

THE NEW KAATSU CYCLE 2.0

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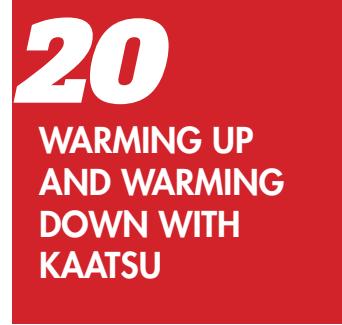
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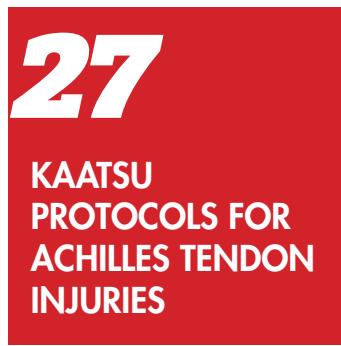
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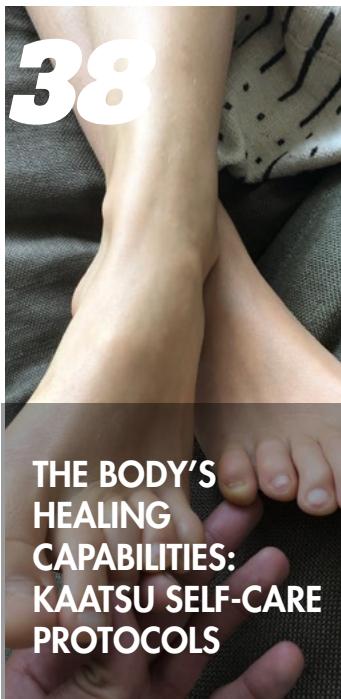
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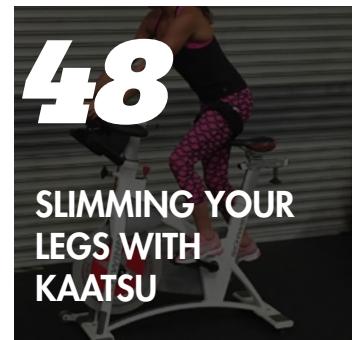
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TWICE DAILY
KAATSU USAGE
BY BULLETPROOF

THE LETTER FROM THE EDITOR

THE KAATSU CYCLE was invented by Dr. Yoshiaki Sato in 1973. After decades of testing, experimentation and refinement, the patented KAATSU Cycle is the cornerstone of KAATSU training, rehabilitation and recovery for professional and Olympic athletes, paraplegics, aging Baby Boomers, busy parents, stressed out students, corporate executives, soldiers and wounded warriors.

This edition is about how the KAATSU Cycle mode is used by people from various walks of life and of all ages.



The new KAATSU Cycle 2.0 unit is a speciality device that enables people to quickly, efficiently and safely used the KAATSU Cycle mode.

71-year-old Dr. Sato is shown on the cover page using the new KAATSU Cycle 2.0 that can be utilized in both the KAATSU Cycle mode and the KAATSU Training mode for improved athletic performance, enhanced rehabilitation and recovery, improved wellness, and healthful longevity.

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



KAATSU CYCLE 2.0 IS LAUNCHED

After years of research, design modifications, software changes, user feedback and utilization of metabolite testing results, the next-generation KAATSU Cycle 2.0 is now available. "It is more compact and quieter. It is more capable and more powerful than the first-generation KAATSU Nano and KAATSU Master products," explains Steven Munatones. "It enables exercise, recovery and rehabilitation anywhere anytime by anyone."

The ultra compact, ultralight, durable unit offers the KAATSU Cycle and KAATSU Training modes and utilizes precise, software-controlled limb pressure for both your arms and legs."

The KAATSU Cycle 2.0 includes 4 KAATSU Air Bands (for both arms and legs), a rechargeable battery with a USB-C charger. The pneumatic elastic bands can be disconnected from the KAATSU Cycle 2.0 unit and are waterproof, for use in the pool.

Based on the original KAATSU know-how and US patent #9,775,619 (Compression and decompression control system and vascular strengthening method), the equipment:

- » can tone muscle without weights
- » is convenient: do anywhere, anytime by anyone
- » offers access to the KAATSU Performance database
- » offers 6 pre-set KAATSU Cycle levels
- » can efficiently and effectively improve speed, stamina and strength
- » is an incredible time saver
- » can improves circulation
- » enables faster recovery
- » enables greater range of motion for those rehabilitating and recovering from injuries and surgeries
- » is reimbursable with various CPT codes
- » offers customizable KAATSU pressures

KAATSU CYCLING



KAATSU Cycle is a sequential series of increasing pressure on the circumference of a limb by KAATSU Air Bands. The invention in Tokyo in 1973 by Dr. Yoshiaki Sato is based on his blood flow moderation concepts.

KAATSU Global has developed a series of commercial products - KAATSU Nano, KAATSU Master, KAATSU Master 2.0 - with this modality that has long been used by people of all ages and abilities from Navy SEALs and professional and Olympic athletes to aging Baby Boomers and individuals as old as 104 years.

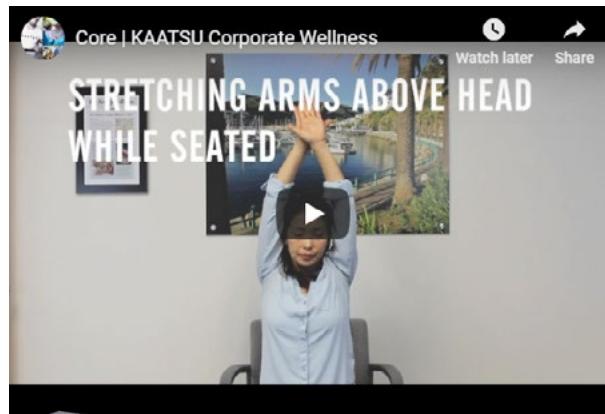
The concept is patented (United States 9,775,619) as a Compression and Decompression Control System and Vascular Strengthening Method by Dr. Sato and is used by athletes preparing for the Olympics to individuals with cardiac issues including those who have just come out of heart bypass surgery at the University of Tokyo Hospital under the care of cardiologists Drs. Nakajima and Morita.

With the KAATSU Cycle modality, users benefit from doing rehabilitation and exercise with different levels of pressure and duration that are automatically applied. Different goals for different individuals are achieved based on the different protocols.

So, for example, a Navy SEAL or an NBA player might use Cycle 60 (i.e., 60 seconds of pressure followed by 20 seconds of no pressure in 8 sequential cycles as the pressure levels increase each cycle) for Performance Training (i.e., meant to improve strength, stamina or speed on a healthy individual) while a patient with a broken bone or a septuagenarian recovering from a

knee replacement surgery might use Cycle 20 (i.e., 20 seconds of pressure followed by 5 seconds of no pressure) for rehabilitation. The appropriate tightness for each individual based on a combination of their Base SKU pressure (i.e., manual tightening of the pneumatic bands) and Optimal SKU pressure (i.e., inflated tightening of the bands).

KAATSU Global offers numerous different KAATSU Cycle modalities depending on the person's age, conditions and goals from Performance Training to Rehabilitation to Recovery - and is an ideal mode to get some quick and efficient exercise or stress relief in the office or work cubicle:



KAATSU CYCLE 2.0

DO'S

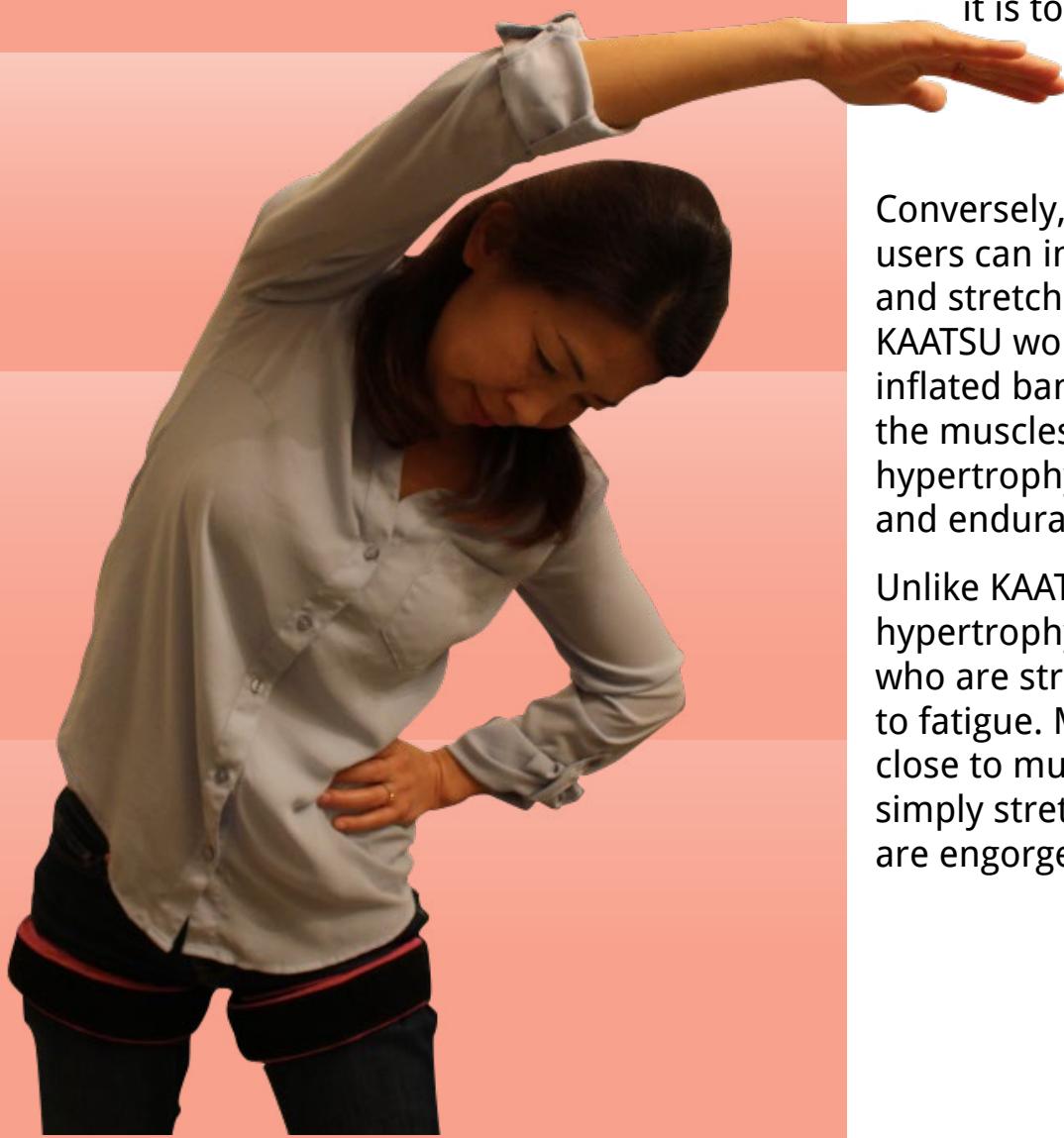
- » Correctly place the KAATSU Air Bands on your upper arms and upper legs every time.
 - Note : On your arms, the Bands should be placed above your biceps and triceps near your armpit, but below your deltoids.
- » Check Base SKU (pressure) and find Optimal SKU (pressure) during every KAATSU session. 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 something is not right. 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.
- » Do hydrate well before, during and after each KAATSU session.



DON'TS

- » 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.
- » Do not have Air Bands inflated for more than 20 minutes on your
- limbs. The KAATSU Cycle 2.0 will deflate automatically the KAATSU Air Bands when the maximum time is reached.
- » Do not lift heavy weights when doing KAATSU

KAATSU STRETCHING



KAATSU during Stretching can be done two different ways:

- Stretching with KAATSU Cycle
- Stretching with Optimal Pressure

KAATSU Specialists often ask older patients or rehabilitating clients to simply stretch as the KAATSU Air Bands are inflated during the KAATSU Cycle mode - and to relax during the 5-second rest (deflated) intervals.

