

Intro to Interval Training

For a Level 1 Client

Developed by the Merrithew™ Team

The goal of this workshop is to introduce the concept of interval training and explore how the technique could be introduced in a lower-level group class. Many Level 1 clients are not able to tolerate a full 45- to 60-minute high-intensity interval workout, so the technique should be introduced slowly in group class settings. Utilizing the innovative design of the Halo® Trainer Plus and Stability Ball™, participants learn an introductory-level group class and explore how to transition smoothly from one exercise to another to maximize flow and build a solid foundation. Help novice clients or those new to Halo Training get the most out of their workout by learning and understanding how to implement this system in an interval-style class.

Learning Objectives

1. Understand the concept and value of interval training and how this type of training can be introduced in a group class setting for Level 1 clients.
2. Learn Halo Training incorporated bodyweight training exercises that can be used in an introductory intermittent interval group class.
3. Explore the Halo Trainer Plus and how to choose appropriate exercises for beginner clients.
4. Discover how to use transitions to move smoothly through this type of workout.

Workshop Length: 2 hours

CECs: 0.2 STOTT PILATES

Level of Difficulty: Basic [Level 1]

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
4. **Handles Down:** Stability Ball holstered between long handles, one long handle on floor
5. **Handles Up:** Stability Ball holstered between long handles, Stability Ball on floor, short handles up (Halo on top of Ball)
6. **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

1. **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 Training Core-Integrated 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 multi-directional and should be treated that way. Exercises should also be multi-directional 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.

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 rest¹.

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 health¹. High interval training has been seen to improve the body's ability to oxidize fats for energy², enhance aerobic physical fitness¹, and increase insulation action and glycemic control³.

The premise of using this type of training is that the high intensity segments promote greater physical and metabolic adaptations due to increased cellular stress⁴. 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 participation⁵.

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 or greater to get a positive training effect at this level.

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

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 indicated before progressing to the next level.

Each exercise should be held or performed as repetitions to fatigue at a controlled pace for 30 to 60 seconds (or as appropriate to maintain good technique and neuromuscular control).

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.

Warm Up

Breathing Flexed Forward

Halo Position: Handles Up

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

Movement:

inhale: prepare, **exhale:** articulate spine from head to tail to flex torso forward, keeping pelvis vertical and Ball still, hold for several breaths then return to vertical on the last exhale

Facilitated Imprint & Release

Halo Position: Handles Up

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

Movement:

inhale: prepare, **exhale:** posteriorly tilt pelvis and flex lumbar spine slightly, pressing short handles forward to facilitate mobility of lumbar spine and pelvis, **inhale:** return

Facilitated Pelvic Clock

Halo Position: Handles Up

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

Movement:

inhale: using coccyx as the pointer, draw a circle from 12 to 6 o'clock, allowing pelvis and lumbar spine to mobilize, keeping upper torso vertical in space **exhale:** finish drawing circle from 6 to 12 o'clock

Repeat, alternating directions

Seated Spinal Rotation

Halo Position: Handles Down

Start Position: seated on Stability Ball, pelvis and spine neutral, arms reaching overhead

Movement:

inhale: prepare, **exhale:** rotate torso to one side allowing arms to reach to shoulder height, **inhale:** return

Supine Hip Rolls To Bridge Down

Halo Position: Handles Down, Ball toward body

Start Position: supine incline on Stability Ball, pelvis and spine neutral with upper torso supported on Ball (or head and upper torso supported on Ball to regress), hands supporting head, legs hip-distance apart, hips and knees flexed so pelvis is below knee-height in neutral supine incline position

Movement:

inhale: stay, **exhale:** extend hips and articulate spine to supine bridge position and allow upper torso to pivot to maintain neutral position, **inhale:** stay, **exhale:** maintain pelvis and spine neutral and flex at hips and knees to hinge back to incline position

Note: can add in small range squat pulses (8x) in the incline start position to warm up quadriceps

Supine Bridge Arm Circles

Halo Position: Handles Down, Ball toward body

Start Position: supine bridge position with pelvis and spine neutral and upper torso supported on Stability Ball (or head and upper torso supported on Ball to regress), arms reaching up to ceiling, legs hip-distance apart, knees flexed and hips extended so pelvis is lifted to torso height

Movement:

inhale: reach arms overhead, **exhale:** circle arms down by sides, then to the ceiling

Repeat 4-6x then reverse directions

Arm Sides

Halo Position: Handles Down, Ball toward body

Start Position: supine bridge position with pelvis and spine neutral and upper torso supported on Stability Ball (or head and upper torso supported on Ball to regress), arms reaching up to ceiling, legs hip-distance apart, knees flexed and hips extended so pelvis is lifted to torso height

Movement:

inhale: slowly reach one arm out to sides, keeping torso still, **exhale:** quickly return arm back to ceiling, keeping torso still.

