

KAATSU[®]



Dave Carlson

Carlson has seen all kinds of personal gains from KAATSU including reducing the amount of time he needs to spend in a gym to reducing his back pain.

But he has also incorporated KAATSU into the off-season, pre-season, mid-season and championship season training and rehabilitation regimen for his high school athletes.

In a KAATSU podcast, Carlson explains how he utilizes KAATSU for the teenage athletes who he coaches.

KAATSU APPLICATIONS



DAVE CARLSON

KAATSU APPLICATIONS

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KAATSU APPLICATIONS

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KAATSU APPLICATIONS

THE LETTER FROM THE EDITOR



KAATSU users include the young and the older, Olympics and recreational athletes, the injured and the healthy, accident victims and military personnel.

They span the globe, using KAATSU in 49 different countries including people who have climbed Mount Everest and swam across the English Channel.

Husbands and wives share KAATSU units as do college roommates and teammates. The husband-and-wife duo of U.S. Marines Major Gamal Awad and 2-time Olympian Hawley Bennett are impressive in their individual achievements, but also how they have completely integrated KAATSU into their daily lives, training regimens, and rehabilitation programs.

Similarly, coach Dave Carlson uses KAATSU on himself and with his 70-year-old parents and young teenage student-athletes who he coaches at Los Alamitos High School in Southern California. His applications span the spectrum of wellness and athletic performance. He uses many different KAATSU applications to develop speed, strength and stamina - as well as to recover from competitions and rehabilitate from injuries.

Gamal, Hawley and Dave's examples are illustrative of how versatile and adaptable KAATSU equipment and applications can be.

Steven Munatones

Steven Munatones,
CEO & Co-founder
KAATSU.com
Huntington Beach, California
U.S.A.

KAATSU CYCLE 2.0



DO

- » Correctly place the KAATSU Air Bands on your upper arms and upper legs every time.
- ⊕ Note : On your arms, the Bands should be placed above your biceps and triceps near your armpit, but below your deltoids.
- » Check Base SKU (pressure) and find Optimal SKU (pressure) during every KAATSU session. Optimal Pressure is one that is not so high as to occlude, but high enough to get that “KAATSU Fatigue/Failure Feeling” during exercise.
- ⊕ Note: Your Optimal SKU can change on a daily basis.
- » Release the KAATSU Air Bands if you feel lightheaded or if you have any pain on one side or the other, stop and continue on another day.
- » You can do different exercises or movements during KAATSU. You can type emails or play the piano or play computer games. Be creative and enjoy the experience.
- » Rest 30-60 seconds between different sets of exercises.

DON'T

- » Do not ever fully occlude blood flow. Signs of this are collapsed veins, no pulse at the wrist, pale palms and skin, severely delayed (>6 seconds) capillary refill.
- » In the untethered mode, do not have the air bands inflated for more than 20 minutes on your limbs
- » Do not lift heavy weights when doing KAATSU

GREAT LEG WORKOUT WITH KAATSU



<https://youtu.be/NTnm7afF5xk>

Football or fútbol, speed skating or rowing, ice hockey or cycling, powerful leg power and drive are common among elite athletes.

One example is using KAATSU Air Bands on the upper legs on a slide board. After a few or several sets of KAATSU Cycles, the KAATSU Cycle 2.0 can be detached from the bands and then used in various sets on the slide board - see above.

Another intense KAATSU program that Japanese Olympic speed skaters developed for speed and power was used by [Hiroyasu Shimizu](#), a 1998 500m speed skating Olympic champion and 5-time world record holder from Japan. While only 162 cm in height (5'-3"), the power and size of his thighs are renowned.

He used the following 5 basic exercises with KAATSU Air Bands:

6 Types of Exercises:

1. Squats
2. Leg Curls
3. Leg Lunges
4. Calf Raises
5. Slide Board

Key Points:

- » Focus on doing “non-lock exercises” where the knees are never fully extended and the muscles are constantly engaged with the KAATSU Air Bands on.
- » Keep the rest period between sets and between exercises to 20 seconds maximum.
- » Build the lactate levels to the highest levels possible.
- » Do 3-4 sets of each exercise to failure (maximum effort).
- » Failure on each set should be reached earlier and earlier (i.e., 24-40 repetitions on the first set in each exercise; >20 reps on second set; >10 reps in his third set; 1-2 reps on fourth set.



DETAILS:

1. SQUATS

Do deep, quick non-lock squats until failure where the knees are kept at less than 90° throughout the 4 sets.

2. LEG CURLS

Do quickly paced leg curls until failure where the legs were kept at less than 90° throughout the 4 sets.

3. LEG LUNGES

Do deep walking leg lunges where athlete “walks” forward with (or without) a bar bell resting on the shoulders (or dumb bells in his hands).

4. CALF RAISES

Do 4 sets of calf raises with weights on the shoulders and toes in a starting position elevated above the heels (i.e., while standing on a small step or a step board) so the calves are worked.

5. SLIDE BOARD

Skate back and forth on a slide board in a deep squat, occasionally with weights resting on his shoulders.

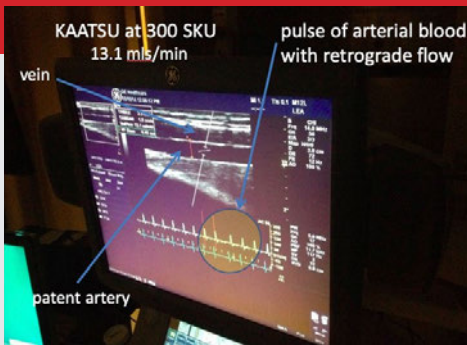
CLINICAL SAFETY OF KAATSU

Steven Munatones of KAATSU Global reported, "After reading the published paper, *Clinical safety of blood flow-restricted training? A comprehensive review of altered muscle metaboreflex in cardiovascular disease during ischemic*, I recall the decade-long research on KAATSU that a team of experienced cardiologists at the University of Tokyo Hospital conducted on over 7,000 cardiac rehab patients between 2004 and 2014.

If this decade-long study had not been successful, KAATSU would have never been introduced outside of Japan. If the KAATSU protocols had caused any untoward issues with these older cardiac rehab patients, KAATSU Global would have never been established in the United States - or anywhere.

