GREATER NEBRASKA SWIM TEAM

Common Postural Pattern (Left AIC/Right BC taught by the Postural Restoration Institute®)

Right side dominance – attributed to many things including organ asymmetry, brain dominance, habitual daily activities (ex. running counter clockwise, reaching with right hand)

Reciprocal/alternating activity is a <u>must</u> (crawling, walking, swimming, and BREATHING)....when one loses reciprocal activity, the likelihood for injuries increase due to one side dominance of your body

Breathing & Swimmers

- In the water = breathe in through your mouth and out through your nose; you should not hold your breath while under water but rather slowly exhale
- On dryland = breathe <u>in through your nose</u> and <u>out through your mouth</u>; allowing your diaphragm muscle (primary muscle for breathing) to work correctly
- Breathing incorrectly in the water and/or on dryland can lead to shortness of breath/ asthma symptoms, pain in your side (stitch) when running, shoulder pain, neck tension, headaches, etc.

Bilateral/Reciprocal Breathing:

What happens when I don't breathe to both sides?

- Develop decreased trunk rotation to one side
- Develop decreased shoulder internal rotation on one side
- Likely develop a rib flare on one side (most commonly left side)
- Increase the likelihood for shoulder or back pain





Are you having difficulty breathing to both sides?

You may demonstrate an asymmetrical pelvis and trunk, not allowing your trunk and ribcage to rotate to both sides and hindering your ability to breathe correctly (bilaterally or reciprocally) on land and in the water

Dryland Strengthening Program

Overactive (and often tight muscles) with swimmers include:

- Pectorals
- Latissimus
- Hip Flexors

Underdeveloped (and weak muscles) with swimmers include:

- Shoulder Stabilizers (low and mid traps, rotator cuff, triceps)
- Abdominals (breathing is very important here)
- Hamstrings/Glutes

To prevent chronic or overuse injuries, a dryland program should incorporate inhibition (stretching, relaxing) of the <u>overactive</u> muscle groups, and facilitation (strengthening) of the <u>underdeveloped</u> groups of muscles listed above.

Over the next four months, we hope to help you child become stronger, more balanced and symmetrical, and prevent injury through the dryland program we have put together.

We will begin the first two weeks with primarily inhibition activities, and then progress into more strengthening activities.

With our education in Postural Restoration®, most (if not all) activities will include:

- Respiratory (breathing) component
- Isolation of specific muscle groups
- Alternating and reciprocal movements

If we notice that your child is having difficulty completing the dryland program activities correctly or are experiencing pain, we may recommend to you that your child be referred for Physical Therapy evaluation.

If you should ever have any questions, please feel free to stop us at one of the dryland training sessions!

Thanks,

Matt Hornung, Hannah Janssen, and Jennifer Platt