Repeat, alternating sides

Tripod Lunge Stretch

Halo Position: Handles Down, Ball toward body

Start Position: hands on floor under shoulders, one knee flexed on floor, other leg long with upper shin or bottom of knee supported on Stability Ball, pelvis and spine neutral

Hip Flexor Stretch

Movement:

lunge backward toward Ball allowing elbows to flex and torso to lean down to maintain neutral spine, allow Halo to rock and back hip to extend further. Hold for several breaths then return.

Rectus Femoris Stretch

Movement:

lunge backward toward Ball allowing elbows to flex and torso to lean down to maintain neutral spine, allow Halo to rock and back hip to extend further, then flex the back knee ensuring the knee is supported on Ball. Hold for several breaths then return.

Sphinx Stretch

Movement:

lunge backward toward Ball allowing elbows to flex and torso to lean down to maintain neutral spine, allow Halo to rock and back hip to extend further, then extend elbows and spine and flex the back knee ensuring the knee is supported on Ball

Hold for several breaths then return

Interval One

DURATION: 2 CYCLES, CONTINUOUS

Ab Prep

Halo Position: Handles Down, Ball toward body

Start Position: supine incline on Stability Ball, pelvis and spine neutral with upper torso supported on Ball (or head and upper torso supported on Ball to regress), hands supporting head, legs hip-distance apart, hips and knees flexed so pelvis below knee height

Movement:

inhale: prepare, **exhale:** articulate spine into flexion from tail, flexing upper torso, **inhale:** stay, **exhale:** return

Repeat 4x then...

on last rep stay in bridge position, **inhale:** lower upper torso only, **exhale:** flex upper torso, 4x then...

inhale: stay on the last rep in curl position and **exhale:** planter flex ankles, **inhale:** lower heels. 4x, on last rep lower upper torso and heels then...

exhale: flex upper torso and planter flex ankle, **inhale:** return

Repeat 4x

Repeat sequence but allow upper torso to start from an extended position

Interval Two

MINIMUM DURATION: 30 SEC WORK, 10 SEC REST; 2 CYCLES

Forearm Plank Handles Down

Halo Position: Handles Down, Ball toward body

Start Position: forearms on Stability Ball, knees down plank position

Movement: static hold of position for 15 sec then come to knees up full plank position for 15 sec (or come to one leg long with knee up if both knees up full plank position not tolerated)

Variation:

Quadruped Position to kneeling plank

Interval Break

Scapula Isolations Prone

Halo Position: Handles Down, short handles toward body

Start Position: prone, upper torso slightly lengthened with arms overhead and holding Halo halfway above short handles, pelvis and lumbar spine neutral, legs abducted and laterally rotated

Movement:

inhale: elevate scapulae while maintaining torso and pelvic position, **exhale:** depress scapulae while maintaining torso and pelvic position. 8x

Breaststroke Prep in Heel Squeeze Prone

Halo Position: Handles Down, short handles toward body

Start Position: prone, upper torso slightly lengthened with arms overhead and holding Halo halfway above short handles, pelvis and lumbar spine neutral, legs abducted and laterally rotated, heels together, toes apart

Movement:

inhale: prepare, **exhale:** rock Halo toward body slightly while simultaneously retracting and depressing scapulae to facilitate thoracic extension and press heels together, ensuring lumbar and pelvis remain neutral. 8x

Variations:

Stability Ball holstered in Halo for more resistance

Frame Only for less resistance

Shell Stretch Over Ball

Halo Position: Handles Down, Ball toward body

Start Position: torso and pelvis flexed over Stability Ball with head turned to one side, arms reaching down to short handles, knees hovering off mat

Movement: hold short handles and flex elbows, reach knees toward Ball and floor to increase spinal stretch over Ball

Interval Three

MINIMUM DURATION: 30 SEC WORK, 10 SEC REST; 2 CYCLES

Side Plank Handles Down

Halo Position: Handles Down, Ball toward body

Start Position: side plank, forearm on long handle, side of pelvis on Stability Ball, pelvis and spine neutral, top leg straight, bottom leg flexed