After 10 years of studying, testing and researching the passive use of KAATSU Cycles and documenting the applications and limitations of KAATSU equipment, it is very clear that BFR equipment and BFR protocols noted in the published literature are significantly different."

In the aforementioned paper, the authors note that "blood flow restriction training (BFRT) requires the inflation of a pneumatic pressure cuff or a tourniquet positioned proximal to the exercising muscle before, and during, the bout of exercise."



KAATSU Difference: KAATSU flexible, narrow pneumatic bands is neither a blood pressure cuff or tourniquet and were never designed or engineered to occlude blood flow. In fact, with the help of a Masimo MightySat Finger Pulse Oximeter, one can easily see how blood flow is never occluded with the KAATSU Air Bands.

"Low-intensity BFRT with resistance training promotes comparable increases in muscle mass and strength observed during high-intensity exercise without blood flow restriction. BFRT has expanded into the clinical research setting as a potential therapeutic approach to treat functionally impaired individuals, such as the elderly, and patients with orthopedic and cardiovascular disease/conditions."

KAATSU Difference: For cardiac rehab patients, only KAATSU Cycles are performed. While BFR refers to sustained constant pressure while trying to build muscle mass, KAATSU

Cycles are repeated intermittent inflation and deflation of the bands without a focus on building muscle mass.

“BFRT is a method of exercise training that involves execution of low-intensity resistance exercise combined with blood flow restriction (LIBFR) provided by an inflatable cuff or a tourniquet placed proximal to the exercising muscle.”

KAATSU Difference: With the KAATSU Cycle, the limbs do not have to move and exercise is not a requirement or even an expectation for cardiac rehab patients doing KAATSU.

“In general, the external cuff pressure applied is set relative to the arterial occlusion pressure (AOP; i.e., the pressure required to cease blood flow to a limb), which is sufficient to produce partial restriction of arterial inflow and full occlusion of venous outflow.”

KAATSU Difference: The pressure of the KAATSU Air Bands are not related to or dependent upon the arterial occlusion pressure. Most definitely, the full occlusion of venous outflow and the partial restriction of arterial information are not neither the goals of KAATSU nor part of its applications and protocols.

“A large survey in Japan with BFRT [note: authors refer to KAATSU Specialists] instructors from 232 facilities did not verify any major event, such as cerebral hemorrhage, cerebral infarct, or thrombosis in 120,000 subjects with a large variability of demographical and clinical characteristics (e.g., older adults and people with obesity, diabetes, cerebrovascular and cardiovascular diseases). Reported side effects were generally minor, including transient numbness or dizziness, subcutaneous hemorrhage, and itchiness.”

KAATSU Difference: This survey of Japanese KAATSU Specialists is accurate (“Use and safety of KAATSU training: Results of a national survey”); however,

none of the Japanese instructors had access to the currently available automated KAATSU Cycle function of the KAATSU Master 2.0, KAATSU Nano and KAATSU Cycle 2.0 units. The survey was conducted in Japan over 15 years ago before the current-generation equipment was developed. In 2014 as a result of the decade-long study, KAATSU Global only sells equipment with the automated KAATSU Cycle function.

In the case of transient numbness or dizziness, the KAATSU Air Bands should be immediately removed and the patients should be well hydrated before and only do the automated KAATSU Cycles. In the case of subcutaneous hemorrhage and itchiness, the KAATSU Air Bands should be removed and reapplied at a lower pressure. For these reasons and others, KAATSU tightness (pressure) is never a function of AOP.

“ However, care should be taken with general assumptions about BFRT safety given the paucity of long-term prospective trials with clinical populations, and the possibility of some remaining adverse effects that are still largely overlooked in the literature.”

KAATSU Difference: An important result of the 10-year study of 7,000 cardiac rehab patients in Japan was that KAATSU is not used on patients who have experienced acute myocardial infarction, unstable angina, ventricular tachycardia or severe arrhythmia, serious case of cardiac insufficiency (NYHA class IV), serious aortic stenosis, acute pulmonary embolism or lung infarction, and acute myocarditis or pericarditis.

KAATSU AT THE 2020 DIGITAL RUNNING SHOW



KAATSU Global CEO & Co-founder Steven Munatones presented the KAATSU running applications at the 2020 Digital Running Show, an entirely virtual running convention (previously called the National Running Show).



JONTY SKINNER TALKS ABOUT SKILL ACQUISITION WITH KAATSU



Jonty Skinner was inducted as a coach in the American Swimming Coaches Association Hall of Fame Class of 2017.

But the South African first made his name in the international sports world as the fastest sprinter in the world [see below].

He would have been one of the gold medal favorites in the 100m freestyle at the 1976 Montreal Olympic Games if his home country of South Africa were not banned due to its apartheid. Ineligible to compete in the Olympics,

he had to showcase his speed in a shallow pool in Philadelphia.

He broke the world record - and was joyfully congratulated by his rivals, a tribute to his journey and obstacles that he overcame to become the fastest man in the water.

At the 1976 Olympics, his American rival Jim Montgomery won the 100m

gold medal en route to becoming the first swimmer in history to break the 50-second barrier in the 100m freestyle with a 49.99. Twenty days later, Skinner set a new standard in 49.44 to set the world record.

Upon his retirement as the world's fastest sprinter, Skinner has long established another great legacy, this time in coaching.

He is a scientifically-minded, analytically-oriented coach whose career included an 8-year reign as USA Swimming's Director of National Team Technical Support covering the 2000 Sydney, 2004 Athens, and 2008 Beijing Olympic Games. In this position, Skinner was charged with organizing all of the testing, monitoring, and analysis of national team swimmers.

He also coached three separate times in Tuscaloosa at the University of Alabama (1978-1981; 1988-1994, 2012-2019) in one of the swimming world's most prestigious swimming programs.

As Skinner is described by Floswimming,

“ He continues to apply his analytical mind towards using cutting-edge scientific methods on his swimmers. In a sport where races are won and lost by hundredths of seconds, Skinner is always searching for new and creative ways to get his swimmers to move faster through the water.”

Watch his use of KAATSU [here](#), produced by [Floswimming](#). Skinner also shared his more recent thoughts about KAATSU and how athletes can accelerate their skill acquisition in the video above.



