

The Home Gym

(Training at home with simple or no equipment)

Training for Slalom

In terms of physical effort Slalom is essentially a Power Endurance Sport

- **Power** is about being able to exert a force quickly. (e.g. big strokes to accelerate the boat up to full speed).
- **Endurance** is about being able to do this repeatedly over the duration of the event (accelerating the boat up to full speed repeatedly throughout your run).

So, ideally for slalom we want to develop our power. That means moving heavy weights quickly - which is why Olympic Lifting is the best option for slalom as it can only be done quickly. *But Olympic Lifting requires training to develop technique and specialist equipment.*

However, there is plenty that you can do at home with simple or no equipment to become stronger and more powerful, and therefore help to improve the slalom performance.

Basically we are talking about doing **resistance training** (the resistance being the weights or your bodyweight). There are numerous benefits from this:

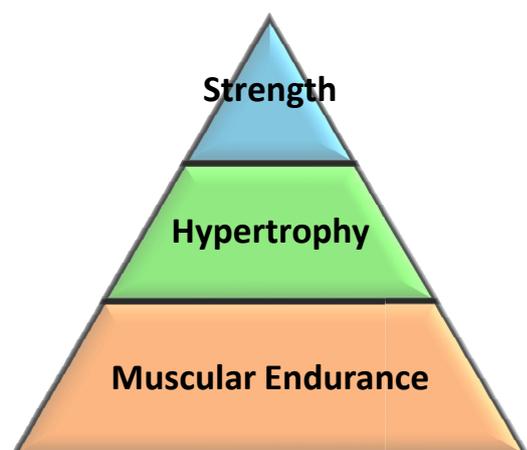
- Increased muscular strength
- Increased neural activation (being able to recruit more muscle fibres)
- Increased muscular endurance
- Increase bone density (important for later life – particularly in females)
- Increased metabolic rate (burn more calories)
- Increased energy stores in the muscles
- Improved muscle tone
- Improved posture

A concern for women and girls is that doing resistance training will mean they are seen as too muscular. The reality is that it takes a considerable volume and intensity of training to get to this point.

Safety Issues

- Always do a good warm up and cool down.
- Have adequate space for what you are doing.
- Health Issues:
 - Don't train if injured or unwell
 - Existing medical conditions – get medical approval
- Breathing – don't hold your breath (causes increased blood pressure)
- Ensure good posture throughout – bracing your core, neutral spine
- Always maintain good technique – poor technique risks injury. Start with low weights and simple exercise and build up when you have developed good technique.
- 'Red Flags' to watch for:
 - Poor posture
 - Head movement
 - Back alignment – should stay neutral and maintain natural curves (S shape) not rounding upper back or hinging at lower back
 - Knees collapsing inward / outward
 - Loss of technique – due to too many reps or too heavy a weight/load

How you train determines what effect it has



Depending on how you train, you can different effects.

- Developing **Strength** = being able to lift heavier load, while minimising increase in muscle size
- **Hypertrophy** = increasing the size of muscles
- **Muscular endurance** = increasing how many times you can lift the weight

When you first start training, you'll probably need to initially develop some muscular endurance, then progress to hypertrophy and then start developing strength. The key is to develop technique with low weights before you progress to training for other effects. You need to be

able to maintain good technique throughout the exercise regardless of the weight and number of repetitions.

Some exercises can be progressed to develop **power** as well (i.e. variation that need to be done explosively - clap press up, jump lunge etc).

The table below sets out how to organise training to achieve either Muscular Endurance, Hypertrophy or Strength

	Reps	Sets	Recovery time (between sets)	Intensity (% of max weight you can lift for 1 rep)
Strength	1 – 5	2 - 6	3 – 5mins	>85% (i.e. heavy weights)
Hypertrophy	6 – 12	3 – 6	1 – 2mins	67 – 85% (i.e. moderate to heavy weights)
Muscular Endurance	12+	2 – 3	30 – 60secs	<67% (i.e. low to moderate weights)

Organising Training

Slalom is a whole body sport, so we need a programme of exercises that will train (work) all areas of the body. This will probably include exercises that work the whole body and some that target specific muscle groups. We should also make sure the programme is balanced - that is we work opposing muscles equally - e.g. if you work your biceps you should also work your triceps.