Movement: static hold of position for 15 sec then come to knees up full plank position for 15 sec

Interval Four

COMPLETE 2 CONTINUOUS CYCLES

Rolling Like a Ball Prep

Start Position: seated on mat, pelvis and spine vertical, arms overhead holding short handles of Halo

Movement:

inhale: prepare, **exhale:** keeping arms by ears throughout, roll ASIS away from femur allowing spine to flex, keeping feet on floor, **inhale:** to return. 8x

Variations:

Stability Ball holstered in Halo for more resistance

Frame Only for less resistance

Shoulder Bridge Prep

Halo Position: Handles Down, Ball toward body

Start Position: supine, pelvis and spine neutral, knees flexed with feet on Stability Ball above long handle

Movement:

inhale: prepare, **exhale:** extend hips to hinge pelvis up maintaining neutral throughout, **inhale:** stay, **exhale:** flex hips to lower pelvis. 4x then...

inhale: prepare, **exhale:** extend hips to hinge pelvis up maintaining neutral throughout, **inhale:** lower pelvis halfway down, pulse pelvis up 8x, then lower Repeat sequence 2x

Obliques Roll Back with Overhead Press

Start Position: seated on mat, pelvis and spine vertical, arms overhead holding short handles of Halo

Movement:

inhale: prepare, **exhale:** roll ASIS away from femur, allow spine to flex and rotate torso to one side, keeping feet on floor, simultaneously flex elbows to lower Halo Trainer around head (if no Ball holstered) or Ball to touch top of crown, **inhale:** return.

Repeat alternating sides 5x.

then...

exhale: stay back in obliques roll back position **inhale:** hold, **exhale:** press overhead, **inhale:** flex elbows. 8x On the last overhead press, keep elbows extended, inhale to roll up.

Repeat sequence on other side.

Variations:

Stability Ball holstered in Halo for more resistance

Frame Only for less resistance

Interval Five

MINIMUM DURATION: 30 SEC WORK, 10 SEC REST; 2 CYCLES

Kneeling Roll Out to Plank

Halo Position: Handles Up

Start Position: long handle against thigh while in a vertical kneeling position, then roll Stability Ball away to Handles Up, hold short handles, allowing torso and thighs to lean forward in neutral

Movement: flex at hips, hinge neutral pelvis and spine backward to sit on heels

then...

extend at hips to roll Ball away from body using short handles and allow torso to lean forward to follow the Ball (roll Ball out as far as torso and pelvis can remain neutral).

then...

roll Ball back, flex at hips to hinge neutral pelvis and spine backward to sit on heels

then...

extend at hips and knees to full plank position allowing the Ball to move slightly

Notes:

- ensure toes are extended/tucked under to support the weight of the body
- omit full plank position if not tolerated

Interval Six

MINIMUM DURATION 30 SEC WORK, 10 SEC REST; 2 CYCLES

Bicycle Bridge

Halo Position: Handles Down, no Stability Ball, long handle toward body, one long handle on mat as close to pelvis as possible

Start Position: supine, pelvis and spine neutral, one foot on each long handle (can put short handles on Gripper Mat to prevent slipping)

Movement: simultaneously extend hips to lift pelvis and spine to bridge position and extend knees (the far leg will come into full extension and the closer leg will be flexed) to bring Halo to Standard V, then rock Halo into Rocking V toward body (without letting long handle touch the floor) by flexing and extending knees while maintaining pelvis height (can be done with arms reaching to the ceiling)

Variations:

Mid-Range Flexion and Extension to prevent Halo from moving

Hold in a Static Position

Interval Break

Tricep Press in Round Back Lunge

Halo Position: Standard, holding short handles

Start Position: spine and hips flexed with shoulders positioned above hands, one leg long reaching slightly back, other leg forward and knee slightly flexed in lunge position

Movement:

inhale: flex elbows to lower torso and head between short handles, **exhale:** return

Repeat 8x each side

Single Leg Extension

Halo Position: Handles Down, Ball toward body

Start Position: torso and pelvis supported on Stability Ball in neutral, hands on floor (or Halo frame if arms don't reach floor, hips flexed, legs long with Balls of feet on floor)

Movement:

inhale: prepare, **exhale:** extend one hip joint as high as pelvis and spine remains neutral, **inhale:** return