These patients do not - or cannot due to age or other ailments - even do the KAATSU 3-point exercises because it is too stressful. For these individuals, stretching with the KAATSU Cycle is sufficiently effective.

Conversely, younger healthy KAATSU users can inflate to their Optimal SKU and stretch before and/or after their KAATSU workouts. Stretching with the inflated bands serves to help keep the muscles limber and avoid muscle hypertrophy that some individuals and endurance athletes do not want.

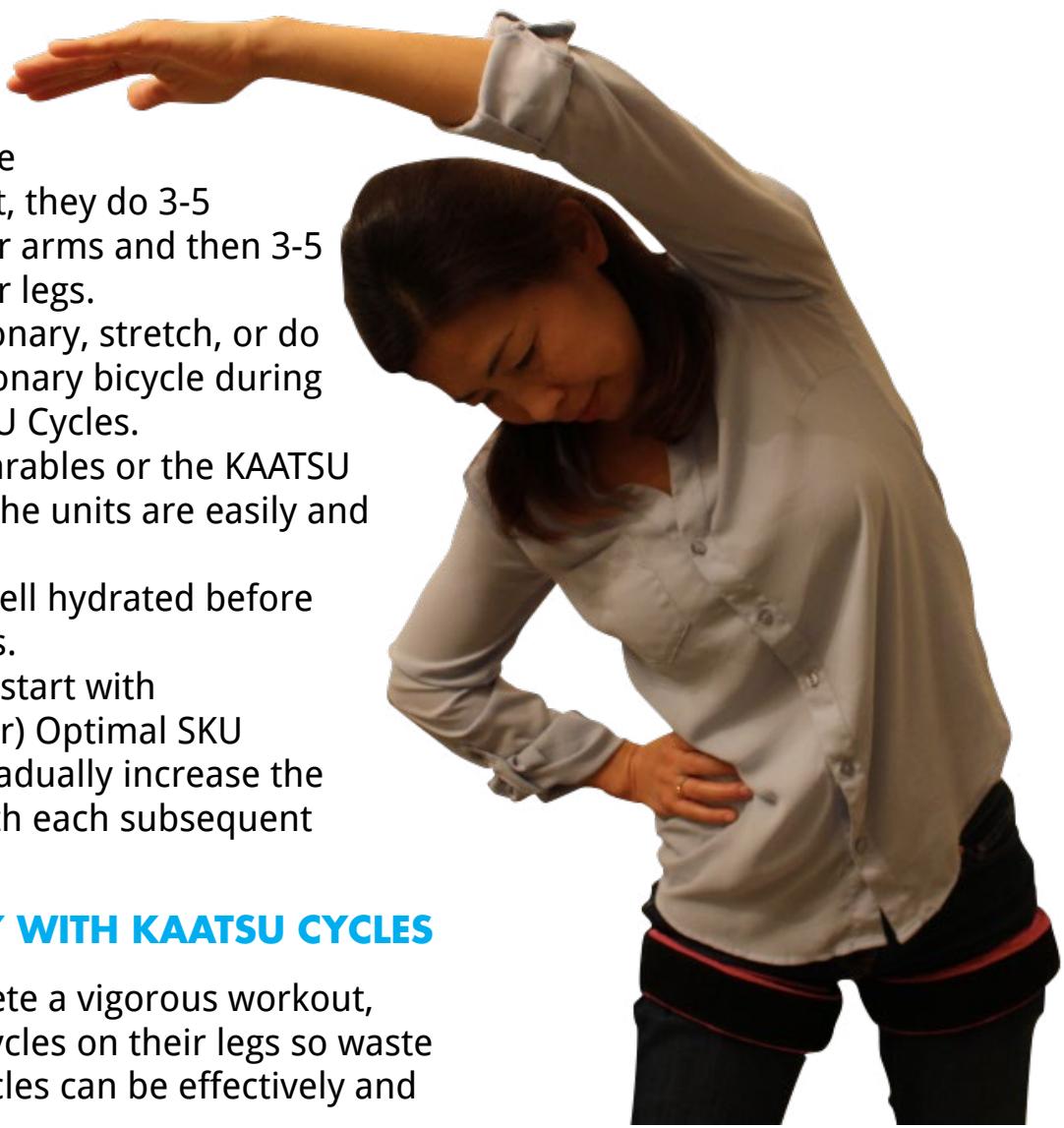
Unlike KAATSU training for muscle hypertrophy (see [here](#)), KAATSU users who are stretching do not need to go to fatigue. Most do not even come close to muscle failure. They are simply stretching the muscles that are engorged in blood.

Competitive cyclists, including professional keirin cyclists and triathletes use KAATSU equipment in a variety of ways:

1. Warm-up and stretching with KAATSU Cycles
2. Workout recovery with KAATSU Cycles
3. Increased watt output with KAATSU Cycles
4. Increased watt output with KAATSU Training
5. Increase functional threshold power using KAATSU Training
6. Rehabilitation with KAATSU Cycles

WARM-UP AND STRETCHING WITH KAATSU CYCLES

- » As the athletes prepare for a vigorous workout, they do 3-5 KAATSU Cycles on their arms and then 3-5 KAATSU Cycles on their legs.
- » They can remain stationary, stretch, or do easy cycling on a stationary bicycle during these warm-up KAATSU Cycles.
- » Using the KAATSU Wearables or the KAATSU Cycle 2.0 equipment, the units are easily and comfortable used.
- » It is important to be well hydrated before starting KAATSU Cycles.
- » It is very important to start with comfortable (i.e., lower) Optimal SKU pressure levels and gradually increase the Optimal SKU levels with each subsequent KAATSU Cycle.



WORKOUT RECOVERY WITH KAATSU CYCLES

- » As the athletes complete a vigorous workout, they do 3-5 KAATSU Cycles on their legs so waste products in their muscles can be effectively and

efficiently removed. This enables the athlete to benefit from a rapid recovery so their subsequent workouts are optimized.

- » They can remain stationary, stretch, or do easy cycling on a stationary bicycle during these cool-down KAATSU Cycles.
- » Using the KAATSU Wearables or the KAATSU Cycle 2.0 equipment, the units are easily and comfortable used.
- » It is important that the KAATSU Color is pink or rosy or beefy red while doing KAATSU Cycles; the skin tone should never be white, blue or gray.

INCREASED WATT OUTPUT WITH KAATSU CYCLES

- » Athletes can do their workouts while gradually increasing the Optimal SKU levels of the KAATSU Cycles.
- » For example, athletes can do 6-8 sets of KAATSU Cycles as the Optimal SKU levels increase from 200 to 225 to 250 to 275 to 300 to 350 to 400 SKU.
- » As time and experience with KAATSU increases, the watt output will also increase.
- » Athletes can change (either decrease or increase) the parameters of time, incline, Optimal SKU levels as well as watt output.

INCREASED WATT OUTPUT WITH KAATSU TRAINING

- » Athletes can workout while setting their Optimal SKU at a specific level in the KAATSU Training mode.

- » For example, athletes can cycle for a specific time at a specific SKU level at a specific watt output (e.g., 200 SKU for 15 minutes at a specific watt output).
- » As time and experience with KAATSU increases, the watt output and time will also increase (e.g., 250 SKU for 20 minutes at an increased specific watt output).

INCREASE FUNCTIONAL THRESHOLD POWER USING KAATSU TRAINING

- » Athletes can workout while setting their Optimal SKU at a specific level in the KAATSU Training mode.
- » For example, athletes can aim for a specific time at a specific SKU level at a specific watt output (e.g., 200 SKU for 15 minutes at a specific watt output).
- » As time and experience with KAATSU increases, the watt output and time will also increase (e.g., 200 SKU for 20 minutes at an increased specific watt output). When the time goal is achieved, then the Optimal SKU level can also be increased.

REHABILITATION WITH KAATSU CYCLES

- » Torn muscles, ligaments, tendons or broken bones can be efficiently and effectively rehabilitated using the KAATSU Cycle mode.

KAATSU CYCLING FOR CYCLISTS



It should be noted that academic researchers confirmed what KAATSU Specialists have long known since the 1980's: that low-intensity exercise with KAATSU Air Bands leads to muscle growth and strength gains.

Many researchers between 2000 - 2005 tested KAATSU Walking with MRI-measured muscle size and strength (maximum dynamic or one repetition maximum) and isometric strength along with blood hormonal parameters. Testing was done on both control groups and experimental groups of subjects ranging from young men to older women.

The testing was done using 2-minute bouts of treadmill speed of 50 meters per minute.

The researchers found a multitude of benefits and changes among the experimental KAATSU users while there was no change in muscle size and dynamic and isometric strength in the control group..

1. Serum growth hormone was elevated after KAATSU Walking with the experimental group, but not with the non-KAATSU control group.
2. MRI-measured thigh muscle cross-sectional area and muscle volume increased by 4 - 7%.

3. One repetition maximum and maximum isometric strength increased between 8 - 10%

Furthermore, indicators of muscle damage (creatinine kinase and myoglobin) and resting anabolic hormones did not change with both groups. The researchers concluded that KAATSU Walking induces muscle hypertrophy and strength gain despite the minimum level of exercise intensity after 3 weeks, and that KAATSU Walking may be a potentially useful method for promoting muscle hypertrophy for a wide range of the population including the frail and elderly.

While these benefits have long been known in Japan, there have been many other applications that have since been developed and researched that address age-related skeletal muscle loss (sarcopenia) that inhibits mobility and increases the risk of developing several diseases such as diabetes, osteoporosis and heart disease.

As the implications of KAATSU protocols began to be appreciated by the

United States military, researchers like Dr. William Ursprung at Texas A&M University studied the effects of KAATSU Walking to improve aerobic capacity. Dr. Ursprung evaluated the effects of KAATSU Walking on VO2max, 1.5 mile run times, and muscular size at low training volumes and intensities with airman from the U.S. Air Force 350th Special Operations and Tactics Training Squadron.

After three weeks of lower extremity KAATSU Walking, the test found significant improvements in VO2max, significant decreases in 1.5 mile run time, and significant increases in thigh muscle cross sectional area and the researchers concluded that KAATSU Walking represents a methodology for improving aerobic capacity, endurance and muscular size at low training volumes and intensities.



This conclusion mirrored the applications for KAATSU that many far forward-thinking coaches and trainers have known and used. For military personnel and athletes who are looking for concurrent improvements in strength and endurance, they do not always have to move, run, swim, cycle or row at maximum intensity if they strategically use KAATSU equipment.

While movement or exercises with KAATSU equipment performed with intensity will result in significant physiological and athletic improvement, it is always unnecessary.

This phenomena means that the implications and applications of KAATSU usage expands significantly. When benefits and improvements can be achieved at any speed, pace or level of intensity, coaches and athletes can be much more flexible and creative in their training decisions.

For example, instead of only going all-out sprints with KAATSU, runners, cyclists, swimmers, rowers and skiers can practice at more moderate pace - which means that KAATSU can be done more frequently and with less resultant fatigue.

The same effects of KAATSU have been found with other KAATSU-using mammals like horses, mice, rats, and goats in testing performed in Japan and China.

"As long as their technique and athletic form is correct, athletes and military personnel can realize benefits with KAATSU by moving more slowly (i.e., walking versus running or swimming at a moderate pace versus swimming at maximum speed) rather than always going all-out," explains Steven Munatones. *"Perhaps this lowered intensity is appropriate after injuries or immediately after a competition or during a taper phase of training. Perhaps this slower pace or raw speed is simply more appropriate during different parts of any specific workout when an athlete is working on their technique or form."*



104-YEAR-OLD DOING KAATSU

Visionary physicians and patients born before 1950 are leading the way on how best to incorporate KAATSU to combat sarcopenia and address a host of other health issues. A 104-year-old female patient in Kawasaki, Japan shows what is possible with KAATSU under the guidance of her physician Dr. Odagiri and KAATSU inventor Dr. Sato.