KAATSU CYCLING TO HELP RECOVER FROM HIGH LACTATE LEVELS

Robert Griswold is an American Paralympic swimmer (a medalist) who has cerebral palsy. He is an experienced KAATSU user and does KAATSU Cycles before and after his races as part of his pre-race warm-up and post-race cool-down. He also uses KAATSU Aqua in his workouts.

Griswold's Anaerobic output (pain tolerance) is extremely high; he averages 16.4 mmol/L after his 100-meter backstroke races and 17.9 mmol/L after his 200-meter individual medley. Those are his two signature races that he should win in next year's Paralympic Games.

Those lactate levels are rarely reached even by other world-class athletes.

Griswold's highest recorded post-race lactate level is 21.9 mmol/L, measured after his 200-meter individual medley race in Mexico City performed at high altitude. He had to be carried off the pool deck by the medical staff. They told Griswold that if anyone else on the American team reached those levels



that they would have to take them to the hospital.

After Griswold's races, he swims about 1500 meters in the warm down pool (taking over 24 minutes to cool down to a 2.0 mmol/L level which is deemed to be normal.

But by doing KAATSU Cycles (repeated and intermittent pressure on and pressure off of the KAATSU Air Bands, Griswold only swims 400 meters and saves significant time to get his lactate level down to 2.0 mmol/L.

He reports, *"This saves me 20 minutes per race warm down and I felt a lot better. This is important because I had the 100m backstroke and the 200m individual medley A finals only 10 minutes apart in Berlin earlier this year. I did KAATSU Cycles between the races and this was the only reason that I was able to get on the starting blocks for the second race. I was at 18.8 mmol/L after the 200m individual medley."*

“

I did KAATSU Cycles between the races and this was the only reason that I was able to get on the starting blocks for the second race. I was at 18.8 mmol/L after the 200m individual medley.

3 APPLICATIONS OF KAATSU FOR ATHLETES



Sprinters, middle-distance athletes, and distance specialists train differently, and have different body types, training strategies, and mindsets. This is true in running, swimming, cycling, speed skating and many different types of sports.

But all athletes can effectively and efficiently use the 3 basic levels of KAATSU:

Level 1:
KAATSU Cycle

Level 2:
KAATSU Performance

Level 3:
KAATSU Recovery

Level 1: KAATSU Cycle:

The KAATSU Cycle is a convenient, easy-to-use, automatic mode that requires no physical movement. It can be done anywhere (e.g., office cubicles, airplane seats, sofas at home, desks at school) anytime (e.g., before or after workouts), on the arms and separately on the legs. Before a workout, physical movement like stretching or an easy

jog or calisthenics while the KAATSU Cycle mode is on can also be used.

During KAATSU Cycle mode, the KAATSU Air Bands remain connected to the KAATSU equipment (KAATSU Master 2.0, KAATSU Nano or KAATSU Cycle 2.0 units) and automatically inflates and deflates to pressures between 0 - 500 SKU.

It is recommended that athletes start with lower pressures on their first KAATSU Cycle set (e.g., Group Low on the KAATSU Cycle 2.0 or Level 1 on the KAATSU Master or 100 SKU on the KAATSU Nano). The second and subsequent sets can be increasingly set to higher pressures (e.g., Group Medium and Group High on the KAATSU Cycle 2.0 or Level 2-5 on the KAATSU Master or 150-400 SKU on the KAATSU Nano).

The KAATSU Cycle mode helps increase the vascular tissue elasticity and prepare the athlete for movement and a vigorous workout.

Level 2: KAATSU Performance

The KAATSU Training mode is ideal for any kind of athletic performance. After inflating the KAATSU Air Bands to your optimal SKU pressure, the bands are untethered (disconnected) from the KAATSU equipment so athletes can work on their starts or anything else from swings of a golf club to turns in a pool, especially after 3-6 KAATSU Cycle sets have been completed.

KAATSU Performance is the most intense form of vigorous exercise and is highly aerobic. Athletes should always remain well hydrated before and during KAATSU

- and should always monitor their CRT (Capillary Refill Time) and should immediately take off the bands if they feel lightheaded or uncomfortable.

Above is a short clip of elite sprinters working on short bursts of speed on a handful of hill runs in the KAATSU Training mode. Middle-distance and distance runners and swimmers can also utilize the KAATSU Training mode. They can combine distance (or duration) with pace, interval and pressure or KAATSU DPIP.

KAATSU DPIP

DPIP = Distance (or Duration) + Pace + Interval + Pressure

KAATSU Air Bands are inflated to an optimal SKU pressure so athletes can achieve a certain pace in a specific interval over a set distance or duration.

For example, a runner can run 8 x 400m at 2-minute intervals at a 1-minute pace with the KAATSU Air Band set at 100 SKU pressure. Swimmers can swim 8 x 100m at 1:45 intervals at a 1:20 pace with the KAATSU Air Band set at 100 SKU pressure.

Once this initial KAATSU DPIP set can be repeatedly achieved at 100 SKU (keeping the distance, pace and interval constant), the runners and swimmers can then increase their SKU pressure to 110 SKU. After the second set at 110 SKU can be repeatedly achieved (keeping everything



constant), the runners and swimmers can then increase their SKU pressure to 120 SKU. They can continue to increase the pressure - or alternatively, increase their distance (or duration) or pace, or decrease their interval.

The SKU pressures used during the KAATSU 3-point Exercises are dependent upon the appropriate Base SKU and Optimal SKU pressures.

Level 3: KAATSU Recovery

The KAATSU Cycle mode is convenient and easy-to-use for post-workout recovery. The athletes can just sit and apply the KAATSU Air Bands to their arms and then their legs - or vice versa.

Some athletes prefer to do repeated KAATSU Cycle sets with the same SKU pressure. Other athletes prefer to start with a higher pressure and then decrease their pressure on subsequent sets. Other athletes prefer to do the opposite; they start with lower pressures and then increase their pressure on subsequent sets.

It is recommended that athletes start with lower pressures on their first KAATSU Cycle set (e.g., Group Low on the KAATSU Cycle 2.0 or Level 1 on the KAATSU Master or 100 SKU on the KAATSU Nano). The second and



subsequent sets can be increasingly set to higher pressures (e.g., Group Medium and Group High on the KAATSU Cycle 2.0 or Level 2-5 on the KAATSU Master or 150-400 SKU on the KAATSU Nano).

