

# Intro to Integrated Bodyweight Training

Developed by the Merrithew<sup>™</sup> Team

Halo<sup>®</sup> Training provides overall body conditioning incorporating strength and endurance work, flexibility training, interval training and injury prevention. In this hands-on workshop, Instructors get an overview of the concepts of the Halo Training program and the basic science of core-integrated bodyweight training. Because every client has unique demands, learn basic Halo Training workouts that progress from a Level 1 (beginner client) to Level 4 (experienced exerciser) and explore how to progress or regress exercises for functional strength and stability, flexibility and injury prevention.

#### Learning Objectives

- Learn the basic progressions and regressions of four Halo Training workouts using the Halo Trainer Plus and Stability Ball<sup>™</sup>.
- **2.** Understand movement essences and exercise goals for four separate levelled workouts.
- **3.** Understand the essentials of core-integrated bodyweight training.
- 4. Learn cues and corrections for safety and effectiveness.

Workshop Length: 2 hours CECs: 0.2 STOTT PILATES Level of Difficulty: Progressive from Basic to Advanced [Levels 1 to 4]

Equipment:

- Halo Trainer Plus
- 55cm Stability Ball
- Mat

### **Halo® Trainer Plus**

The Halo Trainer Plus is a versatile exercise device providing a multi-dimensional approach to functional training. It was created to assist personal trainers, rehabilitative professionals and individual exercisers to progress or regress exercises safely to effectively achieve their desired fitness or rehabilitative goals. This unique ergonomically designed fitness device holsters a standard Stability Ball allowing the user to selectively control the multi-directional movement of the Ball to effectively train the entire core. The two pieces, used together or apart, provide step-wise progressions or regressions of movements that can be applied to any exerciser at any level of fitness. The padded handles are designed to keep the wrists in proper alignment, reducing stress and associated discomfort.

### **Halo Training**

Halo Training incorporates the science of core-integrated bodyweight training. The core group of muscles can be described as a three-dimensional cylinder requiring multiple positions, planes of motion and degrees of resistance to be challenged appropriately. Halo Training is multi-functional and three-dimensional, providing overall body conditioning incorporating strength and endurance work, flexibility training, interval training and injury prevention. With the use of the Halo Trainer and Stability Ball, exercises can be prescribed that follow unique progressions or regressions designed to increase functional strength and stability for a client at any level of condition, from rehab through to athletic performance training.

### **Halo Trainer Plus Positions**

- 1. Standard: long handles on floor, short handles up
- **2**. Standard V: short handles on floor, long handles up
  - 3. Standard Handles Down: short handles on floor, one long handle on floor and one long handle up



Handles Down: Stability Ball holstered between long handles, one long handle on floor



- Handles Up: Stability Ball holstered between long handles, Stability Ball on floor, short handles up (Halo on top of Ball)
- $\mathbf{\nabla}$ 
  - Rocking V: Stability Ball cradled between long handles, short handles on floor (Ball on top of Halo)

To prevent unstable weight shift and risk of falling, ensure Ball is the right size to fit securely in the Halo frame.

### **Halo Trainer Plus Configurations**

 Standard: Long handles out. Convex orientation, long handles bow outward

2. Reverse Standard: Long handles in.

Concave orientation, long handles bow inward

**Note:** Halo Trainer Plus (or Halo Trainer Plus 4) will be referenced as Halo when describing the Halo position required for each exercise.





## Halo Programming Concepts

### Why Stabilize the Core?

Our core muscles provide stability from the lower body to the upper body and vice versa. Achieving stability requires a complex interplay between the musculoskeletal system and the central nervous system through continuous adjustment to perturbation (outside forces or movement, reactive) via feedback and feed forward mechanisms. Our core must be engaged for effective force transfer to or from upper and lower extremities.

### **The Inner Core**

The muscles that make up the inner core are:

- Deep
- Reactive
- Pre-emptive

They are **segmental stabilizers** of the spine such as the transversus abdominis, multifidus, and rotatores.

#### **The Outer Core**

Many exercise modalities focus primarily on the outer core. These are the larger, superficial muscles that mobilize us. They are voluntary muscles that move long levers. They are known as the **multi-segmental movers** such as the rectus abdominis, external obligues and erector spinae.

### **Upper and Lower Core Unit**

We can also separate the core into lower and upper halves. Halo Training focuses on both upper and lower core units and an efficient synergy of these two units working in unison. We consider the upper core from the scapula to T12 and the lower core from T12 to the pelvis.

