

reactivate

PUTTING
ACTIVITY
BACK INTO
YOUR LIFE

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REPAIR
PERFORM
THRIVE

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Strength From Adversity

Adversity is a teacher and provides a chance to learn. Without it we are deprived of the opportunity to grow. We learn to walk by falling. Try too hard to avoid the falls and you spend a long time crawling. Push too hard and fall too much and you will develop the fear anyway. Therefore a better way to look at how we progress from adversity is, 'not too much, and not too little'. Adversity is about the bounce back after the fall.

The adversity we at **PHYSIOSOUTH** manage is primarily a loss of function; pain may or may not be a feature associated with this loss of function. We try to help and support our clients with the 'bounce back', we aim to generate resilience, physically and mentally (they are inseparable). The level of resilience, or bounce back, is of course proportional to many things, but overall we expect our clients to be better in one way or another following their particular adversity or disability.

To achieve this we use our primary tool: exercise or loading progressions. The multi-dimensional effect of increasing physical load and activity builds physical and mental capacity. Make no mistake, we do exercise – but the outcomes achieved are far more than just physical.

We have systemised this whole (holistic) approach into three very different layers to ensure the bounce back is as high as possible and true and lasting benefits are gained.

REPAIR: Accelerated repair or recovery by setting meaningful goals, developing these goals into a plan managing time (too much time or too little time), creating rituals that work, managing energy (the loss of energy represents physical, mental, emotional or spiritual stress somewhere), communicating well, getting individuals to take responsibility and understanding about pain and the effect of loading.

PERFORM: Using increased activity to boost physical and mental capacities. The proven benefit of exercise is overwhelmingly positive, being informed is a must. Setting targets/ goals to increase activity towards a specific and achievable goals and using our weekly and yearly planners to achieve lasting success is the main thrust of perform. The only thing we ask as you design your own program with us is that we agree on a method to make you accountable. This could be emails, texts or direct supervision/ coaching. As well as individualised plans we provide specific packages for walking, cycling, running, strength and conditioning, a 12 weeks challenge, physical screening (core) and triathlons. **CONTINUED OVERLEAF ...**

PHYSIOSOUTH
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THRIVE: Thrive adds mental capacity and adds the missing link to high levels of achievement or bounce back. Treating your brain like a muscle, brainology (understanding the human brain, understanding about fixed or growth mind sets

the initial program. This is heavily based on CBT (cognitive behavioural therapies).

Part two in Thrive is about evidence-based pathways to sustainable happiness or improving subjective well-being. We offer 12

We operate below the clinical level (otherwise we will refer to clinical psychologists), but like all of us these barriers may be temporary and simple evidence-based strategies are highly effective when combined with activity management and rehab.

The choice is yours: what you will get from us is evidence-based exercise therapy/rehabilitation,

PROGRAM	FOR WHOM	HOW
Repair – usual care	Injury or disability	Standard care (make a time)
Perform – Increasing activity	After repair, to continue	Ask Physio/we recommend
Thrive – Managing habitual thinking	When we get in our own way	Ask Physio/we recommend

are primary educational tools). The second part of change is becoming aware (how else can you change habitual thinking styles) and then learning the tools you need to change attitudes and beliefs complete

evidence-based activities that work and that we could all benefit from.

Part three deals with the psychological basis for pain and disability. These are barriers to recovery, or bounce back blockers.

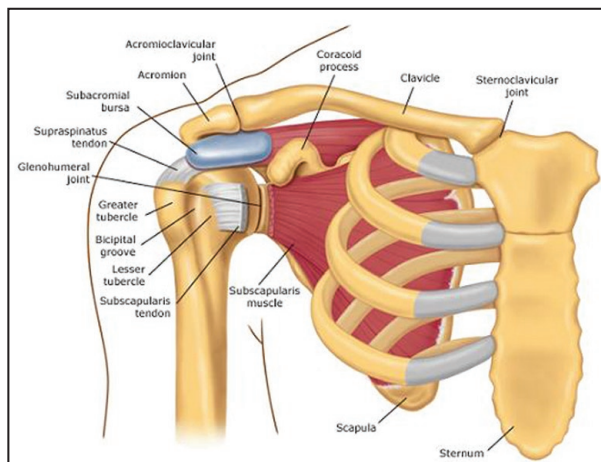
however getting more active (Perform) and optimising your brain function just adds a few levels to the height of that bounce back. As well as how long it lasts.

