rest time, move their priorities around, and be flexible.

SMALL GROUP EXERCISE – PRIORITIES

- Divide the group into pairs. There will be 5 envelopes in a basket. Have one person from each pair pick an envelope (energy envelope) from the basket. Inside each envelope, there is a description of an activity. The activities inside each of the 5 envelopes are as follows :
 - 1) Sorting laundry.
 - 2) Vacuuming family room.
 - 3) Going to son (grandson's) soccer game.
 - 4) Organizing closet.
 - 5) Going on an outing (dinner, movie).
- With a partner, take 5-10 minutes and discuss if this activity is a must/want to do, how they would prioritize it, and how much energy it would take.

- After each group of two has discussed their activity, the group then comes back together. Each group will tell the larger group what their activity was. A discussion is then generated based on the following questions:
 - 1) Why was the activity a must/want to do?
 - 2) Was the activity a priority for you and not someone else?
 - 3) How much energy would the activity take (was this different for your partner)?

HOMWORK INSTRUCTIONS

- Review the instructions for the activity pacing diary homework with the participants. To help participants pre-plan their upcoming week, instruct them to do the following:
 - 1) Complete their 'Want to do & Must do' homework list for their week.
 - 2) When completing, they should identify their high, medium, and low priorities. They might want to keep in mind their short, medium and long-term goals.
 - 3) Next, identify their top 3 tasks priorities (a minimum of one "want to do") and how energy consuming these tasks are (high, medium or low).
 - 4) Next take time to break these top 3 tasks into smaller activities/pieces.
 - 5) Then distribute these smaller activities throughout their week.
 - 6) Remind them to pre-plan/incorporate rest periods and to consider using energy conservation strategies.
- Explain in more details what you mean by physical and mental rest periods. Example: taking a hot bath, reading newspaper, etc. **Highlight that the activity must not be physically or mentally demanding.** Example: talking to the phone to a friend could be mentally demanding or writing emails to your boss could be physically and mentally demanding. Help the group participants to discriminate these differences for trickier activities such as TV. Does watching a particular TV show make them more relaxed or is it mentally demanding (e.g. sports, news, sad movies etc.)?
- Specify that to reduce the burden of keeping a diary they should describe activities in a general way (e.g. shopping, work, household chore, social activity). Suggest that if there is an unusual activity during their week (i.e., that doesn't fit these types of categories) they can include more details (e.g. leaving the office for a meeting across town).
- Remind them of the importance of doing their homework if the treatment is to be effective in improving their pain and fatigue.

ENERGY CONSERVATION SESSION 3

RETHINKING HOW TO PACE: GROUP SESSION

SESSION 3 OBJECTIVES

At the end of this session the participant will be able to:

- Understand the concept of under-doing and over-doing
- Break daily tasks into pieces throughout their day and week
- Increase their understanding of resting principles

SESSION 3 MATERIALS

- Session 3 handouts
- Relaxation CDs
- Handouts on deep breathing and relaxation scripts
- Weekly energy conservation group progress chart
- Props for end of session activity:
 - 1) Laundry (laundry basket, laundry bag, clothes, laundry detergent),
 - 2) Planning Dinner (paper and pen, dishes and cutlery, food, dish soap, cloth)
 - 3) Gardening (paper and pen, gardening tools, gardening gloves, watering can).
 - A piece of paper will be needed at each station for the group to write down their answers to questions re: breaking up the above activities.

SESSION 2 HOMEWORK: FEEDBACK AND DISCUSSION

- First have the participants complete the weekly group progress chart.
- When the charting is completed, take about 15-20 minutes to let the group participants discuss their experiences about the following:
 - Have they successfully used energy conservation during the week? What was their most striking activity pacing success?
 - Have they tried but failed to use energy conservation? In what specific situation? What happened?
 - Did they pre-plan their daily rest periods? Did they need a lot of additional rest time? If yes, what does this mean?
 - Did they respect their priorities (high, medium, low)?
 - How did they deal with high-energy activities?
 - Did they increase their 'Want to do' activities? Did they achieve some of their 'Must do' activities?
 - Have they observed a positive impact on their pain and fatigue levels during the week?
- Take this opportunity to informally review week 1 and week 2 activity pacing principles (pre-planning rest and relaxing activities, prioritizing activities).

TEACHING SESSION 3

Over and under doing (Handout 9)

- Over-doing mental and physical tasks overtaxes them by making them feel more exhausted. When they burden themselves by doing too many things during the day, they are not considering the amount of energy left in their bank account. Ignoring their pain and fatigue when doing activities will result in them having to pay back what they have overspent with interest (i.e. their pain and fatigue increases).
- Sometimes they might have enough energy available that they could spend it doing important things, but instead they decide to do nothing. Underdoing may make them feel badly about themselves or bring on feelings of overtiredness, depressed mood, etc. Also, their body strength and fitness level could decrease as a result of prolonged periods of underdoing.
- Most of those suffering with a pain condition engage in both under and over doing. They get into an over/under activity vicious cycle that is sometimes called the 'yo-yo' pattern. This pattern involves:
 - A persistent increase in activity level that exceeds their tolerance levels (e.g., by overspending energy resources by doing too many things).
 - This period of overdoing causes an increase in pain and fatigue.
 - These high levels of pain and fatigue result in a prolonged period of underdoing and withdrawal from activities. This period of underdoing sometimes lasts for days or even weeks. As their symptoms decrease and they regain their energy, they attempt to make up for lost time by again being overactive.
- This vicious circle disrupts their lifestyle as they are not able to participate in some important activities that occur during 'down' periods. This 'yo-yo' pattern is also likely to make them feel discouraged and helpless because they miss rewarding activities and feel that they have little control over their life and their symptoms. In addition, times of prolonged inactivity may result in a decreased level of productivity. They are likely to achieve more if they pace their activities such that they do more on 'bad' days and avoid overactivity on 'good' days. In order to prevent this 'yo-yo' pattern, they need to do two things: 1) listen to their body to better recognize when they are over or underdoing and 2) pre-plan their activities by alternating periods of activity with rest. These strategies will help them to reach a balance between activity and rest that will result in an overall more stable activity pattern. Pain and fatigue levels should also decrease!

EXERCISES – OVER AND UNDER DOING

- Take around 10 min to ask the group to share and discuss their old ways of activity pacing.
 - 1) Were they overdoers, underdoers or both?
 - 2) Do they remember an overdoing or underdoing situation? What was the impact on their pain and fatigue?

- With their new knowledge of energy conservation principles, do they still think it is a good way to manage their activities? If yes, ask them to explain their point of view and help them with their misconception.

TEACHING SESSION 3

How to rest (Handout 10)

- Remind the participants that physical and mental rests are good ways to make a deposit in their energy bank account.
- There are many ways to rest such as:
 - Napping,
 - Lying down,
 - Taking a hot bath,
 - Listening to music,
 - Meditating,
 - Visualization,
 - Deep breathing,
 - Relaxation techniques,
 - Sitting in a comfortable position in your backyard, garden or balcony,
 - Watching a non-mentally demanding show (e.g. house and garden shows, animal documentaries etc.),
 - Reading a non-mentally demanding article (e.g. on Hollywood stars etc.),
 - Receiving a massage from spouse or friend,
 - Enjoying a cup of tea,
 - Etc.
- Ask the group if they have any other ways to incorporate rest.
- It is important to make a distinction between leisure activities and rest. Rest has a leisure component, but it is not physically or mentally demanding. Rest allows the body to naturally recover. Leisure activities, as we have discussed in past sessions should be treated as priorities. In other words, their 'Want to do's' should be given the same importance as their 'Must do's'.
- Everyone prefers some specific types of rest over others. Each individual needs to choose the ways in which they are going to rest based on their needs and what is enjoyable for them. Making a diversified list of how they want to spend their pre-planned rest time could be helpful when they are having difficulty coming up with ideas (e.g. listening to the CDs a friend lent me). Such lists may be especially helpful on days when they are experiencing higher levels of pain and fatigue (and are struggling to come up with ideas).
- Have the group take 5 minutes to write down on **Handout 11** specific ways that they can include rest in their day. This can be a list that the participants will have as a resource that they can refer to when they are thinking of ways to include rest in their day.

GROUP EXERCISES – HOW TO REST

- Take about 5-10 min to ask the group, when they look at their week 1 and week 2 pre-planned rest times, do they feel that their rest activities were not as restorative as they had expected?
- Help the group to determine whether their rest times were really restful/calm moments, or were they leisure activities?
- Ask them to share ideas about what other types of rest could be added on the list.

*** 15-MINUTE BREAK ***

TEACHING SESSION 3

Breaking tasks into pieces (Handout 12)

- Before the chronic pain condition, participants were probably more likely to pace their lives by planning tasks during their day or week (e.g., washing dishes, completing their homework, preparing dinner for guests). They were likely able to include many tasks in their day with relatively few rest periods, those rest periods being of short duration. However, as their energy is now more limited than before, they might find that previously effective pacing strategies don't work anymore.
- They are now on a more limited energy budget. This means that tasks should now be broken into small pieces. Each of these pieces has to be achievable by balancing activity and rest periods so as not to overspend their energy bank account.
- Every task has to be rethought and split into smaller chunks in order to pre-plan enough time during their week. For example, completing school homework is a highly demanding mental task. By dividing this task into small pieces (e.g., doing half a page a day followed by a quick power nap) will help the person to keep some energy in reserve instead of overdoing. This approach will likely have a positive impact on their pain.
- This means that it might take them the entire week (many small activities) to accomplish a desired task. Some tasks could also be achieved over quite a long term. This idea will be discussed further during a later session on goals and goal-setting.

SMALL GROUP EXERCISE - PRE-PLANNING

- This activity includes 3 stations. Group members rotate through stations in groups of 3 or 4. Each group will start at one station and switch to the next station after 5-10 minutes.
- Each station would have piece of paper with the outlined activity. The three station activities are as follows:
 - 1) **Laundry.**
 - 2) **Planning Dinner.**
 - 3) **Gardening.**

- Group members are asked to analyze the outlined activities in each station. There will be questions under each activity.
 - 1) How would you break this activity into chunks?
 - **Landry** (sorting, washing, drying, folding, putting away, etc.).
 - **Planning dinner** (deciding on menu, grocery shopping, meal prep, setting table, hosting, clean up, etc.).
 - **Gardening** (planning, shopping, weeding, planting, watering, deheading, etc.).
 - 2) How would you incorporate rest during this activity?
- Group members are asked to write down their answers on a piece of paper for each activity.
- Props would be at each station to help assist with breaking up task. Examples of props at stations are:
 - 1) Laundry (laundry basket, laundry bag, clothes, laundry detergent).
 - 2) Planning Dinner (paper and pen, dishes and cutlery, food, dish soap, cloth) .
 - 3) Gardening (paper and pen, gardening tools, gardening gloves, watering can).
- Once all group members have rotated through each activity, the big group will convene for a group discussion. Discussion will be generated around answers they had for the questions at each station. How did everyone break up laundry? Planning Dinner? Gardening? Where would you incorporate rest breaks?

HOMWORK INSTRUCTIONS

- Review the instructions for the activity pacing diary homework with the participants. To help participants pre-plan their up-coming week, instruct them to do the following:
 - 1) Complete their 'Want to do & Must do' homework list for their week.
 - 2) When completing, they have to identify their high, medium, and low priorities. They might want to keep in mind their short, medium, and long-term goals.
 - 3) Next, identify their top 3 tasks priorities (a minimum of one "want to do") and how energy consuming these tasks are (high, medium, or low).
 - 4) Next, take time to break these top 3 tasks into smaller activities/pieces.
 - 5) Then, distribute these smaller activities throughout their week.
 - 6) Remind them to pre-plan/incorporate rest periods, and to consider using energy conservation strategies.
- Specify that to reduce the burden of keeping a diary they should describe activities in a general way (e.g. shopping, work, household chore, social activity). Suggest that if there is an unusual activity during their week (i.e., that doesn't fit these types of categories) they can include more details (e.g. leaving the office for a meeting across town).
- Remind them of the importance of doing their homework if the treatment is to be effective in improving their pain and fatigue.