The video above was presented by Dr. Odagiri at the first KAATSU Training Symposium held in Tokyo, Japan in 2005.

The patient was bedridden and uncommunicative for two months with severe dementia. She was transferred from her local hospital to Odagiri Hospital where she was treated with KAATSU. Initially for the first month, she simply did KAATSU Cycle as she remained in bed. Gradually, she became communicative and was able to get out of bed. Eventually, over the course of two months, she was able to do a variety of exercises and found herself wishing to live to be 200 years old.

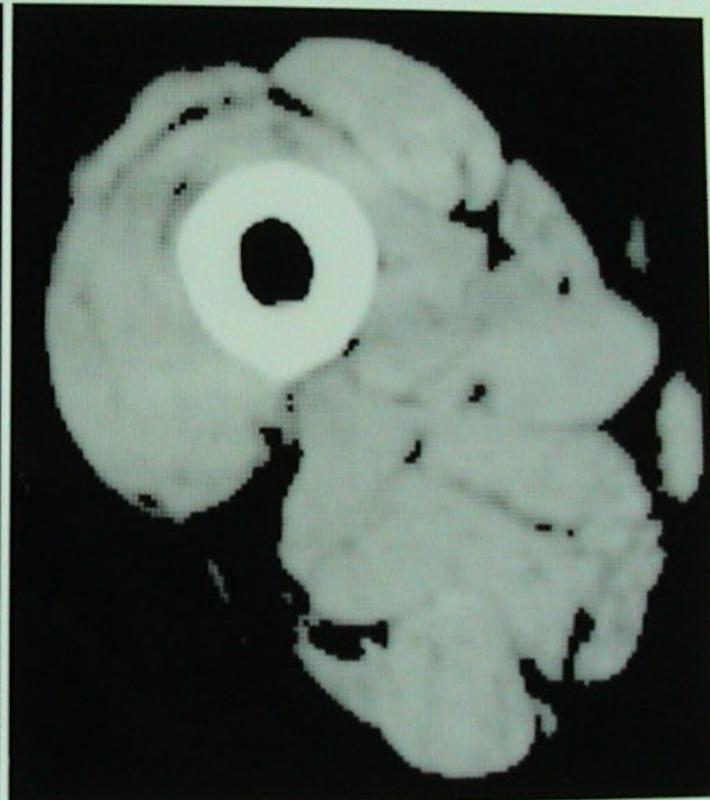
During the video, she was asked how old she is and she answers as 104, holding a document confirming her age and birth date. She is shown doing a variety of exercises with her KAATSU Air Bands on (120 Optimal SKU level).

Her doctors also documented her muscle gains in her upper legs (quadricep + hamstring) via before-and-after comparative computed tomography scans (3 months apart):

大腿部横断像 (らせんCT)



リハビリ前



リハビリ 3ヶ月後

BEFORE AND AFTER EFFECTS OF KAATSU AMONG THE ELDERLY



At the Harvard Medical School in Boston on November 5th 2014, cardiologist Toshiaki Nakajima, M.D., Ph.D., formerly of the University of Tokyo Hospital, presented a study entitled *Skeletal Muscle Hypertrophy induced by KAATSU Rehabilitation and Prevention of Sarcopenia*.

Sarcopenia is the loss of muscle mass and is a major problem among older individuals. Among both males and females, muscle strength decreases with age and muscle volume quickly decreases (0.45 kg per year) as individuals age past 50 years old. That is, fast twitch muscle fiber decreases on average to 50% by the age of 80 years.

To prevent it, physicians and physiologists understand that high-intensity resistance exercise (e.g., weight training or body weight exercises) is required. But this type of training is usually not possible - or desired - by the elderly.

But with KAATSU, individuals up to the age of 104 [see below and here] can perform low-load or no-load, non-impact exercise with KAATSU equipment following the KAATSU Cycle modality to induce muscle hypertrophy and strengthen muscle even with short-term, low-intensity exercise. With the KAATSU Air Bands or KAATSU Aqua Bands, the KAATSU no-load, non-impact exercise physiologically equals high-intensity, high-load training. In both cases (KAATSU and high-intensity, high-load training) the muscle and brain are stimulated to induce muscle hypertrophy and strength including fast twitch muscle fibers.

Dr. Nakajima tested 19 healthy elderly subjects with a mean age of 71 years [one



**Knee Extension
(~20% 1RM)**



**Leg Press
(~30% 1RM)**

84-year-old subject is shown on left]. There were 10 individuals in the control group and 9 individuals in the experimental (KAATSU) group. The individuals did knee extensions and leg press exercises twice per week (Mondays and Thursdays) for 12 weeks. The SKU (Standard KAATSU Unit) pressure on the KAATSU leg bands ranged from 120-250 SKU.

Dr. Nakajima reported the significant increase in cross sectional area

of thigh with MRI in the Scandinavian Journal of Medicine & Science in Sports (2014 Oct;24(5):799-806). He also explained how the increase in muscle strength and mass leads to improvement of life function tests like getting up and out of a chair or bed.

Similar results were realized in the arms (biceps and triceps) among the group of elderly patients.

He explains the process leading up to muscle hypertrophy due to

traditional resistance training. "Typically, an individual needs to perform at least 65% of 1RM to create mechanical stress, metabolic stress, Hormone (catecholamine) secretion, Growth factor, Cytokine (IL-6), nerve factor, local circulation, hypoxia and cell swelling that leads to adaptation and an increase in protein synthesis and decrease in protein degradation.

In contrast, KAATSU leads to several mechanisms that cause KAATSU's

hypertrophic effects: recruitment of fast twitch muscle fibers, increase in Growth Hormone and IGF-1 (Insulin Growth Factor), amino acid uptake, increase in protein synthesis and a decrease in myostatin.

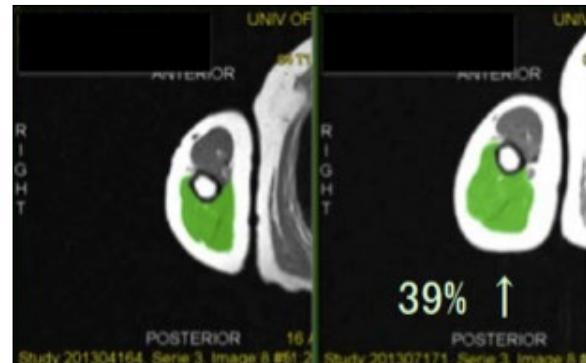
He described the process. "Maintenance of skeletal muscle mass is dependent on the relationship of muscle protein balance - protein synthesis and breakdown. A negative protein balance induces muscle atrophy, whereas a positive balance induces muscle hypertrophy.

After muscle disuse, during long-term bed rest and simulated models of no-bearing activity, severe skeletal muscle atrophy develops due to altered protein metabolism leading to decreased muscle contractile protein content.

To prevent this, resistance exercise, an established and potent stimulus for enhancing muscle protein synthesis and subsequent muscle hypertrophy, is traditionally used.

Conversely, skeletal muscle is a plastic organ that adapts its mass to the different conditions by affecting pathways that regulate protein and cellular turnover. Repetitive KAATSU appears to be a novel stimulus for skeletal muscle to induce a net positive protein balance and prevent atrophy especially with patients with orthopedic diseases or injuries or those with disuse syndrome, sarcopenia and cachexia (weakness and wasting of the body due to severe chronic illness)."

To view an example of the before-and-after effects of KAATSU on a 104-year-old female, visit [here](#).



Repetitive KAATSU appears to be a novel stimulus for skeletal muscle to induce a net positive protein balance and prevent atrophy especially with patients with orthopedic diseases or injuries or those with disuse syndrome, sarcopenia and cachexia (weakness and wasting of the body due to severe chronic illness).

WARMING UP AND WARMING DOWN

WITH KAATSU

KAATSU is well-known to build muscle mass and girth. But this is only one single aspect, one athletic perspective, one possible benefit, one resultant outcome of KAATSU.

There are some athletic activities that need only a greater range of motion or increased strength or improved performance - and do not desire greater muscle mass or girth. Similarly, some individuals do not wish to gain muscle mass or muscle girth - they prefer improved muscle tone or improved BMI.

In these cases, the KAATSU Cycle is an ideal application of KAATSU Training.

The KAATSU Cycle can either be done as a stand-alone workout or should be done before every vigorous workout or KAATSU Training session. The KAATSU Cycle offers the ideal warm-up as it efficiently gets blood in the working muscles of the arms and legs. You can start using the KAATSU Cycle 2.0 with the GROUP (G) mode in the LOW (L) pressure setting on your first KAATSU Cycle. Then, you can proceed to the GROUP (G) mode in the MEDIUM (M) pressure setting on your next KAATSU Cycle if appropriate. Then, you can continue to the GROUP (G) mode in the HIGH (H) setting on your next KAATSU Cycle, etc.



If the pressure is appropriate, you can continue to the PRO (P) mode, going from the LOW (L) level to the MEDIUM (M) level to the HIGH (H) level.

Then, a few additional KAATSU Cycles can be repeated after the end of your workout.

Always be well-hydrated throughout your KAATSU sessions.

After your workout is over, you can begin the KAATSU Cycles again in the GROUP mode LOW pressure level and repeat the process above in order to flush out the lactic acid that you may have built up during your workout.

If you do not want undesired muscle growth and increased girth in your arms and legs, you can walk easily or do simple stretching while you do the cool-down KAATSU Cycles.

The use of KAATSU Cycle is a safe and effective engorgement of blood in the limbs. A warm-up or warm-down while moving (e.g., walking or stretching) in such a physiological state will lead to improved preparation for vigorous training or greater efficiency in flushing out lactic acid that has built up.

RECOVERY FROM A TORN ACL WITH KAATSU

Danny Woodhead is one tough athlete. Small in stature (for an NFL veteran), but huge in heart, the 33-year-old NFL running back has had his share of injuries including two separate torn ACLs. After his latest ACL surgery during the 2016 season, he did KAATSU in order to return to the field as soon as possible.

His return was indeed quick as he followed the following standard KAATSU protocols.

KAATSU is separated into different protocols in each of the following 3 areas:

1. Athletic Performance
2. Rehabilitation
3. Recovery and Wellness

ATHLETIC PERFORMANCE: KAATSU is used in slightly different ways to improve speed, stamina, strength, muscle size or BMI.

REHABILITATION: KAATSU is used to enhance traditional physical therapy for people with broken bones, or torn ligaments, tendons, and muscles. These protocols are specific with different applications of pressure.

RECOVERY: KAATSU is also used for recovery from injuries and the effects of sedentary living.

KAATSU ARM PROTOCOLS

- » Even for post-ACL surgery recovery, start KAATSU on your arms first.
- » Do KAATSU Cycle 20 at your appropriate Base SKU and Optimal SKU.
- » • Your Base SKU can vary between 10 - 30 SKU depending on your age and physical condition. In general, the younger and more fit you are, the higher your pressures. But everyone differs.

- » You can stretch your arms or upper body, do isometric exercises, or do 3 sets of the KAATSU 3-Point Arm Exercises (i.e., 3 sets of Hand Clenches + 3 sets of Biceps Curls + 3 sets of Triceps Extensions) during the KAATSU Cycle mode.
- • Rest while there is the KAATSU Air Bands are deflated. Move while the KAATSU Air Bands are inflated.

