

Department of Occupational Therapy

# **Energy Conservation Strategies for Activities**of Daily Living



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#### **Foreword**

This booklet is designed to provide information for patients experiencing difficulties in performing daily tasks due to fatigue and breathlessness caused by their medical conditions. Booklet should be use with guidance from their Occupational Therapist.

People with medical conditions may experience low energy and get tired easily. Examples of such medical conditions are:

- Cardiology Conditions: Heart failure
- Respiratory Diseases:
   Chronic Obstructive Respiratory Disease,
   Bronchiectasis, COVID -19 infection
- Oncological Conditions
- Neuromuscular Degenerative Disease
- Renal Disease: Kidney failure

Energy conservation strategies are useful for them to continue engaging in activities of their choice.

### **Energy Conservation Principles**

- The 4Ps of Energy Conservation Principles can be applied:
  - PRIORITISE → Do what is important first
  - PLAN → Plan your schedule ahead for the day or week and alternate between light and heavy task.
  - POSITIONING → Perform task in body positions that will not overexert your body.
  - PACING -> Take multiple breaks when performing a task. (remind yourself to: DO - REST - DO)

- By adapting the ways that a task is done and planning your schedule ahead, you can conserve your energy when performing it in a more efficient manner.
- Having a good balance of rest and activity can help one to reduce fatigue. 4

### 10 Tips for Energy Conservation



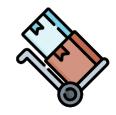
 Reorganise your items to avoid over bending or stretching to reach for items.



 Avoid excessive and continuous forwardbending body movement and awkward body postures e.g. bending forward or reaching down to wash your feet while standing.



 Use a trolley for transportation of heavy objects. If no trolley is available, slide heavy objects along the floor instead of carrying it.



 Sit down to perform your tasks whenever possible.



 Prepare and gather items you need before starting on your task.



## 10 Tips for Energy Conservation



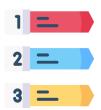
Consider proper body positioning and working height e.g. Elbows should be at 90 degrees, back supported when engaging in tabletop tasks.



Use safe body mechanics when lifting heavy items e.g. keep your back straight, use legs/thighs when lifting items up or down, hold objects close to your body and avoid tight grip.



Divide a task into multiple steps.



 Pace your breathing when engaging in a task.



 Ask for assistance from others when needed.



The followings are modification to daily activities you can engage patient with to prevent over exertion during task

1. Dressing	<ul> <li>Consider wearing loose clothing that is easy to put on and take off</li> <li>Sit on a chair to wear your pants</li> <li>Use a long handled reacher or cross your legs to wear your pants</li> </ul>	
2. Showering	<ul> <li>Sit down to shower</li> <li>Use warm water to shower</li> <li>Shower when the weather is warm</li> <li>Use a long-handled sponge and cross your legs to wash your back and legs</li> <li>Ensure that your bathroom allows air to easily flow in and out (e.g. window is open)</li> </ul>	
3. Toileting	<ul> <li>Use a urinal (for males) or commode if you have difficulty getting to the toilet</li> <li>Pace your breathing when passing motion (defecating)</li> </ul>	

4. Grocery Shopping	<ul> <li>Plan a shopping list so that you only buy what you need</li> <li>Use a shopping trolley to avoid hand-carrying your groceries</li> <li>Take a few breaks in between if the distance to the market/shopping mall is long</li> </ul>	
5. Sweeping	<ul> <li>Use a dry wiper sheet or wireless vacuum cleaner instead of a broom</li> <li>Walk with the dry wiper sheet stick or wireless vacuum cleaner when cleaning the floor, and avoid only using your arms</li> <li>Take a break after cleaning each room</li> </ul>	
6. Mopping	<ul> <li>Use a spin mop (with a handle to drain the water) or a wet sheet to mop the floor</li> <li>Take a break after cleaning each room</li> </ul>	

#### 7. Hand Washing Clothes

- Sit down on a chair and hand wash your clothes in a sink
- Ensure seated upright with the sink slightly below chest level to avoid slouching when doing task



