

The Blended Workout

By The Personal Health Trac, Inc.

A person has so many options available in how they choose to exercise. They can choose resistance training, cardio, flexibility, balance, functional training just to name a few of the categories. The blended workout is just like it sounds "blended". Mixing together yoga moves with cardio moves with resistance training moves or you can choose to blend different ways to put moves together.

Today we will focus on two main portions of an exercise program. One focus is on cardio using components such as high intensity interval training or HIIT also blending in sections of cardio using basic kickboxing moves. Your participants can choose to work at an intensity level that is somewhat challenging up to a level that is very, very challenging or somewhere in between in terms of intensity.

The second focus is on resistance training using rubberized equipment such as bands and stretch cords. For best results the resistance should challenge you, almost feeling as though you will not be able to complete the last couple of repetitions. The resistance training will be blended with the cardio segments to keep the heart rate elevated encouraging more calories burned as well as keep the workout exciting.

Cardio Programming

A cardiorespiratory fitness program that follows ACSM guidelines will be vital for improvements to take place in a safe and effective manner. ACSM suggests that cardio training should be anywhere from three to five days a week exercising at an intensity level of sixty four percent on the low side up to ninety four percent of the high side of maximum heart rate (Whaley, 2007). The training, continuous and interval should be at least twenty minutes up to sixty minutes not counting the warm up and cool down. Then to further progress one's cardiorespiratory fitness, the intensity and duration will need to be increased.

Benefits received by performing cardiorespiratory fitness: The Unseen

- May be lower blood pressure of someone who has high blood pressure,
- Lowered risk of metabolic syndrome
- Decreased LDL cholesterol number

- Increased HDL cholesterol number

Benefits received by performing cardiorespiratory fitness: The Seen

- A reduction in body fat
- Increase energy level
- A positive change in one's body composition.

Interval Training

Interval training is another great way to get the most out of your workout in the shortest amount of time. There are several ways one can put together an interval training program. Programs can be offered as high intensity interval training (HIIT), also called high intensity training (HIT) or the program can be put together in a Tabata format which is also a HIIT program. Interval training blends short bouts of powerful, energetic activity with bouts of activities not as vigorous for example thirty seconds of sprinting followed by thirty seconds of water walking alternating between the two work and rest segments. How the program is put together will depend on a number of factors such as intensity, duration, recovery time and the participants / class fitness goals.

If you have an individual who has been inactive or is deconditioned it would be best to begin them on a low intensity level of exercise, continuous training before beginning a high intensity interval training program. Progress the individual to interval training once they are able to run at a moderate intensity level for thirty minutes at a time.

An athlete whose goal is to improve their power might have their work segments anywhere from five seconds up to thirty seconds. Your power athletes tend to do shorter work intervals where as your endurance athletes will tend to lengthen the work segment. Their work segment might be anywhere from thirty seconds up to eight minutes (Kubukeli, Noakes & Dennis, 2002). The intensity during the work segments should fall within eighty to one hundred percent of VO₂max, HRmax or maximal power output. The intensity of the recovery segments will vary based on if the individual is incorporating a passive recovery or an active recovery. The active recovery is more common especially in the water since the body has a greater tendency to cool off quicker.

The active recovery means the participant will continue moving but at a much lower intensity level than that given for the work segment.

Take into consideration the relationship of the ratio of the work and recovery interval segments as another way to put the program together. The ratio of work to recovery is used in many studies. The ratio is generally used to target something specific such as the cardiovascular system and the skeletal systems to elicit changes. The ratio could be in the format of 1:1. This means that the work segment could be a full minute followed by a full minute recovery segment. It could also mean that the work segment is for thirty seconds followed by a recovery segment of thirty seconds. The ratios do not necessarily need to be in full minute increments. We could also give a ratio of 1:2 which could mean thirty seconds for the work segment followed by a full minute recovery segment. You get the picture. These ratios will vary depending on the class you are teaching, their ability level, how long the actual class time is and what the goals are. Make sure to adjust to the appropriate level of intensity and frequency for population taking the class.

Tabata is also another popular form on interval training. The tabata training uses a ratio of 2:1. After the body is sufficiently warmed up twenty seconds of a work segment – all out max of what a person can give, followed by a quick ten second rest (active could be a simple bounce in place). The frequency might include three sets of ten to fifteen intervals, followed by a cool down.

Interval training can be very demanding. It is best to allow the body to fully recover between workout sessions. Three times a week is a good number to reap the benefits without setting the body up for injury.

Benefits of Interval Training include:

- Improvement in brain function
- Reduced blood pressure
- Fat loss (viscerally and subcutaneously)

Resistance training

Resistance training is another very important component one can add in to their exercise program. Using just the resistance of the water is a great way to begin if someone does not have experience in aquatic exercise. There are additional pieces of equipment that can be added to

make the workout more challenging too such as buoyant, rubberized, drag and weighted. Selecting which piece of equipment to use in the class will need to be chosen with your attendees in mind, their ability levels along with their goals.

There are many benefits that can result from resistance training. The following are some but not all of the benefits seen by including a resistance training segment into ones program.

- Helps with decreasing anxiety
- Can help some individuals suffering from depression
- Helps with those suffering from chronic fatigue
- Increases one's self esteem
- Quality of sleep improves
- Memory increases

The Blend

This program blends the cardio segments with other segments as another way to offer exercise. The blending of resistance training with cardio exercises can be formatted several ways. Today we will look at three ways to blend cardio with other segments. One blend is in an ABA format, another is an ABAB format, and then there are supersets.

A couple of segments will be grouped in an ABA format. In this format there will be one superset of upper body exercises followed by a cardio interval and then coming back to another set of upper body exercises.

