



Fundamentals of Power

Moving well to produce more power more safely

Richard Poole - 18/09/22

TEAMWORK | OPEN TO ALL | COMMITMENT

Fundamentals of Power

Asking questions

Please ask questions as we go through.

If you can get involved... please do!

Fundamentals of Power

Context

Some people here have been through this content with me before over the last few years. Hopefully this reinforces your current understanding and enables further discussion.

Original purpose of this content: To help ambitious TID athletes turn their ‘raw’ power into boat speed.

The name: Make fundamentals exciting.

Fundamentals of Power

Context

Different to ‘Fundamentals of Technique’. If you want to make a novice go fast as soon as possible, just get them to put the oar in the water and get the legs on as hard as possible.

End of year 1 – step up to year 2. (Or bottom end of inter to medals.) Any programs struggle with this?

Delivered prior to guidance on aerobic capacity training.

Fundamentals of Power

Goal

Help athletes to build their most powerful stroke possible.

Fundamentals of Power

Where to look...

Start in the middle and work outwards

- Hips
- Trunk/spine
- Knees
- Shoulders

Start without any equipment!

Fundamental principle

Move from the hip

“Do not move the spine while moving.”

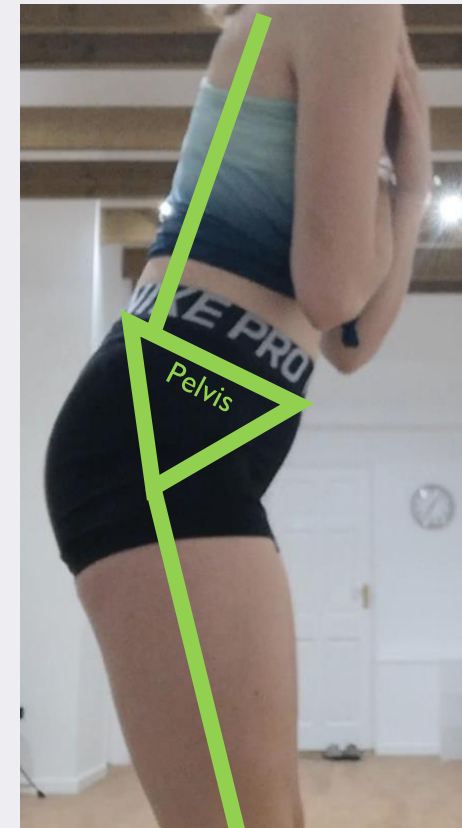
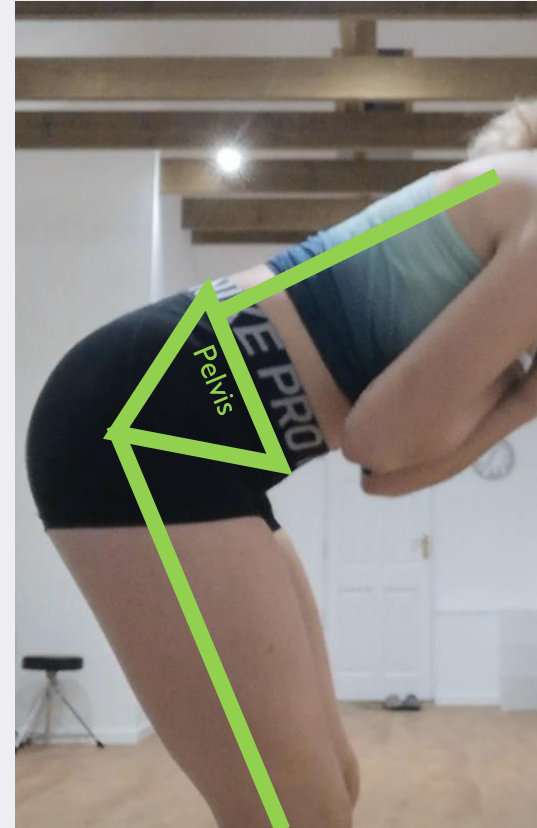
or

“Move the hips without curving the spine.”

or

“Disassociate hip flexion from lumbar spine flexion.”

Not a ‘normal’ pattern but encourages a healthier and more powerful rowing movement.