ENERGY CONSERVATION SESSION 4

ADDRESSING PACING CHALLENGES: GROUP SESSION

SESSION 4 OBJECTIVES

At the end of this session the participant will be able to:

- Be more assertive (asking for help, refusing demands) to conserve their energy and to pace their pre-planned activities better
- Solve problems when confronted with activity pacing difficulties, in order to maintain their schedule and their energy balance.

SESSION 4 MATERIALS

- Session 4 handouts
- Weekly energy conservation group progress chart
- Flipchart
- 5 pieces of paper with the scenarios written on them for group activity before break

SESSION 3 HOMEWORK: FEEDBACK AND DISCUSSION

- First, have the participants complete the weekly group progress chart.
- When the charting is completed, take about 15-20 minutes to let the group participants discuss their experiences with the following:
 - Have they successfully used energy conservation during the week? What is their most striking activity pacing success?
 - Have they tried but failed to use energy conservation? In what specific situations? What happened?
 - Did they pre-plan their daily rest periods? Did they need a lot of additional rest time?
 - Did they increase their 'Want to do' activities? Did they achieve some of their 'Must do' activities?
 - Did they observe a tendency to under-do, over-do? Did they have a "yo-yo" pattern? Did they try to change this pattern?
 - How well were they able to break their priorities into pieces? Did it work? If not, what could be the reasons? If yes, did they feel this way of pacing was helpful to maintain their energy level?
 - Have they observed a positive impact of pacing on their pain and fatigue levels during the week?
- Take this opportunity to informally review weeks 1 to 3's activity pacing principles (pre-planning rest and relaxing activities, prioritizing activities, breaking tasks into pieces).

TEACHING SESSION 4

Saving energy by being assertive (Handout 13)

- Pressure and demands from others could make them want to deviate from their initial activity pacing schedule. They need to understand that if they do deviate from their plan there will be a cost (ie. they will have to pay using their energy ‘bank account’). When another person makes a demand of them, they need to ask themselves the following questions:
 - Is this activity a “want to do” or a “must do”?
 - Am I willing to give up another activity during my weekly schedule in order to accommodate this one?
 - How energy consuming is this activity (high, medium, low)?
 - If I do this activity, do I have enough time to rest afterward?
- They need to be aware that pressure or demands from others could cause them to fall back into their old pacing patterns (e.g., yo-yo pattern).
- They are entitled to refuse any unplanned demands in order to conserve their energy. It is important for them to become more assertive if they are to make better use of their limited energy. For example, if they have an unplanned visit from the neighbor, this could be handled by saying “I am unable to visit today, but I will drop by when I feel better tomorrow”. Another example could be a phone call that is mentally demanding. It could be shortened by saying something like: “I am interested in catching up with you, but I need to go now. I will call you back in the next few days!”
- In some cases, they might want to accept requests, but they need to consider the physical and/or mental demands that the activity may involve. If they say yes, they have to make sure that the person understands that they will have to 1) break the activity into pieces that are achievable, 2) slow down or stop when necessary and, in some cases, 3) give them sufficient notice so that they don’t feel pressured to complete the task too quickly.
- Asking for help is another way to be assertive and to conserve energy. When a task is too demanding, physically or a mentally, they always have the option of asking someone else to do it for them. Such a request might involve only one part of a task (e.g. bringing the laundry downstairs) or the entire task (e.g. going to the grocery store). Most friends or relatives are willing to help sometimes, so asking is worthwhile. If they ask for help with some tasks they might have more time to rest and to do one of their ‘Want to do’ activities. Sometimes a relative might also benefit from helping them. For example, they might say to their husband: “if you help me by going to the grocery store, I will have enough energy left to play cards with you after dinner”.
- It is also important for them to communicate their needs clearly to others to facilitate energy conservation during activities. It is important to emphasize the importance of being honest with themselves as well as others. For example, social events often take a lot of energy. In these circumstances it is important that they express their need to pace themselves before going to an event so that their spouse or significant other understands what to expect. If they

plan to go to a quiet place to rest during the evening, the other person should know where they are going and why.

- Finally, being assertive sometimes involves updating others about their energy budget. For example, being honest and saying that they are tired or that they have too much pain to go somewhere, will make them feel better about themselves and will allow them to stay within their energy limits. It is important to communicate how they feel (i.e their energy level) and when they need rest so that others know what to expect.

SMALL GROUP EXERCISE – USING ASSERTIVENESS SKILLS

- Group members are divided into pairs of two. This small group exercise will involve five scenarios. Each pair will participate in a role playing scenario. One person will be the strainer and the other person, the asserter (reverse roles later). Five scenarios will be written on separate pieces of paper. A person from each pair will pick out a scenario.
- A timer will be used for all interactions. 3 minutes for each person to speak with their partner (6 minutes on total). The scenarios that will be written on pieces of paper are as follows:
 - 1) As old friend calls you late at night to catch up, but you are tired and have to get up early in the morning... What do you say?
 - 2) You have a potluck at work and your co-worker wants you to bring the homemade lasagna that you always used to make. You know that you have a busy night ahead and will not be up for making anything. What do you say?
 - 3) There are plans for the family to go camping for the weekend, but the grass needs to be cut before you leave for the weekend. You typically have always cut the grass, but it has become very difficult, plus there is the time restraint of going away for the weekend. How would you ask your teenager to cut the grass and to start taking on more responsibility with the yardwork? What would you say?
 - 4) You wake up and it is a nice day. Your partner wants you to go to the park for a walk, but you are not feeling up to it. What would you say?
 - 5) You have volunteered in the past at work (or community activity – coaching, school council, church function) and you did a great job, but were exhausted by the time you were done. Now... you have identified that you can no longer do it on your own. How do you ask for help?
- Once everyone has had a chance to discuss with their partner, bring the group back together and ask each group to discuss their role playing experiences. Each pair will tell the group what their scenario was and how they were able to use some assertiveness skills. The bigger group will be asked if they have any further comments or suggestions on how they would have handled the same scenario. Help the group to see that there are many different ways to communicate their needs.
- Each pair will have approximately 5 minutes to discuss scenario with the group.

*** 15-MINUTE BREAK ***

TEACHING SESSION 4

Problem solving to conserve energy (Handout 14)

- Sometimes, and in some settings (e.g., work), they might find it hard to maintain a stable balance between activity and rest. Since they began these group sessions, they have learned how to use different techniques to help them listen to their body's needs and to conserve their energy. They will learn more techniques and new skills in the remaining sessions.
- Tell the participant that they still might fail sometimes or be confronted with pitfalls that they do not know how to deal with. For example, some activities cannot be broken into small pieces (e.g. if you go to the movie theater you cannot stop the movie to rest). Can they recall some situations in which their pre-planning did not work out as they expected it would? For example, they have underestimated the amount of time required to cook a special meal for guests. They might also have received requests from others that they had no idea how to handle within their energy limits.
- Problem solving will help them to better assess these types of situations in order to stay within their energy 'budget'.
- Specifying activity pacing problems: Sometimes participants might not be able to clearly identify the activity pacing problems that they are having. So it is important to clarify the situation with them and to put it into context. **Example**: Julie wants to volunteer to supervise playground activities at her children's school. However, in order to do this work she is expected to commit 2 hours, 2 times a week and will not be able to take breaks while she is supervising the children. This example provides a clear description of a situation so that it is now solvable.
- What are the barriers to maintaining their energy? This aspect of pacing is likely something that they are (unconsciously) doing as part of pre-planning their schedule. If they are confronted with an unexpected event, they should step back from the situation before proceeding. This pause would allow them to take a few minutes so that they can problem-solve adequately. This pause will help them to make better decisions that will more likely lead to them staying within their energy limits and to do appropriate modification of their weekly schedule. **Example**: Julie knows that
 - She has a hard time standing for prolonged periods of time.
 - She finds it mentally demanding to watch six kids simultaneously.
 - She is not sure how she will be able to bring the play materials from the storage room to the playground.
- What are alternative activity pacing solutions that are available? Defining the exact challenges involved in situations will help participants to generate solutions and think about the available options. They should be encouraged not to censor themselves because they think their ideas are 'stupid' or 'silly'. They should try to be as creative as they can; even the most outlandish possibilities are worth considering as they might lead to novel solutions. This is also a good time for them to think about applying the techniques that they have learned in their previous sessions. **Example**: In Julie's case she could:

- Sit on the grass, bring a lawn chair or bring a yoga mat in order to decrease the amount of time that she has to stand.
- She could request help from the other volunteers in the playground or appoint one of the children as her assistant if the task seems too mentally demanding.
- She could take the material using a cart. She could ask the children to help by each taking something with them or ask that the material is already in place before she arrives, etc.
- Look at the pros and the cons of every activity pacing solution: They need first to weigh every solution by examining the pros and the cons. At this point they should also consider combining solutions. **Example:** In Julie's case:
 - For the standing problem: If she sits on the grass, it will be uncomfortable, but it is somewhat better than standing. If she brings a chair, she would be very comfortable but then there is the burden of putting the chair in the car and carrying it to the playground. She could easily bring a yoga mat and it would be more comfortable than sitting on the grass but not as comfortable as a chair. For the mentally demanding task: she could ask another volunteer to help when she feels her energy gets low, but they might not agree to this as they need to take care of their own group. If she asks one of the children to help her watch the other children, she will still be responsible but she will have help so it will be less mentally demanding.
 - For the playground materials: if she asks for it to be put in the playground before she comes, it could be stolen. If she asks all the children to carry something it will help her pain but she might have to deal with their complaining, which is mentally demanding. If she uses a cart it will be easier, but she will spend some energy by pushing it.
- Finalize their pacing solutions: They should choose the solutions that will allow them to pace themselves the best so they can conserve their energy. Remember that solutions can sometimes be abandoned if a task is too demanding or they need to say no to the demands of others. Even if they say no in the end they will understand why they made that choice (i.e. their budget was too tight). **Example:** Julie decides
 - To give volunteering at the school a shot as it is part of her 'Want to do' list. She decides to bring a yoga mat to sit on to minimize her pain. She will also ask one of the children to assist her and she will also ask another volunteer (who has offered to help in the past) to give her some help if it is needed. She also decides to ask the children to help carry the playground materials outside.
- Evaluation of the impact of the pacing plan on their energy level: After they pre-plan, they will then have to try their activities in order to see how well their pacing plan works. Some adjustments will likely be needed along the way. If they find their solution was not optimal they can always go back to their solutions list and try something else. It could also happen that other options become available to them as they carry out their plans. They should readjust their plans in order to identify those that will provide the most energy savings for them. **Example:**
 - After implementation, Julie realized that she had problems with the yoga mat as it was not comfortable enough. At that point, she had developed better relationships with the

other volunteers and she feels comfortable asking one of them to bring a chair to the playground for her. She believes that this change, along with the rest of her plan, provides the best energy conservation solution for her in this situation. It is still a moderately demanding activity for her, so she needs to rest more at other times during these volunteering days. She had to give her gardening task to her husband to take care of. However, he is pleased that she is able to do something she enjoys and he doesn't feel overburdened by the request. Julie wouldn't have known this if she hadn't problem-solved and thought to ask her husband for help!

SMALL GROUP EXERCISE – PROBLEM SOLVING

- In small groups of 3-4 participants, take around 10-15 min to do this exercise. Use the problem solving and assertiveness handout 13 and 14 to help them manage the following situation: Your friend asks you to help her organize a special dinner with 8 invited guests. She tells you she knows how talented you are at doing these types of events (which is actually true). She would like you to plan the entertainment for the night, choose the menu with her, cook the meal with her and help her clean up after the guests leave. What do you say to her?
- Bring the group back together and ask them to choose one participant from every small group to share their ideas. How did they arrive at their solution? Did they think of pre-planning rest periods?
- Help the group to see that there are many different ways to deal with an activity pacing problem.