The highest pressures that can be obtained are generally among athletes between ages 18-30 and decrease for both younger and older individuals. Dr Jim Stray-Gundersen explains, *“There is an overlay of ‘physiologic’ age that modifies the chronological age. That is, older athletes who may have stiff, damaged arteries, should use relatively low pressures. Keep in mind what one is trying to do with KAATSU is find your optimal amount of venous outflow impediment so that otherwise easy exercises become unsustainable.”*



The KAATSU Cycle mode is convenient and easy-to-use for post-workout recovery. The athletes can just sit and apply the KAATSU Air Bands to their arms and then their legs - or vice versa.



STROKE SURVIVORS DO KAATSU



Rehabilitation and a positive mindset are critical to recovering from a stroke.

Strokes can vary in type and severity, and recovery from a stroke is difficult and often seems overwhelming. There are many stroke patients who incorporate KAATSU in their rehabilitation.

Al is one example. The Southern Californian experienced a stroke in 1999 and he began KAATSU in June 2020 - and saw immediate improvement in his pain management and mobility.



These are the standard KAATSU protocols that he, his KAATSU Master Specialist Dave Carlson, and other stroke survivors follow:

1. Only use the KAATSU Cycle mode. Do not use the KAATSU Training mode.
2. Use conservative (i.e., low) pressure in the beginning and at the start of each KAATSU session. This would be Group Low on the KAATSU Cycle 2.0 unit.
3. Be able to put a single finger between the KAATSU Air Bands on your skin.
4. Your skin should have a pink or red tone to it with your KAATSU Air Bands on; your skin should not appear blue, gray or white. The goal is to have blood engorged in your limbs; the goal is not to prevent blood from going into your limbs.
5. Put your KAATSU Air Bands over your clothing.
6. Be well hydrated before and during each KAATSU session.
7. Use KAATSU frequently (1-2 times per day) for optimal and quick improvement.
8. Do 3-6 KAATSU Cycle sets per session. For example, you can do:
(a) 3-6 sets of the KAATSU Cycle 2.0 on Group Low pressure, or
(b) 3-6 sets of the KAATSU Cycle 2.0 with 1-2 sets on Group Low, 1-2 sets on Group Medium, and then 1-2 sets on Group High pressure
9. First, do KAATSU on your arms. Then, do KAATSU on your legs. But never wear the KAATSU Air Bands on both your arms and legs together.
10. Do simple movements with your KAATSU Air Bands on your arms in the KAATSU Cycle mode (e.g., Hand Clenches, Biceps Curls, Triceps Extensions, Ball Squeezes, Holding and Writing with a Pen). There is no need to do push-ups or lift weights with the KAATSU Air Bands.
11. Do simple movements with your KAATSU Air Bands on your legs in the KAATSU Cycle mode (e.g., Toe Curls, Toe Raises, Sitting Heel Raises, Standing Leg Curls, Quadriceps Contractions, Easy Walking).
12. In the beginning, you can place the KAATSU Air Bands only on your affected limbs. That is, if your right arm is affected by the stroke, use the KAATSU Air Bands only on the right arm.

These protocols have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease and its use should be evaluated by your own physician before use.



KAATSU®

CYCLE

2.0 EXERCISE, RECOVER
AND REHABILITATE.
ANYTIME. ANYWHERE.

THE KAATSU CHOICE: HIGHER PRESSURES OVER HEAVY WEIGHTS



Most personal trainers, strength and conditioning coaches, and exercise physiologists believe that optimal muscle building requires lifting of weights or doing resistance exercises. This leads to DOMS (Delayed-onset muscle soreness) that is felt after a hard workout and acute muscle soreness that is felt during or immediately after a workout.

Conventional wisdom is that the heavier the weight and/or the more repetitions or time in the gym, the larger and faster muscles will develop.

The muscle-building process leads to DMOS where the muscle fibers are damaged while weight lifting, and leads to the secretion of HGH (Human Growth Hormone) that results in muscle recovery, growth and size.

Practically, this means that if you are bench pressing 50 kg in 3 sets of 12 repetitions, and then gradually increase the weight to 55 kg in 3 sets of 12 repetitions, then not only are you psychologically satisfied with your performance, but you are also getting stronger and most probably bigger in size.

And usually sore for a while after every weight training session.

Figuratively speaking, a strength and conditioning coach wants their athletes to lift more weights over more repetitions.



KAATSU equipment enables strength and conditioning coaches to very precisely and MUCH more frequently increase the strength and size of their athletes in addition to their speed and stamina.

Let's imagine that those weights are rocks. Let's place those rocks in a bucket and ask the athlete to lift those imaginary buckets.

If the coach wants to increase their weight of that bucket, he will add another rock. But at some point, the bucket will be filled and no more rocks can be added.

But what if those rocks were replaced by sand? Rocks are clearly heavier than sand. But, if we filled the bucket with sand - tiny particles of little rocks - the overall weight of the sand-filled bucket will be even greater than a bucket filled with larger, heavier rocks.

Now imagine the coach wants to increase the weight of the bucket for his athlete. He cannot add another rock, but he can add some additional sand.

The sand enables micro increases of weight in a way that rocks cannot. This can enable the coach to help his athlete very gradually and very minutely increase the weight and performance gains.

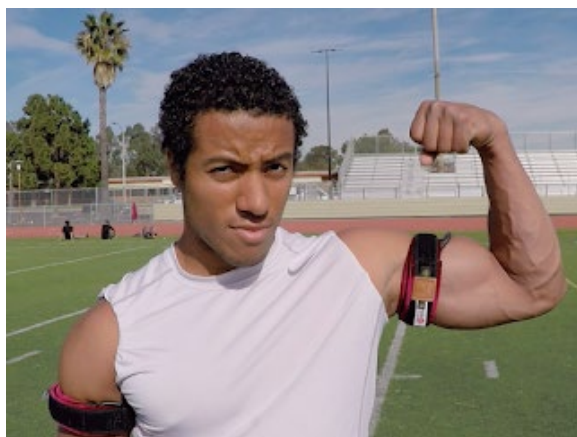
Now figuratively imagine, a clever coach used powder instead of sand in his imaginary weight training bucket. Powder is obviously lighter than sand and significantly lighter than rocks. But powder enables the coach to very



precisely and gradually increase the weight and strength of his athlete.

