



SPORTSMED
SUBIACO

EXCELLENCE IN DIAGNOSIS & MANAGEMENT

Swimming: Injury Prevention

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Today's Slides + Generic Land Program + Brief Stretching
Index can be found at our website -> Injury Head
Quarters -> Sports Specific Prevention

SPORTSMED WEBSITE = www.sportsmedsubiaco.com.au

Swim Screening @ SportsMed Subiaco

BOOK ONLINE/PHONE = www.sportsmedsubiaco.com.au
ADVISE SWIM SCREEN REQUIRED – 1HR SESSION w/PHYSIO

Other Important Websites

AISS Nutrition/Hydration = <http://www.ausport.gov.au/ais/nutrition>

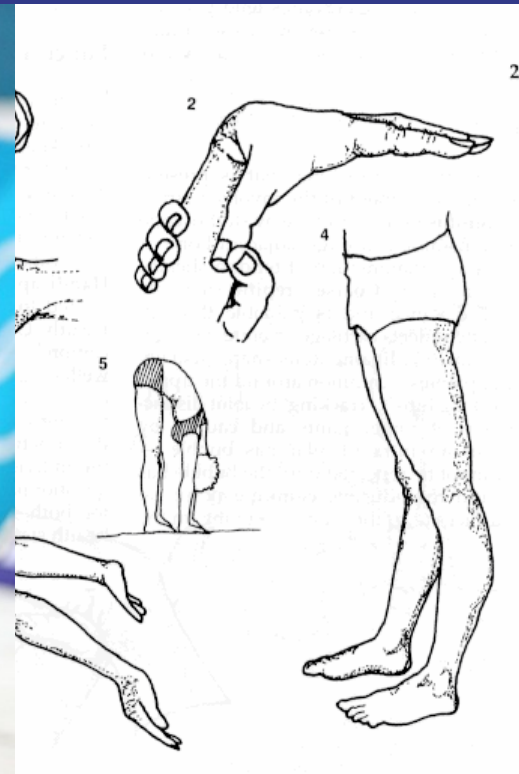
RISE & SWIM

<http://www.youtube.com>

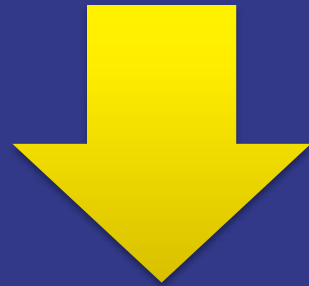


Beighton Score of Hypermobility

- Requires 9 Maneuvers
- One point for every pos
- Tests 1-4 performed on
- Minimum of 3 points –
Hypermobility
- Maximum of 9 points –
hypermobility



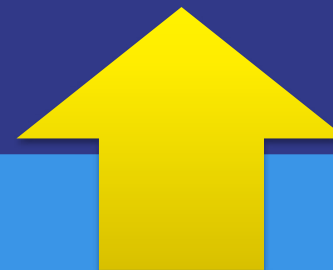
'Swimming is A Balancing Act'



Flexibility (ROM)
Propulsive Force (Strength & Power)
Stroke length
Energy Expenditure



Stability & Control
Drag Forces
Stroke Rate
Energy Reserve



Swimming Fast

- You must move **CONSISTENTLY WELL** through the water
- ⬆ Speed makes the water harder to get through (hydrodynamics)



Swimming Fast

GOAL: ↑ Speed by 10%

TWO OPTIONS

- a) Increase your propulsive force by 30% - OR -
- b) Decrease your drag forces by 3-5%



TWO OPTIONS = SAME OUTCOME

Swimming Fast

Extreme positions (e.g. streamline, high elbow) are needed to produce force without drag

If your body cant adopt these extreme positions you WON'T SWIM FAST and you're more likely to get injured

