

# Primal Patterns

## PERSONAL FITNESS TRAINING



Change is an amazing process. Just think about the technological and social changes which have occurred within just your lifetime so far! The pace and nature of change is dizzily fast sometimes, however physiologically we aren't as quick to evolve and change. In fact in the past 5000 years we haven't really changed that much, but our lifestyles have! Labour saving devices, methods commerce and communications have all meant that our overall energy expenditure has dropped. Of course there are opportunities to recreate ourselves in ways which didn't exist before, physical recreational pursuits which allow us to regulate and offset the decrease in energy demands from our activities of daily living (ADL). However, sometimes (and increasingly more often) the anatomical positions and demands of our elected active pursuits, and those of our ADL for that matter, require us to move in inefficient, unnatural and potentially injurious ways.

Our bodies evolved to best allow us to move and complete certain essential physiological and lifestyle activities. These "primal movement patterns" are as appropriate to our health and wellbeing today, as they were 5000 years ago. As hunter-gathers we evolved to move, walking miles everyday and complete total body movements lifting, throwing, building or digging. This type of movement not only facilitated survival, it promoted a balanced muscular development. Consider the outcome of the activities listed, when compared to the typical gym goer who trains for the best shape, the cyclist who only cycles or runner who only runs.

Yes, these guys might be “fit” on the surface, but their ability to transfer this into ADL or indeed avoid repetitive strain / postural problems is limited.

Our bodies are a synchronous system of bones, ligaments, muscles, tendons, fascia, organs and other tissues. With all of this being driven by an infinitely complex electrical system, our bodies have evolved to function almost as a single unit. Why then do we isolate aspects of movement or focus on one single muscle group within a workout. We advocate an approach which focuses on movement patterns not muscles. One that is both efficient in transfer to our ADL (and therefore “functional”) and allows for balanced, healthy development across and within our bodies. The bottom line for us is that exercise is all about movement!

The foundations of our workouts have been developed from the primal movement patterns clarified and suggested by exercise physiologist Paul Chek (1) and movement based programmes such as GMB or Animal Flow. Essentially, from extensive research Chek identified that activities (and exercises are included) which deviate from these primal movement patterns are less functionally beneficial and hold increased (and often hidden risk) of injury.

### **Our 7 Primal Movements**

- Primal Movement #1. Twist Pattern
- Primal Movement #2. Pull Pattern
- Primal Movement #3. Lunge Pattern
- Primal Movement #4. Bend Pattern
- Primal Movement #5. Squat Pattern
- Primal Movement #6. Push Pattern
- Primal Movement #7. Gait / Crawling



### **Primal Movement #1. Twist Pattern**

Twisting movements occur within the transverse plane and often times these are among the weakest within our bodies. Consider the movement of throwing a ball, the twisting element is easy to identify. However, rotational forces are generated in pretty much all movement (walking is indeed a series of rotations within the body) and our strength and efficiency lies in our ability to handle these forces.

Training within a twist pattern can be done in two ways. First we can train the rotation itself, with exercises such as: wood chops, throws or punching for example. The second method would be to train anti-rotation, decelerating the forces on the body to provide stability, with exercises such as: single arm presses, rows or single leg deadlifts.

### **Primal Movement #2. Pull Pattern**

Pull patterns can again be seen in two ways. Either you are pulling an object towards the centre body, or you are pulling the centre of your body towards an object. Pulling is an extremely common movement in ADL and one which requires a efficient and wide range of available movement.

From a directional perspective we will engage in a pulling pattern in one of two general manners: horizontal or vertical. Horizontal pulling can be trained by the rowing type of exercises. Vertical pulling best characterised by looking at a pull up/chin up movement.

### **Primal Movement #3. Lunge Pattern**

The lunge pattern is a multi-directional movement which requires one leg to remain stationary, whilst the other moves. If one imagines standing in the middle of clock face, it is possible to suggest that the lunge pattern can be performed by either side at a multitude of angles. Each angle creates different loads and forces on the body.

The lunge pattern is a dynamic exercise, requiring total body stability as well as balance, flexibility and strength. The nature of the movement is directly applicable to many ADL and sport related functions. As such the lunge pattern is often used and combined as an integral foundation element of exercises within our workouts.

### **Primal Movement #4. Bend Pattern**

The bend pattern is better referred to a hip hinge, one where one moves the torso over the lower body. Often this is considered to be a relatively “high risk” anatomical position as poor execution can create significant pressure on intervertebral discs, potentially resulting in significant and chronic injury. However, when one considers the necessity of this pattern with ADL (for example picking something up from the floor) it becomes clear that we require strength and efficiency in this pattern in order to complete it without injury.

Stabilisation, flexibility and strength are again all key to the bend pattern and no better exercise characterises this than the deadlift. However, like the twist pattern training the bend pattern can be considered from two perspectives. Fundamentally we can use exercises such as the deadlift to safely challenge this pattern of movement, or we can use movements to necessitate an anti-bend position, using the core and peripheral musculature to stabilise and prevent forward movement of the torso.

### **Primal Movement #5. Squat Pattern**

The squat pattern is a fundamental human movement where we plant our feet and lower our body to the ground. This movement (and posture) is often seen as an indicator of overall health, with a decreased capability to squat leading to an overall reduction in quality of life. The squat movement is innately imprinted in our nervous system, if one looks at a toddler squatting you can identify how readily and freely this movement is undertaken. However it is highly unlikely that they had any professional guidance or coaching to complete this complex, whole body, compound movement.