SPECIFIC POST-ACL SURGERY PROTOCOLS

- » Do muscle contractions of your quadriceps and calves or stretch or perform simple therapeutic motions (in combination with resistance bands or other equipment that is requested by aa you can during the KAATSU Cycle.
- • Higher SKU levels are usually tolerable on the legs compared to the arms in most cases.
- » Do specific physical therapeutic movements, stretch or the KAATSU 3-Point Leg Exercises:

SIMPLE: 3 SETS EACH OF TOE CURLS + TOE RAISES + SITTING HEEL RAISES

Moderate (after the body begins to heal and such movements become possible): 3 sets each of Balancing on one leg + casual walking

Advanced (after the body begins to heal and such movements become possible): 3 sets each of Standing Heel Raises + Standing Leg Curls + Non-lock (partial extension) Quarter Squats

- ** Note: KAATSU Aqua Bands are also available and any kind of aqua-therapy movements can be done in the water or on an AlterG treadmill.

HOW TO WEAR

- » Place the KAATSU Air Bands on your upper arms, above your biceps and below your deltoids near your armpits. Your KAATSU Air Bands should be placed snugly so your finger cannot be easily slipped under the bands when it is against your skin.
- » The palms of your hands should start turning pink or even a redness right away. Your KAATSU Air Bands are on too tightly if the hands turn white, gray and blue or you feel numbness.
- » If the KAATSU Air Bands are on too tightly, your Capillary Refill Time (CRT) will be longer than 3 seconds. In this case, loosen the KAATSU Air Bands on your arms.
- » To check your CRT, firmly press your thumb into the palms of both hands and release. The temporary white spot on your palms should quickly fill back with blood and turn pink (or red). You can do this anywhere on your legs, but preferably on your quadriceps above your knee on your legs, when you are checking your CRT on your legs.
- » Place the deflated KAATSU Air Bands around the upper legs, right by your groin (i.e., under mens's briefs or a woman's swimsuit are worn).
- » Start with the appropriate KAATSU Cycle level depending on your age and physical condition (10 - 30 SKU).

GENERAL GUIDELINES

- » Do 3-4 sets of each exercise, stretch or therapeutic movement. Then continue with the next 3 sets with a different exercise, stretch or movement.
- » For rehabilitation and recovery, movements should be performed slowly, steadily and non-stop (e.g., do not lock knees on squats).
- » For athletic performance, movements should be performed at desired pace or speed in a game, set or match. This is called KAATSU Performance Training.
- » After 3-4 sets of a specific exercise, stretch or movement, then move onto another type of exercise, stretch or movement. Note: If you are working on your legs, do 3-4 sets on one leg and then 3-4 sets on the other leg.
- » Keep rest short between sets and between exercises. That is, rest 20 seconds maximum between sets of 3 or 60 seconds maximum between different exercises. Modify as necessary.
- » Select exercises, therapeutic movements or resistance loads that allow performance of a good number of repetitions (e.g., 30- 40 in the first set, 20-30 in the second set, fewer than 15 in the third set, fewer than 10 in the fourth set).
- » Reach maximum effort (or go to muscular failure or technical failure) within each set.
- » Always remain well hydrated before and during the entire KAATSU session.
- » Always start with standard KAATSU CYCLE 20 (i.e., 8 cycles of 20 seconds of pressure followed by 5 seconds of pressure off with sequentially increasing pressure).

- » Always conduct movements with a good range of motion. However, if you feel any pain or uncomfortable sensation, restrict your range of motion so there is no pain or uncomfortable sensation. That is, never push your joints or limbs to the point of pain.
- » Always follow KAATSU protocols (i.e., have Capillary Refill Time within 3 seconds with no occlusion or lightheadedness, and no paleness or no numbness in limbs).
- » Immediately release and remove KAATSU Air Bands if there is any numbness or lightheadedness, or the skin color becomes pale or white. Lie down with the legs elevated if necessary.
- » First start KAATSU on your arms and then proceed to do KAATSU on your legs.
- » Never simultaneously put on or use the KAATSU Air Bands on your arms and legs.
- » Limit KAATSU to 15 minutes on your arms and 20 minutes on your legs.
- » Frequently check your CRT (i.e., Capillary Refill Time). Confirm that the color of your limbs remains either pink or beefy red.
- » Your veins may become distended (i.e., popping out) during KAATSU.
- » You may feel a slight tingling in your fingers or toes during KAATSU.
- » KAATSU should be implemented with the understanding of your physician.

KAATSU BEAUTY AFTER 50



Many older Japanese women have great skin.

Most of their secrets are well-known: good sun protection throughout their lives combined with good nutrition.

But there is another secret: KAATSU.

KAATSU has been called anti-aging in the popular Japanese media. In fact, the KAATSU Cycle modality is highly effective in maintaining vein and capillary elasticity as one ages. The blood flow moderation that is instigated and enhanced

with KAATSU stimulates the repeated constriction and dilation of the body's blood vessels and improves the elasticity vascular system. As a result of the KAATSU Cycle, vascular endothelial cells and nitric oxide are produced that also helps.

When the KAATSU Master 2.0 or KAATSU Nano is used, the blood vessels in the arms or legs are dilated as the blood pools in the upper or lower limbs (as is seen as the color of the arms or legs becomes pink, beefy red or even a shade of purple with people with a high degree of vascular elasticity doing

aerobic exercise with KAATSU Air Bands on). As the limbs are dilated, more blood is pooled in the limbs (which is why the color of the arms or legs often starts off with a slight pinkness color and then gradually changes to a darker or redder color within minutes).

Meanwhile, the blood vessels in other parts of the body are also positively impacted. Due to the increased elasticity in the arms and legs, the blood circulation is improved throughout the body - including the face and neck.



During KAATSU, the enhanced blood flow in the arms and legs pools into blood vessels where no blood has been previously supplied - or alternatively new capillaries are formed. This is why older people or those with cold hands or cold feet feel a sense of warmth after doing KAATSU. These new capillaries help supply a limited amount of blood more efficiently and helps with the onslaught of aging.

With increased vascular elasticity - especially of the tiny amount of capillaries* - skin elasticity is increased.

KAATSU BEAUTY - NIGHTTIME PROTOCOL #1

1. Be well-hydrated.
2. Do 3-6 KAATSU Cycles one hour before going to bed.
3. Repeatedly pronounce vowels (a - e - i - o - u) out loud while doing 1-2 KAATSU Cycles with the KAATSU Air Bands on the arms.

4. Slowly rotate the head left and right, forwards and backwards, and clockwise and counterclockwise while doing 1-2 KAATSU Cycles with the KAATSU Air Bands on the arms.
5. Gently stretch the upper body while doing 1-2 KAATSU Cycles with the KAATSU Air Bands on the arms.

KAATSU BEAUTY - NIGHTTIME PROTOCOL #2

1. Be well-hydrated.
2. Do 3-6 KAATSU Cycles one hour before going to bed.
3. Slowly and steadily stretch the legs and core (abdominal and lower back) while doing KAATSU Cycles with the KAATSU Air Bands on the legs.

Actual KAATSU users shown above are at least 50 years old.

KAATSU PROTOCOLS FOR ACHILLES TENDON INJURIES



The Achilles tendon is a tough band of fibrous tissue that connects the calf muscles to the heel bone. When the tendon is strained, torn or repaired due to surgery, the following KAATSU protocols are recommended:

GENERAL GUIDELINES

- » Always remain well hydrated before and during the entire KAATSU session.
- » Your skin should turn pink or a beefy red or even a hint of purple. This indicates engorgement of blood in your arms or legs.
- » Your skin should not turn white, gray or blue. This indicates the KAATSU Air Bands are too tight and the bands are serving as a tourniquet. KAATSU is not occlusion training. There must be sufficient and regular arterial flow (i.e., blood flow from the torso to the limbs) and only a modified venous flow (i.e., blood flow from the limbs back to the torso) when doing KAATSU.
- » Continue to follow the recommendations of your medical professional and perform the movements as recommended by your physical therapist.
- » You can use the KAATSU Air Bands while doing standard physical therapy.
- » You can do KAATSU twice per day which is especially effective if one session is in the morning hours and another session is closer to bedtime.
- » Keep rest short between sets and exercises while doing KAATSU. Rest 20-30 seconds between sets or 60 seconds between different exercises. This can be modified as necessary.

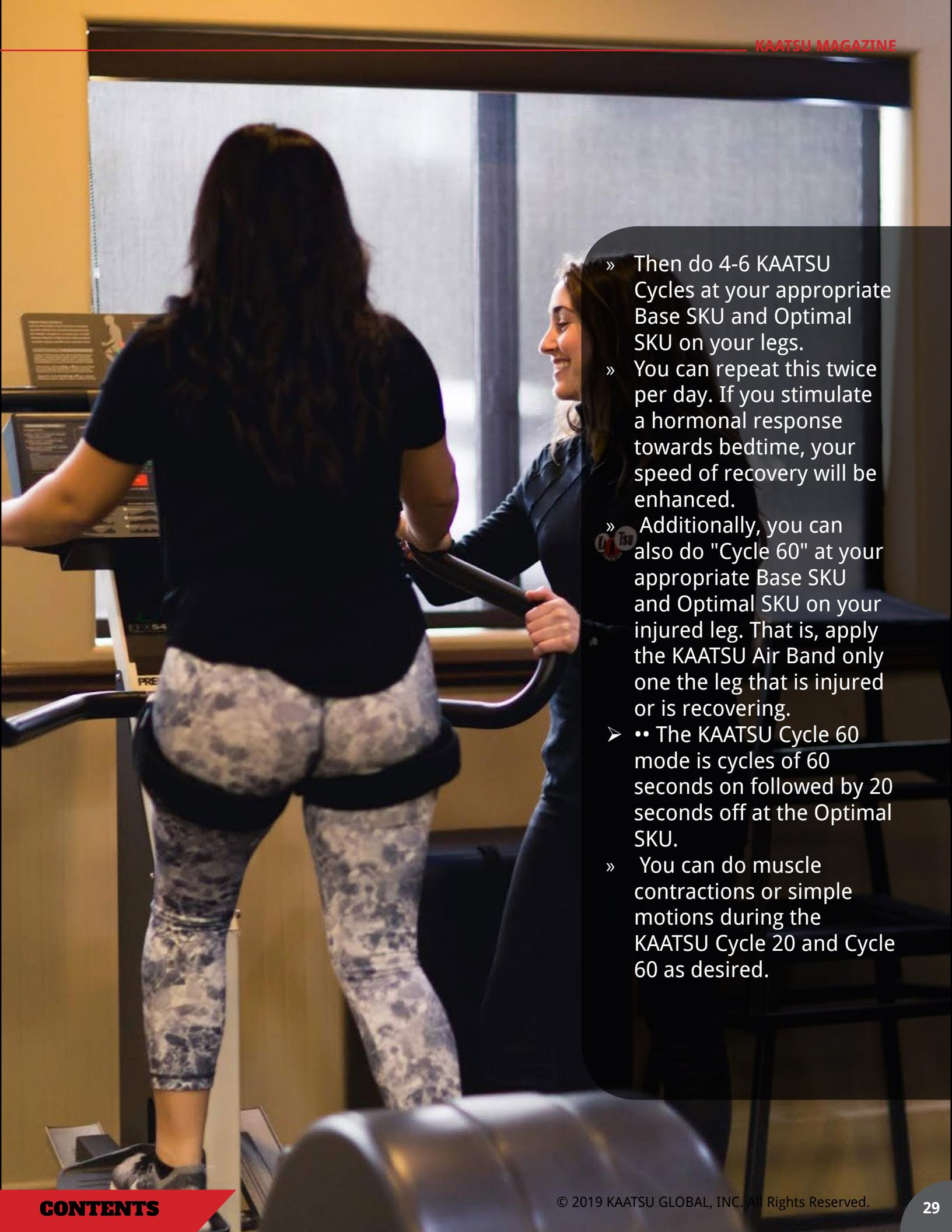
- » Select physical therapy movements, exercises, or loads that allow you to perform a good number of repetitions (e.g., 30-40 repetitions in first set, 20-30 repetitions in the second set, fewer than 15 repetitions in the third set).
- » Do at least 3 sets of each exercise or movement and then move onto a different exercise.
- » Try to reach maximum effort (or go to muscular or technical failure) within each set.
- » Always start with up to 15 minutes of KAATSU Cycle on your arms and then do up to 20 minutes of KAATSU Cycle on your legs.
- » Always have your Capillary Refill Time fall within 3 seconds with no occlusion or lightheadedness, and no paleness or no numbness in your limbs.
- » Immediately release and remove KAATSU Air Bands if there is any numbness or lightheadedness, or the skin color becomes pale or white. Lie down with the legs elevated if necessary.
- » Never simultaneously put on or use the KAATSU Air Bands on your arms and legs.
- » Do not exceed 15 minutes of KAATSU on your arms or 20 minutes on your legs.
- » Frequently check your Capillary Refill Time and confirm that the color of your limbs remains either pink or beefy red.
- » Your veins may be distended (i.e.,



- » You may feel a slight tingling in your fingers or toes during KAATSU. This indicates that the small capillaries of your hands are fully engorged.
- » KAATSU should be implemented with the understanding of your physician and physical therapist.
- » Higher SKU levels are usually tolerable on your legs compared to your arms in most cases.

