

Running Biomechanics

Breathing & Posture

Breathing & Posture Challenges:

1. Sedentary Jobs
2. Pain & Chronic Injuries
3. Shallow breathing

Alignment and Posture Principals:

1. Head over shoulders
2. Chin up
3. Shoulders relaxed and open
4. Imagine 2 strings: 1 attached to your chest pulling you forward & 1 attached to your head pulling you up.

Improving our Running Posture:

1. **Start with our daily posture:**
 - Sitting / standing tall will help change our postural patterns.
2. **Breathe from our belly, not our shoulders:**
 - Should see & feel our belly move when we breathe.
 - Shallow breathing tightens our upper body and is less efficient.
3. **Strengthen weak muscles & stretch tight ones:**
 - Weak core causes forward bend as we fatigue
 - Weak shoulders & tight chest brings chest forward.
4. **Get Injuries evaluated and treated:**
 - eg: Chronic low back pain can inhibit deep belly breathing.
 - Eg: Neck pain causes us to lean our chin down.
5. **Slow Down:**
 - You run out of breath when you run too fast for your ability/running fitness. As you run more, your breathing rate will slow at a given pace.

Exercise:

- Try taking 3-4 steps for every breath in & 3-4 steps for every breath out. This is an excellent way to combine aerobic running with breathing and cadence (technique).
- This forces you to run in your aerobic zone and increase your turnover/cadence at the same time.
- If you aren't doing this either your strides are too long/inefficient or your breathing rate is in more of a tempo/speed work zone or both.