HOMEWORK INSTRUCTIONS

- Review the instructions for the activity-pacing diary homework with the participants. To help participants pre-plan their up-coming week, instruct them to do the following:
 - 1) Complete their 'Want to do & Must do' homework list for their week.
 - 2) When completing, they have to identify their high, medium, and low priorities. They might want to keep in mind their short, medium and long-term goals.
 - 3) Next, identify their top 3 task priorities (a minimum of one "want to do") and how energy consuming are these tasks (high, medium or low).
 - 4) Next, take time to break these top 3 tasks into smaller activities/pieces.
 - 5) Then, distribute these smaller activities throughout their week.
 - 6) Remind them to pre-plan/incorporate rest periods and to consider using the following energy conservation strategies: assertiveness and problem-solving.
- Specify that to reduce the burden of keeping a diary they should describe activities in a general way (e.g. shopping, work, household chore, social activity). Suggest that if there is an unusual activity during their week (i.e., that doesn't fit these types of categories) they can include more details (e.g. leaving the office for a meeting across town).
- Remind them of the importance of doing their homework if the treatment is to be effective in improving their pain and fatigue.

ENERGY CONSERVATION SESSION 5

MODIFYING TASKS: GROUP SESSION

SESSION 5 OBJECTIVES

At the end of this session the participant will be able to appropriately:

- Switch from one task to another
- Slow down or stop tasks or activities, as appropriate
- Abandon tasks or activities, as appropriate

SESSION 5 MATERIALS

- Session 5 handout
- Group activity materials (list of activities, dice, board)
- Weekly energy conservation group progress chart

SESSION 4 HOMEWORK: FEEDBACK AND DISCUSSION

- First, have the participants complete the weekly group progress chart.
- When the charting is completed, take about 15-20 minutes to let the group participants discuss their experiences about the following:
 - Have they successfully used energy conservation during the week? What is their most striking activity pacing success?
 - Have they tried but failed to use energy conservation? In what specific situations? What happened?
 - Did they pre-plan their daily rest periods?
 - Did they increase their 'Want to do' activities? Did they achieve some of their 'Must do' activities?
 - Did they have a situation where they received unexpected demands or pressure from others? If so, did they use assertiveness?
 - Did they ask for help from someone in order to save their energy?
 - Did they use problem-solving techniques during their week in a specific activity pacing situation? What was the process they followed to achieve a solution? Did it work? If not, did they try other solutions?
 - Have they observed a positive impact on their pain and fatigue levels during the week?
- Take this opportunity to informally review weeks 1 to 4's activity pacing principles. (pre-planning rest and relaxing activities, prioritizing activities, breaking tasks into pieces, using assertiveness skills, problem-solving).

TEACHING SESSION 5

Saving energy by switching from one task to another (Handout 15)

- Switching means changing from one task to another to avoid fatigue or pain caused by excessive physical or mental exertion.
- It is important that they listen to their body as it will tell them when to switch. Switching is about stopping and doing something else when they start to feel an increase in their pain or fatigue, even if the task is not finished. For example, they might start emptying the dishwasher and, when they feel pain, stop to go sit down and fold some clothes. They have to remind themselves that they will be able to finish emptying the dishwasher later in their day.
- This strategy could be hard to do at first because they might have the impression that they won't achieve anything. Overdoers, for example, sometimes have difficulty letting go of tasks before they are completed. However, by using switching throughout their whole day they will discover that they are able to meet their pre-planned daily objective.
- Switching is an effective way to conserve their energy as it helps them to stop the activity before they experience excessive fatigue or pain. It is important that when they switch they carefully choose the alternate task to make sure that it doesn't involve the same group of muscles, or that it is not equally demanding (physically or mentally). So switching tasks is not just about doing something different. They also need to remember that it is acceptable to let a task remain unfinished as they can return to it when they feel better. Switching might also allow them to achieve a little bit more during the day, even though the main purpose is to stay within their energy limits.

GROUP EXERCISE – TASK SWITCHING

- In small groups of 3-4 participants, have them use the following task list to make a task-switching plan.
 - The task list:
 - 1) Grocery shopping
 - 2) Calling your boss
 - 3) Going to the bank
 - 4) Doing laundry
 - 5) Repotting a plant
- Bring the group back together and ask them to choose one spokesperson from every group to share their plan. How did they arrive at their solution? Did their switching plans involve other tasks that used different parts of their body or their brain?
- Help the group to see that there are many different ways to task-switch.

*** 15-MINUTE BREAK ***

TEACHING SESSION 5

Stopping or slowing down (Handout 16)

- Activity pacing is also about slowing down or stopping their activities (resting) when their body sends them warning signs.
- To help them to slow down or stop their activities it is important that they don't set short, unrealistic deadlines for themselves (i.e., don't 'overdraw' their limited energy bank account). To continue our 'banking' analogy, if a person knows that they have to pay their tax bill in three months it would be easier for them to put some money aside on a weekly basis, even if there is one week when they weren't able to do so. They will be able to redistribute their payments over the weeks that they have left if they pre-plan their budget.
- Slowing down and stopping will also prevent them from overdoing activities (overspending their bank account).

Abandoning task (Handout 17)

- Abandoning tasks could be perceived as a failure or as laziness by some participants. However, it is important for them to remember that even if they have pre-planned adequately, they cannot predict what their exact energy level is going to be on a specific day. This means that sometimes they will have to decide to abandon tasks and rest in order to respect what their body is telling them.
- Even if they are pre-planning they still might have accepted requests from others that they hadn't planned in their initial schedule. To manage this new demand, they may need to drop another pre-planned task to stay within their energy limitations.
- When they are deciding which task they want to give up, it is important that they don't always choose "must do" over "want" to do task. They might also want to abandon a low or medium priority task rather than a high priority task. They could also decide to remove a task that requires a high amount of energy instead of one that takes a low or medium amount of energy. Finally, in some cases, they might not have to abandon the entire task but only some pieces of it. For example, they might decide to water their garden but ask their spouse to pull weeds for them. It is also important for them to be creative and use techniques learned in previous sessions (like breaking tasks into pieces, assertiveness, problem solving, etc).

SMALL GROUP EXERCISE – APPLYING SWITCHING, SLOWING DOWN/STOPPING, AND ABANDONNING TASK TO DAILY SCENARIOS

- This exercise will involve a game incorporating various strategies taught in session number 5 as well as strategies taught in previous sessions.
- There would be a game board (made from Bristol board) that looks like a table of squares with two strategies in each square. Each square will have one strategy from session #5 (switching, slowing

down/stopping, or abandoning tasks) and the other strategy in the square will be from a previous session (i.e. breaking up tasks, using assertiveness, etc.). Some squares will have an option of choosing a strategy which can be applied to the scenario.

The board would look like this:

Abandon task & Break up task	Switching & Problem-solving	Choose strategy & Switching	Problem Solve & Stop/Slow down
Prioritize task & Slow down/Stop	Abandon Task & Choose strategy	Prioritize task & Abandon task	Choose Strategy & Switching
Assertiveness & Abandon task	Switching & Assertiveness	Break up task & Slow Down/Stop	Slow Down/Stop & Incorporate Rest
Abandon task & Problem solve	Choose Strategy & Switching	Break up task & Slow Down/Stop	Switching & Prioritize task
Prioritize task & Slow Down/Stop	Abandon task & Incorporate Rest	Assertiveness & Switching	Choose Strategy & Slow Down/Stop

- The group will be divided into 2 groups of five.
- Each group will have a board in front of them. The board will be the same for each group. There will be a die for each group with numbers 1 to 6 on each die. Each number will correspond to an activity. The activities are numbered 1 to 6 and will be outlined on a sheet of paper for each group, as well as on the presentation slide in front of the class.

- **Activities will be:**

- 1) Cleaning the bathrooms before weekend guests arrive.
- 2) Your family decides to have a picnic on Sunday afternoon which you have already set aside as your rest time.
- 3) Your child wants you to go on a school field trip for a nature walk.
- 4) It is the long weekend and there are three social events that you are invited to (i.e. lunch with old friend, husband's work party, family birthday (niece, uncle, etc.)).
- 5) Your dad has asked you to do his Christmas shopping for him (something you have done in the past), but now you are finding shopping more challenging.
- 6) Your family is on vacation and your spouse wants to do excursions, but you would rather stay on the beach.

- Each person in the group will take turns rolling the dice over the board.
- Whatever number shows up when the dice stops, is the activity that the person needs to use. The groups will refer to the list of activities outlined in front of them as well as on the slide presentation. If the dice comes up with the number 3 for example, then the person is to use scenario #3 to outline how they would use the two strategies on the board. The square that the die lands on defines the two different strategies the person will need to apply. **Example:** If the die lands on switching and assertiveness, the person is to describe how these two strategies can be applied to the activity scenario. If the die lands on a *choose strategy* option, the individual can choose what strategy they would like to apply to the scenario.
- Once the two groups do the activity for 30 minutes, the separate groups are then brought back together to have a discussion. Ask the group how they applied the different strategies to the activity scenario. Did people have other strategies that they would have liked to apply? Illustrate how activities can be approached very differently and that various strategies can be applied to the same activity. Often people may choose a different strategy than their group members would have chosen.

HOMWORK INSTRUCTIONS

- Review the instructions for the activity pacing diary homework with the participants. To help participants pre-plan their up-coming week. Instruct them to do the following:
 - 1) Complete their 'Want to do & Must do' homework list for their week.
 - 2) When completing, they have to identify their high, medium, and low priorities. They might want to keep in mind their short, medium, and long-term goals.

- 3) Next, identify their top 3 tasks priorities (a minimum of one “want to do”) and how energy consuming these tasks are (high, medium, or low).
 - 4) Next, take time to break these top 3 tasks into smaller activities/pieces.
 - 5) Then, distribute these smaller activities throughout the week.
 - 6) Remind them to pre-plan/incorporate rest periods and to consider using the following energy conservation strategies: assertiveness, problem solving, slowing down, stopping, switching, abandoning.
- Specify that to reduce the burden of keeping a diary they should describe activities in a general way (e.g. shopping, work, household chore, social activity). Suggest that if there is an unusual activity during their week (i.e., that doesn’t fit these types of categories) they can include more details (e.g. leaving the office for a meeting across town).
 - Remind them of the importance of doing their homework if the treatment is to be effective in improving their pain and fatigue.

ENERGY CONSERVATION SESSION 6

SIMPLYFING AND REASSESSING ACTIVITIES: GROUP SESSION

SESSION 6 OBJECTIVES

At the end of this session the participant will be able to:

- Simplify and modify their activities
- Reassess their activities

SESSION 6 MATERIALS

- Session 6 handout
- Weekly energy conservation group progress chart
- Assistive devices
- Flipchart
- Paper to write on (for last group session on simplifying and modifying activities)

SESSION 5 HOMEWORK: FEEDBACK AND DISCUSSION

- First have the participants complete the weekly group progress chart.
- When the charting is completed, take about 15-20 minutes to let the group participants discuss their experiences about the following:
 - Have they successfully used energy conservation during week? What is their most striking activity pacing success?
 - Did they use other strategies in their week such as breaking tasks into pieces, being assertive, using problem solving? Did it work? If not, what happened?
 - Have they tried but failed to use energy conservation? In what specific situations? What happened?
 - Did they pre-plan their daily rest periods?
 - Did they increase their 'Want to do' activities? Did they achieve some of their 'Must do' activities?
 - Did they use slowing down, stopping or switching during their week? Did it work? If not, what happened?
 - How do they feel about their activity pacing progress so far?
 - Have they observed a positive impact on their pain and fatigue levels during the week?
- Take this opportunity to informally review weeks 1 to 5's activity pacing principles. (pre-planning rest and relaxing activities, prioritizing activities, breaking tasks into pieces, using assertiveness skills, problem-solving, switching, slowing down/stopping, abandoning tasks).