### **Core Integration**

The efficient transfer of forces in one or more planes of motion requires appropriate core stabilization:

- From side to side (left to right and right to left)
- From upper to lower or lower to upper
- From inner to outer or outer to inner

In order to be effective in athletic endeavors or in everyday life, our bodies must be able to move in a myriad of ways. The efficient transfer of forces through the body requires appropriate core stabilization. Strength and stability of the inner core is imperative during rehabilitation or fitness conditioning. Halo core-integrated functional training focuses on the core stability necessary for efficient force transfer in one or more planes of motion. Consider a hockey player doing a slap shot, a tennis player striking a ball, or a grandmother pushing open a door or getting out of a car.

### **Halo Training**

### Halo Core-Integrated Training Principles

**Integrated:** core training should be integrated to train for optimal function. Exercise selection should reflect the target area, but maintain a functional application.

**Proximal Stability for Distal Mobility:** the core must be engaged for effective force transfer to and from upper and lower extremities, and to allow for functional mobilization of the arms and legs.

**Three-Dimensional:** the core is three-dimensional or multidirectional and should be treated that way. Exercises should also be multidirectional and involve a variety of planes of motion.

**Neuromuscular Performance:** if the exercise cannot be safely performed with control while maintaining focus on the movement essence and exercise objective, a regressive option should be used. If the exercise can be safely performed without significant strain or fatigue, progressions should be introduced.

**Specific:** programming of exercises and graded levels of modifications should be based on weak-link findings, personal strengths and exercise goals.

#### Level System

Halo Training programming is presented in four levels of difficulty for functional bodyweight training. The level of exercises chosen for a specific individual should reflect that client's fitness level and ability. Although increasing the challenge in a workout is often the goal, it is not always appropriate. It is the responsibility of the trainer to recognize when an exercise can be progressed and when it should remain the same or made a little easier. The four distinct levels presented here are based on scientific principles, and allow trainers to create progressive individualized programs to maximize the benefits of integrated bodyweight training.

Level 1 Entry Level to Fitness. This client is healthy but new to Halo training and has engaged in some physical activity. Exercises are used for foundational training to build proper biomechanics and begin building muscular strength and endurance.

Level 2 **Moderate Fitness Level.** This client has been working out regularly at least two to three times a week for three to six months with bodyweight training or resistance training, or has progressed from the Level 1 Halo training and can apply the principles of core stabilization effectively.

Level 3 Good Fitness Level. This client has been working out consistently at least four to six times a week for eight to twelve months and is ready for additional challenge in a workout. These exercises are very challenging and require greater core stabilization and upper and lower body strength.

Level 4 Experienced Exerciser or competitive athlete. This client has mastered all three previous levels and can perform expert-level exercises.



### Halo Core-Integrated Training Variables

**Base of Support:** wide, narrow, single, stacked, staggered, feet on Ball

Angle of Inclination: vector of body relative to horizontal

Lever: resistance arm from fulcrum

**Stability:** stable, holstered, rocking (uni-planar), rolling (multi-planar)

Depth: termination height relative to start position

Speed: static, dynamic, plyometric

Plane of Motion: sagittal, frontal, transverse

Accessory Load: addition of upper and lower external load

#### **Performance of Halo Exercises**

To ensure an effective and safe program, foundational building variations should be performed with good technique, neuromuscular control and for the duration of the time or repetitions indicated before progressing to the next level.

### **High-Intensity Interval Training**

#### Definition

High-Intensity Interval Training is defined as vigorous exercise performed at a high intensity for a brief period of time that is interspersed with recovery intervals at low to moderate intensity or complete rest<sup>1</sup>.

#### **Benefits**

Studies have suggested that compared with continuous moderate exercise, high-intensity interval training may result in a superior or equal improvement in fitness and cardiovascular health<sup>1</sup>. High interval training has been seen to improve the body's ability to oxidize fats for energy<sup>2</sup>, enhance aerobic physical fitness<sup>1</sup>, and increase insulation action and glycemic control<sup>3</sup>.

The premise of using this type of training is that the high intensity segments promote greater physical and metabolic adaptations due to increased cellular stress<sup>4</sup>. The recovery periods allow the body to withstand brief periods of high intensity exercise that would not be sustainable for longer periods of continuous exercise. As a result of exercising at high intensity, a shorter total duration of each exercise session is required to complete an equal volume of work compared with continuous moderate exercise.

High-Intensity Interval Training can provide an opportunity for individuals to work harder than would otherwise be possible. In addition, this form of training can provide an alternative solution for people who do not possess the necessary fitness level to perform continuous high-intensity exercise. In addition, greater enjoyment has been noted with high intensity interval training that may provide an effective strategy to improving adherence to an exercise program and long-term exercise participation<sup>5</sup>.

