



PURA VIDA HEALTHCARE  
*Your Mind-Body Connection*

## **Staying Well Hydrated**

~Dr. Nicola Dehlinger

Staying well hydrated is essential not only for optimal physical functioning, but for ideal mental-emotional health as well. Anytime of year this can be challenging, but during the summer it can be even more so. And for those of us living in drier climates, we may not realize how much fluid we are losing. I have created the following guidelines to help us hydrate optimally – not just drinking water, but adjusting water by adding in another ingredient to help our body absorb and retain the water (in a good way!).

- This is especially important before, during and after any exercise
- If you drink a caffeinated beverage, you are drinking a diuretic (or something that makes you urinate more frequently). Therefore, you need to replace the water lost. A good rule of thumb is drinking 2 cups of water for each cup of caffeinated beverage – one to replace the water you lost and another to hydrate.
- Maintaining hydration is key to maintaining cardiac output (keeping your blood moving) and regulating body temperature
- Plain water does not have the same osmolarity as the water in our bodies (water in our bodies has salts and electrolytes) – putting something into plain drinking water will help our bodies absorb the water more effectively and retain the fluid, rather than just urinating more
  - Squeeze lemon juice
  - Pinch sea salt (not too much so that it's not palatable)
  - Small amount of honey
  - Electrolyte replacement mix
  - Herb tea
  - Splash juice
- Natural energy/sports drink (developed with Steve Taylor):
  - Glutamine (this could be optional if you're using this to hydrate during the day, not just post-exercise)
    - Fuels muscle recovery, even in endurance events
    - It stimulates muscle protein synthesis
    - It preserves skeletal muscle mass (minimizes muscle breakdown)
    - Boosts the immune system
    - Has potential to neutralize lactic acid by helping to buffer the muscles
  - Wheat Grass or Barley Grass Powder
    - Feeds Krebs cycle (which is what produces energy in our bodies)
    - Wheat and barley grass are the foods that are highest in electron potential

- Electron potential refers to the amount of electrons released into the energy cycle – when we add an electron, we convert ATP to ADP – this releases a phosphorus into the cycle and that creates energy
- So, foods that have high electron potential are foods that will stimulate energy production and therefore keep us moving!
- Wheat and barley grass are harvested when they are young and highest in nutritional content.
- They are harvested before gluten has a chance to be created, so they are gluten-free
- Products should be organic and simple – there are many green “foods” products on the market, which are beneficial for other reasons. For athletic performance, we don’t want the extra ingredients like other vegetables. We want straight barley or wheat grass powder to maximize energy conversion and not waste energy on digestion.
- The nutrition in these foods are highly absorbable.
- Wheat grass juice is different than powder – that is a highly concentrated form that can be overpowering, especially if you’re not used to drinking it. It can cause GI upset, nausea, etc. You can get a shot of it and dilute it with water and sip on it, or just use powder (more convenient and equally nutritious).
- Sea salt
  - Keeps electrolytes up
  - Helps us retain water
- Honey
  - Good source of carbs – if raw and unpasteurized, it has a low glycemic index (about 35) which means it won’t spike blood sugar and will provide more sustained energy
- Lemon
  - Keeps body more alkaline
  - Helps change the osmolarity of the water to make it easier to retain
- Recipe for sports drink:
  - For 16oz water, add:
  - ½ tsp (about 2.5g) glutamine powder, 1 packet electrolyte replacement, ½ tsp barley or wheat grass powder, juice ½ lemon, 1 tablespoon honey – mix well – add ice if desired

Remember that the first thing to go when we become dehydrated is mental objectivity! Enjoy the summer....Cheers!