TEACHING SESSION 6

Reassessing activities (Handout 18)

- One of the activity pacing goals is to reduce activities in order to have more time to rest and relax. To achieve this balance they might want to start assessing the things they are doing during their week to check if it is really necessary. We will talk further in session 8 about how to help them change their priorities and lower their standards.
- The first step is to start sorting tasks that could possibly be dropped completely. Here are some examples:
 - Do you really have to dry your hair in the summer time?
 - Could you wear the same pants twice before putting them into the laundry?
 - Could you ask your pharmacy to deliver your medication to your home?
 - Do you have to cut vegetables by hand when you can use a food processor?
 - Do you have to talk with your neighbour who is having problems with her daughter for 10 minutes when you go to pick up the mail?
 - Do you have to do the grocery shopping when your spouse offers to go?
- Reassessing can also help them choose the things they really want to do more carefully and will provide them with more available time to rest.
- Reassessing can also be combined with task simplification and modification.

SMALL GROUP EXERCISE – REASSESSING TASKS

- Ask the group to split in pairs. Take 5 minutes to discuss some ways that they could reassess their daily tasks. Get the group to think about if the activity is necessary or could it be dropped.
- The group will then reconvene for 5-10 minutes. The pairs are asked to share how they thought they could reassess their daily tasks.

TEACHING SESSION 6

Task simplification and modification (Handout 19)

- They might never have thought about the way they go about their daily tasks. However, without realizing it, they might be losing some energy from their 'bank account'. It is a bit like when a person finds a better deal at a particular store and can save some money. Those few extra dollars could be used to buy something else that they want. It is the same for their energy: saving a little bit of energy throughout the day adds up and is more important now that they have a limited amount of energy (i.e., a more limited energy 'budget').

- To save energy they first need to examine all aspects of their daily routine to see if there is anything that can be dropped or modified. They can also use some of the techniques that they have learned in previous sessions such as breaking tasks into smaller pieces, being assertive, slowing down, stopping, switching, or abandoning some part of the task or using problem solving techniques to determine the best solution to conserve their energy.
- Task simplification means alteration of daily activities so that they are done in a different manner. By discovering new ways of doing things, they might also find that some of the tasks that they had previously dropped are now becoming achievable. For example, perhaps they stopped planting annual flowers because it was too exhausting. However, it could be that by saving energy through dropping tasks and modifying others that this highly valued activity becomes possible.
- Here are some specific principles that will help them to simplify and modify their tasks:
 - First, they need to pre-plan the task.
 - Next, it has to be broken into smaller pieces to help them maintain their energy level.
 - Once the pieces are identified, they should think about the tools, equipment, materials, etc., that will help them to conserve their energy while doing the task. For example, if they use a cart to carry even fairly light loads (e.g., small flower pots) they will save energy. They could also buy a watering can that is lightweight. Virtual tools like the Internet should also be considered. They could order all of their equipment from an online store that will deliver the items to their door so that they can avoid going on a shopping trip.
 - Once they have identified the material or equipment they need, they can prepare their “work space” so that it is as energy conserving as possible. For example, sitting comfortably in a quiet room with proper seating and body mechanics when repotting plants might help them reduce the amount of energy expended. More on proper positioning and body mechanics will be taught in next session.
 - Determine which tasks can be simplified, modified or even abandoned. For example, they might not have the energy to plant flowers in their backyard like they have in the past, but they might have sufficient energy to plant some in the front of their house (abandoning a portion of the task). Also, they might previously have chosen flowers that require a lot of care but now they might want to choose others that are easier to take care of (simplifying task). Finally, they could decide to use flower pots instead of planting the flowers in the ground, which is more energy consuming (modifying the task).
 - They should also think about how they are going to prepare for and clean up after the task, as part of their pre-planning. For example, they might decide that they will put plastic over their table to make it easier to dispose of the spilled soil and the rest of the mess that they might make while repotting flowers. They could also plan to ask their spouse in advance whether they would be willing to help them wash the dirty floor afterward.
- They also need to remember that tasks can be broken down and spread out over many days and that they can use techniques such as slowing down, stopping and switching. Sometimes doing a task in a more efficient manner can also help diminish the amount of energy required. For example, they

could set up a little 'assembly line', where they put all the pots on the table, then add soil to all of them, make holes in the soil for the seeds, put the flowers into the holes, water the flowers etc.. This might require less energy, overall.

*** 15-MINUTE BREAK ***

GROUP EXERCISE – SIMPLIFYING/MODIFYING TASKS USING ASSISTIVE DEVICES

- Assistive Devices are used as a way to modify tasks and help conserve energy. See **Handout 20** on Assistive Devices. There are various assistive devices available that can help conserve energy. Assistive devices are used as a way to simplify or modify tasks, making an activity easier to do.
- During this session, various assistive devices will be demonstrated to show how they can be incorporated into daily activities. Approximately 10 minutes will be used to demonstrate the devices. Examples of assistive devices/equipment that will be demonstrated during this session are:
 - Long handled reacher, long handled shoe horn, long handled scrubber, sock aid, elastic shoe laces, lumbar support, jar opener, angled knife, built up handled utensils, step stool, dycem, rubazote, spring loaded scissors, blow dryer holder, card holder, adapted nail clippers, kitchen scissors, angled knife, electric can opener, documents holder, splints.
 - The group will be given 10 minutes to try out the devices so that they can see how they would help to save energy and simplify tasks¹.

GROUP EXERCISE – SIMPLIFYING/MODIFYING TASKS (using Laundry as the activity)

- This exercise will take approximately 15 minutes. A flip chart will be used in this exercise. Ask clients what the different components/steps involved in doing laundry are (sorting, taking clothes to laundry area, placing clothes in washer/dryer, folding, putting away). Write these steps on flip chart.
- With each step, ask clients how the components in the task could be modified.
 - **Example:** How would you modify sorting laundry? Use different laundry baskets, sort by color, sit to sort laundry instead of bending over, etc.
 - **Example:** How could taking laundry out of the dryer be modified? A reacher can be used to take clothes out of the dryer, a chair can be used to sit on to take clothes out of dryer

¹ Different Centres or health professionals will have access to different devices so this list of assistive devices may vary.

instead of bending over, use a laundry washing bag for small items such as socks and underwear so you only have to pull out one bag vs several small items.

- Ask the group: How could you modify the **other steps** involved in doing laundry? Refer to steps on flipchart that were outlined earlier by the group.

SMALL GROUP ACTIVITY - SIMPLIFYING/MODIFYING TASKS (choosing an activity)

- Divide into groups of 3-4. Give each group 10 minutes to complete this exercise.
- They are asked to 1) pick an activity and then 2) outline the steps involved in the activity.
- Once the steps are outlined, the groups are then 3) asked how they would modify/simplify steps in the activity.
- During this exercise, the group will be provided with paper and a pencil. One person is to be the recorder in the group.
- Once the groups have completed the exercise, the big group will come back together for 10 minutes. There will be one spokesperson from each group that will explain the activity they chose, the steps involved in the activity, and how the steps of the activity could be modified or simplified. Once each presentation is completed, the group is asked if they have any other ideas of how the steps could be simplified or modified.

HOMEWORK INSTRUCTIONS

- Review the instructions for the activity pacing diary homework with the participants. To help participants pre-plan their up-coming week instruct them to do the following:
 - 1) Complete their 'Want to do & Must do' homework list for their week
 - 2) When completing, they have to identify their high medium and low priorities. They might want to keep in mind their short, medium, and long-term goals.
 - 3) Next, identify their top 3 tasks priorities (a minimum of one "want to do") and how energy consuming are these tasks (high, medium, or low).
 - 4) Next, take time to break these top 3 tasks into smaller activities/pieces.
 - 5) Then, distribute these smaller activities throughout their week.
 - 6) Remind them to pre-plan/incorporate rest periods and to consider using the following energy conservation strategies: assertiveness, problem solving techniques, slowing down, stopping, switching, abandoning, simplifying or modifying the task.
- Specify that to reduce the burden of keeping a diary they should describe activities in a general way (e.g. shopping, work, household chore, social activity). Suggest that if there is an unusual activity during their week (i.e., that doesn't fit these types of categories) they can include more details (e.g. leaving the office for a meeting across town).
- Remind them of the importance of doing their homework if the treatment is to be effective in improving their pain and fatigue.

ENERGY CONSERVATION SESSION 7

USING PROPER BODY MECHANICS: GROUP SESSION

SESSION 7 OBJECTIVES

At the end of this session the participant will be able to:

- Apply proper body mechanics to sitting, standing, sleeping, lifting, carrying, and reaching
- Generalize application of proper body mechanics to their daily activities
- Set up a computer work station so that it is ergonomically correct

SESSION 7 MATERIALS

- Session 7 handouts
- Weekly energy conservation group progress chart
- Materials for practical component:
 - 1) Computer work station: computer with keyboard and mouse, document holder, chair, desk, footrest, lumbar support, timer
 - 2) Sweeping floors: broom and dustpan, long and short
 - 3) Laundry: two boxes to simulate washer and dryer, clothes to fold and put away, chair, table, footrest, reacher, laundry bag, laundry basket
 - 4) Meal Prep: pantry, table, assistive devices such as angled knife, dycem, jar openers, and built up handles, barstool, footrest, recipe book with book holder, supportive footwear
 - 5) Packing to move: various sizes of boxes on different levels, items to put into boxes (i.e. books), table, chair

SESSION 6 HOMEWORK: FEEDBACK AND DISCUSSION

- First, have the participants complete the weekly group progress chart.
- When the charting is completed, take about 15-20 minutes to let the group participants discuss their experiences about the following:
 - Have they successfully used energy conservation during the week? What is their most striking activity pacing success?
 - Have they tried but failed to use energy conservation? In what specific situations? What happened?
 - Did they pre-plan their daily rest periods?
 - Did they increase their 'Want to do' activities? Did they achieve some of their 'Must do' activities?
 - Did they use simplification and modification strategies when doing tasks during their week? Did it work? If not, what happened?
 - Have they observed a positive impact of pacing on their pain and fatigue levels during the week?
- Take this opportunity to informally review the week 1 to 6's activity pacing principles. (pre-planning rest and relaxing activities, prioritizing activities, breaking tasks into pieces, using assertiveness skills, problem-solving, switching, slowing down/stopping, abandoning tasks).

- Take 2-3 minutes to positively reinforce the group by showing them their pacing progression curve from session 1 until now. Highlight the improvements in pain and fatigue reduction and show them that, generally, they have been able to maintain their pacing strategies over the past month and a half.

TEACHING SESSION 7 (45 minutes)

- Using proper body mechanics is important for helping to conserve energy. Good body mechanics allows the body to have good joint alignment and use large muscles during activities. The biomechanical principles involve reducing the load or stress placed on the spine during various positions and when moving objects. The spine is composed of natural curves and it is important to maintain these curves during daily tasks. A healthy spine curves inward at the neck, slightly outward at the upper back, and inward at the lower back (resembling a “S” curve). These three curves balance each other to ensure that the pull of gravity is evenly distributed. The curves of the spine as well as the discs between the curves act like springs to help absorb shock. If the curves of the spine are increased or decreased, the muscles, ligaments, and joints have to work harder to support the weight of the head and body. There are several principles of good body mechanics that can be used in various daily tasks at work, home, and during leisure activities. By using their body correctly to do activities more efficiently, they will save energy.
- **Sitting (Handout 21)** Maintaining proper body mechanics during sitting is important whether they are sitting at a desk or are at home watching television. Techniques taught to help maintain proper position during sitting include:
 - Place feet flat on the floor with knees bent at a 90° angle. Footrests can also be a helpful way to maintain good posture while sitting. Make sure the footrest is positioned so that knees are bent at approximately 90 degrees and level with hips.
 - Chin in, earlobes over shoulder and hips - pull shoulders back and lift the chest. Maintain the normal "S" shaped curve of the spine.
 - Place buttocks at the back of the chair while maintaining a small space between the back of their knees and the seat of the chair.
 - The lower back must be supported. Look for a chair that has adjustable lumbar support (lower back support). A lumbar roll or even a rolled up towel or cushion placed behind the lower back will provide support.
 - If a chair has armrests, make sure they are positioned to support the weight of their arms. Armrests in a proper position help the neck and shoulders to relax. Armrests should not be too high to make them hunch or too low to make them over reach.
 - Avoid slouching or slumping while sitting.
 - To get up from a seated position, move forward in the chair with feet shoulder-width apart, and if appropriate place one foot in front of the other. This technique will allow them to use their stronger leg muscles and minimize relying on upper extremity and back muscles.
 - Keep in mind that even sitting in the "correct" position for long periods of time will eventually become uncomfortable. Don't forget to take breaks, get up, move around and stretch! This will reduce stress on the spine and help prevent muscle fatigue and stiffness.