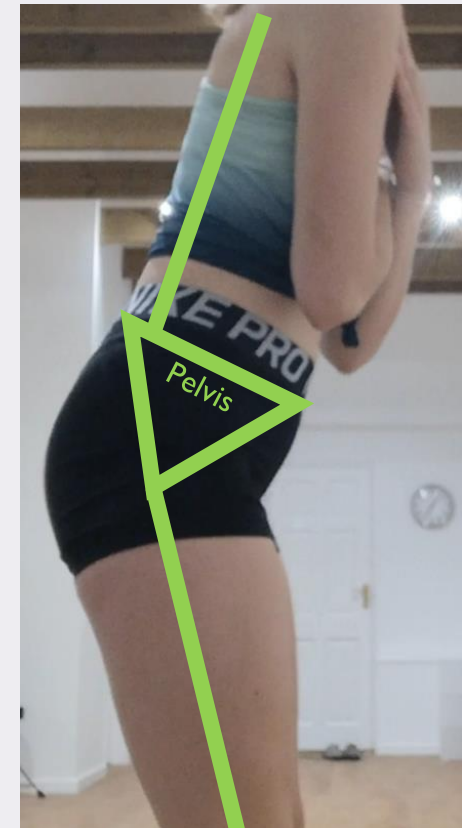
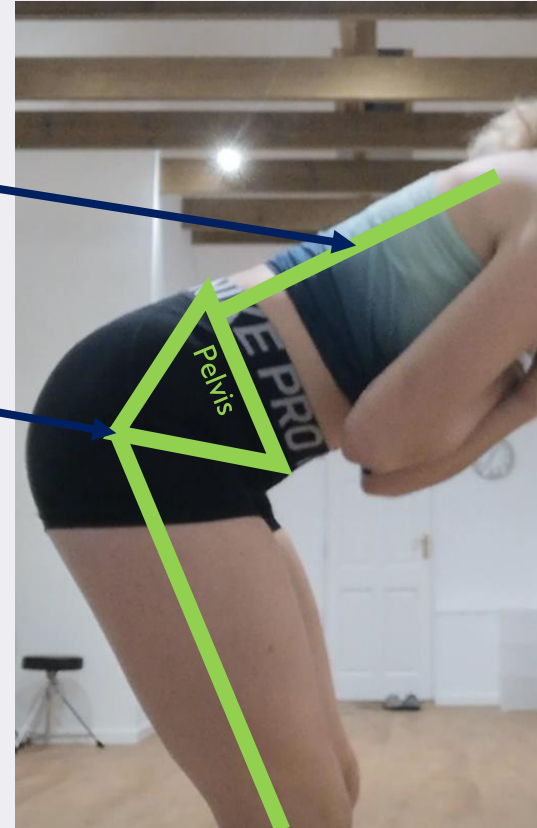
The most important one to get right!

Hip Hinge

Do not move the spine while moving.

Have conscious control over the hip joints.

Some people can do this easily. Others will need to practice.



The most important one to get right!

Hip Hinge

A rower who might benefit from this exercise:

- Curves their spine heavily in order to ‘rock over’.
- Hunched catch position.
- Likely to develop lower back pain.

The most important one to get right!

Hip Hinge

What does this look like in a rowing stroke?

- Powerful hip extension.
- Good posture.

TRY IT ON THE ERGO. Hip swing then hip drive only suspensions.

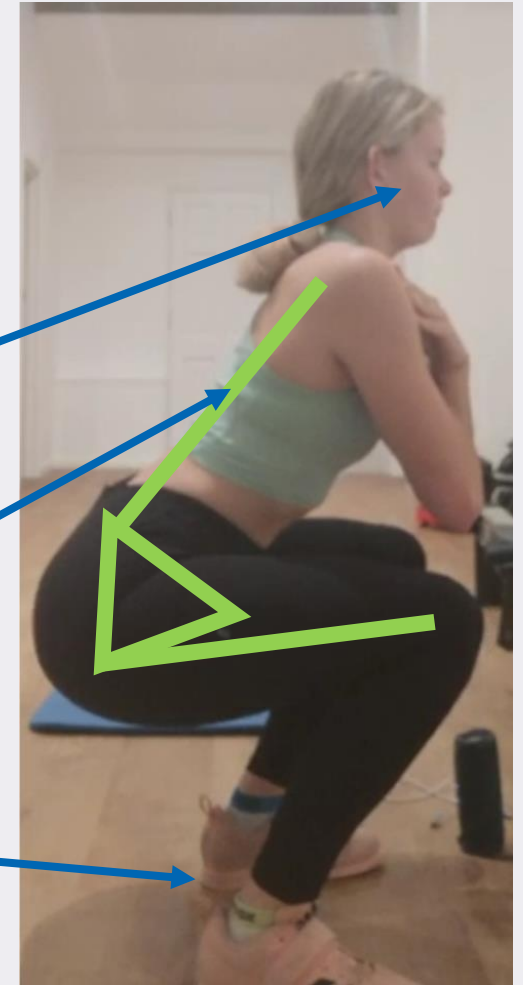
Coordinating the knees and hips

Squat



Coordinate the ankles, knees and trunk well together.

