

Better Balance Through the Clockwork Approach

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Katrien will be teaching the Balance course at the ATRI Chicago conference on Friday April 12th.

A clock is something we take with us every day. From the time we were set on this world, the clock is ticking, the clock is guiding, is helping us. It is functional and helps us in our daily routine, our internal clock is continuous, and a clock is used for many reasons. Even Pilates referred to a clock in his exercise 'the Pelvic Clock' and used it for a diagnostic tool for checking restriction in e.g. leg rotations or flexion in the lumbar spine.

Although most clocks are mainly digital now, most know about the numbers on the clock and the moving hands showing what time it is. The face of the clock can be held in many directions, to copy our daily functioning and helping us guiding the exercises in many ways.

I like to use the clock in many of my classes by using the clock as a visualization technique for both static and dynamic balance exercises. Static balance as in anchored moves and more rotational exercises and dynamic balance during gait training or during (multiple) jump training. Water is a great environment to train with the clockwork approach as the fear of falling will be diminished, there is less stress on the joints, less pain and it is fun! The body can move more freely and we can add variable forces in to the training, to make it really worthy.

Making it more functional is not a total purpose of this approach, it is an addition to our regular formats or programs with the intention to teach participants to transfer this to land as well. Using more multiple joints with the visualization on the hands of the clock and variable loading and weight-shifting is the method that will (im)prove our protection of the human body in daily functioning.

Let's start with basic examples by dividing the body in an upper and lower part (UE and LE) by using the transverse plane motions. By using Newton's law of 'action- reaction' we will start with symmetrical exercises. Start in the middle, LE right leg steps out to 3 and comes back in the middle. At the same time the UE left arm swings straight to 9 and UE right flexed arm crosses over, pointing at 9 (and both come back middle) to end in a basic (narrow) stance. Now repeat that simple exercise but change the foot positions; right and left can be the same but can be different as well. Right toes out, left toes straight forward. Now see what happens! What is the change in the upper body?

What does this simple exercise mean in daily functioning? How can that exercise help us for better functioning? Think about doing household: do we ever change our foot position before starting a task? NO! We just do it, we don't think about it. The more we make it involuntary (by adding it in our trainings) the more we are better ready or ready better.

Now, let's take that same exercise and make it asymmetrical. Feel the change in the load and use weight shifting to stay in balance! The water will provide a good help doing that exercise and we've just learned it will help for better balance on land! The transfer is there... By adding buoyant or weighted equipment (also on one side only!) we can even make it more functional: when you cook, you have pots you have to lift and shift to the other side, while balancing on your legs...

We can always add some competition in to it: change the direction (by changing the numbers of the clock where to reach to), change the distance (reaching is one of the ADL's!), changing the speed (and look at the reflexes involved there, by the kinetic chain movements) or change the force applied (just tap to the side, versus hit the pools' floor on that side)

Creating exercises (both unilateral or bilateral, symmetrical or asymmetrical, bilateral reciprocal...) into a more patterned shaped format, could be useful for PNF (stretching) as well. Even better: Our daily life exists on spiral and diagonal components of our movements! PNF patterns could mean improvement of coordination, increased flexibility, strength and endurance, helps in neuromuscular (re)training and also triggers the weaker parts of the body by promoting balance of muscle motion and reflex activity. If we can help our participants by using the clockwork approach for these patterns, it can be worthy to give it a go, right? Focus on trunk stabilization or increase the trunk mobility by repeating the patterns and making it FUNctional.

Using the clockwork approach is more than using a horizontal version: put the clock in a vertical position (as it is hanging on the wall) and create more exercises, both anchored and maybe even propelled! Use UE ROM training in that position. Or put the clock on the side and see what changes there... I could do this all day... so many variations possible! Are you excited too? DO IT!

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