– GRAEME NUTTRIDGE

Exploring the Shoulder

Shoulder pain is common, affecting about 16–21% of the population and is second only to back pain. The anatomy of the shoulder is complex. With its 5 joints, 8 ligaments and 30 muscles, the shoulder complex presents a compromise between stability and mobility, and the result is that it is inherently unstable.

Regarding the muscles, those attached to the scapula, such as trapezius and serratus transfer



energy to the arm, along with the pectoralis and latissimus dorsi; while the rotator cuff muscles maintain the centre of rotation of the humeral head, and its position in the glenoid. The rotator cuff comprises the deep stabilizers of the shoulder and is considered by many to the equivalent of the 'core muscles' of the spine. Without great rotator cuff strength and control the shoulder cannot function normally.

The primary sources of shoulder pain are:

1. AC joint, including the articular meniscus
2. Subacromial area, with the rotator cuff, the bursa and the acromion
3. Glenohumeral joint, including the articular labrum, the biceps and the capsule

COMMON INJURIES

AC JOINT INJURY

The main goals of treatment, whether surgical or nonsurgical, are to achieve a pain-free shoulder with full range of motion, normal strength, and no limitations in activities. The demands on the shoulder will differ from patient to patient, and these demands should be taken into account during the initial evaluation.

FROZEN SHOULDER

Frozen shoulder is an extremely disabling condition, presenting with and remitting shoulder pain and stiffness. It is characterised by a loss of movement. It has 3 stages.

Stage:

1. Freezing phase: This is associated with pain and loss for about 3 months.
2. Frozen phase: This lasts for approximately 3–9 months, with pain at extreme range of movement and marked stiffness.
3. Thawing phase: This last for approximately 9–18 months, usually painless and the stiffness starts to gradually resolve at this stage.

The frozen shoulder has been found to be more common in association with the following conditions:

Overhead athlete/worker shoulder pain

The problem in the overhead athlete /worker (be they elite or amateur in level) and can be of various pathological origin. Key to their successful management is a multidisciplinary assessment, looking at extrinsic and intrinsic influences; including biomechanical, nutritional and training factors. Initial management should include rest with protected mobilisation, specialist physiotherapy input is vital. Early input from a shoulder specialist with experience in managing overhead athletes is beneficial for optimal and quicker return to sports.

Return to sport/work is dependent on many factors; age, severity of the injury, the type of treatment administered and patient expectations.

ROTATOR CUFF INJURY TEARS

Rotator cuff tendinopathy is a common cause of shoulder pain and impingement.

There are two main theories for the cause of rotator cuff tears:

1. Extrinsic - due to compression and impingement of the rotator cuff from without. Such as on the subacromial bursal side from acromial spurs and the coracoacromial ligament (subacromial impingement); and on the articular side from trapping of the tendon between the glenoid and humerus in extreme abduction and external rotation (internal impingement)

2. Intrinsic - development of tears due to changing properties of the rotator cuff itself

As we age the tendons do degenerate and this does predispose them to injury.

However a full range of injuries present from tendonopathy (tendon injury) to tears (small to full rupture). Some will respond to graded exercise/rehabilitation, and the larger and more disabling tears will not. Surgery is effective when indicated.

GLENOID LABRAL TEARS

The glenoid labrum is a ring of fibrous tissue attached to the rim of the glenoid (socket part of the joint). The labrum is the primary site of attachment of the shoulder capsule, and ligaments, as well as the long head of biceps.

Injuries to the labrum occur with repetitive overhead action (like throwing) or trauma. Unfortunately management of most labral injuries requires surgery. Only a few get better with conservative management.

DISLOCATIONS AND INSTABILITIES

Dislocations of the shoulder are one of the most common sporting injuries. Outcomes are best when reduction is quick. Recurrence rates are very high and so rehabilitation needs to be thorough and in many cases surgery is a serious option.

