

Transverse Training

The high number and variety of different tasks we have to complete in our average day means that we are bending, twisting, extending, pulling, pushing, reaching, rotating and flexing all day long. This puts our body at all sorts of stress that we were designed to cope with. When you play almost any sport you start to use far more variety in your movements and they begin to have a lot more force and speed placed through them.

There are three plains of motion that our bodies move through.

These are:

Sagittal- Imagine a line going straight through your body front to back. When we walk in a straight line we are moving in the sagittal plain.

Frontal- This line goes through us sideways. When we do star jumps our arms and legs and moving through the frontal plain.

Transverse- This plain cuts us in half. So standing with your arms out in a T position and clapping your hands out in front of you like a seal is your arms moving in a transverse plain.

So the type of training that most people will be doing, even athletes and qualified coaches is in the sagittal plain with a smaller percentage in the frontal plain. Just look at these popular and 'supreme' exercises and see what I mean. Squat, lunge, bench press, seated row, bent over row, clean and press and pull up. I am not saying that these exercises are not great and are not very beneficial in a huge percentage of fitness and performance programs but you will notice that there just isn't any transverse plain movements in there. You will agree with me that if you just train bench press you will not get much stronger in the deadlift, squat or bent over row. This is exactly the same with the plains. If you are just training the sagittal and frontal plain and never the transverse plain you will get stronger and stronger in the sagittal and frontal plain and your transverse plain will never get stronger.

For a sporting point of view you can see exactly why this would be detrimental as you are not training 1/3 of your movement ability. Even from a health, fitness and everyday point of view it is easy to see why this leaves you in a poor position. For person who never plays sport but likes to train to build a bit of muscle and strength. Lets pretend they are gardening and digging a hole. They dig their spade into the ground, lever the soil out of the earth and then lift it up. This has all been in the sagittal and frontal plain so their trained strength allows them to pick up a heavy load of soil. Now with their feet planted they twist to fling the soil to one side. This is where the untrained muscles in the transverse plain have to come into play and there is no strength or protection so they pull a muscle, damage their spine, tear a ligament etc.

Our training should supply each and every plain of motion with sufficient work to progress each plain equally creating a well balanced and functionally efficient body.

Some good exercise examples that work throughout the transverse plain are:

Russian Twist – Lie on your back with your arms out in a t-position. Keeping your legs straight, raise your legs off the floor so your hips are at 90 degrees. Keeping your shoulders on the floor and your hips at 90 degrees, bring your legs from side to side.

Wood Chop – Set a cable machine handle at about head height on your right side. Then take the handle with your left hand and put your right hand over your left. Keeping your feet planed, hips pointed forward and your arms straight, rotate your upper body from right to left whilst pulling your arms from above your right shoulder to below your right hip.

Medicine Ball Side Throws – Take a medicine ball with both hands and stand side on to a solid wall. Then whilst keeping your feet planted and arms around shoulder/stomach height, rotate and throw the ball against the wall.

Single Arm D/B Bench Press – Exactly the same as a normal D/B bench press except you will only be using one hand. If you're already using a good weight on this movement you will find that switching to one arm really fires up your core trying to stabilize in the transverse plane.

Give these exercises a go and make some up for yourself. You will be surprised how much they can increase your sporting performance or just everyday lifting safety and strength.