Essentially, the sand and the powder enables a more precise means to very incrementally increase the strength and performance of an athlete.

Using KAATSU is similar to this analogy of using rocks versus sand versus powder.



KAATSU equipment enables strength and conditioning coaches to very precisely and MUCH more frequently increase the strength and size of their athletes in addition to their speed and stamina.

The preciseness and specificity that is enabled by KAATSU equipment is unparalleled. With KAATSU equipment, one pressure point increase is the figurative and literal amount that is equivalent to a single grain of sand or tiny bits of powder. For elite athletes who seek victory by being only incrementally faster, better, and stronger than their opponents, KAATSU - or the equivalent of adding sand or powder to your bucket - can be the incremental difference.

Likewise, for a stroke victim or a paraplegic who is striving to make only slight incremental improvements in their movements or strength, KAATSU enables the tiny increases in their Quality of Life. Performed regularly and ideally daily for less than 20 minutes per day, these incremental increases in performance and in the Quality of Life makes significant changes in the lives of healthy athletes and injured individuals.

Some younger and some male athletes frequently want to lift heavy weights with their KAATSU Air Bands on.¹ But it is not necessary to get bigger and stronger. The real key is two-fold:

- do KAATSU Cycles before and during the strength-training session
- finish off with some KAATSU Training
- increase the SKU pressure of the KAATSU Air Bands in the KAATSU Cycle and KAATSU Training mode instead of adding resistance (weights) to your lifts²



¹ As shown with New York Mets' Yoenis Céspedes in the ESPN report above.

² If you want to feel some resistance, you can use very light weights (e.g., water bottle or light dumbbells) and/or contract your muscles in the both the positive and negative directions.

KAATSU CYCLE 2.0

BENEFITS



KAATSU is the ultimate bio hack for health, rehabilitation and recovery.

Invented in 1966 by Dr. Yoshiaki Sato of Tokyo, Japan, and protected by 47 patents, KAATSU next-generation equipment and protocols have a unique and unprecedented safety track record with over 20 million individual KAATSU sessions in 48 countries around the globe.

Backed by over 50 years of expertise, KAATSU Global is excited to introduce the latest advancement in health and wellness, the KAATSU Cycle 2.0.

Fitting in the palm of your hand or in your pocket, the KAATSU Cycle 2.0 is the most advanced, most portable, easiest-to-use compression device in the world. In combination with a precise algorithm-controlled limb pressure, KAATSU's narrow, elastic bands yield to muscle contractions, providing safe and effective exercise and rehabilitation for users of all ages and from all walks of life, from Olympic champions to disabled individuals.

KAATSU users have a full range of motion providing complete control and the opportunity for a wide variety of movements and training.

From elite athletes and soldiers to aging Baby Boomers and busy executives, KAATSU Cycle 2.0 is the next-generation training and rehabilitation device used around the world.

KAATSU
IS USED BY





KAATSU FOR EXPLOSIVE STRENGTH AND VERTICAL LEAP INCREASE

[Aaron Gordon](#), an NBA basketball player from the Orlando Magic, is considered one of the most athletic players in the NBA. His dramatic dunks have captivated fans for years.

[John Murray](#) of [Murray Athletic Development](#) first introduced KAATSU to Gordon who uses the KAATSU Master unit.

Like Gordon, athletes who focus on basketball, football, soccer, rugby, volleyball, and many other sports focus on explosiveness, acceleration, agility, and their vertical leap abilities.

This is where use of the KAATSU Cycle and KAATSU Training modalities can make incremental differences and help athletes reach their true potential.

In a test witnessed by [Dave Durden](#), the 2020 USA Olympic Swim Team coach and 5-time NCAA Coach of the Year, one of the University of California Berkeley Assis-

tant Athletic Performance coaches wanted to focus on KAATSU effects on performance. [Steven Munatones](#) recalls the test with [Joel Smith](#), "Joel was not focused on recovery or rehabilitation with the KAATSU equipment, but rather on performance. So he did 3 KAATSU Cycles, with progressively higher pressures, on his arms. We walked right over to the gym after the 12 minutes of KAATSU Cycles was finished in order to shoot 5 free throws - without a warm-up. 3 shot were beautiful swishes, 1 ball bounced around the rim and went in, and 1 ball bounced out.

Joel responded, 'I felt very good, more fluid, with a greater mind-body connection.'

KAATSU passed the initial performance test, however rudimentary it was.

Then we did one more KAATSU Cycle on his leg at a fairly low pressure. We tested his vertical leap with a vertical leap measurement device in the Haas Pavilion on the Cal campus. Even without a warm-up, he leaped 26.0 inches; he said 'It was a lifetime best'. Joel was surprised, but I was not because not only were his vascular tissue with his limbs were made more elastic with the KAATSU Cycles on his arms and legs, but he had already done 16 minutes of KAATSU Cycles and a hormonal response was well underway.

Joel said that in order for KAATSU to be scientifically and statistically valid that he needed to leap at least one inch more than his best. We took up this challenge. The next two sets of KAATSU Cycles were done with a higher manual Base SKU and higher Optimal SKU levels while he did 2 more KAATSU Cycles with the KAATSU leg bands (at 350 SKU).

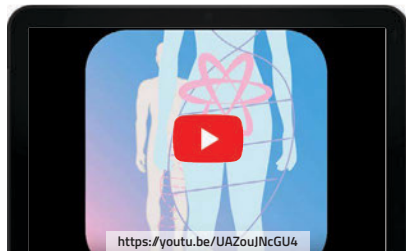
He walked up to the vertical leap measurement device and jumped again. 27.2 inches.

He did it again and leaped 27.5 inches. He leaped a fourth time and did 27.5 inches again. It was 1.5 inches greater than his max. Test passed."