### Monitoring Interval Training Intensity

Use of a modified rating of perceived exertion (RPE) has been shown to be a good indicator of effort and work during exercise. Clients should work at a rating of 6 (for Level 1), 7 (for Levels 2 & 3) or greater to get a positive training effect.

Rating	Descriptor
0	Rest
1	Very, very easy
2	Easy
3	Moderate
4	Somewhat hard
5	Hard
6, 7	Very hard
8, 9, 10	Maximal

### **Types of Interval Workouts Used**

#### **Reps Interval Workout**

Exercises are performed to a set number of repetitions. Interval performance is measured by time on how quickly the Halo participant can complete the required repetitions.

#### **Timed Interval Workout**

Exercises are performed to a set time limit or to exhaustion. Interval performance can be measured in two ways:

- How long the Halo participant can sustain the exercise
- How many repetitions can be performed in the given time frame



# **Examples of Halo Exercise Progressions**

### **Prone**

### **Plank Series**

**Goal:** static stabilization of the upper and lower core and core integration

**Start Position:** plank position, pelvis and spine neutral, arms anywhere from full flexion to extension, or on forearms where appropriate

### 1. Plank Knees Down

- Smaller lever decreases load for low-load stabilization of the upper and lower core
- 2. Full Plank Legs Adducted
- Narrower base of support increases perturbation challenge
- 3. Full Plank Single Leg
- Smaller base of support increases perturbation challenge and asymmetrical adds rotational challenge to the whole body with focus on the lower core

### Modification:

One Arm Reach progression of Planks 1-3

• Decreased base of support and unilateral loading challenges side-to-side core integration and rotational control

# 4. Suspension Plank Shins on Stability Ball

### Modification:

### Single Leg progression

 Unstable surface for lower extremity increases perturbation challenge

### **Halo Trainer Plus Positions**

- 1. Standard Holding Short Handles
- Wrists are in a more neutral position therefore, less pressure on wrist joints, lower load on shoulders due to angle of inclination
- Allows varying height of body to challenge Plank
- 2. Standard V Holding Long Handles
- Halo rocks in transverse plane which requires upper body stabilization against rotation
- Allows varying height of body to challenge Plank
- **3.** Handles Down Forearms or Hands on Stability Ball Long handle away from body
- Lower load on shoulders due to angle of inclination
- Unstable surface facilitates upper core and scapula stabilization without rolling
- When in this position, always have Ball facing you with long handle on opposite side
- 4. Handles Up Holding Short Handle
- Halo sits atop an unstable surface reducing surface challenge while requiring multi-planar control of the upper body
- Allows varying height of body to challenge Plank
- 5. Rocking V Forearms or Hands on Stability Ball
- Unidirectional rocking prepares body for Handles Up variation
- 6. Stability Ball
- Unstable surface facilitates upper core and scapular stabilization



### **Scapula Isolation in Plank Series**

**Goal:** closed kinetic chain and weightbearing loading of the shoulder girdle during movement

**Movement:** protract and retract scapulae in Plank, arms can be mid-flexed to extended position or on forearms where appropriate

- Can be done with Halo positions 1-5
- Promotes segmental integration of the sternoclavicular (SC) and acromioclavicular (AC) joints to mobilize the scapulae on the rib cage

# Roll Out

**Goal:** closed kinetic chain and weightbearing loading of the shoulder girdle during movement

Halo Position: Handles Up

Start Position: plank position, holding short handles, pelvis and spine neutral

**Movement:** flex shoulders to roll Stability Ball away, extend shoulders to promote upward and downward rotation of scapula while resisting anterior pelvic tilt

### **Modification:**

Ball Only on hands or forearm progression

- Integration of shoulder and scapula motion on rib cage
- Can vary the start position of hand to shoulder alignment to work different shoulder ranges and lever lengths

# Jack Knife $\Lambda$

**Goal:** closed kinetic chain, weightbearing loading of the shoulder girdle, dynamic stability and strength of lower extremity and core

Halo Position: Standard, Stability Ball separately on floor

**Start Position:** plank position, holding short handles, shins on Stability Ball, pelvis and spine neutral

**Movement:** flex knees and hips to pull Stability Ball in while maintaining neutral pelvis and spine, extend knees and hips to return

- Halo facilitates neutral wrist and grip
- Hands to feet angle of inclination facilitates more even weightbearing through upper and lower extremities
- Ball provides an unstable surface for multi-planar stabilization of the lower core

# Pike $\Lambda$

**Goal:** closed kinetic chain, weightbearing loading of the shoulder girdle, dynamic stability and strength of lower extremity and core