The shoulder also is commonly unstable, but without trauma (as per dislocation). This occurs often with overhead activity. It is best treated with good quality rehabilitation.

IMPINGEMENT

Sub acromial impingement syndrome accounts for 44–66% of all shoulder pain. Impingement syndrome involves degeneration and/or mechanical compression of the sub acromial structures. The key structures involved are the rotator cuff tendons, the long head of biceps and sub acromial bursa. The cause of impingement is considered

multifactorial and related to exposure and biomechanical factors. Repetitive work or sports activities above the head are associated with higher levels of impingement. Poor posture, poor rotator cuff function, limitations in flexibility and poor scapular control are also related risk factors.

The treatment options include rehabilitation, to address strength, ROM or posture deficits and then a graduated loading regime. Surgery to decompress the impingements or injections.

The Knee Clinic

We operate a specialised assessment and management program for long term health and recovery of knee related disability. Referrals can be made to any branch. Just note 'knee clinic'. This includes all complicated knee injuries and OA Knees. Knee health can be managed and function optimised.

Energy Management

Energy is the key reflection of how things are really going. When energy levels are high your life is generally balanced in the four key domains of life, which are:

- **PHYSICAL** this relates to physical fitness.
- **EMOTIONAL** this relates to your ability to cope with emotional daily interactions with others such as in relationships.
- **MENTAL** this relates to your ability to cope with new tasks and brain challenges.
- **SPIRITUAL** this relates to your awareness of your reason for existence day to day. It relates to your goals you form in life for yourself.

Having problems in any of these domains will produce a response (call it a stress) and will eventually lead to a loss of energy.

1. Physically this could be injury itself or some other health issue such as a cold.
2. Emotional energy leakage can occur with such things as relationship stress (such as stress in marriage). Emotional energy loss can be from a number of things, but commonly shows as anxiety, mild depression, along with coping with adversity of any type. This is common: over 30% of the population in New Zealand have some form of depression or anxiety.
3. Mental energy loss occurs when you struggle to learn new tasks. Your brain's capacity to learn reduces if it lacks stimulation, just like physical fitness. Symptoms of mental energy loss can show as memory loss, poor understanding, poor attention span and confusion.
4. Lastly spiritual, which is often defined as a lack of meaning, of something 'bigger than you' in your life. The things that give us meaning drive us to cope. It is often quoted 'he who has meaning and purpose can cope with almost anything'.

In conclusion any aspect of your life that is stressful will have an effect in terms of energy loss. Your ability to cope (resilience) against adversity depends on you fitness physically, emotionally, mentally and most importantly spiritually. For great rehabilitation outcomes and for other change to occur it is important to plug the energy loss and address the lifestyle issues that affect our well being. The evidence behind this is very significant, to the point it is indisputable. We have an energy audit available; it will give you an idea of any energy leaks.

THE ENERGY AUDIT

To measure your energy, go to www.theenergyproject.com and then go to *tools* and take the free online test. This will only take 5 minutes and you will be emailed the results - which will assist you in your action plan.

Screening What Works?

For years we have been screening athletes at the top level in NZ sport. The aim of this screening is to identify correctable risk factors to injury. The ultimate aim being assessment leading to intervention and a reduction in the risk of injury. Surprisingly some assessments are worth doing. Research focused on cricket has identified the following assessment findings are related to injury.

- Previous history
- Poor jumping/landing posture (dynamic valgus) – some biomechanical factors
- Poor hip/core control
- Reduced range of movement in the ankle (dorsiflexion standing)
- Reduced balance (proprioception)
- Too much or too little training load (based on cricket bowling load data).

The question then arises dos correcting these injury related risk factors prevent the injury. Logic says of cause, but that's hard to prove.

If all old injuries were well rehabilitated, if the individual had great hip and core control (for their level of activity), if they had good lower limb biomechanics and ROM in the ankle and trained with a well-balanced program would they have reduced injury rates?



Mindfulness

'Ultimately Mindfulness leads to you having the ability and awareness to control and manage your thoughts, rather than the opposite.'

