

# Developing Flexibility & Mobility

**Flexibility** is about your **Range of Movement** about a joint / series of joints. You could be:

- *Immobile* – lacking range of movement due to muscle tightness or shortening, poor motor control, technique, joint restriction
- *Mobile* – full range of movement and able to control movement
- *Hyper-mobile* – full (or beyond) range of movement, but not able to control or stabilise joints.

You can improve range of movement, motor control, and stabilise joints, and remove tightness and restrictions. But this needs regular work to develop it, and to maintain it.

## Safety Issues

- Need a thorough warm up before working on flexibility and mobility – never stretch when your muscles are cold (so could be part of cool-down at the end of other training).
- You will feel discomfort, but beware of overstretch to the point of causing pain! Work on gradual improvements not forcing your body beyond where it can go.
- **Growth Spurts** – there is a risk of injury in young people in their growth spurt(s). Basically bones grow faster than muscles, so muscles ligaments and tendons and are playing catch up constantly in a growth spurt. So stretch only to the point of mild tension during growth spurts.
- **Aging** – there is a progressive loss of Range of Movement and elasticity in tissues from the age of 35-45. Staying active is the best way to hold / reduce the effects. That doesn't mean you can't improve flexibility and mobility after this age.

## Ways to develop Flexibility and Mobility:

**Static Stretching** – taking the muscle to tension and holding for 30-60 secs, tension eases as the muscle relaxes and stretches. You can repeat several times in a session.

### *The problem with stretching*

1. When you stretch you tend to feel the stretch the thinnest (and weakest) part of the muscle so may not get the change you want or need.
2. Not all problems with flexibility and mobility result from 'short' muscles! Movement can be limited by:
  - a. poor posture (joint not in correct alignment) – could be due to tight or weak stabilising muscles (and adaptive shortening)
  - b. tissues not moving over each other as they should – if you spend most of the day sitting, your glutes and hamstrings are compressed. Also the fascia that wraps round muscle groups can be tight
  - c. poor motor control poor technique – not activating the correct muscles, allowing larger muscles to take over / comprise movement

### *Other solutions*

**Myofascial release** (foam roller/hockey ball/tennis ball) – this is effectively using a ball or roller to self massage tissues to work out tightness and free up sliding surfaces

**Posture** – simply being aware of and correcting posture constantly. Yes we need to be aware we maintain good posture when training/exercising – but we spend more of the day not training so need to be aware of it throughout the day. E.g spending time on strengthening exercises for our core to help our posture is good, but if you spend 8 hours a day sitting with poor posture work against ourselves.

**Motor control and strengthening** – this includes focussing on correct technique in all movements (everyday and when exercising) to ensure the right muscles are being activated.

It also means addressing muscle imbalances in training, particularly spending time on stabilising muscles, for paddlers the priority are those in the core and rotator cuff (shoulder).

## How often should I work on this?

Developing flexibility and Mobility (and maintaining it) are long term and an ongoing process! Ideally it is something you need to work on daily! Try to fit in at least 15mins per day, 5 times per week!

Generally there isn't time to stretch everything every day. So you will probably want weekly programme that visits each area of the body a few times during the week – and that might mean targeting a problem

areas several times a week to develop flexibility and mobility, along with some general work on maintenance for other parts of the body.

### Common Problem Area for Paddlers

Shoulders and Upper Back		
Issues	Causes	Solutions
Shoulder rounding forward, back hunched - shoulder joint out of position Tight chest muscles, weakness in rotator cuff and rhomboids Risk of injury Lack of Range of Movement Ability to apply/control power through joint	Poor posture – prolonged sitting, working at PC, tablet and mobile phone use, etc Imbalanced training	Awareness of posture (shoulders down and back) in everyday activities as well as sport. Shoulder stabilisation exercises (pre-hab routine – see last year’s sheet on website) Chest stretches – single arm chest stretch Lat stretches – single arm lat stretch Trigger points (Hockey/tennis ball rolling)

Hips and Lower back		
Issues	Causes	Solutions
Limited range of motion – impacting on boat control and everyday activities. Weak hamstrings and glutes Tight hip flexors Risk of injury Lower back pain	Poor posture – prolonged sitting, working Imbalanced training Not engaging / activating correct muscles group Poor technique (eg when lifting)	Awareness of posture (spinal and pelvis position) in everyday activities as well as sport. Glute and hamstring exercises: - Good mornings - Glute bridge Glute and hamstring stretches: hamstrings Lying glute stretch Standing, sitting or lying hamstring stretch Hip flexor and thigh stretches - Standing or lying quad stretch - couch stretch - piriformis stretch Foam rolling and Trigger points (Hockey/tennis ball rolling)

Core and rotation		
Issues	Causes	Solutions
Limited range of motion – impacting on boat control and everyday activities. Not transferring power from upper body to lower body (i.e. moving the boat) efficiently	Poor posture Links to Hip and lower back issues Imbalanced training Not engaging / activating correct muscles group	Awareness of posture and tension in core in everyday activities as well as sport. Core and rotational exercise: - Twister - Wipers - Leg raise/lower - Lower back raise - TA activation Core and rotational stretches: - Lying or sitting trunk rotation - Sphinx <i>Also see hip and back solutions</i>

### Tips

- Remember it’s a long term process that needs regular work.
- Don’t forget other strength and conditioning can work against flexibility and mobility – eg if you strengthen your chest, it increase the forward pull on your shoulders – training needs to be balanced to develop opposing muscles.
- Identify problem areas and target them, once you see an improvement move that area to ‘maintenance’ and target another area. But keep revisiting areas to make further improvements
- Try to keep track of range of movement so you can see progress (photos to compare then and now)
- The best way to offset and delay decreasing flexibility and mobility in older age is to stay active.