Halo Position: Standard, Stability Ball separately on floor

Start Position: plank position, holding short handles, shins on Stability Ball, pelvis and spine neutral

**Movement:** flex hips to pull Stability Ball in, keeping knees straight and pelvis and spine neutral to lift hips toward ceiling, extend hips to return

### Modification:

One Foot can be progressed by taking one foot off

- Halo facilitates neutral wrist and grip
- Hands to feet angle of inclination facilitates more even weightbearing through upper and lower extremities
- Ball provides an unstable surface for multi-planar stabilization of the lower core
- Longer lever of legs increases loading of the exercise to progress from Jack Knife





### **Push Up Series**

**Goal:** static stabilization of the upper and lower core and core integration through space, foundational upper extremity strength with strength-building progressions

### 1. Push Up Knees Down

- Smaller lever decreases load for low-load stabilization of the upper and lower core
- 2. Push Up Legs Long & Adducted
- Narrower base of support increases perturbation challenge

#### 3. Push Up Single Leg

- Smaller base of support increases perturbation challenge and unilateral position adds rotational challenge to the whole body with focus on lower core
- 4. Suspension Push Up Shins on Stability Ball

### Modification:

#### Single Leg progression

• Unstable surface for lower extremity increases perturbation challenge

### Halo Positions:

- 1. Standard Holding Short Handles
- Wrists are more in neutral position than when hands on floor, less pressure on wrist joints, lower load on shoulders due to angle of inclination
- Greater range of motion as body can go lower than hands

### 2. Standard V Holding Long Handles

- Halo rocks in transverse plane to the body which requires upper body stabilization against rotation
- More range of motion as body can go lower than hands
- 3. Handles Down Hands on Stability Ball Long handles away from body
- Lower load on shoulders due to angle of inclination
- Introduces unstable surface of Ball to facilitate upper core and scapula stabilization without rolling
- Low-level proprioceptive input
- 4. Rocking V Hands on Stability Ball
- Unidirectional rocking prepares body for Handles Up variation
- 5. Handles Up Holding Short Handle
- Halo on an unstable surface requiring multi-planar control of the upper body
- Allows varying height of body to challenge Plank

### Cat & Cow 🔨

**Goal:** sequential segmental articulation of the spine and pelvis, closed kinetic chain, weightbearing loading of scapula and shoulder

#### Halo Position: Standard

**Start Position:** quadruped position, holding short handles, pelvis and spine neutral

**Movement:** sequentially articulate spine to flexion starting from head or pelvis, then sequentially extend spine starting from head or pelvis

- Preparation for loaded spinal articulation exercises
- Low-load scapula stabilization and mobilization due to angle of inclination
- Promotes dynamic stability of pelvis and spine through segmental articulation to achieve movement

### Single Leg Extension L

**Goal:** low-load strengthening of hip extensors, mobility of the hip joint, stabilization of the lumbo-pelvic region

Halo Position: Handles Down, long handles away from body

**Start Position:** prone on Stability Ball with lumbo-pelvic region supported, pelvis and spine neutral, hands on floor under shoulders, legs straight, feet on floor, hips flexed

Movement: extend one hip to lift leg, return

 Flexed hip start position facilitates dissociation of femur on fixed pelvis to mobilize hip and challenge lumbo-pelvic stability to maintain neutral

## Double Leg Extension

**Goal:** low- to moderate-load strengthening of hip extensors, mobility of the hip joint, stabilization of the lumbo-pelvic region

Halo Position: Handles Down, long handles away from body

**Start Position:** prone on Stability Ball with lumbo-pelvic region supported, pelvis and spine neutral, hands on floor under shoulders, legs straight with feet off floor, legs follow inclination of torso

**Movement:** flex at hip joint to lower legs as far as lumbo-pelvic region stays neutral then return

### Modification:

Single Leg Extension progression



### Spinal Extension on Ball

**Goal:** moderate- to high-load strengthening of erector spinae, mobilization of the spine and hips into extension

Halo Position: Handles Down, long handles away from body

**Start Position:** prone on Stability Ball, positioned where pelvis and lumbar can maintain neutral in the start position (typically between ASIS and sternum region), upper body flexed over Ball, hands on long handle, legs straight, hips flexed, feet on floor

**Movement:** extend spine and hips then return **Modification:** 

Hands on Forehead progression

- Range of motion as large as smooth performance of extension and ability to maintain form
- When extending from flexed position to neutral, initiate movement from mid-back. Once in neutral then work sequentially into full extension

### Rotation Prone

**Goal:** erector spinae endurance, mobilization of spine into rotation

Halo Position: Handles Down, long handles away from body

**Start Position:** prone on Stability Ball, positioned where pelvis and lumbar can maintain neutral throughout exercise (typically between ASIS and sternum region), pelvis and spine neutral, one hand under forehead with other hand on long handle, legs straight, hips flexed, feet on floor