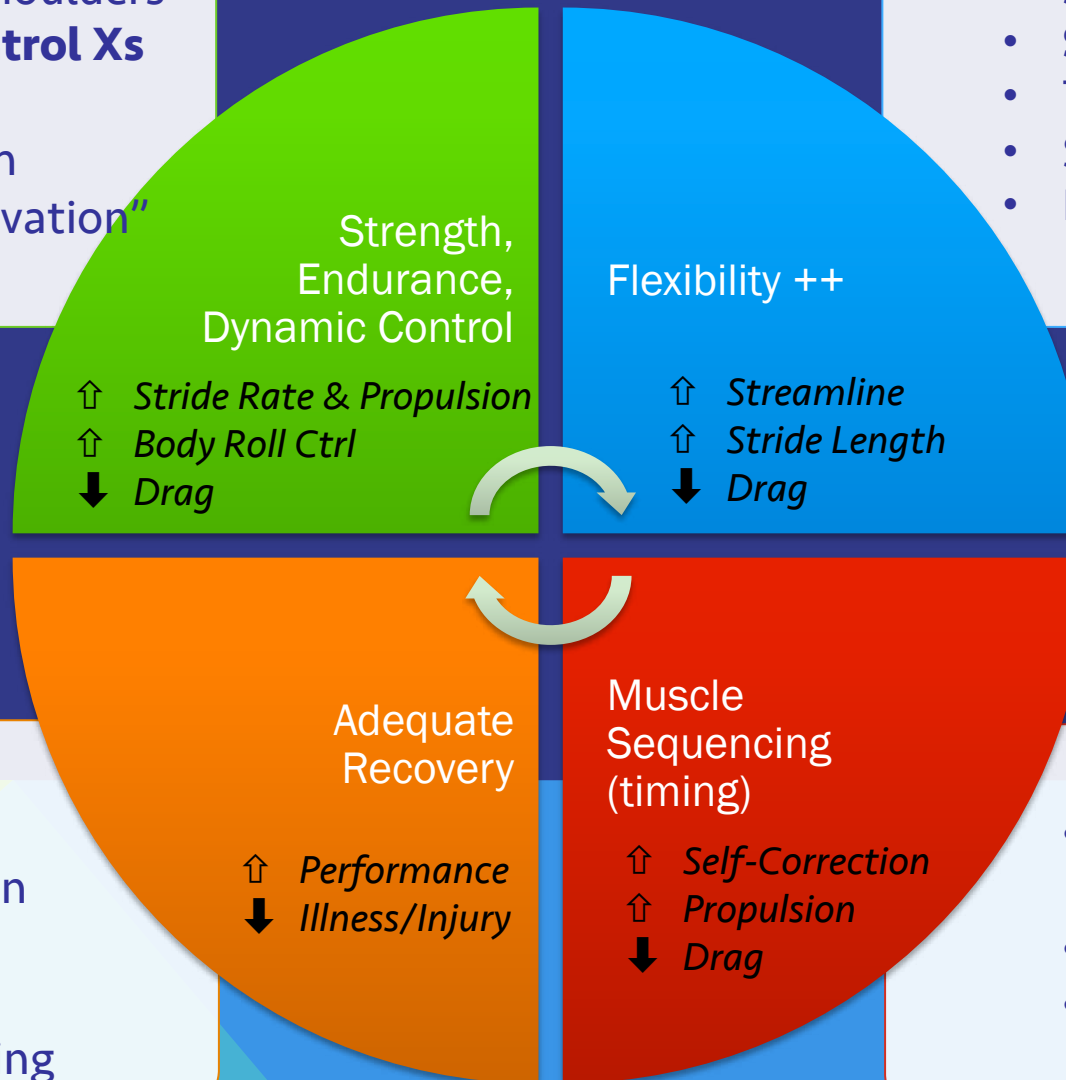


.... AND THIS, MY FRIENDS, IS WHY PHYSIOS
COME IN AND TEACH INJURY PREVENTION !!

PHYSIO P.O.V – What's Important?

