

Study conducted by the President of Smart Fit Heart, Mike Fussell, a Registered Respiratory Therapist (Rrt)



Learn How to Maximize Your POWERHANDZ POWERSUIT!

1. Put on the Suit
2. Do your normal “active” daily routine.
3. Wear it until you feel “fatigue”.
4. Continue to wear it for 15 – 45 minutes past the feeling of “fatigue.
5. Take the Suit off.
6. Repeat every 2nd – 3rd day

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The Universal Performance POWERHANDZ POWERSUIT

Consider This Step-by-Step Progression:



1. Begin by wearing the suit during everyday activities until you can tolerate 4 – 8 hours of continuous use, wearing the suit every third day (1 day on, 2 days off).
2. Increase usage of the suit by wearing it every other day (1 day on, 1 day off) during weekdays (i.e., Monday, Wednesday, Friday) until tolerated 4 - 8 hours.
3. Begin athletic training with the suit using a 2-week cycle as follows:
 - a. First Week: Monday, Wednesday, Friday.
 - b. Second Week: Tuesday, Thursday
4. Depending on the sport, you may eventually increase usage of the suit to 3 days every week.
5. Suit can be worn over or under workout clothing.
 - a. Worn under, wear for entire training session
 - b. Worn over, wear for a portion or entire training session
6. Wear during:
 - a. Warm up runs
 - b. Stretching and flexibility exercises
 - c. Speed, Agility, Quickness Drills
 - d. Sport-specific Fundamental Drills
 - e. Interval training
 - f. Scrimmage (non-contact)
 - g. Cool down
7. Benefits are realized on the recovery days (those days on which you do not wear the suit). As with any resistance training method, failure to allow the exercised muscles adequate time to adapt to the stress imposed by training can lead to:
 - a. Over-training or over-use fatigue
 - b. Increased risk of injury
 - c. Less than optimal results

In other words, **more** is not necessarily **better**.
8. Usage may be adapted to specific training programs as tolerated and as required. For example:
 - a. Some training may be designed with hard days on Monday, Tuesday, and Thursday. In that case, suit might be worn 2 consecutive days as that type training gives a 3-day “break” at the end of the week.
 - b. Some training may be geared toward wearing the suit on hard days; other training may be geared toward using the suit on easy days.
 - c. In-season use of the suit may require less than 3 days per week (1 or 2 days), or maybe none at all. This is an individual coaching decision.
 - d. Wearing the suit for 2 or more consecutive days should be considered only with caution.
9. Generally, 10 lbs. of weight are enough to gain training effect. However, some activities or body sizes may benefit by using higher weight totals. Also, some coaches have found that added weight to the legs for powerful starts can be beneficial. The basic idea is that coaches should determine what the goals of the resistance training program should be, and then implement a method to take advantage of all the benefits the suit can produce.

(As with any training, proper coaching, nutrition, technique, and listening to your body are imperative. Be wise, be consistent, and be successful!)

The Team at Universal Performance

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The Universal Performance POWERHANDZ POWERSUIT

Benefits of Training in The POWERHANDZ POWERSUIT



Unique and patented technologies incorporated into the suit gives you performance features not found in any other training product:

1. An immediate and noticeable improvement in posture.

Your shoulders move back, and your hips move forward as you “adjust” to maintain a good center-of-gravity. This happens automatically due to the distribution of the weights. Better posture reduces the risk of injury, improves efficiency, and promotes proper leverage.

2. Improve running form.

Your arms move front-to-back instead of across the body, Hips, knees, elbows, abdomen, lower back, upper back, shoulders; all work together for forward motion.

3. Enhance muscle memory.

The added weight directly over the exercising muscle provides a “feel” within the muscle as it fires, allowing the athlete to better learn and re-create positive movement.

4. Increase muscle length, definition (tone), and ligament / tendon strength.

As muscle strength improves, instead of bulky muscles you simply realize increased muscle length, definition (tone), and joint strength. All of these reduce the risk of injury and lead to improved performance.

5. Increase caloric burn

19% more calories are burned per minute while wearing the suit and performing any weight-bearing activity
 . . . just walking around doing activities of daily living acts as a “mini-workout”.

6. Increase Core strength

Lower back, upper back, and abdominal muscles receive constant low-grade resistance.

7. Wear it under your everyday work or leisure clothes without attracting attention

Water-wicking and anti-odor properties of the suit keep you cool and dry throughout the day.

8. Improve cardiovascular fitness

The “gold-standard” measurement of fitness is VO₂ (oxygen consumption). Wearing the suit has shown an increase in VO₂ by 7% – 18% for any level of work. Ventilation increases by 13% – 18%. You get a harder workout any way you look at it!

With the suit, you can work out for 20% less total time and still achieve the same fitness benefits. Or, you can work out with the suit the same amount of time and get a 20% increase in total fitness benefits. Either way, you win!

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Exercising the POWERHANDZ POWERSUIT Way

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Hypertension – General Information

Introduction

Hypertension (HTN) is a major public health problem in the United States, with 58.4 million (28.7%) Americans aged 18 yr or older having HTN (systolic blood pressure [SBP] > 140 and/or diastolic blood pressure [DBP] > 90 mmHg) . HTN prevalence is increasing whereas awareness of the condition and control rates is suboptimal. The positive relationship between cardiovascular disease [CVD] risk and blood pressure (BP) occurs with a BP as low as 115/75 mmHg and doubles for each 20/10 mmHg increase. The BP classification of “prehypertension” (SBP120–139 or DBP 80–89 mmHg) has been introduced to stress the public health importance of reducing BP and preventing HTN via healthy lifestyle interventions for all people. There are minimal cost and side effects associated with lifestyle interventions, and they interact favorably with other CVD risk factors.