**Movement:** rotate spine toward shoulder of hand on long handle then return

### Modification:

Hands on Forehead and alternate rotation progression

- Hand position sets scapula in stable position on rib cage and provides increased loading of upper core
- Holstered position of Ball facilitates more stable pelvic support and Ball height helps keep feet anchored on floor

# Prone Balance 🖉

Goal: posterior chain endurance, high level proprioceptive input

Halo Position: Handles Down, long handles away from body

**Start Position:** prone on Stability Ball where balance point can be maintained, legs straight and lifted off floor, arms straight reaching forward

Movement: hold position (spine may be extended)

- Decreased base of support increases load on posterior chain muscles and balance challenge
- Preparation for swimming



**Goal:** posterior chain endurance, high level proprioceptive input, co-ordination challenge

Halo Position: Handles Down, long handles away from body

**Start Position:** prone on Stability Ball where balance point can be maintained, legs straight and lifted off floor, arms straight reaching forward, spine may be extended

**Movement:** lift and lower arm and opposite leg alternately in swimming motion

- Perturbations from peripheral joints create multi-directional forces to challenge the upper and lower core
- Focus on core integration between both sides and upper and lower core





### **Supine**

### **Bridge Series**

**Goal:** static stabilization of torso and pelvis, hip mobility, foundation hip extensor strengthening in weightbearing, closed kinetic chain with strength-building progressions

# Bridge 🛴

**Goal:** static stabilization of torso and pelvis, hip mobility, foundational hip extensor strengthening in weightbearing, closed kinetic chain

Halo Position: Handles Down, long handlesr toward body to Rocking V

**Start Position:** supine, knees flexed, feet or lower calves on Stability Ball, legs parallel and hip-distance apart, arms long by sides

**Movement:** extend hips to lift pelvis and torso into one long line from knees to shoulders, flex hips to return

- More stable than Stability Ball only
- Orientation of feet on Ball facilitates more gluteus maximus recruitment through a larger range of motion
- Orientation of lower calf on Ball facilitates more hamstrings recruitment

# Single Leg Bridge 🛴

**Goal:** static stabilization of torso and pelvis, hip mobility, foundational endurance and further strengthening hip extensors, foundational endurance of lower core stabilizers

Halo Position: Handles Down, long handle toward body to Rocking V

**Start Position:** supine, knees flexed, feet or lower calves on Stability Ball, legs parallel and hip-distance apart, arms long by sides

**Movement:** extend hips to lift pelvis and torso into one long line from knees to shoulders, lift one leg to tabletop, lower leg, then repeat other side, flex hips to return

- Unilateral leg movement adds rotational challenge to maintain pelvic orientation
- Unilateral leg support adds increased load to lower extremity
- Orientation of feet on Ball facilitates more gluteus maximus recruitment through a larger range of motion
- Orientation of lower calf on Ball facilitates more hamstrings recruitment

# Bridge with Rocking V Q

**Goal:** static stabilization of torso and pelvis, hip mobility, foundational hip extensor strengthening in weightbearing, closed kinetic chain

### Halo Position: Handles Down,

long handles toward body, to Rocking V

**Start Position:** supine, knees flexed, hips close to Stability Ball, feet or lower calf on Ball, legs parallel and hip-distance apart, arms long by sides

**Movement:** extend hips to lift pelvis, roll Stability Ball away to Rocking V position, flex hips and knees to return

- V position provides a smaller base of support making Ball harder to control
- Rocking quality of position requires uni-planar control to prepare for Ball only progression



# Single Leg Bridge with Rocking V Q

**Goal:** static stabilization of torso and pelvis, hip mobility, foundational endurance and further strengthening hip extensors, foundational endurance of lower core stabilizers

### Halo Position: Handles Down,

long handles toward body, to Rocking V

**Start Position:** supine, knees flexed, hips close to Stability Ball, feet or lower calf on Stability Ball, legs parallel and hip-distance apart, arms long by sides

**Movement:** extend hips to lift pelvis, roll Ball away to Rocking V position, lift one leg to tabletop, lower leg, then repeat on other side, flex hips and knees to return

- V position provides a smaller base of support making Ball harder to control
- Rocking quality of position requires uni-planar control to prepare for Ball only progression
- Unilateral leg adds increased load to lower extremity

# Bridge with Leg Curl Q

**Goal:** static stabilization of torso and pelvis, hip and knee mobility, foundational endurance and further strengthening of hip extensors and knee flexors, foundational endurance of lower core stabilizers