KAATSU PROTOCOLS FOR MUSCLE, BONE, LIGAMENT, AND TENDON RECOVERY

- » Do 3-5 KAATSU Cycles ("Cycle 20") at your appropriate Base SKU and Optimal SKU, first on your arms (i.e., 8 cycles of 20 seconds on + 5 seconds off).



- » Then do 4-6 KAATSU Cycles at your appropriate Base SKU and Optimal SKU on your legs.
- » You can repeat this twice per day. If you stimulate a hormonal response towards bedtime, your speed of recovery will be enhanced.
- » Additionally, you can also do "Cycle 60" at your appropriate Base SKU and Optimal SKU on your injured leg. That is, apply the KAATSU Air Band only one the leg that is injured or is recovering.
- • The KAATSU Cycle 60 mode is cycles of 60 seconds on followed by 20 seconds off at the Optimal SKU.
- » You can do muscle contractions or simple motions during the KAATSU Cycle 20 and Cycle 60 as desired.



REDUCING JET LAG AND BATTING INSOMNIA

Many KAATSU users, including KAATSU inventor Dr. Yoshiaki Sato, use their KAATSU equipment following the standard KAATSU protocols to reduce the effects of jet lag and battle insomnia when they travel internationally or cross several time zones.

Steven Munatones explains important points regarding KAATSU use before, during and after airplane travel:

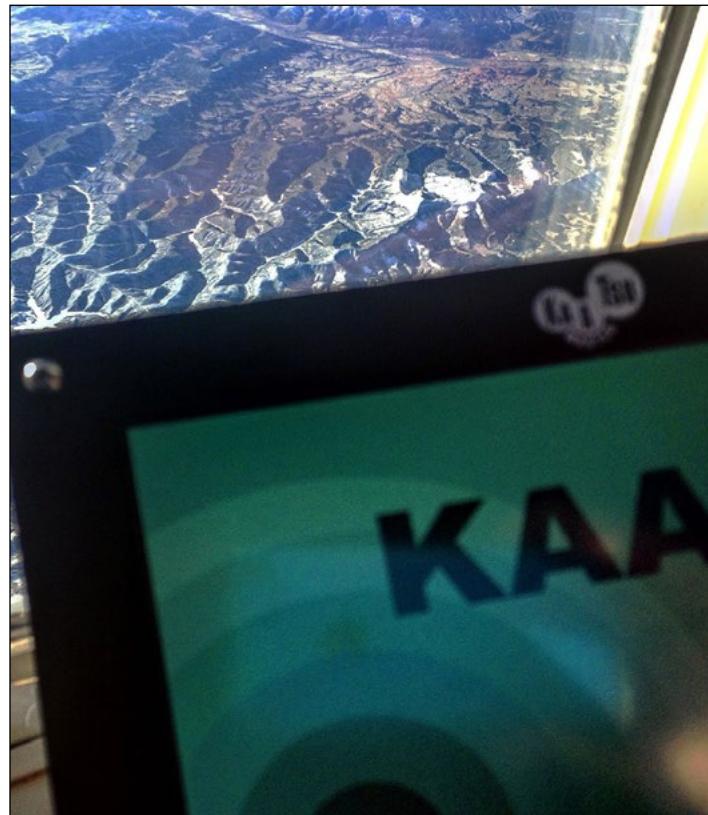
- » Be very well-hydrated before doing KAATSU Cycles in the airplane or before takeoff at the airport in order to help reduce your jet lag.
- » Do KAATSU Cycles and KAATSU Wellness Exercises in your hotel room if possible before going to bed on your first few evenings in your new location.
- » Always focus on doing KAATSU Cycles after setting your appropriate Base SKU (10-30 SKU) pressure and identifying your Optimal SKU pressure (50-400 SKU).
- » You can be conservative with your

pressure. The effects will still be evident despite a lower-than-normal pressure.

- » Rest at least 30 seconds between each set and each exercise.
- » There is no need to go to failure with these protocols; the goal is to become relaxed.
- » Always follow the standard KAATSU safety protocols (e.g., always have Capillary Refill Time faster than 2-3 seconds with no occlusion and no numbness in your feet or legs after setting the appropriate Base SKU and Optimal SKU pressures).
- » Ideally, do your KAATSU Cycles before you board the airplane.

UPPER BODY JET LAG EXERCISES:

1. Place the KAATSU Air Bands on your upper arms.
2. Do 2-4 KAATSU Cycles, ideally within 30-60 minutes of boarding the airplane.
3. You can do all or any the following KAATSU exercises while sitting in your seat during flight:
 - Forward Shoulder Rolls
 - Backward Shoulder Rolls
 - Head Rotations
 - Tricep Muscle Stretches
 - Deltoid Muscle Stretches
 - Arm Rest Press Downs
 - Isometric Contractions
4. Do 20-30 Forward Shoulder Rolls in a steady motion while your KAATSU Air Bands are inflated in the KAATSU Cycle mode. Breathe deeply. Relax while your KAATSU Air Bands are deflated. Repeat as desired.
5. Do 20-30 Backward Shoulder Rolls in a steady motion while your KAATSU Air Bands are inflated in the KAATSU Cycle mode. Breathe deeply. Relax while your KAATSU Air Bands are deflated. Repeat as desired.
6. Slowly roll the head forwards and backwards. Then slowly roll your head to the left and then to the right. Then slowly roll your head in a clockwise direction and then in a counterclockwise direction while your KAATSU Air Bands are inflated in the KAATSU Cycle mode. Breathe deeply. Relax while the KAATSU Air Bands are deflated in the KAATSU Cycle mode.



Note: Skip this exercise if rolling your head forwards, backwards, left, right, clockwise or counterclockwise causes dizziness.

7. Stretch your triceps muscles on your left and right arms while your KAATSU Air Bands are inflated in the KAATSU Cycle mode. Breathe deeply. Relax while the KAATSU Air Bands are deflated in the KAATSU Cycle mode.
8. Stretch your deltoid muscles on left and right shoulders while your KAATSU Air Bands are inflated in the KAATSU Cycle mode. Breathe deeply. Relax while the KAATSU Air Bands are deflated in the KAATSU Cycle mode.
9. Do isometric exercises like placing both hands on your arm rests and press down for a few seconds while contracting your muscles. Rest and relax, then repeat.

10. Place the palms of your hands together and push your hands together for a few seconds. Then, rest, relax and repeat.
11. Grasp the fingers of your hands and pull your hands apart for a few seconds. Then rest, relax and repeat.
12. Stretch your upper body or torso as you desire and are able.

LOWER BODY JET LAG EXERCISES:

Note: Doing KAATSU on your legs is much easier in a business or first class seat and most difficult or impossible while in the middle seat in economy class.

1. Place the KAATSU Air Bands on your upper legs.
2. Do 2-4 KAATSU Cycles, ideally within 30-60 minutes of boarding the airplane.
3. You can do all or any the following KAATSU exercises while sitting in your seat during flight:
 - Heel Raises
 - Leg Extensions
 - Inward Leg Squeezes
 - Outward Leg Squeezes
 - Isometric Contractions
4. Slowly do 10-20 Heel Raises in a steady motion while your KAATSU Air Bands are inflated in the KAATSU Cycle mode. Breathe deeply. Relax while your KAATSU Air Bands are deflated. Repeat as desired.

5. Slowly do 10-15 Leg Extensions in a steady motion while your KAATSU Air Bands are inflated in the KAATSU Cycle mode. Breathe deeply. Relax while your KAATSU Air Bands are deflated. Repeat as desired.
6. Place your hands on your inner thighs and slowly push outwards as you push your legs inwards against the force of your hands while the KAATSU Air Bands are inflated in the KAATSU Cycle mode. Breathe deeply. Relax while the KAATSU Air Bands are deflated. Repeat the Inward Leg Squeezes as desired.
7. Place your hands on your outer thighs and slowly push inwards as you push your legs outwards against the force of your hands while the KAATSU Air Bands are inflated in the KAATSU Cycle mode. Breathe deeply. Relax while the KAATSU Air Bands are deflated. Repeat the Outward Leg Squeezes as desired.
8. Contract your upper leg muscles (quadriceps and hamstrings) while the KAATSU Air Bands are inflated in the KAATSU Cycle mode and repeat.

Some of these exercises are demonstrated below. These same exercises can be done in your office while at work to relieve stress and get some exercise during the day when you are sitting and being sedentary all day long.



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.



SOLD IN 2020 BY

amazon

MOVING SLOWLY WITH KAATSU TO ULTIMATELY MOVE FASTER

Since 2001, Japanese researchers confirmed what KAATSU Specialists have long known: that low-intensity exercise with KAATSU Air Bands leads to muscle growth and stamina gains. These findings were confirmed using U.S. elite military personnel [photos below].

Improvements in strength, speed and stamina have been long known to KAATSU Specialists since the 1980's.

Many researchers between 2000 - 2005 tested KAATSU Walking with MRI-measured muscle size and strength (maximum dynamic or one repetition maximum) and isometric strength along with blood hormonal parameters. Testing was done on both control groups and experimental groups of subjects ranging from young men to older women.

The testing was done using 2-minute bouts of treadmill speed of 50 meters per minute.

The researchers found a multitude of benefits and changes among the experimental KAATSU users while there was no change in muscle size and dynamic and isometric strength in the control group..

1. Serum growth hormone was elevated after KAATSU Walking with the experimental group, but not with the non-KAATSU control group.
2. MRI-measured thigh muscle cross-sectional area and muscle volume increased by 4 - 7%.
3. One repetition maximum and maximum isometric strength increased between 8 - 10%



Furthermore, indicators of muscle damage (creatine kinase and myoglobin) and resting anabolic hormones did not change with both groups. The researchers concluded that KAATSU Walking induces muscle hypertrophy and strength gain despite the minimum level of exercise intensity after 3 weeks, and that KAATSU Walking may be a potentially useful method for promoting muscle hypertrophy for a wide range of the population including the frail and elderly.

While these benefits have long been known in Japan, there have been many other applications that have since been developed and researched that address age-related skeletal muscle loss (sarcopenia) that inhibits mobility and increases the risk of developing several diseases such as diabetes, osteoporosis and heart disease.

As the implications of KAATSU protocols began to be appreciated by the United States military, researchers like Dr. William Ursprung at Texas

A&M University studied the effects of KAATSU Walking to improve aerobic capacity. Dr. Ursprung evaluated the effects of KAATSU Walking on VO2max, 1.5 mile run times, and muscular size at low training volumes and intensities with airman from the U.S. Air Force 350th Special Operations and Tactics Training Squadron.