Detailed training recommendations for increasing one's vertical leap over the course of a short duration (1-2 weeks) or over the duration of a season include the following:

1. Do 6 KAATSU Cycles on the arms at progressively higher pressures to warm-up or work on the arms (optional, if time is limited). Remove KAATSU Air Bands from the arms and place KAATSU Air Bands on the legs.
2. Do 6 KAATSU Cycles on the legs at progressively higher pressures to warm-up the legs ((e.g., Group Low > Group Medium > Group High > Pro Low > Medium > Group High).
3. During the first 3 KAATSU Cycles, simply stretch or walk around. During the last 3 KAATSU Cycles, begin some easy and light jumping.
4. Remove KAATSU Air Bands from legs.
5. Do some aggressive jumping or vertical leap drills.
6. Place KAATSU Air Bands on the legs at a sufficiently high pressure.
7. Do vertical leap drills until legs are burned out. Remove bands, rehydrate and stretch a bit.
8. After fully recovered, do a few more vertical leap drills to complete working on explosiveness and vertical leap.

Kevin Perrott, PhD of [OpenCures](#) explains a bit what happens biochemically after sets of KAATSU Cycles:



MOBILITY AND MOVEMENT IMPROVEMENTS WITH OLDER USERS



<https://youtu.be/JiJ7u4umW3k>

[Samuel Amorim](#), the leading KAATSU Master Specialist in Brazil and many other KAATSU Master Specialists around the world are helping their older patients improve their mobility and range of motion after doing repeated KAATSU Cycles.

In many cases, the older patients purchase their own KAATSU Cycle 2.0 unit and continue to make significant improvements after they can use the equipment at the comfort of their own home, optimally twice per day using the KAATSU Cycle mode.

Amorim initially warms up his clients and patients with the KAATSU Cycle while they are sitting and stretching. Then, they do a variety of exercises following the standard KAATSU protocols with resistance bands.



<https://youtu.be/HDbxikBHNzs>

KAATSU BY OLDER USERS



<https://youtu.be/9f8Qts1KMco>

KAATSU TRAINING BY OLDER USERS



<https://youtu.be/jxCZMZjLmMg>

KAATSU BY OLDER USERS

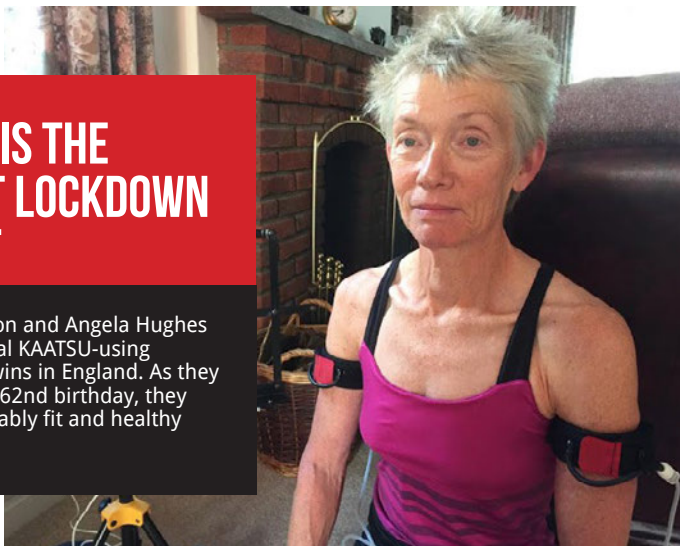


https://youtu.be/_5-SONFIJHs

KAATSU TRAINING BY OLDER USERS

KAATSU IS THE PERFECT LOCKDOWN PROJECT

Kathy Davison and Angela Hughes are identical KAATSU-using identical twins in England. As they approach their 62nd birthday, they are unquestionably fit and healthy Baby Boomers.



We were both previously very active (home gym, running, cycling and swimming – when pools were available), but have undoubtedly both

increased muscle and become fitter and stronger by using KAATSU.

We have picked up ideas from the KAATSU magazine and the blogs and have added many new exercises to our workouts. We also use the kit around the house doing less energetic activities (e.g. playing the sax).

We know there are many ways to use KAATSU and that there's much more to learn about this amazing kit.

This is exciting for the rest of lockdown and beyond."

The twins use the KAATSU Cycle 2.0 unit and the KAATSU Air Bands.

After hearing about KAATSU on Dr. Joseph Mercola's podcast this year, Angela and Kathy became regular users starting on April 4th. Angela said, "KAATSU has been the perfect lockdown project.

We're great enthusiasts and use our kit every day. Whenever we can, we do Facetime workouts 'together', [even though we are] 100 miles apart.

We synchronize the button presses so that we workout using identical KAATSU settings.



The twins use the KAATSU Cycle 2.0 unit and the KAATSU Air Bands.

GAMAL AWAD AND HAWLEY BENNETT ON KAATSU



The husband-and-wife duo of U.S. Marines Major [Gamal Awad](#) and 2-time Olympian [Hawley Bennett](#) talked about their use of KAATSU with retired Navy SEAL captain and KAATSU Master Specialist John Doolittle.

They regularly use the original KAATSU Nano unit with their KAATSU Air Bands.

Awad and Hawley have used KAATSU to help with their rehabilitation from numerous injuries - all quite serious