- **Chest and head up, looking forward**
- **Knees over toes**
- **Lower is better**
- **Do not move the spine while performing the exercise.**
- **Feet flat on floor**



Coordinating the knees and hips

Squat

A rower who might benefit from this exercise:

- **Weak leg drive.**
- **Loses 'connection' in the middle of the drive.**
- **Likely to develop back pain.**

Coordinating the knees and hips

Squat

What does this look like in a rowing stroke?

- **Good leg and hip drive coordination.**
- **Stable trunk.**

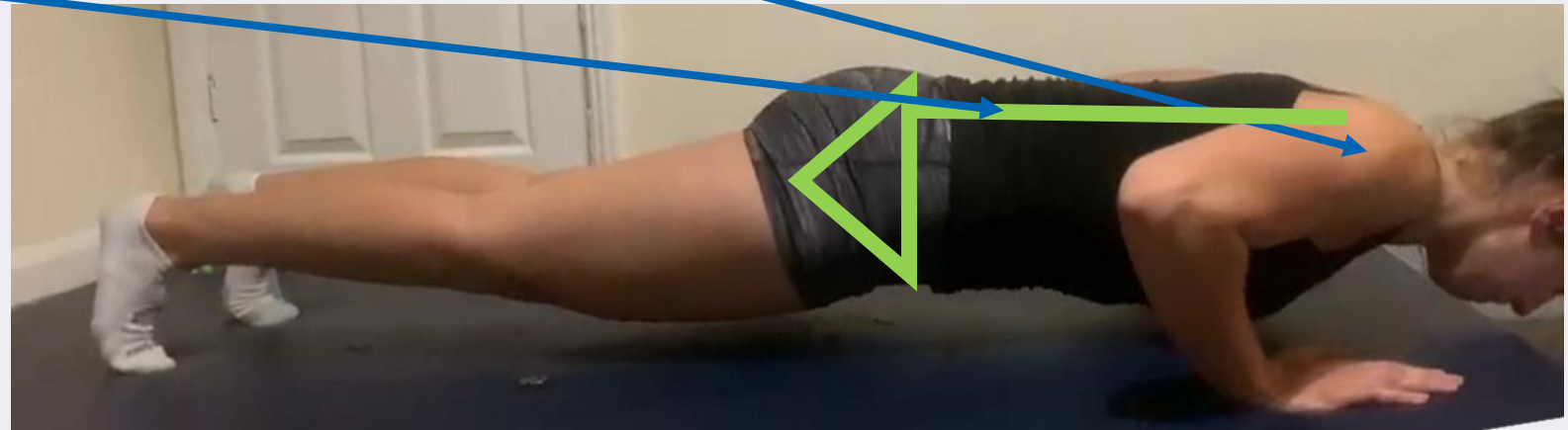
TRY IT ON THE ERGO.

Upper body stability

Press Up

Maintain shoulder stability under load.

Do not move the spine while performing the exercise.



Athlete: Amy 'Chicken Dinner' Hicken – Coach: Nicola Benavente

Upper body stability

Press Up

A rower who might benefit from this exercise:

- **‘Hunched’ shoulders and heavily bent arms during the drive.**
- **Slow to ‘connect’ the leg drive and weak finish.**
- **Likely to develop shoulder and rib pain.**

Upper body stability

Supine Pull

Maintain shoulder stability under load.

Do not move the spine while performing the exercise.

As per the press up but the load is in the same direction as a rowing stroke.



Upper body stability

Press Up/*Supine Pull*

What does this look like in a rowing stroke?

- Shoulders stay low.
- ‘Connection’ happens quickly at the front.
- Legs, hips and arms all finish together.

TRY IT ON THE ERGO. Carefully put it all together.

Coach what is in front of you

A note on progression and regression of skills

Some of these skills might need to be made simpler or lower load. E.g. the press up might be hands on a table.

All athletes and coaches talk different languages.

Q&A

Any questions?