

WHAT IS FUNCTIONAL TRAINING



The terms 'functional training' and 'core stability' are the latest buzz words within the fitness industry.

Suddenly every man (and woman) and his dog are rolling around on physio balls performing all manner of 'circus skills' to the encouragement of their personal trainers and sports therapists.

Whilst the introduction of 'fun' is important to the longevity of any training cycle, I believe that many of the people using this form of training are doing so without 'qualifying' their clients needs in terms of current biomotor ability.

It is important for ALL exercise professionals to understand the WHY as well as the HOW of each and every exercise that they prescribe to their clients! To this end, those prescribing 'functional' exercises might do well to consider the following:

Common sense alone should tell most of us that exercises performed in isolation and on machines have little carryover into real life, but for those new to the functional concept, here's how we at Military Fitness Training see things.

1. The movement MUST follow the intended use of the joints and muscles involved.

This sounds obvious but it is an established practice in most gyms today, that exercisers use machines and exercises that are about 180 degrees out of phase with the intended use of the structure of the joint. Also a problem, is the 'fixed' hand positions on many machines that lock rotary joints into linear paths.

2. The movement should require balance and stabilisation over the participants own base of support.

This requires force reduction and force production against a background of stabilisation. This continually changing interplay of forces is essential in all movement pattern production.

Balance is a foundation component of ALL of the biomotor abilities!

3. The movement should occur in all three planes of motion.

The Saggital plane is the most trained area in most programs. Whilst flexion and extension are necessary to functional movement, the neglect of the frontal and transverse planes creates interplanar instability. In other words, even if your sporting or job requirements are predominantly Saggital plane, you are still at increased risk of injury due to the inability of the other planes to reduce force eccentrically or stabilise effectively.



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4. Movements should emphasise entire muscle contraction spectrum.

As already referred to in the previous sections, there should be a balance between the ratio of eccentric, concentric and isometric muscular contractions.

The current paradigm focuses its attention on the concentric contraction with minimal regard for the other areas of the spectrum.

Quite simply, without force reduction (eccentric) and stabilisation (isometric) the muscles and joints are inefficient at producing force (concentric) so what's the point?

Early stages of any strengthening program should place their initial emphasis on stabilisation and force reduction for greater long-term benefits in force production.

5. Movements should be predominantly multi-joint or 'compound' patterns.

Single joint isolated movements may have some usefulness in the corrective exercise strategy but should be given less priority as the subject progresses through the performance continuum. This reduces the likelihood of pattern overload and repetitive stress and reduces imbalance.

Multi joint movements improve functional capacity through the creation of gross movement patterns that are easily 'remembered' by the central nervous system.

Remember! Muscles may have anatomical individuality but lack functional individuality. This means you may be able to work them in isolation, but they will *never function* in complete isolation.

6. Movements should occur at a variety of speeds.

Training in the 'sterile' environment of the gym it is not uncommon to see most movements being carried out at an 'up one-two, down one-two' tempo. Supposedly this creates optimum load and reduces injury potential. What happens when the individual training under this protocol has to react to catching a fast moving object (football) or even slowly lowering a heavy weight (moving furniture). Do you think that the gym work prepares this individual for either eventuality?

Just as training specificity applies to angles and loads, so it also applies to speed of movement. Does *all* of the movement in your life occur at one speed? No?, then neither should your training!

On a final note, for those of you who find yourselves face to face with another 'functional practitioner' use these guidelines to assess whether or not they really know their stuff.