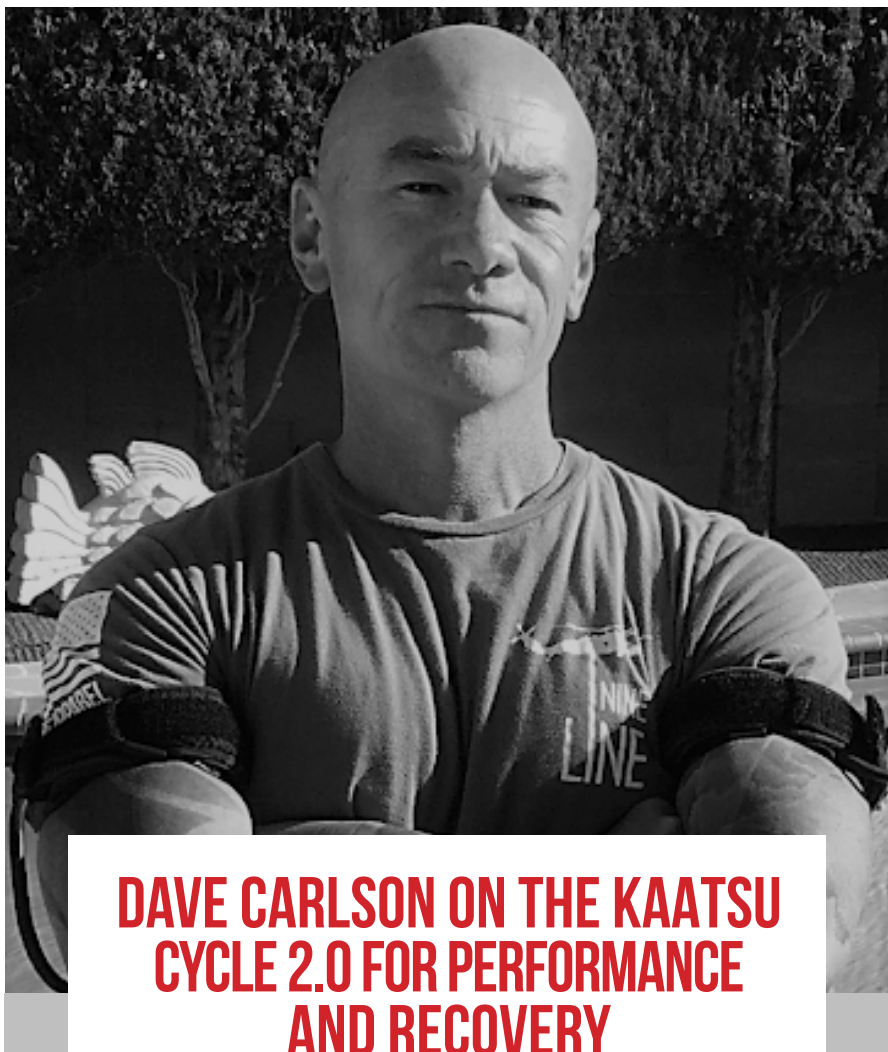
from broken pelvis bones to broken backs. They also use KAATSU in the course of their daily exercise routines. Awad talks of his daily need for KAATSU while Olympian Hawley talked about her own KAATSU journey in the podcast above.



Awad is shown below on the day of his most recent injury - and soon thereafter during his recovery with his pink KAATSU Air Bands on his arms.

To learn more about equestrian athlete Hawley who is looking to participate in her third Olympic Games next summer in Tokyo in 3-day eventing, visit hawleybennett.com.





DAVE CARLSON ON THE KAATSU CYCLE 2.0 FOR PERFORMANCE AND RECOVERY

Dave Carlson teaches Military History and Financial Literacy at Los Alamitos High School in the City of Los Alamitos in Southern California. He is a water polo coach who has seen several dozens of his players go on to college and compete in the Olympic Games, both men and women.

Carlson has seen all kinds of personal gains from KAATSU including reducing

the amount of time he needs to spend in a gym to reducing his back pain. But he has also incorporated KAATSU into the off-season, pre-season, mid-season and championship season training and rehabilitation regimen for his high school athletes.

In a KAATSU podcast, Carlson explains how he utilizes KAATSU for the teenage athletes who he coaches.

KAATSU®

Dave Carlson Talks KAATSU

SPECIAL TWO-PART PODCAST

PART 1: A HUGE ADVANTAGE

LEARN MORE

website
KAATSU.COM

blog
KAATSUBLOG.COM

phone
866.217.3460

<https://youtu.be/KaACVrahZ-0>

DAVE CARLSON ON KAATSU, PART 1

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DAVE CARLSON ON KAATSU, PART 2 ON RECOVERY

KAATSU CYCLE 2.0



Unit weighs 3.5 ounces and measures 3.6" x 2.25" x 1"

- > Exercise, recover and rehabilitate anywhere anytime
- > Offers KAATSU Cycle and KAATSU Training modes
- > Ultra compact, ultralight, durable
- > Utilizes precise, computer-controlled limb pressure on both arms, or both legs
- > The pneumatic elastic bands can be “untethered” from the KAATSU unit and are waterproof, for use in the pool
- > Utilizes original KAATSU know-how
- > US patent #9,775,619

PACKAGE

- > Includes 4 KAATSU Air Bands (for arms + legs)
- > Rechargeable battery with USB-C charger

RETAIL PRICE

- > \$899.⁹⁵ (1-yr warranty on device, 6 mo on bands)
- > \$979.⁹⁵ (2-yr warranty on device, 6 mo on bands)

BENEFITS

- > Tone muscle without weights
- > Convenient: do anywhere, anytime
- > Offers access to KAATSU Performance Database
- > Offers 6 pre-sent KAATSU Cycle levels
- > Improves speed, stamina and strength
- > Incredible time saver
- > Improves circulation
- > Faster recovery
- > Enables greater range of motion
- > Reimbursable with various CPT codes
- > Offers customizable KAATSU Training pressures
- > Proven safe for users up to 104 years old

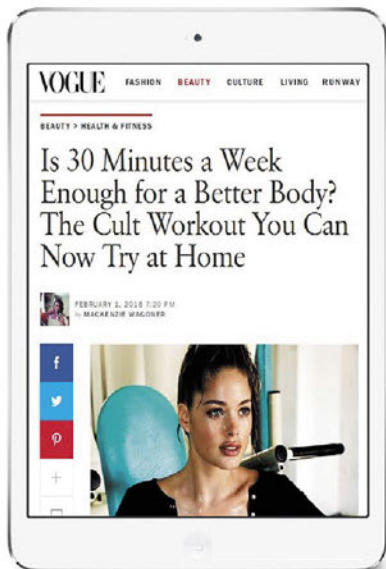
ABOUT KAATSU

KAATSU is the world-leader in blood flow moderation training and therapy. Invented in 1966 by Dr. Yoshiaki Sato in Tokyo, Japan and protected by 47 patents, our equipment and protocols have an impressive and unprecedented safety track record with over 20 million individual KAATSU sessions in dozens of countries across the globe. From elite athletes, to baby boomers, and everyone in between, KAATSU is the ultimate biohack for health and rehabilitation.

LEGAL NOTICE—DISCLAIMER Warning: KAATSU Global, Inc. cannot diagnose diseases, prescribe drugs, or recommend treatments for specific disease conditions and does not dispense medical advice. Any views and ideas expressed are opinions only and not intended to be a substitute for conventional medical advice or service. You agree that no responsibility or liability will be incurred to any person or entity with respect to any loss, damage, or injury caused or alleged to be caused directly or indirectly by the information contained within this document. If you have a medical condition, please see a licensed healthcare practitioner.