Hypertension is associated with an increased incidence of all-cause and CVD mortality. Lifestyle modifications are advocated for the prevention, treatment, and control of HTN, with exercise being an integral component. Exercise programs that primarily involve endurance activity prevent the development of HTN and lower blood pressure (BP) in adults with normal BP and those with HTN. The BP lowering effects of exercise are most pronounced in people with HTN who engage in endurance exercise with BP decreasing approximately 5–7 mmHg after an isolated exercise session (acute) or following exercise training (chronic). Moreover, BP is reduced for up to 22 h after an endurance exercise bout (e.g., post exercise hypotension), with the greatest decreases among those with the highest baseline BP. The proposed mechanisms for the BP lowering effects of exercise include neurohumoral, vascular, and structural adaptations. Decreases in catecholamines and total peripheral resistance, improve insulin sensitivity, and alterations in vasodilators and vasoconstrictors are some of the postulated explanations for the antihypertensive effects of exercise.

An abnormal or exaggerated exercise BP contributes to the prediction of future HTN in persons with normal BP.

Excerpts From:

Exercise and Hypertension – Position Stand (Am. College of Sports Medicine) N/D



POWERSUIT Exercise Guidelines for Hypertension

Exercise Prescription

Frequency: Begin with at least 3 times a week, then increase up to 6 -7 days per week as tolerated.

Intensity: Moderate-intensity effort (40-70% of what you could possibly do).

Time: 30 - 60 minutes or more of intermittent or continuous activity total for the day.

Type: Walking, jogging, shopping, yard work.

Goal: 30 - 60 minutes; 6-7 days per week

A single bout of exercise can cause an acute reduction in BP that lasts many hours (up to 22 hr/day) – this is a GOOD thing!

In general, wearing the suit for long duration combined with low intensity effort will improve endurance; wearing the suit for short duration combined with moderate intensity effort will improve strength. If you do high intensity activities (pure strength improvement), make sure the duration is very short, but repeat the activity numerous times while taking rest periods that allow your heart rate and muscles to recover completely between repetitions (interval training).

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What Will the POWERHANDZ POWERSUIT Do for Me?

Clinical considerations for exercising with hypertension

heart-healthy
LIVING

Weekly Update

Lifting Weights Helps Lower Blood Pressure

An American Heart Association study found that participants who did progressive resistance training two to five times per week lowered their blood pressure. Jennifer Mieres, M.D., recommends consulting with your doctor before beginning any weight-lifting program. If you have the green light, perform weight- or resistance-training exercises at least two days a week.

7 out of 10 hypertensives are ***NOT*** at recommended Blood Pressure levels

Cardiovascular mortality (death) is ***DOUBLED*** with every 20/10 mmHg increase in Blood Pressure over 115/75

What Will the POWERSUIT Do for Me?

The major benefits of POWERSUIT training in individuals with hypertension are: 1) improved blood cholesterol, 2) increased heart function, 3) decreased blood pressure, 4) improved muscular strength, power, and endurance, 6) increased bone strength, (7) lower risk of stroke, and (8) reduce belly fat.

You're Never Too Old for POWERSUIT Training!

ADA Scientific sessions

Results of 12-week training program:

- 🕒 Waist circumference decreased from **39** to **38** inches
- 🕒 Systolic blood pressure improved from **143** to **132**
- 🕒 Diastolic blood pressure improved from **76** to **70**
- 🕒 HDL ('good') cholesterol improved from **46** to **51** mg/dl

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Special Considerations

- ① **Medications such as beta-blockers and diuretics impair the ability to regulate body temperature during exercise in hot and/or humid environments and provoke hypoglycemia. Thus, people using these medications should be educated on the signs/symptoms of heat illness, the role of adequate hydration, proper clothing to help cool the body, the optimal times of the day to exercise, the importance of decreasing the amount of exercise (time and intensity) during periods of increased heat or humidity, and methods to prevent hypoglycemia. In addition, beta-blockers can substantially lower maximal exercise capacity.**
- ① **Because medications such as alpha blockers, calcium channel blockers, and vasodilators may lead to hypotension after stopping activity, extending the cool down period is generally recommended.**
- ① **Many persons with HTN are overweight or obese. Therefore, an exercise program that emphasizes a daily caloric expenditure of more than 300 kcal during the exercise, coupled with reducing food intake, should be recommended. This may be accomplished best with moderate-intensity, prolonged exercise, such as walking. The combination of regular exercise and weight loss should be effective in lowering resting BP.**
- ① **Older persons appear to demonstrate similar reductions in BP with exercise training as young adults.**
- ① **Patient education regarding the importance of regular exercise for BP control and management may increase exercise adherence. Patients may be especially responsive if this information comes from their personal physician.**
- ① **Individuals with severe or uncontrolled BP should add exercise training only after physician evaluation and initiation of drug therapy.**
- ① **Other precautions or modifications may be necessary for selected patients, particularly higher risk patients, such as those with coronary artery disease or chronic heart failure. For example, in the hypertensive patient with coronary artery disease, the above-referenced guidelines are still appropriate, but the intensity of training should be set safely below (< 10 beats/min) the ischemic ECG or anginal threshold.**