- **Standing (Handout 22)** Start with good, low-heeled supportive shoes (i.e. runners) with good shock absorption, arch support, and firm heel counter. Proper footwear should be worn indoors as well as outdoors. Proper footwear helps to maintain proper body alignment of the lower extremities.
 - While standing upright there should be an imaginary straight line that passes through the ears, shoulders, hips, knees and ankles.
 - Keep head up and chin in with arms and shoulders relaxed.
 - While standing, place feet shoulder-width apart (weight evenly distributed over both feet) with knees relaxed and bent slightly.
 - Abdominals should be tight and buttocks tucked in to help to maintain the lumbar curve of the back.
 - Raise one foot on a stool, promoting tilting of the pelvis & minimizing excessive curve of the lower back (e.g. open the cupboard door under the sink while doing dishes and place one foot on the ledge inside of the cupboard during standing).
 - Avoid standing in one position for prolonged periods of time. Change positions often - this will help to relieve stress on the spine. With prolonged standing, gravity and fatigue pull the head and neck forward and the lumbar curve increases.
 - Consider doing some jobs sitting rather than standing, such as chopping vegetables and ironing clothes. A barstool is a good alternative to standing while working at counter height.
- **Proper positioning when lying down – Sleeping (Handout 23)** Similarly to waking hours, the goal is to maintain a neutral spine even while lying down. People tend to spend about one-third of their time in bed, so they can't ignore how their bodies are positioned during sleep.
 - Make sure to sleep on a mattress that is not too firm or too soft. We want to support the body while lying down, but want to avoid pressure points from a hard mattress or sagging from a soft mattress.
 - Avoid sleeping on the stomach, which twists the neck to extreme ranges of motion, and causes the back to arch, placing stress on the spine.
 - The side and back are the best positions for maintaining a neutral position.
 - Place a pillow between the knees (for side sleeping) or behind the knees (for back sleeping). This will help keep the spine in the right position and help ease stress on the lower back.
 - Thick pillows may cause too much neck flexion - use a pillow that keeps the head aligned with the rest of the body. Try a cervical pillow or roll to help with neck and back alignment.
- **Lifting and Carrying (Handout 24)** Teach the group to use their stronger leg muscles for lifting: bend at the knees and hips
 - Keep the back straight (keeping with the natural back curves) – Do not bend back!
 - Maintaining a wide base of support will help with stability while lifting - feet should be kept about shoulder-width apart, with one foot placed slightly ahead of the other.
 - Lift straight upward, in one smooth motion (no jerking).
 - Tighten stomach muscles when lifting. Teach the group that their abdominal muscles will help them while lifting, and reduce strain on their lower back.
 - Best height for lifting is between the knees and chest. Carrying heavy objects and doing activities above the shoulder level creates an extra burden on the heart, and thus uses more energy. Store heavy articles in the area easiest to reach, light articles in the high and low areas.
 - Stand directly in front of and close to the object. Turn to face the activity, which avoids muscular stress on the spine caused by twisting the body.

- Before moving the object, be sure that it is not too large or too heavy. Test the load. Check the weight and make sure it can be lifted safely. If not, ask for help.
- Keep the object being lifted close to the body (i.e. parcel, laundry basket, grocery bags) – hug the load.
- Avoid carrying when possible - wear an apron with pockets to carry around things such as cleaning items, gardening tools. Use a cart or trolley to carry items. A small basket keeps cleaning supplies handy and avoids holding many small items. A carpenter's apron works well for small home repairs. They can also slide objects instead of carrying (e.g. slide heavy pot along the counter vs. lifting it).
- Keep loads light - Teach the group that they can divide the load (e.g. carry two smaller bags of groceries instead of one large heavy bag.). If your laundry room is located downstairs, toss dirty linen down in a pillowcase or laundry bag, rather than making an extra trip and carrying a laundry basket.
- Pushing is easier than pulling or lifting. It is easier to use your weight advantage when pushing.
- Replace existing heavy items with lighter ones (i.e. dishes, vacuum).
- Do not hold breath while straining or lifting. Try to breathe normally through any exertions.
- **Avoid bending and stooping:** Adjust work spaces, such as raising a tabletop, to eliminate awkward postures of bending over. Poor posture drains energy.
 - Elbows should be around 90 degrees when sitting at a desk or standing at a counter. If doing heavy work, surfaces should be a bit lower and when doing light work, surfaces can be a bit higher.
 - Prevent bending and stooping by using long or adjustable handles on dustpans, brushes, shower mops (even paint rollers). Wearing slip-on shoes and using sock aids, reachers, and long-handled sponges can prevent bending over, thus conserving energy. To put on socks/shoes, cross legs rather than bending over. Sit down when gardening. Consider raised flower beds or window boxes to limit bending and stooping. Using a light duvet rather than several layers of sheets and blankets can reduce the amount of bending while making the bed.
 - Plan Ahead. Gather all supplies that you need prior to starting a task or project, so everything is in one place. For example, arranging garden supplies and tools prior to planting.
- **Avoid Twisting and Overreaching (Handout 25)** Avoid over-reaching (past the *imaginary arc*). The imaginary arc is their arm's length in all planes. Demonstrate this arc to the group.
 - Move their body closer to the object to avoid over reaching.
 - Position the body squarely when reaching to higher or lower levels.
 - Keep nose and toes in the same direction. Twisting places excessive stress on the spine.
 - Moving their body close to the task (i.e. walk with the broom) and using a leg lunge technique will help to keep stress off spine. This can also be done while performing duties such as vacuuming, sweeping, shovelling, or raking.
 - Using a stable step stool is recommended when doing activities that are above chest level such as washing windows, painting, changing light bulbs, or hanging pictures. Another alternative to avoid overreaching is to use a long handled reacher.
 - Rearrange your environment. Keep frequently used items in easily accessible places. Items not used frequently can be kept on higher shelves or in lower cupboards
- **Ergonomics (Handout 26)** Ergonomics is the study of how to adapt the work place to the person. In other words, the work environment should be adapted to the person, not the other way around. This is important because when the work station fits a person's needs, fatigue and stress decrease while

comfort increases. Here are some tips to keep proper posture when working at a computer workstation:

- Monitor and keyboard should be placed directly in front of the person with the monitor at eye level. Look up and away from the monitor regularly, blinking your eyes, to reduce eye fatigue.
- Position the mouse as close to the keyboard as possible. The mouse should be at the same level as the keyboard.
- The keyboard should be positioned so that wrists are neutral (not bent up or down or twisted). A wrist rest can sometimes be helpful in maintaining proper wrist posture.
- A lumbar roll or support should be used to provide lower back support.
- Feet supported, flat on the floor (a footrest may be needed).
- Hips and knees should be approximately 90 degrees.
- Shoulders should be relaxed (not elevated) with forearms resting alongside your body.
- Elbows should be at a 90-degree angle when using the keyboard and mouse. Arms can be supported with armrests.
- The monitor should be at approximately arm's length away from the person typing.
- Use a document holder to keep neck in a good alignment when typing from a document.

*** 15-MINUTE BREAK ***

GROUP EXERCISE – APPLYING PROPER BODY MECHANICS TO HELP CONSERVE ENERGY (Handout 27)

- 40 minute Practical Session: 5 Stations consisting of different daily activities will be set up for the group to rotate through. The group will be divided into pairs to rotate through stations. Take 5 minutes per station.
- The activity stations are outlined below as well as the supplies needed for each station.
 - 1) Computer workstation: monitor with keyboard and mouse, document holder, different chairs with various support, footrest, desk, lumbar support, timer.
 - 2) Sweeping the floor: broom, dust pan, long handled dust pan.
 - 3) Packing and unpacking for a move: different sizes of boxes on different levels, table, items to put in boxes (i.e. books).
 - 4) Laundry: two boxes to simulate washer and dryer, clothes to fold and put away, reacher, table, laundry bag, laundry basket.
 - 5) Meal Prep: chair, table, barstool, counter-height table, assistive devices such as angled knife, dycem, jar opener and built up handles, footrest, recipe book with book holder, supportive footwear.
- During the time at each station, the group is asked to come up with ways to do the activity applying proper body mechanics. They are also asked to apply energy conserving techniques that they have already been taught such as taking breaks, prioritizing, problem solving, and using assistive devices/equipment.

- Once each group has rotated through the stations the group will reconvene. Take 15 minutes to discuss the following:
 - What principles of proper body mechanics were used?
 - What straining postures were you able to avoid?
 - What changes did you have to make (your technique /environment)?
 - Were there any other principles of energy conservation that you could have applied to the scenarios?
 - Were any tools/devices used?
 - What benefits were experienced? How did they help to conserve energy?
- **In Closing...**
 - Pay attention to how sitting, standing, and lying postures can save energy and help with managing pain and fatigue.
 - Alternate postures and take frequent rest breaks throughout daily tasks.
 - Know your limits and ask for help when needed.
 - Eliminate repetitive lifting duties if possible.
 - Rearrange your space or hang tools up so that everything is convenient and easy to reach. Place items that you regularly use at a better height to decrease lifting/bending.
 - Avoid over-reaching and twisting during activities.
- Proper body mechanics is important for keeping the spine healthy. And it's easy to incorporate these principles into their daily life. It may seem unnatural at first, but if one keeps up with it, the new positions will easily become routine.
- Remember, energy is like money. There is only so much, so think about what it's being spent on.

HOMEWORK INSTRUCTIONS

- Review the instructions for the activity pacing diary homework with the participants. To help participants pre-plan their up-coming week, instruct them to do the following:
 - 1) Complete their 'Want to do & Must do' homework list for their week
 - 2) When completing, they have to identify their high, medium and low priorities. They might want to keep in mind their short, medium and long-term goals.
 - 3) Next, identify their top 3 task priorities (a minimum of one "want to do") and how energy-consuming are these tasks (high, medium or low)
 - 4) Next, take time to break these top 3 tasks into smaller activities/pieces
 - 5) Then, distribute these smaller activities throughout their week
 - 6) Remind them to pre-plan/incorporate rest periods and to consider using the following energy conservation strategies: assertiveness, problem solving techniques, slowing down, stopping, switching, abandoning, simplifying or modifying the task

- Specify that to reduce the burden of keeping a diary they should describe activities in a general way (e.g. shopping, work, household chore, social activity). Suggest that if there is an unusual activity during their week (i.e., that doesn't fit these types of categories) they can include more details (e.g. leaving the office for a meeting across town).
- Remind them of the importance of doing their homework if the treatment is to be effective in improving their pain and fatigue.