Generally we should do whole body exercises first in the programme, then exercises that work the major muscles groups and then exercises that target smaller muscle groups.

Rest between sets (and exercises) is an important part of training, not a waste of time - it allows recovery to do the next set properly (full number of reps, good technique)

Supersets - this is a way of organising training so that you make efficient use of time. You pair up exercise that work different muscle groups, and during the rest for one you do the other exercise.

Progression

You need to organise your home gym sessions so that you keep developing. If you keep doing the same thing session after session your body adapts to the training and you plateau. To avoid that you need to refresh what you do - that could be every few weeks or when an exercise becomes too easy.

Remember - You need to be able to maintain good technique throughout the exercise regardless of the weight and number of repetitions. *Don't progress until you can do all the reps and sets with the current weight/resistance.*

Things you can change to aid progression:

- increase the weight or resistance
- change what you are training for e.g. move from training for muscular endurance to hypertrophy to strength
- change number of reps in each set (within the ranges for the training type you are working towards)
- change the number of sets (within the ranges for the training type you are working towards)
- change the time under tension (i.e. quicker or slower) - while maintaining good technique
- change the exercise - often a different exercise for the same muscle group(s) will provide a different challenge

It is easy to get 'lazy' and not change things regularly - but you won't get the same effect if you do this.

Example programmes:

These use the same exercises throughout (for familiarity and developing good technique) but change from training for Endurance to Hypertrophy to Strength over 12 weeks (training say 2 x per week). Within each 4 week blocks you could still increase the weights if the exercise is no longer challenging.

There are many possible variations (endless options really) that you can make to these programmes - different exercise, different progressions, different weights. You may be able to progress some exercises quicker than others

For Endurance (eg use for weeks 1 - 4)

Exercise	Equipment	Sets / Reps	Notes
Squats	Dumbbells?	2 set of 15 reps. 1min rest between	Progress to using dumbbells when able to maintain technique throughout
Shoulder press	Dumbbells	2 set of 15 reps. 1min rest between	
Lunges	Dumbbells?	2 set of 15 reps. 1min rest between	Progress to using dumbbells when able to maintain technique throughout
Press Up	---	2 set of 15 reps. 1min rest between	
Prone Flies	Dumbbells	2 set of 15 reps. 1min rest between	
Lat Raises	Dumbbells	2 set of 15 reps. 1min rest between	

Back Raises	---	2 set of 15 reps. 1min rest between	
Ab Curls	---	2 set of 15 reps. 1min rest between	

For Hypertrophy (eg use for weeks 5-8)

Exercise	Equipment	Sets / Reps	Notes
Squats	Dumbbells	3 set of 8 reps. 90sec rest	Choose a weight that you can complete all sets with
Shoulder press	Dumbbells	3 set of 8 reps. 90sec rest	
Lunges	Dumbbells	3 set of 8 reps. 90sec rest	Choose a weight that you can complete all sets with
Press Up	---	3 set of 8 reps. 90sec rest	
Prone Flies	Dumbbells	3 set of 8 reps. 90sec rest	Choose a weight that you can complete all sets with
Lat Raises	Dumbbells	3 set of 8 reps. 90sec rest	Choose a weight that you can complete all sets with
Back Raises	---	3 set of 8 reps. 90sec rest	
Ab Curls	---	3 set of 8 reps. 90sec rest	

For Strength (eg use for weeks 9-12)

Exercise	Equipment	Sets / Reps	Notes
Squats	Dumbbells	4 set of 5 reps. 3min rest	Choose a weight that you can complete all sets with
Shoulder press	Dumbbells	4 set of 5 reps. 3min rest	
Lunges	Dumbbells	4 set of 5 reps. 3min rest	Choose a weight that you can complete all sets with
Press Up	---	4 set of 5 reps. 3min rest	
Prone Flies	Dumbbells	4 set of 5 reps. 3min rest	Choose a weight that you can complete all sets with
Lat Raises	Dumbbells	4 set of 5 reps. 3min rest	Choose a weight that you can complete all sets with
Back Raises	---	4 set of 5 reps. 3min rest	Could add light hand weights
Ab Curls	---	4 set of 5 reps. 3min rest	