After three weeks of lower extremity KAATSU Walking, the test found significant improvements in VO2max, significant decreases in 1.5 mile run time, and significant increases in thigh muscle cross sectional area and the researchers concluded that KAATSU Walking represents a methodology for improving aerobic capacity, endurance and muscular size at low training volumes and intensities.

This conclusion mirrored the applications for KAATSU that many far forward-thinking coaches and trainers have known and used. For military personnel and athletes who are looking for

concurrent improvements in strength and endurance, they do not always have to move, run, swim, cycle or row at maximum intensity if they strategically use KAATSU equipment.

While movement or exercises with KAATSU equipment performed with intensity will result in significant physiological and athletic improvement, it is always unnecessary.

"As long as their technique and athletic form is correct, athletes and military personnel can realize benefits with KAATSU by moving more slowly (i.e., walking versus running or swimming at a moderate pace versus swimming at maximum speed) rather than always going all-out," explains Steven Munatones. "Perhaps this lowered intensity is appropriate after injuries or immediately after a competition or during a



taper phase of training. Perhaps this slower pace or raw speed is simply more appropriate during different parts of any specific workout when an athlete is working on their technique or form."

This phenomena means that the implications and applications of KAATSU usage expands significantly. When benefits and improvements can be achieved at any speed, pace or level of intensity, coaches and athletes can be much more flexible and creative in their training decisions.

For example, instead of only going all-out sprints with KAATSU, runners, cyclists, swimmers, rowers and skiers can practice at more moderate pace - which means that KAATSU can be done more frequently and with less resultant fatigue.

The same effects of KAATSU have been found with other KAATSU-using mammals like horses, mice, rats, and goats in testing performed in Japan and China.

The photo above show Chinese scientists

attaching standard KAATSU Air Bands on the hind legs of goats in northern China under the auspices of China's State General Administration of Sports, the government agency responsible for sports in China that also administers the Chinese Olympic Committee.

Kenneth McKeever, Ph.D., FACSM serves as the Associate Director of Research and is a Professor of Animal Sciences at The Rutgers Equine Science Center. The Center is part of Rutgers, The State University

of New Jersey, and is dedicated to better horse care through research and education to advance the well-being and performance of horses and the equine industry.

Since 1995, Professor McKeever has proceeded to build, develop, and coordinate one of the most active Equine Exercise Physiology laboratories in the USA. One of the most interesting studies that Professor McKeever conducted in collaboration with his colleagues Professors Abe, Kearns, Filho and Sato of the Department of Exercise and Sport Science at the Tokyo Metropolitan University and the Department of Ischemic Circulatory Physiology at The University of Tokyo in Japan.

His study on this topic of using standard KAATSU Air Bands - the same used on humans - is entitled Muscle, tendon, and somatotropin responses to the restriction of muscle blood flow induced by KAATSU-walk training that was published in Equine Exercise Physiology.

Professor McKeever and his fellow researchers delved into the efficacy of KAATSU being used as both as a therapeutic method as well as a training aid. The purpose of their study was to investigate the effects of slow KAATSU Walking on muscle and tendon size.

They studied 6 healthy, unfit Standardbred mares performed walking (240 meters/minute for 10 minutes and then a 5-minute recovery) with KAATSU, and 6 mares performed walking without KAATSU. The KAATSU Air Bands - the same model and type that were used by humans and with the goats in China - were inflated using KAATSU equipment and placed at the most proximal position of the forelegs and inflated to a pressure of 200-230 mmHg throughout the KAATSU walking and recovery sessions.

The training was conducted once a day, 6 days/week for 2 weeks. Skeletal muscle thickness and tendon thickness were measured using B-mode ultrasound at baseline and after 2 weeks of training. Venous blood

samples were obtained before the first acute exercise and 5, 15 and 60 minutes afterwards. Serum somatotropin concentration was determined using a commercially available equine-specific ELISA kit.

The professors found that the acute increase in plasma somatotropin was 40% greater ($P<0.05$) in the KAATSU Walking group than in the Control-walking group 5 minutes after exercise and remained elevated ($P<0.05$) at 15 and 60 minutes post exercise compared with the Control-walking group. After 2 weeks of training, muscle thickness increased ($P<0.05$) 3.5% in the KAATSU Walking group, but did not change in the Control-walking group (0.7%). Tendon thickness did not change ($P>0.05$) in either group.

They concluded that these data demonstrate that KAATSU can induce muscle hypertrophy in horses and suggest that KAATSU may provide significant therapeutic/rehabilitative value in horses, as has been shown in humans.

THE BODY'S HEALING CAPABILITIES: KAATSU SELF-CARE PROTOCOLS

Day 1 and Day 7 Photos

Before and after photos of a young female's toes
- one week of doing daily KAATSU protocols, 20 minutes per day



Day 4 and Day 9 Photos

Before and after photos of a young female's toes after doing the daily KAATSU protocols, 20 minutes per day



KAATSU Master Specialist David Tawil utilizes the KAATSU Cycle on his handheld KAATSU Nano for a wide variety of purposes, from increasing the range of motion and strength for paraplegics to improving the muscular strength of Olympic athletes. He does this utilizing the KAATSU Cycle mode on a daily basis with individual sessions no longer than 20 minutes each. The efficiency and efficacy of his protocols are unheard of.

Tawil also utilizes the KAATSU Cycle to help the body heal itself of unsightly problems as varied as improving and eliminating toenail fungus.

Toenail fungus is an infection that gets in through cracks in the nail or cuts in the skin. The toenails change color or become thicker while it can cause pain.

Because toes are often warm and damp, fungus grows well there. Different kinds of fungi and sometimes yeast affect different parts of the nail.

"The photos above show the progress Victoria is experiencing with her toenail fungus," Tawil explained. "When I first started the KAATSU Cycle Self-Care Protocols, she had fungus, ingrowths, dead skin, facia and overall stagnation. After treating comfortably and easily over the last few weeks, she is now enjoying stretchy new skin.

We combined KAATSU Cycles with coconut oil, oregano, magnesium and salt for their antiseptic, antibacterial, antifungal and antibiotic properties.

While doing KAATSU Cycles with the KAATSU Nano, we gently stretched the toe, her skin, the ankle joint, and her overall foot. We also gave her a magnesium and salt bath for additional antiseptic properties that enabled her local muscles to relax. This combination initially led to a total removal of stagnation that stopped the fungus in its path. She moisturized her skin with oils and greatly improved the blood circulation with KAATSU Cycles.

Concurrently, she continued to flex and stretch her toes, feet and ankles and kept her feet and toes clean. We could have also added the standard KAATSU 3-point Leg Protocols (e.g., Heel Raises + Leg Curls + Quarter Squats) if she had wanted, but these exercises are entirely optional.

In summary, the KAATSU Cycle Self-Care Protocol is simple: essentially, clean, hydrate, oxygenate with KAATSU Cycles.

The result was the elimination of edema (swelling was reduced via KAATSU), no more curling of the toenails with oil, magnesium, salt, toenail clippers, and the elimination of fungus with KAATSU, antiseptics, and good hygiene."

The result was the elimination of edema (swelling was reduced via KAATSU), no more curling of the toenails with oil, magnesium, salt, toenail clippers, and the elimination of fungus with KAATSU, antiseptics, and good hygiene.

USING KAATSU TO RECOVER FROM BROKEN FINGERS AND TOES

For optimal results from strained, sprained or broken fingers or broken toes, especially with hairline fractures, KAATSU can be used an ideal rehabilitation methodology and recovery modality.

KEY POINTS

- Do KAATSU Cycles on all four limbs for optimal systemic results.
- Do KAATSU Cycles at least once per day, but ideally twice per day. Optimally, do KAATSU Cycles once in the morning and once again within an hour of going to bed. If there is time, doing KAATSU Cycles in the middle of the day is also recommended.
- During each KAATSU session, first do KAATSU Cycles on your arms (whether or not you have broken bones in your upper or lower body). Then proceed with KAATSU Cycles on your legs.
- Always be very well-hydrated when you do KAATSU. Well-hydrated means your urine is clear or nearly clear.
- Do KAATSU only on the injured limb for the first few (or several) KAATSU Cycles for the first days. Later, you can simultaneously and use place the KAATSU Air Bands on both limbs (both healthy and injured limbs).
- Consult with your personal physician before starting KAATSU, especially if there is a compound fracture.

ARM PROTOCOLS

1. Manually tighten your KAATSU Air Bands on your arms to the appropriate Base SKU (pressure).
2. Inflate the KAATSU Air Bands on your arms to your personalized Optimal SKU.
3. Start with a conservative (i.e., low) SKU on the first KAATSU Cycle. Then proceed with higher and higher SKU levels on the next several subsequent KAATSU Cycles. For example, do 100 SKU for the first KAATSU Cycle, then 150 SKU on the second KAATSU Cycle, then 200 SKU on the third KAATSU Cycle, etc.
 - Note: Even if the first or second KAATSU Cycles do not feel tight enough, it is perfectly acceptable to start at a low SKU pressure. This will help warm-up your capillaries and prepare them for higher and more effective SKU levels.
4. Each KAATSU Cycle on the KAATSU Nano includes 8 repetitions of 20 seconds of pressure followed by 5 seconds of no pressure in sequentially increasing pressures (e.g., 100 SKU on the first repetition, 110 SKU on the second repetition, 120 SKU on the third repetition, etc. to the 8th and last repetition).
 - Note 1: on the KAATSU Wearables and KAATSU Cycle 2.0 units, there are 8 repetitions of 30 seconds followed by 5 seconds on no pressure.

- Note 2: on the KAATSU Master 2.0, there are five standard SKU Levels and one customizable SKU Level.

1. Do 3-6 of these KAATSU Cycles on your arms. This will take 9-18 minutes total. These are called Cycle 20 (indicating 20 seconds of pressure) or Cycle 30 indicating 30 seconds of pressure).
2. During these KAATSU Cycles, you can do standard physical therapy movements.

- Note 1: You can also do isometric exercises or simply contract your arm muscles in the positive and negative direction during exercise.
- Note 2: You can also do the KAATSU 3-Point Arm Exercises (i.e., Hand Clenches if possible, followed by Biceps Curls, and then Triceps Extensions).

3. After the first 2-3 days, you can add longer KAATSU Cycles. This is called Cycle 60 (i.e., 60 seconds of pressure on followed by 20 seconds of pressure off). In order to do Cycle 60, go to the KAATSU Training mode and manually input 1 minute (60 seconds) and select an appropriate SKU level (e.g., 250 SKU for 60 seconds).
4. Constantly confirm your CRT (Capillary Refill Time, see photo above) on the palms of the hands and make sure your CRT is faster than 3 seconds. Your palms should be pink or even a beefy red color. There should be significant blood pooling in your arms with your veins distended.

- Note 1: Never occlude blood flow to your arms. KAATSU Air Bands are not a tourniquet. Tourniquet or



blood pressure cuffs keep blood out of your arms by restricting arterial flow. KAATSU Air Bands function as the opposite of tourniquets and blood pressure cuffs. KAATSU Air Bands modify the venous flow - or blood flow from your limbs back to your torso.

- Note 2: Never feel numbness while doing KAATSU or allow your hands or arms to turn white, gray or blue. In these cases, immediately release the pressure and take off the KAATSU Air Bands.
- Note 3: There should ALWAYS be a pink color or a beefy red color in your hands and arms when doing Cycle 20 or Cycle 60. This indicates blood pooling in the limbs, bringing fresh blood to the capillaries of your entire arm.