ENERGY CONSERVATION SESSION 8

REVISING GOALS AND STANDARDS: GROUP SESSION

SESSION 8 OBJECTIVES

At the end of this session the participant will be able to:

- Change their priorities and adjust their standards
- Pre-plan short, medium, and long term goals
- Balance their life in a more realistic way

SESSION 8 MATERIALS

- Session 8 handout
- Weekly energy conservation group progress chart

SESSION 7 HOMEWORK: FEEDBACK AND DISCUSSION

- First, have the participants complete the weekly group progress chart.
- When the charting is complete, take about 15-20 minutes to let the group participants discuss their experiences about the following:
 - Have they successfully used energy conservation during the week? What is their most striking activity pacing success?
 - Did they use some of the previously learned pacing strategies? Which ones? Did they work? If not what happened?
 - Have they tried but failed to use energy conservation? In what specific situations? What happened?
 - Did they pre-plan their daily rest periods?
 - Did they increase their 'Want to do' activities? Did they achieve some of their 'Must do' activities?
 - Did they use positioning and body mechanics when doing activities during their week? Did it work? If not, what happened?
 - Have they observed a positive impact with pacing on their pain and fatigue levels during the week?
- Take this opportunity to informally review the week 1 to 7's activity pacing principles. (pre-planning rest and relaxing activities, prioritizing activities, breaking tasks into pieces, using assertiveness skills, problem-solving, switching, slowing down/stopping, abandoning tasks, proper body mechanics)
- Take 2-3 minutes to positively reinforce the group by showing them their pacing progression curve from session 1 until now. Highlight the improvements in pain and fatigue reduction and show them that, generally, they have been able to maintain their pacing strategies over the past 7 weeks.

TEACHING SESSION 8

Changing priorities and adjusting standards (Handout 28)

- At this point in the group sessions, participants should have clarified their priorities (“Must” and “Want” to do). They also should be able to rank how important a specific activity is for them (high, medium, or low) and how much energy will be consumed by those activities (high, medium, low).
- They are now more aware of their energy limitations and understand why they should listen to their body accordingly. They know they have to budget their energy when they are making decisions about the activities in which they would like to engage in as they have only a certain amount in their ‘bank account’. The question that they have to ask themselves at this point in their activity pacing program is: should their pacing priorities change based on what they have learned in previous sessions?
- They might still “automatically” assign some activities as priorities when they could be eliminated, delegated or deemed unnecessary in the context of their new pacing lifestyle.
- Activity pacing could bring a shift in their priorities that need to be reassessed from previous sessions.
- Standards are also usually related to their activities and priorities. These standards need to be reassessed at this point in order to determine whether they have changed. For example, it is possible that before they had their pain and fatigue condition they considered keeping a spotless house as one of their top priorities. It made them happy to see their house clean so they enjoyed spending time housecleaning. However, prior to their pain and fatigue condition, they also had enough energy left after housecleaning to have people over for dinner or to play with their grand-children during the evening. Now, considering their more limited energy ‘budget’, they might want to reconsider their housekeeping standards. Is the accumulation of some dust acceptable if it means that they can conserve their energy for current priorities? Can they accept their spouse’s help with housework even if that person would be less meticulous than them? Is it reasonable to delegate some household chores if it means that they can conserve their energy for higher priority tasks? Could they ask every guest to bring something to eat and to use disposable dishes? Altering their standards will provide them with more available energy to spend on something else that is more valuable to them (e.g., having enough energy to play with their grand-children).

EXERCISE – STANDARDS AND PRIORITIES

Ask participants to share and discuss about how they could alter their standards and priorities when doing activity pacing. Maybe some participants had already made this change and it is a good opportunity to highlight this new way of approaching activities. If participants are not initially willing to share some examples, start with one individual and rotate through the group in a clockwise fashion.

*** 15-MINUTE BREAK ***

TEACHING SESSION 8

Pre-planning short, medium, and long-term goals (Handout 29)

- To maintain a satisfying quality of life and to promote their pacing skills, it is important that they set some short (2 weeks to one month), medium (one month to three months) and long (three months to one year) term goals that they would like to accomplish in the future. For example, Ann used to love to backpack in Europe every year or two. Now that she suffers from pain and tires easily, she has given up travelling. Travelling was an important part of her quality of life. This goal seems unachievable if you frame it this way. Ann used to go on her trips to Europe without an itinerary. However, if she makes an itinerary in advance (**pre-planning**) and if she divides tasks such as making plane reservations and booking hotels over a six-month period (**breaking task into pieces**), the goal becomes more realistic. If she decides not to backpack (**abandoning**) and limits herself to visit only one country per trip (**slowing down**), the goal will become more achievable. She could also use her pacing strategies when travelling. For example, she could sit down frequently to rest when visiting museums (**stopping**), take public transit instead of walking from one place to another to save energy (**modifying**), and ask for help from hotel staff to bring her suitcase to her room (**communication/delegation**). Ann will also have to pre-plan rest periods every day during her trip. She might want to bring things that help her rest such as her music player with her favorite relaxation music on it, etc.
- It is true that Ann's trip is quite different than the way she used to travel. However, making these changes enables her to achieve a long-term goal that is otherwise unachievable. This example helps illustrate that they don't have to take an all or nothing approach to certain activities and that participation in tasks can be done by using various energy conservation strategies such as problem solving. By using these strategies she can also enjoy the trip without excessive pain and fatigue. In this example, she chooses to listen to her body warning signs, and pre-plans within her energy limits instead of overspending. When Ann returns from her trip she won't have to recuperate for weeks to help restore her energy.
- It is important that participants identify their short, medium and long-term goals in order to include them in their pre-planning schedule. Experiencing the benefits of using these strategies will help to motivate them to continue implementing these strategies more consistently in their daily activities.
- Goals need also to be ranked (high, medium, low) according to both their priorities and the amount of energy that each requires.

EXERCISE – PLANNING GOALS

- Ask the participants to take 20 minutes to complete their goals lists. (**Handouts 29 and 30**)
- Ask them to share and discuss what their short, medium, and long term goals are. What are their goal priorities? How do they plan to achieve these goals?

TEACHING SESSION 8

Pre-planning their week in a more realistic way (Handout 31)

- They are starting to become “pre-planning experts” however they might still need to think about readjusting their self-care, productivity (“Must”) versus leisure (“Want”) and their rest periods. At this point, since they have been budgeting their time for one month and a half, they should have a good idea of how much they have in their bank accounts. To continue our money analogy, when they have been adhering to a regular financial plan they become more aware of their expenses and the amount of money they have deposited. After a while, budgeting becomes less burdensome because these habits become more automatic. It is the same for pacing. At the beginning of the program they might have found it hard to pre-plan and to determine their baseline energy level. This task should now be part of their routine and they might even begin to view it as a convenient tool.
- Getting to better know their limits by listening to their body's warning signs might lead them to realize that there is sometimes a gap between what they consider to be an ideal week and, realistically, what they can manage to do during an actual week. They need to be careful to stay within their actual energy limits when they are pre-planning. Otherwise they will risk falling into the overdoer, underdoer or yo-yo patterns. Also, even though they may have pre-planned well, they might just have a bad energy week and therefore need to rest more.
- Pre-planning in a realistic manner will help them to anticipate exacerbations of their pain and fatigue. Balancing between “Must do” and “Want to do” activities will help to keep them within their energy limits. Staying within these limits will allow them to maximize their quality of life.
- Maintaining this energy balance will sometimes be challenging so it is important for them to remember that doing so will help them to decrease their pain and fatigue and allow their body to recover.
-

HOMEWORK INSTRUCTIONS

- Review the instructions for the activity pacing diary homework with the participants. To help participants pre-plan their up-coming **2 weeks**, instruct them to do the following:
 - 1) Complete their ‘Want to do & Must do’ homework list for their week.
 - 2) When completing, they have to identify their high, medium, and low priorities. They might want to keep in mind their short, medium, and long-term goals.
 - 3) Next, identify their top 3 tasks priorities (a minimum of one “want to do”) and how energy consuming are these tasks (high, medium or low).
 - 4) Next take time to break these top 3 tasks into smaller activities/pieces.
 - 5) Then distribute these smaller activities throughout their week.
 - 6) Remind them to pre-plan/incorporate rest periods and to consider using the following energy conservation strategies: assertiveness, problem solving techniques, slowing down,

stopping, switching, abandoning, simplifying or modifying the task, adjusting their standards and using proper positioning/body mechanics.

- Specify that to reduce the burden of keeping a diary they should describe activities in a general way (e.g. shopping, work, household chore, social activity). Suggest that if there is an unusual activity during their week (i.e., that doesn't fit these types of categories) they can include more details (e.g. leaving the office for a meeting across town).
- Remind them of the importance of doing their homework if the treatment is to be effective in improving their pain and fatigue.

ENERGY CONSERVATION SESSION 9

MANAGING WORK, EXERCISE AND ENERGY CHANGES:

GROUP SESSION

SESSION 9 OBJECTIVES

At the end of this session the participant will be able to:

- Manage change in their energy “bank account”
- Manage activity pacing when exercising
- Manage activity pacing when working

SESSION 9 MATERIALS

- Session 9 handouts
- Weekly energy conservation group progress chart

SESSION 8 HOMEWORK: FEEDBACK AND DISCUSSION

- First, have the participants complete the weekly group progress chart.
- When the charting is completed, take about 15-20 minutes to let the group participants discuss their experiences about the following:
 - Have they successfully used energy conservation during week? What is their most striking activity pacing success?
 - Did they use some of the previously learned pacing strategies? Which ones? Did it work? If not, what happened?
 - Have they tried but failed to use energy conservation? In what specific situations? What happened?
 - Did they pre-plan their daily rest periods?
 - Did they increase their ‘Want to do’ activities? Did they complete some of their ‘Must do’ activities?
 - Did they reduce some standards? Which ones? What did they choose to do with their extra energy? Did they have more time to rest?
 - Did they change some of their priorities? Which ones? Did they replace some high level priorities with new priorities? Are they “Must do” or “Want to do” priorities?
 - Have they observed a positive impact of pacing on their pain and fatigue levels during the week?
- Take this opportunity to informally review the activity pacing principles that they learned during weeks 1 to 8: pre-planning rest and relaxing activities, prioritizing activities, breaking tasks into pieces, using assertiveness skills, problem-solving, switching, slowing down/stopping, abandoning tasks, proper body mechanics, pre-planning goals).
- Take 2-3 minutes to positively reinforce the progress that group members have made by showing them their progression using the pacing graph, which illustrates their improvement over time. Highlight improvement in pain and fatigue. Also show them how they have maintained their use of pacing skills (most of the time) for more than two months.

TEACHING SESSION 9

Managing Energy changes (Handout 32)

- It is important for participants to understand variations in their overall energy level (i.e., their energy “account”). They should understand that although pacing strategies give them a lot of control over their overall energy level (or capacity); some unpredictable variation is also likely. To continue our monetary analogy, their energy account will behave in a manner similar to the stock market. Like a stock account (portfolio) which changes with stock prices, their overall energy account might increase, decrease or remain unchanged over a period of weeks, months or even years. Short-term changes (up or down) also occur on a day-to-day basis. In general, as with stocks, it is best to have a long-term perspective and to not become too concerned about short-term fluctuations. As with stocks, continuing to contribute to your energy “account” is likely to pay off in the long-term. In other words, it is important that participants not get discouraged or distracted by temporary setbacks.
- Using the stock price analogy, explain to participants that they might be experiencing an overall increase in their energy capacity (“account”). As they have continued applying the pacing techniques, they may have found that they have a greater reserve of energy and can do more than what they were previously able to do. Other participants may not have noticed such a change in their energy level. Still, others may have experienced a decrease in their capacity (e.g., due to unpredictable factors such as illness). In general, we expect that such decreases will be temporary.
- A key concept for participants to understand when having variations in energy levels is that they are better off continuing to apply the pacing strategies. Like the stock market, which over the long-term always increases, managing their energy level and maintaining their “account” will “pay off” in terms of improved pain, fatigue, and quality of life.