The number of repetitions for the ABA superset exercises will be 12, since we are using the rubberized equipment. The interval segments of cardio will be for 40 seconds followed by 20 seconds of rest, either active or passive.

The ABAB format consists of seven groups of two exercises each. One of the two exercises will focus on upper body exercise and the other exercise will be a cardio kickboxing combination. Each will be done twice for 45 seconds with 15 seconds rest in an ABAB pattern.

A superset is blending one exercise followed by another exercise with no break in between them. Supersets can be performed several ways such as working the same muscle group for both exercises, or target muscle in pairs and you can also target random muscles for each superset.

Supersets can target the same muscle group for both exercises such as triceps or hamstrings. This type of training is a common way of improving strength. To Superset means to fatigue a single muscle group to encourage the breakdown of the muscle fiber which in turn promotes muscle growth.

Another way to superset is to work the opposing muscles of the joints. There is research that suggests that by performing a second exercise in the superset an individual may actually be stronger on the second set as compared to performing straight sets. This is due to a boost of strength received by the muscle immediately following an intense contraction of its antagonist. You can pair just about any exercise together when using supersets. So randomly pairing a shoulder exercise with a calf exercise can be considered a superset. The benefit of performing supersets this way is you are able to do more work in the same amount of time than if you were just doing straight sets with rests in between each set. Another benefit of supersets is an individual can burn more calories and improve overall conditioning for their body.

Example HIIT for cardio blended with upper extremity resistance training

HIIT: 20 seconds, Rest: 10 seconds x 4 (Roughly 16 Minutes) combined with resistance supersets for the upper extremity, 12-16 repetitions, repeating each set twice

Mountain climber 4 times

Tuck side shoot tuck & down

Description: the mountain climber begins with alternating knees R, L, R, L (4) - go into a tuck then both legs shoot side right, then go into a tuck from the tuck press both legs down in center. Repeat mountain climber with side shoot to the left

Knee high jogs

Reverse squat, power down

Description: begin in a center stance. Instead of lowering the body down towards the pool bottom, pull both legs up at the same time then power both legs down to start position.

Power Lunge Pulse

Description: hold legs lunge position powering / pulling the legs up and pressing the legs back down 3 times & power close the legs to center.

Tuck-tap

Description: from tuck position, tap the right foot down to side, pull right foot up immediately then repeat with the left foot. Keep alternating the tuck and taps for the designated time.

Equipment

Equipment can be a great tool to use to see increases in strength, endurance as well as keep the class exciting. While it is an option, equipment is not recommended for every individual in class. There may be some issues that may make using equipment not a good choice. They may have issues such as carpal tunnel, arthritis to name a few. Make sure if bringing equipment in you are able to offer modifications.

The individual needs to display proper body alignment and control with the range of motion. Remind the class that the range of motion is their "pain-free" range. Offering different strengths of each piece of equipment will allow all to choose which one will be the best fit for them.

For rubberized equipment, be sure to check the equipment from time to time for nicks so it does not accidentally brake when someone is exercising with it. Rubberized equipment stretches so to operate this type of equipment there needs to be an anchor point from which to move the band or tube/chord away. Moving the rubberized equipment away from the anchor point is called the concentric phase where the muscle shortens and then returning back towards the anchor point is called the eccentric phase. The eccentric phase is where the muscle lengthens to allow movement back in a slow and controlled fashion. The body will need to be adjusted or repositioned to target all the major muscles using rubberized equipment.

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Pool Practical

Warm up 5 minutes

Section ABA : this section will focus on lower body using rubberized equipment. Each move is performed for 40 seconds work / 20 seconds of rest.

- I. A: Hip Extension
B. Leg Swing + Kick Back Repeat 3
A. Side Lunge
- II A. Knee Extension / Flexion
B. Level III Hurdles 3 & Hold + 4 Rock Hop
C. Hip Abduction
- III. A. Diagonal Press Back
B. 3 Knees w/ Quick Kick/ Level II Jack Slides
A. Knee Flexion from Anatomical Position

Repeat again but with the opposite leg working against the rubberized equipment

Section ABAB: this section will have intervals with focus on upper body. Each move is performed for 40 seconds followed by 20 seconds of rest.

- I. A. Double Cross, Jab, (Side Kick X 2 - lead leg)
B. Pectoral Squeeze
A. Double Cross, Jab, (Side Kick X 2 – rear leg)
B. Scapula Squeeze
- II A. Wipe Back Jack + Hoover Jack

B. Triceps – Right Arm

A. Wipe Back Jack + Hoover Jack

B. Triceps – Left Arm

III A. Double Jab, Cross, Lead leg- Front Kick, Rear Leg- Back Kick

B. Bicep Work

A. Double Jab, Cross, Lead leg- Front Kick, Rear Leg- Back Kick

B. Bicep Curl

IV. A. 211 (Tuck to a Double Side Kick to a tuck & down +Single Side Kick Right & Left)

B. Shoulder Extension – Single Arm

A. 211

B. Shoulder Extension – Single Arm

Cool Down & Stretch

3 Single Arm Water Pulls

Shoulder Stretch – Hold arm across

3 Single Arm Water Pulls

Pec Stretch – Hold arm behind

(Repeat on the other side)

Quad Stretch

Add ankle point / flex

Low figure 8's

Add Glute and hamstring stretch

Add ankle circle

(Repeat on the other side)

Raise both arms up (shoulder flexion)

Open arms out (pec stretch)

Close arms front (scapula stretch)

Lower arms down (shoulder extension)

Ear to shoulder (stretch neck)

Breathe!