5. Remove the KAATSU Air Bands on your arms and rehydrate. Then apply the KAATSU Air Bands on your legs.

LEG PROTOCOLS

1. Manually tighten the KAATSU Air Bands on your legs to the appropriate Base SKU (pressure).
2. Inflate the KAATSU Air Bands on your legs to your personalized Optimal SKU.
3. Start with a conservative (i.e., low) SKU on the first KAATSU Cycle. Then proceed with higher and higher SKU levels on the next several subsequent KAATSU Cycles. For example, do 150 SKU for the first KAATSU Cycle, then 200 SKU on the second KAATSU Cycle, then 250 SKU on the third KAATSU Cycle, etc.
 - Note: Even if the first or second KAATSU Cycles do not feel tight enough, it is perfectly acceptable to start at a low SKU pressure. This will help warm-up your capillaries and prepare them for higher and more effective SKU levels.
4. Do 3-6 of these KAATSU Cycles on your legs. This will take 9-18 minutes total.
5. During these KAATSU Cycles, you can do standard physical therapy movements.
 - Note 1: You can also do isometric exercises or simply contract your leg muscles in the positive and negative direction during exercise.
 - Note 2: You can also do the Standard KAATSU 3-Point Leg Exercises (i.e., Toe curls if possible, followed by Toe Raises if possible, and then Leg Curls).
 - Note 3: You can alternatively do

the Advanced KAATSU 3-Point Leg Exercises (i.e., Heel Raises if possible, followed by Standing Leg Curls and then Non-Lock Quarter Squats).

- Note 4: You can walk comfortably inside or outside or steadily on a treadmill.
- 6. After the first 2-3 days, you can add longer KAATSU Cycles. This is called Cycle 60 (i.e., 60 seconds of pressure on followed by 20 seconds of pressure off). In order to do Cycle 60, go to the KAATSU Training mode and manually input 1 minute (60 seconds) and select an appropriate SKU level (e.g., 250 SKU for 60 seconds).
- 7. Constantly confirm your CRT (Capillary Refill Time) on the quadriceps above your knees or near your ankles on your calves. Make sure your CRT remains faster than 3 seconds. Your feet and legs should be pink or even a beefy red color. There should be significant blood pooling in your legs with your veins distended, particularly visible in your feet.
 - Note 1: Never occlude blood flow to your legs.
 - Note 2: Never feel numbness while doing KAATSU or allow your feet or legs to turn white, gray or blue. In these cases, immediately release the pressure and take off the KAATSU Air Bands.
- 8. Remove the KAATSU Air Bands on your legs and rehydrate.



BEFORE BED ARM PROTOCOLS TO SLEEP BETTER WITH KAATSU CYCLES

In order to get better quality sleep, follow the night time KAATSU Sleep Protocols:

1. Manually tighten your KAATSU Air Bands on your arms.
2. Inflate the KAATSU Air Bands on your arms to GROUP (G) on the LOW (L) pressure level.
3. Continue with this conservative pressure level - or proceed to higher pressure levels on the subsequent KAATSU Cycles. For example, do GROUP (G) on the MEDIUM (M) level on the next KAATSU Cycle, then GROUP (G) on the HIGH (H) level on the next KAATSU Cycle. Note: Even if the first or second KAATSU Cycles do not feel tight enough, it is acceptable to start at a low SKU pressure.

4. During these evening KAATSU Cycles, you can do forward shoulder rolls, backward shoulder rolls, head rotations, and deltoid and triceps stretching. Note: Movements before bedtime should be casual and light. Do not do anything too vigorous and difficult like push-ups or squats.
5. If you wish to feel a slight pump in your arms or legs, you can slowly contract your muscles during the KAATSU Cycles.
6. You can do the same protocols if you wish to have a great nap in the middle of the day.
7. If you want to get some exercise after dinner, go for a leisurely walk using the GROUP (G) LOW pressure level.

KAATSU FOR GROIN PULLS, TEARS & STRAINS



The standard protocol for muscle injuries, including groin pulls and strains, is RICE (Rest + Ice + Compression + Elevation). Depending on the severity of the injury, individuals may want or need additional treatments to speed healing that can include: physical therapy, massage, heat and stretching, and electrotherapy.

But in the KAATSU community, KAATSU can play a significant role in healing and speeding up recovery from groin injuries (i.e., an injury or tear to the adductor (inner side) muscles of the thigh).

Whether a groin strain is experienced by a water polo player or an older adult, KAATSU is a very effective modality for significantly reducing the pain factor during recovery. For optimal results, KAATSU can be used as follows:

KEY POINTS

- Do KAATSU Cycles on all four limbs for optimal systemic (overall) results.
- Do KAATSU Cycles at least once per day, but ideally twice per day. Optimally, do KAATSU Cycles once in the morning and once again within an hour of going to bed. If there is time, doing KAATSU Cycles in the middle of the day can also be added - all

of this can be done at your home, office or during travel.

- Do KAATSU only on the injured limb for the first few (or several) KAATSU Cycles for the first days. Later, you can simultaneously and use place the KAATSU Air Bands on both limbs (both healthy and injured limbs).
- During each KAATSU session, first do KAATSU Cycles on your arms.

Then proceed with KAATSU Cycles on your legs.

- Always be very well-hydrated when you do KAATSU. Well-hydrated means your urine is clear or nearly clear.
- Consult with your personal physician before starting KAATSU, especially if you think you may have a Grade 3 strain that may need surgery to repair the torn muscle or tendon.

ARM PROTOCOLS

1. Manually tighten your KAATSU Air Bands on your arms to the appropriate Base SKU (pressure).
2. Inflate the KAATSU Air Bands on your arms to your personalized Optimal SKU.
3. Start with a conservative (i.e., low) SKU on the first KAATSU Cycle. Then proceed with higher and higher SKU levels on the next several subsequent KAATSU Cycles. For example, do 100 SKU for the first KAATSU Cycle, then 150 SKU on the second KAATSU Cycle, then 200 SKU on the third KAATSU Cycle, etc.
 - Note: Even if the first or second KAATSU Cycles do not feel tight enough, it is perfectly acceptable to start at a low SKU pressure. This will help warm-up your capillaries and prepare them for higher and more effective SKU levels.
4. Each KAATSU Cycle on the KAATSU Nano includes 8 repetitions of 20 seconds of pressure followed by 5 seconds of no pressure in sequentially increasing pressures (e.g., 100 SKU on the first repetition, 110 SKU on the second repetition, 120 SKU on the third repetition, etc. to the 8th and last repetition).
 - Note 1: on the KAATSU Wearables and KAATSU Cycle 2.0 units, there are 8 repetitions of 30 seconds followed by 5 seconds on no pressure.
 - Note 2: on the KAATSU Master 2.0, there are five standard SKU Levels and one customizable SKU Level.

5. Do 3-6 of these KAATSU Cycles on your arms. This will take 9-18 minutes total. These are called Cycle 20 (indicating 20 seconds of pressure) or Cycle 30 indicating 30 seconds of pressure).
6. During these KAATSU Cycles, you can do standard physical therapy movements.
 - Note 1: You can also do isometric exercises or simply contract your arm muscles in the positive and negative direction during exercise.
 - Note 2: You can also do the KAATSU 3-Point Arm Exercises (i.e., Hand Clenches if possible, followed by Biceps Curls, and then Triceps Extensions).
7. After the first 2-3 days, you can add longer KAATSU Cycles. This is called Cycle 60 (i.e., 60 seconds of pressure on followed by 20 seconds of pressure off). In order to do Cycle 60, go to the KAATSU Training mode and manually input 1 minute (60 seconds) and select an appropriate SKU level (e.g., 250 SKU for 60 seconds).
8. Constantly confirm your CRT (Capillary Refill Time) on the palms of the hands and make sure your CRT is faster than 3 seconds. Your palms should be pink or even a beefy red color. There should be significant blood pooling in your arms with your veins distended.
 - Note 1: Never occlude blood flow to your arms. KAATSU Air Bands are not a tourniquet. Tourniquet or blood pressure cuffs keep blood out of your arms by restricting arterial flow. KAATSU Air Bands function as the opposite of tourniquets and

- blood pressure cuffs. KAATSU Air Bands modify the venous flow - or blood flow from your limbs back to your torso.
- Note 2: Never feel numbness while doing KAATSU or allow your hands or arms to turn white, gray or blue. In these cases, immediately release the pressure and take off the KAATSU Air Bands.
- Note 3: There should ALWAYS be a pink color or a beefy red color in your hands and arms when doing Cycle 20 or Cycle 60. This indicates blood pooling in the limbs, bringing fresh blood to the capillaries of your entire arm.

1. Remove the KAATSU Air Bands on your arms and rehydrate. Then apply the KAATSU Air Bands on your legs.

LEG PROTOCOLS

1. Manually tighten the KAATSU Air Bands on your legs to the appropriate Base SKU (pressure). If you feel uncomfortable placing the leg band on your injured side, simply place the bands on your leg/side that is not injured.
2. Inflate the KAATSU Air Bands on your leg(s) to your personalized Optimal SKU.
3. Start with a conservative (i.e., low) SKU on the first KAATSU Cycle. Then proceed with higher and higher SKU levels on the next several subsequent KAATSU Cycles. For example, do 150 SKU for the first KAATSU Cycle, then 200 SKU on the second KAATSU Cycle, then 250 SKU on the third KAATSU Cycle, etc.
- Note: Even if the first or second KAATSU Cycles do not feel tight enough, it is perfectly acceptable to start at a low SKU pressure. This will help warm-up your capillaries and prepare them for higher and more effective SKU levels.

4. Do 3-6 of these KAATSU Cycles on your leg(s). This will take 9-18 minutes total.
5. During these KAATSU Cycles, you can do standard physical therapy movements.
 - Note 1: You can also do isometric exercises or contract your leg muscles in the positive and negative direction during exercise.
 - Note 2: You can also do the Standard KAATSU 3-Point Leg Exercises (i.e., Toe curls if possible, followed by Toe Raises if possible, and then Leg Curls).
 - Note 3: You can alternatively do the Advanced KAATSU 3-Point Leg Exercises (i.e., Heel Raises if possible, followed by Standing Leg Curls and then Non-Lock Quarter Squats), if you feel comfortable doing so
 - Note 4: You can walk comfortably inside or outside or steadily on a treadmill.
6. After the first 2-3 days, you can

1. add longer KAATSU Cycles. This is called Cycle 60 (i.e., 60 seconds of pressure on followed by 20 seconds of pressure off). In order to do Cycle 60, go to the KAATSU Training mode and manually input 1 minute (60 seconds) and select an appropriate SKU level (e.g., 250 SKU for 60 seconds).
2. Constantly confirm your CRT (Capillary Refill Time) on the quadriceps above your knees or near your ankles on your calves. Make sure your CRT remains faster than 3 seconds. Your feet and legs should be pink or even a beefy red color. There should be significant blood pooling in your legs with your veins distended, particularly visible in your feet.
 - Note 1: Never occlude blood flow to your legs.
 - Note 2: Never feel numbness while doing KAATSU or allow your feet or legs to turn white, gray or blue. In these cases, immediately release the pressure and take off the KAATSU Air Bands.
3. Remove the KAATSU Air Bands on your legs and rehydrate.



SLIMMING YOUR LEGS WITH KAATSU

Many individuals are initially attracted to KAATSU due to cosmetic reasons and weight loss goals. They simply want to lose weight or tone their bodies in some way.

Dr. Yoshiaki Sato, the inventor of KAATSU, writes that thigh muscles are strengthened and legs can be slimmed especially when people are overweight and they experience swelling or have loose skin in their lower body. Swelling is relieved by promoting blood circulation - which is what KAATSU can achieve for people.

In order to strengthen your inner thighs, you can spin on a stationary bicycle or casually do KAATSU Walking for 10-20 minutes - or do these following

exercises 10 - 20 times each.

Dr. Sato explains, "You can lie flat on your back on the floor with your hands clasped behind your head. Lift your legs together straight up from the floor. Concentrate on the muscles of your inner thigh and open your legs as widely as possible and then slowly close them 10-20 times.

It will not be easy in the beginning, but your legs will gradually get stronger.

When the veins and capillaries are engorged

in blood, it takes incrementally more energy for our vascular system to expand and contract. When more energy is used, more calories are burned which is why daily KAATSU usage leads to effective body toning."