EXERCISE – MANAGING ENERGY CHANGES

- Take 10-15 min to ask the group to share and discuss how their energy levels have changed since they started the program. Did they observe an increase, decrease or no change in their overall energy level?
- Even if they did not experience any improvement in their energy limits, what about their pain and their fatigue levels? Did they observe an increase? Decrease? Or no change in energy levels at all?
- What about their overall quality of life? Are there any other things in their lives that have improved because they have been pacing?
- Do they have a better balance in self-care, productivity, and leisure activities?

TEACHING SESSION 9

Implementing activity pacing when exercising (Handout 33)

- Participating in exercise or sports with a limited amount of energy can be challenging. Exercising is good for their health and some participants might also consider it a leisure activity.
- For activities such as walking, biking and swimming, they will have to use activity pacing in order to manage their energy. For example, Michael used to like to take a 30 minute walk with his dog. Since he has had pain and fatigue, he occasionally goes for a walk but then he pays for it with a pain flare up. Michael has recently started to pace his activities. He has decided to take 2 walks of 15 minutes each (one in the morning, one in the afternoon) instead of one exhausting walk of 30 minutes. He changes his regular itinerary to a new one where he stops to relax on a bench in the park in the middle of his walk. He also slows down the pace at which he walks and gives up one walk when he is having a “bad pain day”. He also wears supportive footwear during his walks, which helps to absorb shocks and helps with proper body mechanics (as taught in session 7).
- During exercise, participants also have to pre-plan sufficient rest periods to balance their activity. Stretching before, during and after the exercise could also be helpful to maintain a good energy level.
- If they feel the exercise or the sport that they used to do is too energy consuming, they might want to consider switching to a new activity that will better fit within their actual energy limitations.

GROUP EXERCISE – STRETCHING

- Get participants to stand up, walk, and do stretches that they know are safe to do.
- Ask the group if they can pick one exercise activity and how they would incorporate energy conservation into this activity.
- Give the group 5 minutes to discuss with the person beside them, and then the whole group will come back together to share ideas.

*** 15-MINUTE BREAK ***

TEACHING SESSION 9

Managing activity pacing at work (Handout 34)

- Participants may find that activity pacing is more challenging at work. For example, they might be confronted by unexpected demands and pressure from others to accomplish tasks. They may also have fewer opportunities to rest properly during working hours.
- The key to use activity pacing at work is through problem solving. Participants should not assume that they can't make any changes in their work environment. To help them to

conserve their energy before they start to feel increases in pain and fatigue, they could adapt their work station with ergonomic tools, and change positions frequently (i.e. stretching, alternating sitting and standing). They also have to listen to their body's warning signs when working.

- Some work tasks have to be done routinely and are often predictable. These tasks can be pre-planned, broken into pieces and then distributed throughout their week according to how much energy they consume (high, medium, low).
- Other pacing strategies are also applicable at work. For example, they might want to alternate between physical and mentally demanding tasks (switching), modify tasks to conserve their energy, be assertive when a colleague/boss asks them to take on extra work, etc.
- There are ways to pre-plan rest periods at work that will help better manage energy limits. For example, if they have a 15-minute break, they could decide to use that time to relax in a quiet room instead of talking with a colleague who always complains about their work (which can drain energy). They might also want to consider finishing work one hour later or start one hour earlier so that they can take more breaks throughout their day.
- Participants who are working (or volunteering) should also consider that they have less energy to do things when they get home from work. If work is a high priority ("Must do"), they should consider prioritizing more leisure activities as "Want to dos" when they aren't at work.
- If their work environment does not allow them to rest properly, they might want to reconsider their work schedule (e.g.: reducing the number of hours per day) or rethink the type of job they can do. Is it still feasible within their energy limitations to do that job? They might, for example, ask for a demotion in order to have fewer tasks to manage).

GROUP EXERCISE – PACING AT WORK (Handout 35)

- Form small groups of 3-4 participants, where a minimum of one of the participant is presently working or volunteering. Take 10-15 min to do the following exercise.
- Bring the group back together and ask one participant per group to share how they would use pacing in a specific work/volunteer environment.

Explain potluck activity for session 10

- Discuss with the group that there will be a potluck on the last day. The group is encouraged to use activity pacing when preparing their food (i.e. taking breaks, switching, using good body mechanics, using assistive devices, etc.).
- The group will be given approximately 15-20 minutes to discuss what they are going to bring for potluck.

HOMWORK INSTRUCTIONS

- Review the instructions for the activity pacing diary homework with the participants. To help participants pre-plan their up-coming **2 weeks**, instruct them to do the following:
 - 1) Complete their 'Want to do & Must do' homework list for their week
 - 2) When completing, they have to identify their high medium and low priorities. They might want to keep in mind their short, medium and long-term goals.
 - 3) Next, identify their top 3 task priorities (a minimum of one "want to do") and how energy consuming are these tasks (high, medium or low)
 - 4) Next, take time to break these top 3 tasks into smaller activities/pieces
 - 5) Then, distribute these smaller activities throughout their week
 - 6) Remind them to pre-plan/incorporate rest periods and to consider using the following energy conservation strategies: -assertiveness, problem solving techniques, slowing down, stopping, switching, abandoning, simplifying or modifying the task, adjusting their standards and using proper positioning/body mechanics
- Specify that to reduce the burden of keeping a diary, they should describe activities in a general way (e.g. shopping, work, household chore, social activity). Suggest that if there is an unusual activity during their week (i.e., that doesn't fit these types of categories) they can include more details (e.g. leaving the office for a meeting across town).
- Remind them of the importance of doing their homework if the treatment is to be effective in improving their pain and fatigue.

ENERGY CONSERVATION SESSION 10

MAINTAINING ACTIVITY PACING SKILLS: GROUP SESSION

SESSION 10 OBJECTIVES

At the end of this session the participants will be able to:

- Understand the importance of maintaining a consistent activity level
- Manage setbacks in their use of activity pacing skills
- Generalize pre-planning across all areas of their lives (self-care, productivity, and leisure)
- Combine different pacing strategies while engaged in activities

SESSION 10 MATERIALS

- Session 10 handout
- Weekly energy conservation group progress chart

SESSION 9 HOMEWORK: FEEDBACK AND DISCUSSION

- First, have the participants complete the weekly group progress chart.
- When the charting is completed, take about 15-20 minutes to let the group participants discuss their experiences:
 - Have they successfully used energy conservation during the week? What is their most striking activity pacing success?
 - Did they use previously learned pacing strategies? Which ones? Did they work? If not, what happened?
 - Have they tried but failed to use energy conservation? In what specific situations? What happened?
 - Did they pre-plan their daily rest periods?
 - Did they increase their 'Want to do' activities? Did they complete some of their 'Must do' activities?
 - Did they apply some of the pacing strategies when working or exercising? Did it work? If not, what happened?
 - Have they observed a positive impact from pacing on their pain and fatigue levels during the week?
- Take 2-3 minutes to positively reinforce the progress that group members have made by showing them their progress using the pacing graph, which illustrates their improvement over time. Highlight improvements in pain and fatigue. Also show them how they have maintained their use of pacing skills (most of the time) for the last 10 weeks.

TEACHING SESSION 10

Maintaining activity pacing: being back on track (Handout 36)

- Participants might find it hard to continue their use of pre-planning on a weekly basis in the long term. Most participants are likely to discontinue their use of their weekly schedules at some point. Although such interruptions are to be expected, how these setbacks (**lapse** and **relapse**) are managed is critical to establishing long-term use of pacing. There are times when one can have a lapse or relapse despite previously implementing pacing into their daily activities.
- A lapse is a small “slip” or a brief interruption of their self-management plan. If a treatment lapse is caught early, it is fairly easy to “get back on track”. A Relapse is a serious and prolonged interruption of their self-management plan. When this occurs, people often give up entirely.
 - Examples of a lapse:
 - Over-exerting chores by accepting demands from other as they are ‘too busy’ to listen to their body.
 - Forgetting to pace themselves on a busy day or weekend.
 - Examples of relapse:
 - Giving up to pre-plan their weekly activities and rest periods.
 - Resuming their overexertion/crash pattern behaviour.
- It is important to let participants know that setbacks (lapse and relapse) are a normal part of their pacing program. Having a lapse or relapse does not equal failure. If for some reason, they do not complete their weekly schedule for a while (e.g. vacation, death of a relative, illness, and lack of motivation) they should simply begin using pre-planning from where they left off. They won’t lose everything that they have gained or the skills they have acquired through the program. The sooner they resume using these skills, the sooner they will get “back on track” and see the benefits again.
- To help them resume their use of pre-planning skills, you should suggest that they review their most recent schedule as a starting point. This review will remind them of the progress that they had made and will help motivate them to continue. Remind them to listen to their bodies to detect any ‘warning signs’ that might be an indication that they should get back to their pacing strategies. Refer them to the list of the body warning signs that the group had previously identified during session one. They can also ask themselves some questions that will highlight reasons for resuming their use of pacing: Did they experience more pain or fatigue since they stopped pre-planning? Did pre-planning have a positive impact on their quality of life?
- Despite setbacks (lapse and relapse), pre-planning rest and activity should now be part of their daily routine. At this point, it should also be easier for them to use their schedule, as they will have a better sense of their baseline energy level. Moreover, they are likely to have found that many activities are at the same time each week so it should be taking them less

time to complete their weekly schedules. Their body may now be used to restorative rest periods that are enjoyable. Knowing the importance of rest for the body's recovery can help them maintain their pacing strategies.

- They should remind themselves that maintenance of activity pacing is also beneficial because it is letting their body naturally recover!

Review of pacing strategies (Handout 37)

- Ask them to identify and describe the principles of pacing. Provide them with an opportunity to ask any questions that they still have regarding the use of pacing strategies.
- Use the review handout 37 to briefly summarize the pacing strategies that they have learned throughout the activity pacing program. You can use one or two examples of every strategy using actual examples provided by the group participants in previous sessions.
- Highlight the importance of generalizing these strategies across their life domains (e.g. work, home etc.).
- Remind them that the key to successful activity pacing is the combined application of different strategies in a flexible and creative manner. Remind them to ask themselves when approaching an activity that is challenging: How could I do this activity differently? Example: Gardening: It is much better to adapt the activity (break up tasks, use ergonomic tools, use good posture, slow down) than to stop participating in the activity altogether.

*** 15-MINUTE BREAK ***

GROUP EXERCISE: POTLUCK ACTIVITY

- Allow about 15 minutes for participants to set out the potluck meal.
- Take 30-45 min to eat the meal. While participants are eating, encourage them to share how they used pacing to prepare their meal for the potluck. For example, they may have purchased a prepared salad dressing rather than making it themselves. How did they use proper body mechanics while preparing their meal? Did anyone use other pacing strategies (e.g. task switching: switching between cutting vegetables and stirring something on the stove)?

HOMEWORK INSTRUCTIONS

- Participants are expected to maintain their weekly scheduling chart during the 3 months until the first booster session is held. Ask them to keep track of any specific pacing problems during this period of time (e.g., use a highlighter to identify these on their chart).

- Remind them that even if they have setbacks at some point during the next three months, it is important that they attend the booster session because it will help them to overcome any difficulties.

BOOSTER SESSIONS

There will be two booster sessions (one at 3 months and one at 6 months). It is highly recommended that the group attend these booster sessions to review the principles taught in the Activity Pacing Program as well as to problem solve any challenges they have endured. During these booster sessions, participants may also share with the group the many benefits that they have experienced while applying pacing strategies. There will also be a 12 month follow-up session as closure for the Activity Pacing Program. At the 12 month session, each participant will receive a certificate of their completion of the Activity Pacing Program. At this time, refreshments will be served as well as some time will be spent highlighting the participant's successes of applying pacing strategies.