Repeat alternating sides

Leg Circles

Halo Position: Handles Down, Ball toward body

Start Position: pelvis and torso neutral, pelvis supported on Stability Ball, hands on floor, hips extended and legs long to come to a continuous line with torso

Movement:

inhale: circumduct at hip joints to circle legs outward and down, **exhale:** circumduct legs together and up at hip joints to complete circle

Repeat 6x in each direction

Interval Seven

MINIMUM DURATION 30 SEC WORK, 10 SEC REST; 2 CYCLES

Squats

Start Position: standing, holding long handles of Halo, elbows flexed by sides, Halo positioned in front of torso

Movement: flex deeply at hips and knees to hinge torso forward and pelvis back while maintaining neutral pelvis and spinal alignment, simultaneously extend elbows to reach Halo forward at shoulder height, then return to start position.

Repeat for 15 seconds,

then...

keeping arms forward, flex at hips and knees, hinge torso forward and pelvis back only as far as neutral pelvis and spinal alignment can be maintained (range will be less due to increased lever)

Repeat for 15 seconds

Variations:

Short Handles hold for more resistance

Stability Ball holstered for maximum resistance

Interval Break

Side Bends

Halo Position: Handles Down, Ball toward head

Start Position: side bending over top of Stability Ball, pelvis supported on Ball, bottom arm long reaching overhead, top arm touching Ball for support (or long by side), legs straight and staggered with top leg forward

Movement:

inhale: prepare, **exhale:** side bend away from Ball, **inhale:** return

Dive

Halo Position: Handles Down, no Stability Ball, short handles toward body

Start Position: prone, upper torso slightly extended arms overhead, hands on long handle, pelvis and lumbar spine neutral, legs abducted and laterally rotated

Movement:

inhale: prepare, **exhale:** rock Halo toward body slightly, simultaneously slightly retract and depress scapulae to facilitate thoracic extension, then continue to articulate into full spinal extension allowing ASIS to come off mat, **inhale:** reverse sequence from pelvis to head to come back to start position

Repeat 4x, on the last sequence hold extension and rock forward and backward 4x

Shell Stretch

Halo Position: Handles Down, no Stability Ball, short handles toward body

Start Position: kneeling, arms reaching overhead, hands on long handle, legs abducted hip-distance apart, feet together, knees flexed to allow pelvis to rest on heels, spine flexed over thighs reaching head toward the floor

Movement:

inhale: prepare, **exhale:** increase spinal flexion allowing Halo to rock toward body, **inhale:** lengthen spine to rock Halo back to floor.

Repeat for several rocks

Interval Eight

MINIMUM DURATION 30 SEC WORK, 10 SEC REST; 2 CYCLES

Push Ups

Halo Position: Standard, holding short handles

Start Position: spine and pelvis neutral in a kneeling plank position

Movement: flex elbows to lower plank position to floor as much as neutral alignment can be maintained, return

Variation: Full Plank

Interval Nine

MINIMUM DURATION 30 SEC WORK, 10 SEC REST; 2 CYCLES

Single Leg Lunge

Halo Position: Handles Down, Ball toward body

Start Position: standing in single leg lunge position, facing away from Halo, one leg reaching back with knee flexed to allow front of ankle to rest on Stability Ball, other leg straight under pelvis to support body, hands on hips or reaching forward of shoulders

Movement: flex front hip and knee until back shin touches Ball, then return to start position, ensuring pelvis and spine remain upright and neutral throughout

Interval Ten

MINIMUM DURATION 30 SEC WORK, 10 SEC REST; 2 CYCLES

Kneeling Burpee

Start Position: pelvis and spine neutral in upright position, knees and hips flexed to bring pelvis toward heels, holding short handles, elbows flexed by sides, Halo positioned in front of torso

Movement: reach arms forward place long handles of Halo on floor and extend hips and knees to come into a plank position, bring knees to floor sit pelvis back toward heels and bring torso upright, simultaneously flex elbows by sides to bring Halo close to torso, extend at hips keeping torso upright and reach arms overhead with Halo.

Return to start position

Cool Down & Stretch

Rectus Femoris Stretch

Halo Position: Handles Down, Ball toward body

Start Position: lunge position, facing away from Halo, 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 to start position

Hamstring Stretch

Halo Position: Handles Down

Start Position: standing facing Stability Ball, one leg on Ball with knee extended

Movement: lengthen hamstrings, flex hip to increase stretch stabilize pelvis and flex at the hip joint rather than tilting pelvis posteriorly or flexing spine

Sources

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