Mindfulness is the practice of purposely focusing your attention on the present moment, and accepting it without judgement. Ultimately, mindfulness leads to you having the ability and awareness to control and manage your thoughts, rather than the opposite: your thoughts controlling and managing you. Another way of looking at mindfulness is considering its opposite, 'being mindless'. To be mindless is simply to react in a primal way to external stimuli. Whilst you may think you have a degree of control over your responses to adversity or situations the truth is generally you do not. You react according to deep, strong programs based in the sub-conscious brain. This is mindless behaviour.

The question we all ask is why? What is the advantage is being more mindful?

Research has shown many benefits, in fact too many benefits to ignore, and many of these benefits are quite specific to our patient's needs and outcomes.

As mindfulness brings you back to the present it helps with disorders that focus on negative future or past events, these include depression, anxiety, perfectionism, compulsive behaviours, conflict etc.

We are often in a state of overwhelmed stress (too much to do in too little time, and too worried), by coming back to the present and creating a singular, present focus (via meditation), the brain and body have a chance to let go and get back to a relaxed focus. It is possible from this point to select thoughts which are more positive and that give us

RESEARCHED PROVEN BENEFITS

PHYSICAL

Improved well-being
Reduction in stress
Reduces symptoms of heart disease
Reduction in hypertension
Reduction in chronic pain
Improves sleep
Improves GI problems

MENTAL

Reduces anxiety
Reduces depression
Reduces substance abuse
Helps with eating disorders
Improves obsessive – compulsive behaviour
Helps with couples conflict
Increase subjective well-being (happiness)



energy rather than being a prisoner to thoughts which are often negative and energy draining. Once in a 'better state of mind' we move from the flight and fight mode (which has a very narrow focus) to a more relaxed and positive mode from which we can see opportunity. This is part of the 'broaden and build theory'. This means the more relaxed, optimistic and positive we are, the more likely we are to see solutions to problems. The more stressed and worried we are the less likely we are to find creative solutions to problems.

LEARNING MINDFULNESS

Mindfulness can be cultivated through mindful mediation (relaxation/distraction). Simply meditation is a systematic method of focusing your attention on singularity. As well as meditation activities such as Tai Chi or yoga can induce the relaxation response, which is valuable in reducing the body's reaction to stress

Meditation and mindfulness can be practiced either formally or informally.

FORMAL MEDITATION

- Sit on a straight backed chair, or adopt any comfortable posture
- Focus on any aspect of your breathing, such as air flowing through your nostrils or your belly rising and falling. You may count your breaths, and try to be aware of all the sensations associated with breathing. Try counting 5 lots of 10 breaths.
- You may draw the outline of a number in your mind, as if using

pencil to do so. Start at 20 and quietly and slowly work back to 0.

- Be aware of the weight of your arms and legs as they get heavier the more you relax.
- Scan your body for any tension and then let the tension go, gently becoming heavier and more relaxed.
- Once you have narrowed your concentration begin to widen your focus. Become aware of sounds, sensations and your ideas
- Embrace and consider each thought or sensation without judging it to be good or bad. If your mind starts to race return to your breathing, then expand your awareness again.
- Try to find that state at which you are at peace with your thoughts and in which have some control over them.

INFORMAL MEDITATION

- Start by bringing your attention to the sensations of your body
- Breathe in via your nose, allowing the air downward into your lower belly. Let your abdomen expand fully
- Now breathe out via your mouth
- Note the sensation of each inhalation and exhalation
- Proceed with the task at hand and with full deliberation
- When you notice your mind has wandered from the task at hand, gently bring your attention to sensations of the moment.

SOME POINTS

Pain is only a sensation, attached to a threat of some kind. See these sensations as friendly; do not label them as a pain but a friendly sensation that will pass.

Be mindful and aware of what makes you feel better, and more energised. Try to adopt these behaviours and postures more.

Realise that sometimes doing less is more. Rest and recovery is as important as activity. Work in a focused way with clear purpose, but then realise the role rest has after activity.

Try to understand how powerful the brain can be in overcoming adversity and if you can give it relaxed focus it can achieve almost anything.