Our ADL necessitates squatting, however often our increasingly sedentary lifestyles serve to limit our capabilities. Many people experience issues with squatting due to tip hips and lower backs caused by prolonged sitting. The squat movement however is a biomechanical necessity for strength, core stability and overall mobility, and we emphasise this pattern within all our workouts.

### **Primal Movement #6. Push Pattern**

Similar to pulling, the push pattern can be viewed from one of two perspectives. Either you are pushing an object away from the centre of your body, or you are pushing the centre of your body away from an object. The push pattern is the mainstay of many a gym-goer, reclined on a bench, driving a bar into what is essentially a horizontal push pattern without the limiting effect of gravity.

Push patterns however are not just for the gym, they are functional patterns which require movement either horizontally or vertically. Horizontal push patterns are the type where an object is pushed away, and in front of the body. Here we need to factor in the need for stabilisation and strength and ensure the body is capable of creating the movement in more than a lay down position. Vertical push patterns are those which require us to move an object overhead, typically and primarily requiring the shoulder muscles to activate (with a concert of additional co-contractions occurring throughout the body to provide the necessary assistance and stabilisation). Vertical and horizontal push patterns can again be trained in both a dynamic fashion, where we emphasise on creating “pushing” forces (such as a simple dumbbell press) or a more eccentrically loaded fashion we emphasise deceleration and control of the “pushing” forces created (for example, throwing or punching exercises).

### **Primal Movement #7. Gait/Crawling**

Walking, jogging, running and sprinting are all referred to as gait. Gait is a complex sequence of lunges, rotations and pulls required to propel us forward. Gait necessitates our bodies generate forces to accelerate certain joint complexes, whilst simultaneously decelerating other forces and stabilising yet other joint complexes. In regards to ADL or for healthy function in general gait is essential. The necessity for coordinate and balanced muscular contraction is alone enough cause for it to feature in all exercise programmes. In addition to gait we also combine the movement patterns previously discussed by altering body position to facilitate crawling type movements. Through essentially changing the posture, or primary driver within the crawling movement we are able to impose a variety of muscular forces within the body, which in a similar way to gait require co-contraction of muscles and stabilisation. Crawling is a highly effective way to challenge the body through unaccustomed movement patterns, which will directly transfer to overall health and ADL.

### **Combining Patterns**

Whilst biomechanically combinations of primal patterns may be really complex, the actual movements don't need to be. For example a simple **lunge pattern** combined with a **twist pattern**, or a **squat pattern** combined with an **overhead push pattern**, can serve to place significantly greater demands on the body without overtaxing the need for highly coordinated, skill based movement.

By combining and integrating primal movement patterns a greater amount of muscle tissue is actively recruited within a singular movement. This may in direct response to the imposed demand (to generate force vs the object) or peripherally to assist or stabilise the body to better enable the primary movers to do their job. Simplicity in movement is always key and generally the more simple and more a movement, the better our efficiency in completing it. Through adopting primal patterns as the foundation of our more movement, and progressing through the integration of these patterns we can maintain efficiency in movement, minimising unnecessary stresses to the body and yet still progressively overload and achieve a great training response.

## **Choosing The Correct Patterns**

Whilst generally speaking a balanced exercise programme will include all primal patterns of movement, for more specific goals (for example, rehabilitation or sport performance goals) it may be beneficial to select and prioritise one or more specific patterns.

In this respect, looking at the component primal patterns intrinsic within the movements required for success in that specific goal is essential. For example, individuals suffering with low back pain may be relatively weaker in twist or bend patterns, and a rehabilitation programme for this condition may well look at progressively introducing exercises including these patterns with a view to providing a gradual and progressive overload to promote specific strength improvement.

It is fundamental that a full assessment is undertaken, with this being based on the individual's performance in the completion of the fundamental (specific) primal movement patterns. The training programme designed can then meet the specific needs of the individual being focused on generating better performance within those areas where they are relatively weaker.

## **Start simple...**

We've included two simple workouts to get you started.

**PRIMAL PATTERNS** includes movements from each of the 7 primal movement patterns, providing an opportunity to focus on the basic fundamental movements

**PRIMAL MOVEMENTS** is more focused on combined movements to introduce you to the strength, stability and mobility benefits provided by crawling.

As ever with any exercise programme if you have any concerns about your suitability consult a medical professional before you begin.

## **Our Service**

At **Primal Patterns** we offer a personal training service based on your individual goals and needs. We will work with you to fully understand, positively frame and schedule your goals. We will provide you a full programme of sessions, education, lifestyle and nutrition advice, to support you to the achievement and realisation of your desired results.

**To get started simply contact us today to book your first session!**

## **Reference**

1. Chek P. **Movement That Matters 2000 C.H.E.K. Institute**

# PRIMAL PATTERNS

7 simple exercises to get you moving in  
the way your body should!  
Squat, lunge, push, pull, twist and bend to  
a fitter you!



**SQUAT X 20**

**LUNGE WITH ROTATION X 20**

**T PUSH UP X 20**

**HANG PULL X 20**

**RUSSIAN TWIST X 20**

**BURPEE TO STAND X 20**

**BEAR CRAWL 30 SECS**

Complete exercises as circuit

Repeat 3 to 5 times

Rest 60 secs between repeats



# Primal Movements



Crab Reach x 10 each arm  
Downward Dog to Long Arm Plank x 10  
Bear Crawl 30 secs  
Inch Worm Push Up x 20  
Side Gorilla Crawl 30 secs  
Sit Through x 10 each side  
Alligator Crawl 30 secs  
Walking Plank x 10 each side  
Childs Pose to Long Arm Plank x 10  
Crab Walk (forward and back) 30 secs

Complete exercises as a circuit.

60 secs rest between repeats.

Repeat 3 to 5 times.