ENERGY CONSERVATION

THREE-MONTH BOOSTER: GROUP SESSION

THREE-MONTH BOOSTER SESSION OBJECTIVES

At the end of this session the participant will be able to:

- Reflect on their personal successes
- Identify their barriers in implementing pacing strategies
- Manage set-backs (lapse and relapse) by using pacing strategies
- Better Understand the importance of maintaining a consistent activity level
- Further generalize pre-planning in their self-care, work, and leisure activities

BOOSTER SESSION MATERIALS

- Handouts 3 month booster
- Weekly energy conservation group progress chart
- Flip chart, markers
- Laptop for presentation slides (optional)

FEEDBACK AND DISCUSSION (15 minutes)

- Start by giving the participants a chance to get reacquainted and discuss their experiences informally.
- Next, distribute **Handout 38 Part-I** and have participants indicate what their pain and fatigue levels are on average in the past week. Also, have them identify how many days per week on average they are using some form of pacing strategy: 0 1 2 3 4 5 6 7 days/week
- Note: before the end of the session make a copy of this form as reference for the 6 month booster session and return the original to the participants.
- Discuss what has contributed to any significant changes in their pain & fatigue levels.
- Then summarize this discussion by positively reinforcing the participants' progress. Highlight improvements in their pain and fatigue levels and how they have maintained their use of activity pacing skills (most of the time) for the past 3 months.

REVIEW SESSION

- Activity Pacing Principles/Strategies (**Handout 39**)
- Take 15-20 minutes to review the activity pacing principles.
 - Use the review handout (or digital slides) to briefly summarize every activity pacing principle/ associated strategies that they have learned from the 10 week program.
 - Engage the group to participate and facilitate the review discussion as follows: For each principle, get a volunteer to describe the principle and give one or two examples of actual strategies they have used associated with the principle.
 - Highlight the importance of generalizing these strategies across their activities of daily living
 - Remind them that the key to successful pacing is to combine the application of different strategies in a flexible and creative manner (THINKING OUTSIDE THE BOX).

FILLING OUT 3-MONTH BOOSTER FORM/GROUP DISCUSSION

- Distribute the forms **Handout 38 Part-II** and explain to the participants the purpose of this exercise. Give them 10-15 minutes to complete the questions.
- Tell the participants that by answering the questions it will give them an opportunity to reflect on their personal successes and any setbacks in using pacing strategies, as well as how they have overcome any challenges. Give a brief review of the definitions of lapse and relapse. A lapse is a small “slip” or a brief interruption of their self-management plan. If a treatment lapse is caught early, it is fairly easy to “get back on track”. A Relapse is a serious and prolonged interruption of their self-management plan. When this occurs, people often give up entirely.
- Examples of a lapse:
 - Over-exerting chores by accepting demands from others as they are ‘too busy’ to listen to their body.
 - Forgetting to pace themselves on a busy day or weekend.
- Examples of relapse:
 - Giving up the pre-planning of their weekly activities and rest periods.
 - Resuming their overexertion/crash pattern behaviour.
- The group discussion will give them a chance to share with their peers their problem solving strategies and, in turn, learn from each other how they could tackle a challenging situation.

* 15-MINUTE BREAK *

DISCUSSION SESSION

- Use the flip chart to create two charts as illustrated:
 - **Chart I** : Most Successful Situation, What Helped/Associated Strategies & Tools, Benefits.
 - **Chart II**: Most Challenging Situation, What May Help/ Associated Strategies & Tools, Benefits.

Example :

Most successful pacing situation	What helped / Associated strategies & tools	Benefits
Applying pacing to laundry task	<p>Modified activity. Used proper body mechanics, divided task into sections & spread throughout the week</p> <p>Scheduled rest / Kept to limits- listened to body</p> <p>Identified priorities</p> <p>Delegated, time management</p>	<p>Able to do this ‘must do’ task without over-exerting</p> <p>Able to do ‘want to do’ activities: attend child’s soccer game</p>

Most challenging pacing situation	What may help/Associated strategies & tools	Benefits
Applying pacing to exercise	<p>Modify activity. Break-up into smaller sessions e.g. 15-20 minute session 2x/day vs. one long session</p> <p>Identified priorities Schedule into weekly routine</p> <p>Keep to limits: Listen to body, modify exercise routine on off-days</p>	<p>Improved energy levels</p> <p>Improved motivation to do activity regularly</p> <p>Minimized "pain and fatigue" cycle</p>

- Starting with **Chart I**, give each participant 2-3 minutes to share their one most successful situation, and have them identify what helped, and any associated strategies/tools used. Write out the answers on the chart. Note, other participants may have the same or similar answers, group these items accordingly.
- Next, using **Chart II**, give each participant 2-3 minutes to identify their one most challenging situation and list it on the chart. If the participant is able to identify a strategy that helped, have them indicate this answer. If not, then the group can help to give suggestions on what strategy/tool could have been tried. Again, if there are similar situations identified, group these answers accordingly.
- You may use the following questions to facilitate the discussion. Note: Questions may be placed on the presentation screen while participants are filling the form out, to help them reflect when answering the questions; just change the phrasing to the second person ("you")
 - Have they successfully used pacing strategies in the past three months? What is their most striking pacing success?
 - Have they tried but failed to use pacing strategies? What situations? What happened?
 - Did they pre-plan their daily rest periods?
 - Did they increase their 'Want to do' activities? Did they complete some of their 'Must do' activities?
 - Did they apply some of the pacing strategies when exercising or working? Was it effective? If not, what happened?
 - When they applied pacing strategies, what impact did it have on pain and fatigue levels?
 - How has their energy level changed? Improved? No change? Decreased?
- Summarize the results of the discussion, and highlight the benefits of activity pacing and the main strategies that were helpful in both the successful and challenging situations identified by the group. Note, keep the charts and use as appropriate for the six-month booster session.

HOMEWORK INSTRUCTIONS

- Participants are expected to maintain their weekly scheduling chart during the next 3 months. Instruct them to keep track of any additional pacing problems during this time frame.
- Remind them that even if they relapse at some point during the next 3 months, it is important that they attend the next booster session because it will help them further overcome any challenges.
- Instruct participants to keep track of any tips that have helped them succeed in maintaining some of the life style changes to share with peers at the next booster session.

ENERGY CONSERVATION

SIX-MONTH BOOSTER: GROUP SESSION

SIX-MONTH BOOSTER SESSION

At the end of this session, the participants will be able to:

- Reflect on their personal successes and barriers in implementing pacing strategies
- Further consolidate the principles of activity pacing and generalize its application in their daily activities
- Maintain lifestyle changes that incorporate pacing strategies & tools
- Celebrate their participation with the treatment program

BOOSTER SESSION MATERIALS

- Handouts
- Weekly energy conservation group progress chart (to provide as needed)
- Flip chart, markers
- Laptop computer for presentation (optional)

FEEDBACK AND DISCUSSION (15 minutes)

- Start by giving the participants a chance to get reacquainted and discuss their experiences informally.
- Next, distribute **Handout 40** and have the participants fill out the form to identify where their pain and fatigue levels are on average in the past week. Also have them indicate how they have applied the pacing strategies over the past six months by identifying how many days per week, on average, they use some form of pacing strategy: 0 1 2 3 4 5 6 7 days/week.
- Ask participants how their pain and fatigue levels, and application of pacing strategies, compare from the 3-month booster session. Provide them with the copy of the form they filled out at the 3-month booster session.
- Discuss what has contributed to any significant change in their pain and fatigue levels and application of pacing strategies.
- Positively reinforce the progress that group members have made. Highlight the participant's improvements in pain and fatigue levels, and how they have maintained their use of activity pacing skills (hopefully most of the time) for the past 6 months.

REVIEW SESSION

- Take 15-20 minutes to review the activity pacing principles.
- Use the review **Handout 41** (or presentation screen) to briefly summarize every activity pacing principle/associated strategies.
- Engage the group to participate and facilitate the review discussion as follows:
 - For each principle, get a volunteer (different volunteer for each item) to describe the principle and give one or two examples of actual strategies they have used associated with the principle.
 - Highlight the importance of generalizing these strategies across their activities of daily living.
 - Remind them that the key to successful pacing is to combine the application of different strategies in a flexible and creative manner (THINKING OUTSIDE THE BOX).

DISCUSSION SESSION (20-30 minutes)

Contents will vary depending on the needs of the group

- Use the recorded list of 'Most Challenging Pacing Situations' from the 3-month booster from this group to revisit these challenges. Have the participants identify the principles and associated strategies/tools they have tried and what benefits they have experienced.
- Next, give each participant an opportunity to share their 'best tips' that have helped them succeed in maintaining the life style changes that have enabled them to balance their work, rest and play activities. List these tips on a flip chart. (Remember to keep these tips/quotes as they will be used for the 12-month review session to share the participants' successes and to acknowledge their progress in improving their quality of life).

HOMEWORK

- Summarize the results of the discussion by highlighting their successes and provide encouragement to the participants to continue with their pacing self-management strategies.
- Remind participants about the 12-month review session. Certificates and refreshments will be provided. Note that all participants will be given a certificate even if they are unable to attend this last session.
- Encourage them to continue to keep track of any tips/specific strategies that they have found most useful. They can share these ideas with their peers at the 12-month review.

ENERGY CONSERVATION

12-MONTH FOLLOW-UP: GROUP SESSION

12 MONTH FOLLOW-UP SESSION

Objective:

- To have participants further reflect on their pacing success stories and the lifestyle changes they have made incorporating these principles.
- To acknowledge the group members' participation and commitment to the program with a certificate of recognition (those not able to attend this session will have their certificate mailed to them).
- To give participants an opportunity to celebrate their achievements with a brief social gathering and complimentary refreshments. (optional)

BOOSTER SESSION MATERIALS

- Bristol/poster board, flip chart, or a laptop for presentation
- Certificates
- Refreshments (optional)

Prior to the session, prepare posters with quotes/stories of participants' successes, with photos if available (this material would have been collected at the 6 month booster session and/or sent in by participants prior to this last meeting). The posters will be displayed around the meeting room to showcase the success stories to everyone. Alternatively, a presentation can be developed and projected on a large screen or white wall to show the group's success stories/photos.

INFORMAL DISCUSSION SESSION

- Content will vary based on the group's needs. Allow for approximately 1 ½ - 2 hours
- Give the participants a chance to get reacquainted and to have them informally share their success stories.
- Informally facilitate the discussion as needed and highlight any relevant points/strategies shared.
- The focus of the session is to also allow the participants to learn from each other and to help each other solve any persisting challenge.
- Certificates will be handed out, followed by the social and refreshments session.

Reference List

- Collinge, W. 1993. *Recovering from chronic fatigue syndrome: a guide to self-empowerment*. New York: The Body Press/Perigee Books.
- Cox, D., S. Ludlam, L. Mason, S. Wagner et M. Sharpe. 2004. «PACE: manual for therapists : adaptative pacing therapy (APT) for CFS/ME». Consulted April, 24th 2012.
- Hammond, A. 2004. «What is the role of the occupational therapist?». *Best Pract Res Clin Rheumatol*. vol. 18, no 4, p. 491-505.
- King, C. P., L.A. Jason, E.L. Frankenberry et K.M Jourdan. 1997. «Think inside the envelope». *The CFIDS Chronicle*, no Fall, p. 10-14.
- Nielson, W., M.P. Jensen et J. W. Vlaeyen. 2012. «Activity pacing in chronic pain: concepts, evidence and future directions». *Clin.J Pain*.
- Packer, T.L., N. Brink et Sauriol. A. 1995. *Managing fatigue: a six-week course for energy conservation*. Tuscon: Arizona: Therapy Skill Buiders.
- Pesek, J.R., L.A. Jason et R.R. Taylor. 2000. «An empirical investigation of the envelope theory». *Journal of Human Behavior in the Social Environment*. vol. 3, no 1, p. 59-77.
- Services, U.S. Department of Health and Human. 1985. *Rehabilitation through learning: energy conservation and joint protection. A workbook for persons with rheumatoid arthritis*: Public Health Service National Institutes of Health.