KAATSU IN THE NEWS

KAATSU has received recognition and coverage in prominent and prestigious publications.



"Can You Work Out Less, Get More Results?"

By Eleanor Warnock and Rachel Bachman
The Wall Street Journal



With Kaatsu, people do a light workout while wearing pressurized belts, first on the upper arms and then on the legs.

"Could the Kaatsu Workout Be the Most Efficient Exercise?"

By WSJ Video
The Wall Street Journal



Japanese bodybuilder Yoshiaki Sato says he has a way for Hollywood's aging action stars to stay as youthful and fit as ever.

MilitaryTimes

A TEGNA Company

"Kaatsu training is blowing fitness researchers' minds"

By Jon R. Anderson, Staff Writer
MilitaryTimes



Read the article and discover why so many people are so excited about KAATSU Training.

Outside

"You Should Probably Try This Japanese Blood-Flow Routine"

By Devon Jackson, Staff Writer
OutsideOnline.com



Footballers of both kinds have caught on. Here's what you need to know.

Customer Service:

Call Toll-Free International +1-888-410-6350

e-mail: info@kaatsu-usa.com

AVAILABLE
NOW

NEXT-GENERATION KAATSU MASTER 2.0



- ◆ **Designed for performance, recovery, rehabilitation and wellness applications**
- ◆ **Touch-screen tablet offers personalized KAATSU Cycle options**
- ◆ **Dual air compressors enable each limb to be simultaneously inflated to different pressures**
- ◆ **WIFI connectivity enables automatic storage of user data in the KAATSU Cloud**

www.kaatsu-global.com

NEXT-GENERATION KAATSU MASTER 2.0

AVAILABLE
NOW

www.kaatsu-global.com

The new KAATSU Master 2.0 is the fourth-generation KAATSU device that enables real-time monitoring and archiving of user's physiological data. The 2.0 is ideal for use by individuals, corporations, organizations, physical therapy clinics, universities, hospitals, and teams.

2.0 is combined with the Masimo MightySat™ Finger Pulse Oximeter and a wrist blood pressure monitor that capture and archive your oxygen saturation, pulse rate, Perfusion Index, Pleth Variability Index and blood pressure readings in real-time.

FEATURES

- Designed for performance, recovery, rehabilitation and wellness applications
- Touch-screen tablet offers personalized and comprehensive KAATSU Cycle options
- Dual air compressors enable each limb to be simultaneously inflated to different optimally pressures
- WIFI connectivity enables real-time monitoring and automatic storage of data in the KAATSU Cloud
- Video feedback and interaction with KAATSU Master Specialists for real-time consultation
- Access to KAATSU Cloud where user information is automatically uploaded and archived
- Rechargeable battery
- Used with both the KAATSU Air Bands or KAATSU Aqua Bands
- Band pressure up to 500 SKU (Standard KAATSU Units)
- Reimbursable with CPT codes

BENEFITS

- effective muscle toning
- improved circulation
- faster recovery from competition or vigorous workouts
- anti-aging benefits
- improved speed
- enhanced stamina
- increased strength
- greater range of motion
- significant time savings
- convenience - exercise anywhere anytime
- offers 6 levels of the KAATSU Cycle

PACKAGE

2.0 comes with 4 sets of KAATSU Air Bands or KAATSU Aqua Bands (Small, Medium, Large or Extra Large) and certification for KAATSU Specialists

DATA MONITORING

Masimo MightySat™ Fingertrip Pulse Oximeter and a Wrist Blood Pressure Monitor measures and monitors the following data during exercise or rehabilitation:

- Pulse Rate (PR) or the number of heart pulses per minute indicates your overall fitness and exertion levels
- Oxygen Saturation (SpO₂) or the oxygen level in the blood indicates changes due to your heart or lung function, oxygen use by your body, and altitude
- Perfusion Index (PI) indicates the strength of blood flow to the finger as blood circulation changes
- Respiration Rate (RRp) or the number of breaths per minute indicates how well your heart and lungs are functioning and how quickly you recover from exercise
- Pleth Variability Index (PVI) or the variation in perfusion index over your breathing cycle which may indicate changes in hydration, breathing effort, perfusion or other factors.
- Blood Pressure (BP) indicates your systolic blood pressure and diastolic blood pressure.

2.0 ALSO MEASURES AND ARCHIVES ADDITIONAL INFORMATION INCLUDING:

- KAATSU Time (KT) or the amount of time spent doing KAATSU per session
- Capillary Refill Time (CRT) or the amount of time in seconds that it takes for your capillaries to refill with blood
- KAATSU Exercise (KE) or the type of exercise, movement or rehabilitation you do with KAATSU
- KAATSU Cycle Function (KCF) or the specific type of KAATSU Cycle (e.g., Cycle 20 or Customized Cycle)

BAND SIZES

KAATSU Air and Aqua Bands are available in 4 sizes: Small, Medium, Large and Extra Large. Measure the circumference of the top of your arm (right by your armpit) and the circumference of the top of your leg (right alongside your groin). Those circumferences will determine the appropriate size for your KAATSU Air Bands.

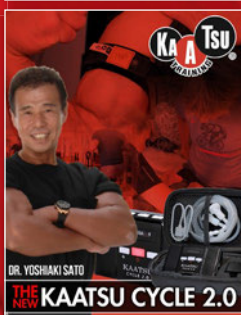
ARMS

Small: circumference of upper arm is less than 11.5 inches (29 cm)
Medium: circumference of upper arm is between 11.5 - 14 inches (29-35 cm)
Large: circumference of upper arm is between 14 - 16.5 inches (35-42 cm)
Extra Large: circumference of upper arm is between 16.5 - 21 inches (42-54cm)

LEGS

Small: circumference of upper leg less than 16 inches (40 cm)
Medium: circumference of upper leg is between 16 - 21 inches (40-53 cm)
Large: circumference of upper leg is between 21-26 inches (53-66 cm)
Extra Large: circumference of upper leg is between 26-32 inches (66-81 cm)

PREVIOUS ISSUES



PREVIOUS ISSUES



For customer service,
(or to order KAATSU products)

Call Toll-FREE: +1-866-217-3460

Email: info@kaatsu.com

Learn more about KAATSU, visit: KAATSU.COM

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KAATSUBLOG.COM