Halo Position: Handles Down, long handles toward body, to Rocking V

**Start Position:** supine, knees flexed, hips close to Stability Ball, feet on Stability Ball, legs parallel and hip-distance apart, arms long by sides

**Movement:** extend hips to lift pelvis and torso to one long line from shoulders to knees, extend knees to roll Ball away to Rocking V position, flex knees keeping Halo in Rocking V (repeat knee flexion and extension), flex hips and knees to return

 Orientation of feet and legs facilitates gluteus maximus endurance to maintain torso and pelvic position and isolation of concentric and eccentric hamstring to create knee flexion / extension

# Bridge with Single Leg Curl Q

**Goal:** static stabilization of torso and pelvis with smaller base of support, hip and knee mobility, foundational endurance and further strengthening of hip extensors and knee flexors, foundational endurance of lower core stabilizers

#### Halo Position: Handles Down, long handles toward body, to Rocking V

**Start Position:** supine, knees flexed, hips close to Stability Ball, feet on Stability Ball, legs parallel and hip-distance apart, arms long by sides

**Movement:** extend hips to lift pelvis and torso to one long line from shoulders to knees, extend knees to roll Ball away to Rocking V position, lift one leg to tabletop, flex support knee keeping Halo in Rocking V (repeat knee flexion and extension), lower leg, flex hips and knees to return

- Orientation of feet and legs facilitates gluteus maximus endurance to maintain torso and pelvic position and isolation of concentric and eccentric hamstring to create knee flexion / extension
- Unilateral leg movement adds rotational challenge to maintain pelvic orientation
- Unilateral leg support adds increased load to lower extremity



### Seated

### Seated One Knee Lift

**Goal:** static stabilization of torso and pelvis, hip mobility, foundational strengthening of hip flexors, foundational endurance of lower core stabilizers

Halo Position: Handles Up

**Start Position:** seated on Stability Ball, pelvis and spine neutral, holding short handles

**Movement:** lift one foot off floor while maintaining neutral pelvis and spine then return

### Modification:

10

One Leg Lift progression,

keep knee straight to lift foot off floor

 Holstered position of Ball provides foundational balance control and control of unstable Ball

### Half Roll Back 🛴

**Goal:** mobilization of pelvis and lumbar spine, foundational strengthening of abdominals and hip flexors

Halo Position: Handles Down, long handles toward knees

**Start Position:** seated on Stability Ball just above or lightly touching long handle, pelvis and spine neutral, legs parallel, hip-distance apart, hands behind head

**Movement:** roll pelvis away from thighs flexing spine, return to neutral

• Ball does not move and femurs are fixed to facilitate more spinal articulation

# Roll Back into Extension

**Goal:** mobilization of pelvis and spine, moderate abdominal strengthening of abdominals and hip flexors

Halo Position: Handles Down, long handles toward knees

**Start Position:** seated on Stability Ball just above or lightly touching long handle, pelvis and spine neutral, legs parallel, hip-distance apart, hands behind head

**Movement:** roll pelvis away from thighs through flexion, allowing spine and hips to extend over Stability Ball, then initiate roll up from head nod to return

 Ball does not move to facilitate increased extension from spine and hips which requires more control of movement and abdominal strength



# **Side-Lying**

### Side Plank Hip On Ball [supported]

Goal: static stabilization of torso and pelvis in coronal plane

Halo Position: Handles Down, Stability Ball toward hip, long handle on opposite side

**Start Position:** side Plank, forearm on long handle, side of pelvis on Stability Ball, pelvis and spine neutral, legs extended and stacked

Movement: hold plank position

#### Modification:

#### **Top Leg Abduction**

• Ball supports torso to promote foundational endurance of the lateral stabilizers

### Side Plank Hip Off Ball [unsupported]

Goal: static stabilization of torso and pelvis in coronal plane

Halo Position: Handles Down, Stability Ball toward hip, long handle on opposite side

**Start Position:** side Plank, forearm on top of Stability Ball, pelvis off Ball, torso on incline, pelvis and spine neutral, inside knee flexed on floor, outside leg extended with foot on floor

Movement: hold Plank position

### Modification:

### Top Leg Side Kick

- Small base of support provides more challenge to stabilize shoulder and torso
- Less weight on upper body than on floor due to angle of inclination

# Side Plank Feet On Ball



Halo Position: Rocking V

**Start Position:** side Plank, forearm on floor with elbow under shoulder, legs on Stability Ball, pelvis and spine neutral

Movement: hold Plank position

# Modification:

Top Leg Abduction

- Angle of inclination and smaller base of support increases loading on shoulder
- Requires lower body stability as legs on unstable surface increases challenge to core stability, core integration and shoulder stability

