Constraint Therapy

**Will it work for me?**
Research has shown that constraint therapy can have a significant impact on the function of a stroke-affected arm, but ONLY if:
- It’s additional to task specific therapy
- You have at least 20° of unassisted movement in your stroke-affected wrist and 10° in at least one finger or your thumb

If you can’t move your hand this much on your own, then it is best to NOT apply a constraint to your stroke-affected hand, as there is no guarantee that all your hard work and task-specific practice will be beneficial.

There is no research that indicates that simply wearing a constraint mitt will improve the function of your stroke-affected arm or hand.

**How often do I need to wear the mitt?**
We recommend 5 x 5 x 5: At least five hours a day, five days a week, for five weeks.
It’s important to select:
- **Five consecutive hours:** perhaps those hours when you’re busiest in everyday tasks
- **Five consecutive days:** we suggest the five week days with the weekends off
- **Five consecutive weeks:** the same weeks as your therapy sessions, if possible

**When should I NOT wear the mitt?** When:
- There is no-one else around
- It’s too tight around your wrist
- You go to the toilet

It’s best to not wear the mitt for extra hours, particularly in the earlier weeks, as you may fatigue with the demanding constraint routine.

Arm and Hand Therapy

**If you experience pain in your stroke-affected arm, hand or shoulder, it is really important to:**
- Tell someone else about it and if it persists, make an appointment with your doctor
- Record where the pain was, what you were doing and the time of day
- Immediately cease your arm and hand therapy program
- Discuss future therapy plans with your therapist at the next visit

**Task-Specific Therapy**
It’s important to………
1. Use everyday tasks in your therapy program
2. Select tasks that are meaningful to you
3. Use your stroke-affected arm and hand as much as you possibly can
4. Practice, practice and practice

Your Therapist is: .................................

To contact them, ring: .................................

This brochure was produced as part of the Acute Stroke team’s research program. This team is based in the Neurology Department at the John Hunter Hospital. Its author is Isobel Hubbard, an Occupational Therapist and stroke researcher.
How often should task-specific therapy occur?
When you are actively involved in any everyday task you are doing “therapy”. The important thing is to make sure that the stroke-affected arm and hand is as involved as it possibly can be. If it’s possible, we recommend formal therapy sessions at least three times a week, for one hour at a time and scheduled over at least five consecutive weeks.

How do I know that this will be worth all the effort?
Obviously there are no guarantees, but research indicates that if we should use the following guidelines in arm and hand, task-specific therapy, it will be effective in most stroke survivors:

<table>
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<tr>
<th>Therapy should be...</th>
<th>How to put this into practice....</th>
<th>How to make sure this happens....</th>
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| Relevant             | • Select tasks that are important and meaningful to you  
                      • Practice in the usual place and position | • The therapist may use test (COPM or GAS) to help you work this out  
                      • Therapy should be based in the real-world, if possible |
| Random               | • If possible, don’t follow the same routine each time | • In each session, we suggest you prioritise the tasks by shuffling task cards |
| Repetitive           | • Training should be repetitive, practicing the same thing over and over | • We focus on 5 tasks only and you will need to practice, practice, and practice!  
                      • Record your extra practice |
| Rewarded             | • Make sure you’re rewarded for your hard work and receive encouragement  
                      • BUT, the rewards and encouragement should “fade” over time | • Record how much encouragement you received  
                      • Don’t become dependent on the encouragement and rewards |
| Reconstructing the whole task | • Stay focussed on the whole task  
                               • Don’t get bogged down in partial tasks and non-specific exercises  
                               • Aim at achieving the whole task | • Think through the purpose of the exercises to decide whether or not it is going to help you achieve the task |

What is “Constraint Therapy” and how does it work?
Understandably, when you’ve had a stroke you learn to manage as quickly and efficiently as you can. However, research has shown that even though a stroke-affected arm could be more actively involved in everyday tasks, it often “learns” to stay out of the way. This is referred to as “learned non-use”.

Constraint therapy can overcome learned non-use in those who have some movement in their wrist and fingers. It is additional to task-specific therapy and involves constraining the unaffected arm! Yes, that’s right, the arm that’s NOT affected by the stroke.

This therapy actively encourages the stroke-affected arm to become more involved in everyday tasks. We recommend a thumbless mitt applied to the unaffected hand that’s loosely fastened at the wrist.