# 8. Getting Clothes Out of the Washing Machine

- Use a long handled reacher when retrieving your clothes from the washing machine
- Place your laundry basket on a stool to elevate its height
- Use proper breathing techniques and take a break when needed (refer to pg 11)



### 9. Hanging Clothes

- Hang your clothes on window grilles or indoor drying racks
- Use proper breathing techniques and take a break when needed (refer to pg 11)



#### 10. Changing Bed Sheets

- Sleep on a mattress with a bedframe
- Place your bed away from the wall
- Use lightweight bed sheets
- Fold your bed sheet in on the side that you are standing on
- Use proper breathing techniques and take a break when needed (refer to pg.11)



#### 11. Cooking

- Prepare ingredients while sitting down whenever possible (e.g. cutting or washing vegetables)
- Place a chair nearby to sit down and rest during cooking Consider making smaller portions of ingredients or dishes to avoid carrying heavy pots of food



### **Breathing Strategies**

The following breathing strategies can be applied during activity to reduce exertion and breathlessness. Practice these skills with your Occupational Therapist.

### 1) BREATH IN WHEN DOING THE FOLLOWING ACTIONS

- Moving against gravity
   e.g lifting things from floor
- Pulling motion e.g. mopping floor
- Lifting of arms e.g. putting things above head
  - → During this actions, ensuring your breathing is in sync with your muscles and chest movement can help reduce breathlessness from exertion



#### 2) PURSED LIP BREATHING

- Inhale through your nose (count 2 seconds)
- Exhale through your mouth (count 4 seconds)
- → Pursed lip breathing can help to relax and pace yourself when you feel breathless





### **Breathing Strategies**

The following recovery positions can be applied during activity to reduce exertion and breathlessness. Practice these skills with your Occupational Therapist.

#### 3) RECOVERY POSITIONS

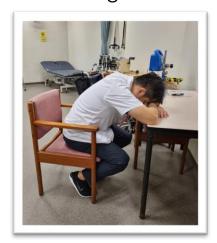
Patients with respiratory conditions that feels breathless can perform breathing strategies in the following positions to recover.

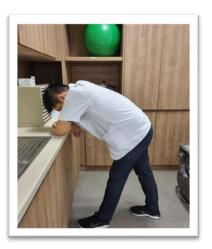
Lean forward when sitting





Lean forward against table





# Rate of Modified Perceived Exertion Scale (RPE)

The following scale can be use with patients to rate their perceived exertion level when performing activities.

1- 10 Borg Ra	ting of Perceived Exertion Scale
1	Resting
2	Very Easy
3	Easy
4	Moderate
5	Hand
6	Hard
7	
8	Really Hard
9	Very Hard
10	Maximal Exertion

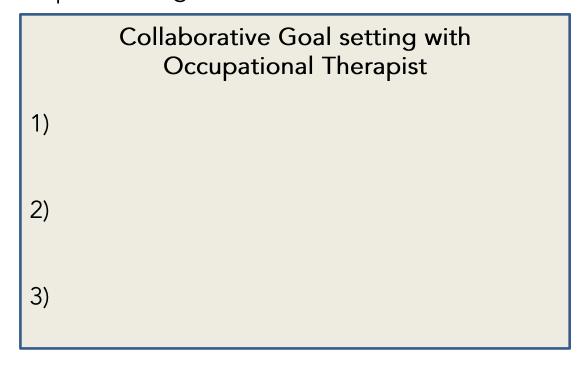
(The Heart Education Rehabilitation Toolkit, by The National Heart Foundation of Australia)



To prevent overexertion, you should keep to rating of 4 (moderate level) and below when engaging in a task

### **Action Plan**

Take down notes and set goals with your Occupational Therapist. Use it to guide yourself when performing a task.



Tips I will apply
1)
2)
3)

### **Activity Scheduling**

Planning your activities ahead can help you better conserve your energy and organise your time. Use this activity schedule with your Occupational Therapist to plan your weekly activity

	Monday	Tuesday	Tuesday Wednesday Thursday	Thursday	Friday	Saturday	Sunday
Ö. AMA							
Na N							

Clinics B1C
TTSH Medical Centre, Level B1
Contact:
6357 7000 (Central Hotline)



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