### Side Bend [supported]

**Goal:** spinal articulation into lateral flexion, moderate endurance and strengthening of lateral flexors

Halo Position: Handles Down, Stability Ball toward hip, long handles on opposite side

**Start Position:** side plank, hip against Ball, inside knee flexed on floor, outside leg extended with foot on floor

Movement: laterally flex spine to lift torso, return

Modifications: Top Leg Abduction handles down

Elbows Flexed arms across chest

Hands at Forehead or behind head

- Small base of support facilitates constant contraction of lateral flexors
- Unstable surface adds rotational challenge





# **Plyometrics**

### Halo Burpee 🔨

**Goal:** dynamic loading of the peripheral joints, torso and pelvis, strength training

Halo Position: Standard

**Start Position:** standing, legs hip-distance apart, holding short handles

**Movement:** reach Halo overhead extending elbows, flex elbows to lower Halo to floor, jump feet back to Plank position, jump to return, extend knees and hips to stand up

- Integration of upper and lower core and the inner and outer unit
- Explosive tempo for athletic conditioning
- Progression to jump at top versus stand up
- Handle height allows vertical squat orientation
- Halo provides external load to shoulders and core

### Halo Burpee Push Ups 🔨

**Goal:** dynamic loading of the peripheral joints, torso and pelvis, strength training

Halo Position: Standard

**Start Position:** standing, legs hip-distance apart, holding short handles

**Movement:** reach Halo overhead extending elbows, flex elbows to lower Halo to floor, jump feet back to Plank position, then lower into Push Up, jump to return feet while pushing up, jump up to reach Halo overhead

- Halo enables body to go lower on Push Up
- Short handles keep wrist joints more in neutral

### Halo Single Leg Burpee 🔨

**Goal:** dynamic loading of the peripheral joints, torso and pelvis, strength training

Halo Position: Standard

**Start Position:** standing on one leg, holding short handles

**Movement:** reach Halo overhead extending elbows, flex elbows to lower Halo to floor, jump feet back to Plank position, jump to return, extend knees and hips to stand up

- Integration of upper and lower core and the inner and outer unit
- Explosive tempo for athletic conditioning
- Unilateral leg movement adds rotational challenge to maintain pelvic orientation
- Progression to jump at top versus stand up
- Handle height allows vertical squat orientation
- · Halo provides external load to shoulders and core

### **Stretch Series**

### Rectus Femoris Stretch



**Start Position:** lunge position with one knee on floor, dorsal part of foot on Stability Ball, hands on floor beside front foot

Movement: straighten torso hinging pelvis to vertical, return

• Halo supports leg in stable position

### Hip-Hinging Hamstring Stretch

Halo Position: Handles Down

Start Position: standing facing Stability Ball

**Movement:** lengthen hamstrings, flex hips to increase stretch with upper extremity support on Ball

- Stabilize pelvis and flex at the hip joint rather than tilting pelvis posteriorly or flexing spine
- May lower from hand support to forearm support to progress stretch
- Ball support reduces hamstring activation to facilitate stretch

### **Sources**

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# The Workout — samples of exercises from Levels 1–4

### **Choose Your Level**

Beginning at Level 1, perform each series of exercise with good technique in a controlled manner either for the number of repetitions chosen or for the duration of time selected. Once the Level 1 workout has been mastered, quickly progress to the Level 2 workout and so on through the other levels.

### Level 1 Workout

The entry level to fitness. This is perfect for those who are reasonably healthy but have not engaged in much physical activity.

### Warm Up Series

Breathing, seated on Ball, handles up

One Knee Lift, seated, handles up

Cat & Cow, Handles Down 🚶

Scapula Isolation and Plank Knees Down (Other progressions as appropriate, standard position)

Bridge and Hip Rolls, Handles Down

### Prone page 4

- Plank Series, choice of 1-5
- 1. Handles Down
- 2. Handles Up
- 3. Standard
- 4. Rocking V
- 5. Standard V
- Variable elbow positions

### Side-Lying page 11

Side Plank Hip on Ball, Handles Down Top Leg Abduction

### Legwork 1 page 6

Single Leg Extension

Armwork 1 page 5

Roll Out, handles up

Spinal Extension page 7

Spinal Extension on Ball

Legwork 2, Bridge Series page 8

Bridge, Handles Down

• Variable ROM

### Armwork 2, Push Up Series page 6

two to three times for best results.

Perform the Warm Up Series prior to beginning the circuit.