- Hip, Trunk & Shoulders
- **Trunk/Ab Control Xs**
- Theraband Exs
- Pilates +/- Gym
- Pre-swim "Activation"

- **Screening**
- **Stretch/Mobility Xs**
- Trigger Point
- Structured Warmup
- Physio Treatment



- Cool Downs
- Hydration
- Good Nutrition
- Compression
- Sleep > 8hrs
- Load Monitoring

- Pre-swim "Activation"
- Swim Drills
- Video Review

Swim Tests – Range of Motion

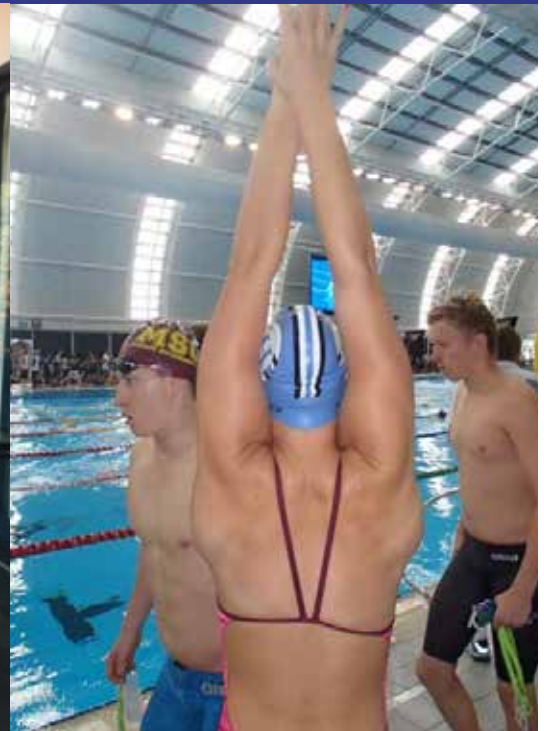
Trunk Rotation



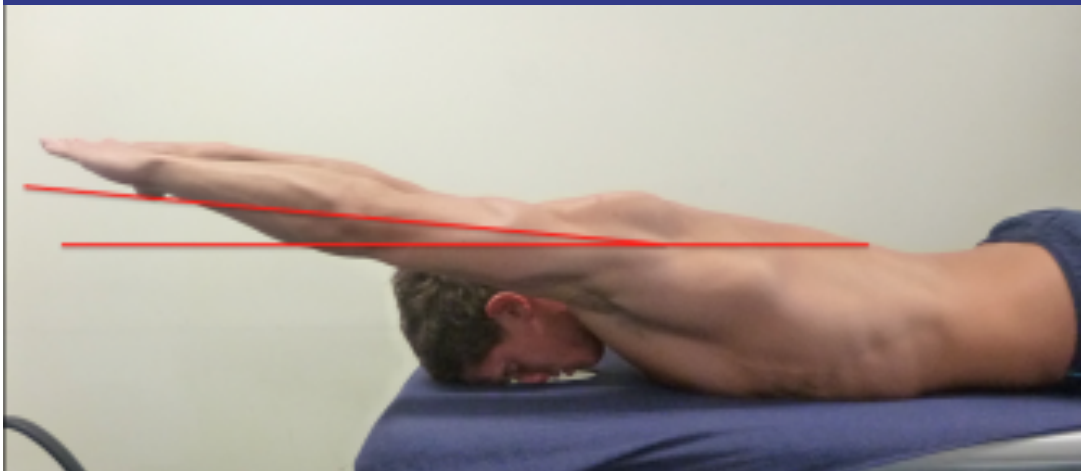
High Elbow Shoulder



Streamline



Swim Test – Combined Elevation



Images: [http:// www.images.google.com](http://www.images.google.com)

Trigger Point Balls – Self Massage of MUSCLES!!

Only useful if you know where the muscles actually are...



HOW & WHY? 10sec hold of pressure on tender muscle points then release
(known as Ischaemic Pressure – forces old blood out of the muscle, allows new blood in)



Images: [http:// www.images.google.com](http://www.images.google.com)

GYM TIME!!

1. FAVOURITE STRETCHES
2. TRUNK CONTROL/STRENGTH WORK

Favourite Stretches – Lower Limb



Images: 'New Moves' APA Conference 2013 & <http://www.images.google.com>

Favourite Stretches – Trunk



Images: 'New Moves' APA Conference 2013 & Kailey Payne

Favourite Stretches – Shoulder



Swim Test – Body Roll



Trunk / Ab Control Exercises



Thanks for having me!