All exercises should be done at the desired pace to make

the workout as challenging as required. Repeat the circuit

Push Up Knees Down, choice of 1-5

- 1. Handles Down
- 2. Handles Up

Instructions

- 3. Standard
- 4. Rocking V
- 5. Standard V
- Variable ROM

### Spinal Flexion page 10

Half Roll Back

### Spinal Lateral Flexion page 11

Side Bend. Handles Down bottom hand on long handle to assist

### Plyometrics page 12

**Halo Burpee** 

### Stretch Series page 12

Can be performed as a Cool Down or as part of the Warm Up.

Rectus Femoris Stretch, Handles Down

Hip-Hinging Hamstring Stretch, Handles Down







### Level 2 Workout

The next step in the fitness journey. For those who have been working out regularly, this level presents some additional challenge.

### Prone page 4

Full Plank, legs abducted or adducted, choice of 1-5

- 1. Handles Down
- 2. Handles Up
- 3. Standard
- 4. Rocking V
- 5. Standard V
- Variable elbow positions

### Side-Lying page 11

**Side Plank Hip Off Ball**, Handles Down Top Leg Side kick

Legwork 1 page 6

**Double Leg Extension** 

Integrated Armwork page 5

Jack Knife, standard position

### Spinal Extension page 7

Spinal Extension on Ball, Handles Down, choice of 1-3Both Hands Down

2. One Hand on Forehead

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3. Both Hands on Forehead

### Legwork 2, Bridge Series page 8

### Single Leg Bridge, Handles Down

• Variable ROM

### Armwork 2, Push Up Series page 6

**Push Up in Full Plank**, legs abducted or adducted, choice of 1-5

1. Handles Down

- 2. Handles Up
- 3. Standard
- 4. Rocking V
- 5. Standard V
- Variable ROM

Spinal Flexion page 10 Roll Back into Extension with Stability Ball

Spinal Lateral Flexion page 11

Side Bend, Handles Down

Plyometrics page 12 Halo Burpee Push Ups





### Level 3 Workout

A very challenging level. Although not the hardest, proceed cautiously into Level **3**. Many exercises require great core stabilization and upper and lower body strength.

WHIT .

### Prone page 4

Full Plank Single Leg or Mountain Climber, choice of 1-5

- 1. Handles Down
- 2. Handles Up
- 3. Standard
- 4. Rocking V
- 5. Standard V
- Variable elbow positions

### Side-Lying page 11

### Side Plank Feet on Ball, Handles Down, choice of 1-3

- 1. Top Leg Abduction
- 2. Top Leg Kick
- 3. Top Leg Circumduction

### Legwork 1 page 6

### **Double Leg Extension**

### Integrated Armwork pages 5 and 7

Pike, standard position, choice of 1-21. Both Feet on Ball2. One Foot off Ball

### **Rotation Prone**

One Hand Down
Both Hands on Forehead

### Legwork 2, Bridge Series page 8

### Bridge, Rocking V Single Leg Bridge, Rocking V

• Variable ROM

STANDARD MOUNTAIN CLIMBER

### Armwork 2, Push Up Series page 6

### Push Up in Full Plank, Single Leg, choice of 1-5

- 1. Handles Down
- 2. Handles Up
- 3. Standard
- 4. Rocking V
- 5. Standard V
- Variable ROM

### Spinal Flexion page 10

Half Roll Back, Handles Down

Spinal Lateral Flexion page 11

Side Bend

Plyometrics page 12

Halo Burpee Push Ups

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### Level 4 Workout

Reserved for the experienced exerciser or competitive athlete. Many of these exercises require very fine control combined with significant strength and power.

#### Prone page 4

Full Plank Suspension Plank, choice of 1-5

- 1. Handles Down
- 2. Handles Up
- 3. Standard
- 4. Rocking V
- 5. Standard V
- Variable elbow positions
- NOTE: suspension Plank is done with standard position

### Side-Lying page 11

Side Plank, feet on Ball, Rocking V

Legwork 1 page 6

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**Double Leg Extension** 

### Integrated Armwork page 5

Jack Knife, standard position

### Legwork 2, Bridge Series page 8

### Bridge with Ball with Rocking V

### Single Leg Bridge with Rocking V

• Variable ROM

### Armwork 2, Push Up Series pages 6

Leg Abduction or Suspension Plank Single Leg, choice of 1-5

- 1. Handles Down
- 2. Handles Up
- 3. Standard
- 4. Rocking V
- 5. Standard V
- Variable ROM
- NOTE: suspension Plank is done with standard position

### Spinal Flexion page 10

Roll Back into Extension, Handles Down

### Spinal Lateral Flexion page 11

Side Bend

### Plyometrics page 12

Halo Single Leg Burpee Push Ups