If this is not possible in the beginning, you can do simple KAATSU Walking (i.e., walking comfortably with the KAATSU Leg Bands on) for up to 20 minutes - or even more simply the KAATSU 3-Point Exercises for the Legs.



These simple exercises have been performed safely and effectively among millions of individual KAATSU sessions among people of all ages and abilities with myriad physical conditions or ailments.

The KAATSU Air Bands should be placed snugly on your legs. Snugly means that you can put one finger between the KAATSU Air Bands and your skin - but not two or three fingers. If you can put two or three fingers between the bands and your skin, the bands should be manually tightened a bit more.

Dr. Sato continues, "You can also stand straight with your arms placed on your hips. Spread your legs wider than your shoulders and stand with your toes pointed outward. While exhaling, lower your hips slowly as low as you can safely go. Then return to your standing position in order to strengthen the muscles of your inner thighs.

Alternatively, you can stand straight with your arms placed on your hips. Spread your legs wider than your shoulders and turn your toes inward. Lower your hips as much

as safely possible to the level where your knees touch each other. Then slowly return to the standing position in order to strengthen the muscles of your outer thighs."

KAATSU 3-point Exercises are a fundamental part of the standard KAATSU protocol for your legs.

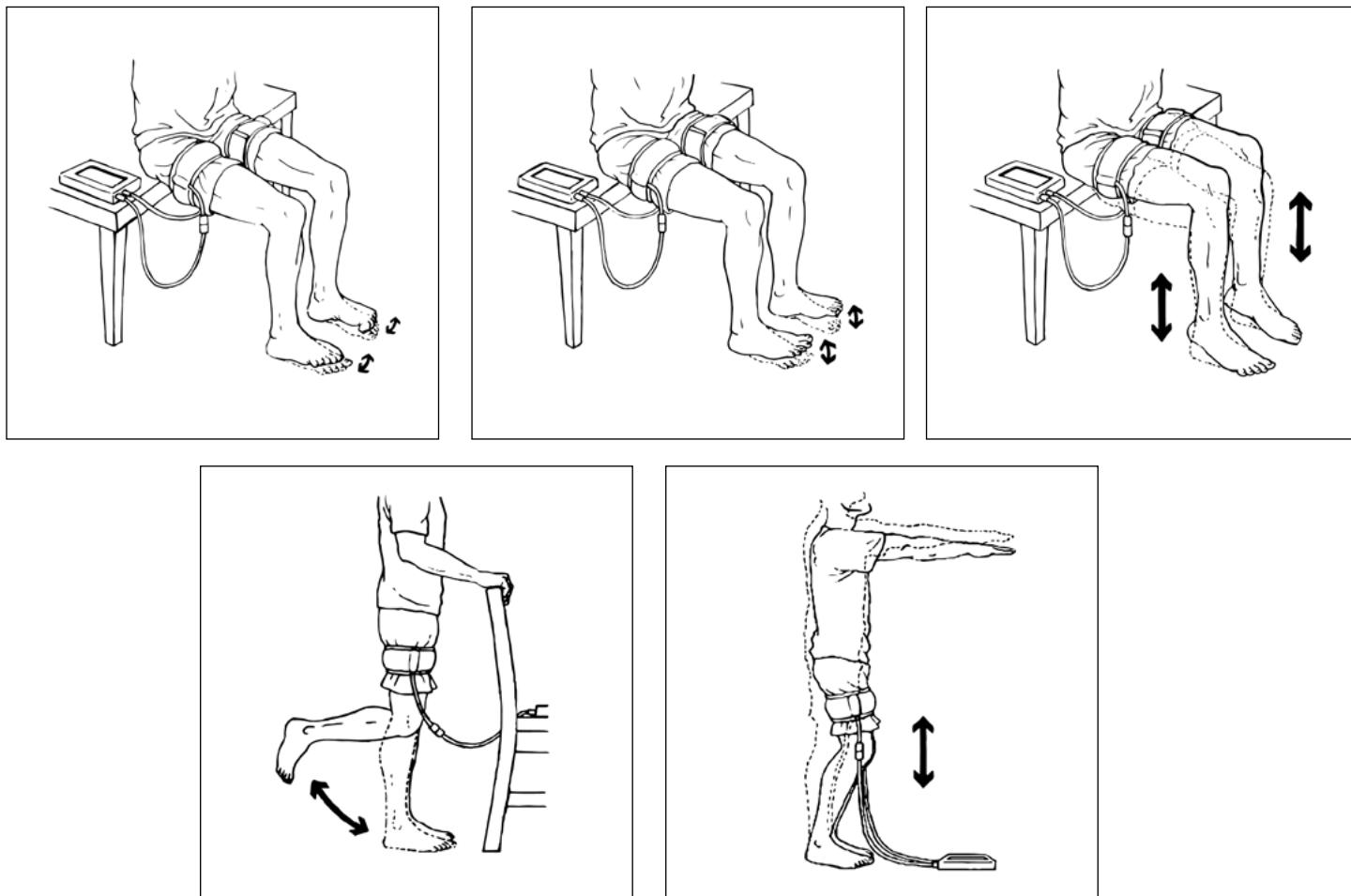
Dr. Sato first established and fine-tuned the KAATSU 3-point Exercises during the 1970s for individuals of all ages and from all backgrounds whether they are athletes or de-conditioned overweight individuals. These simple exercises have been performed safely and effectively among millions of individual KAATSU sessions among people of all ages and abilities with myriad physical conditions or ailments.

The KAATSU 3-point Exercises can either be used to help determine the optimal SKU pressure or as a form of basic

exercise for both the arms and legs. After the Base SKU (manually applied pressure) is established, then the KAATSU 3-point Exercises is a means to determine if the Optimal SKU (inflated pressure of the pneumatic bands) is appropriate (read a more detailed explanation [here](#)).

Alternatively, especially for Baby Boomers and adults who are being reconditioned back to a state of wellness through a simple exercise program, the KAATSU 3-point Exercises can consist of their entire KAATSU training program.

When the KAATSU 3-point Exercises are performed, the exercises can be performed either on a KAATSU Master or a KAATSU Nano or a KAATSU Cycle unit. The KAATSU 3-point Exercises can be performed while the user is either tethered (connected) or untethered (disconnected) to the units.



KAATSU LEG 3-POINT EXERCISES

The KAATSU 3-point Exercises for the legs are either defined as Standard or Advanced.

The Standard KAATSU 3-point Exercises for the legs involves toe curls, toe raises, and heel raises. These are all performed while the user is seated comfortably with good posture on a chair. In general, these are preferred for older or less fit individuals or those just starting an exercise program or KAATSU.

The Advanced KAATSU 3-point Exercises for the legs are alternatively used by more fit or active individuals or for those individuals with more experience in KAATSU. These 3 basic exercises includes heel raises, leg curls and squats. The heel raises can be done while sitting or standing. The leg curls can be performed while standing and holding onto a chair or balancing against a wall. The squats (or "chair touches") can be performed while bending the knees to touch a chair and then popping back up.



Ideally, the squats are "non-lock" (partial extension) so that the muscles are constantly engaged and there is no rest while the knees are "locked" straight (in a full extension). This will build up fatigue and lactic acid more quickly.

Each set of exercises should be done 3-4 times each with a maximum of 20 seconds between each set. Ideally, the number of repetitions for each exercise decreases before the user reaches muscular or technical failure (or fatigues).

That is, an ideal set would be 25-30 repetitions on set #1, 10-15 repetitions on set #2, and 5-10 repetitions on set #3. Even if only 1-2 repetitions are completed on the last set, this failure signal sent to the central nervous system is one of the goals of KAATSU.

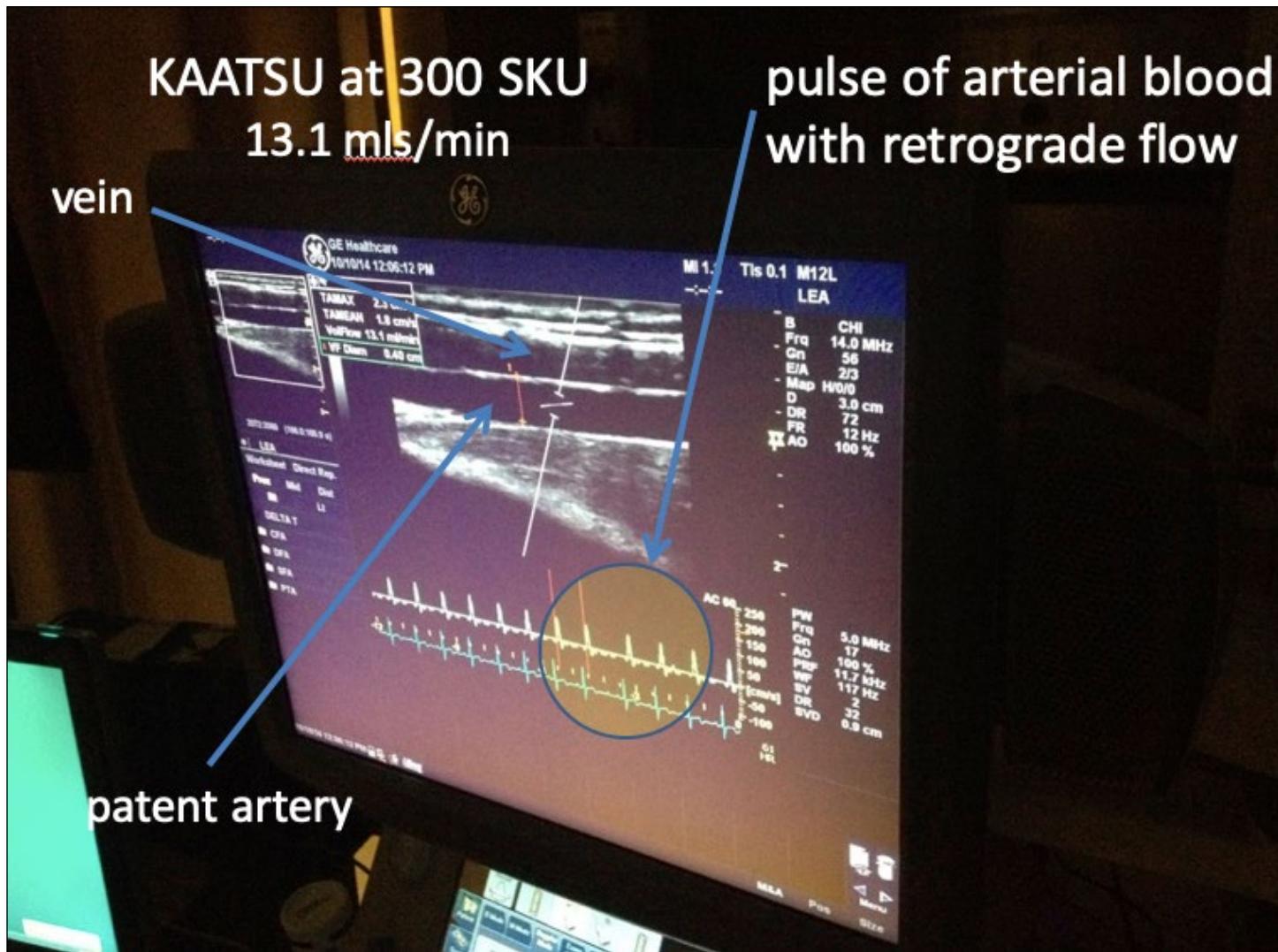
KAATSU ARM 3-POINT EXERCISES [illustrations posted [here](#)]

The KAATSU 3-point Exercises for the arms involves hand clenches, bicep curls and tricep extensions. Each set of exercises is done 3 times each with a maximum of 20 seconds rest between each set. Ideally, the number of repetitions for each exercise decreases before the user reaches muscular or technical failure.* But users do not have to go incredibly hard. It can be casual movement and muscle toning and body slimming can be achieved.

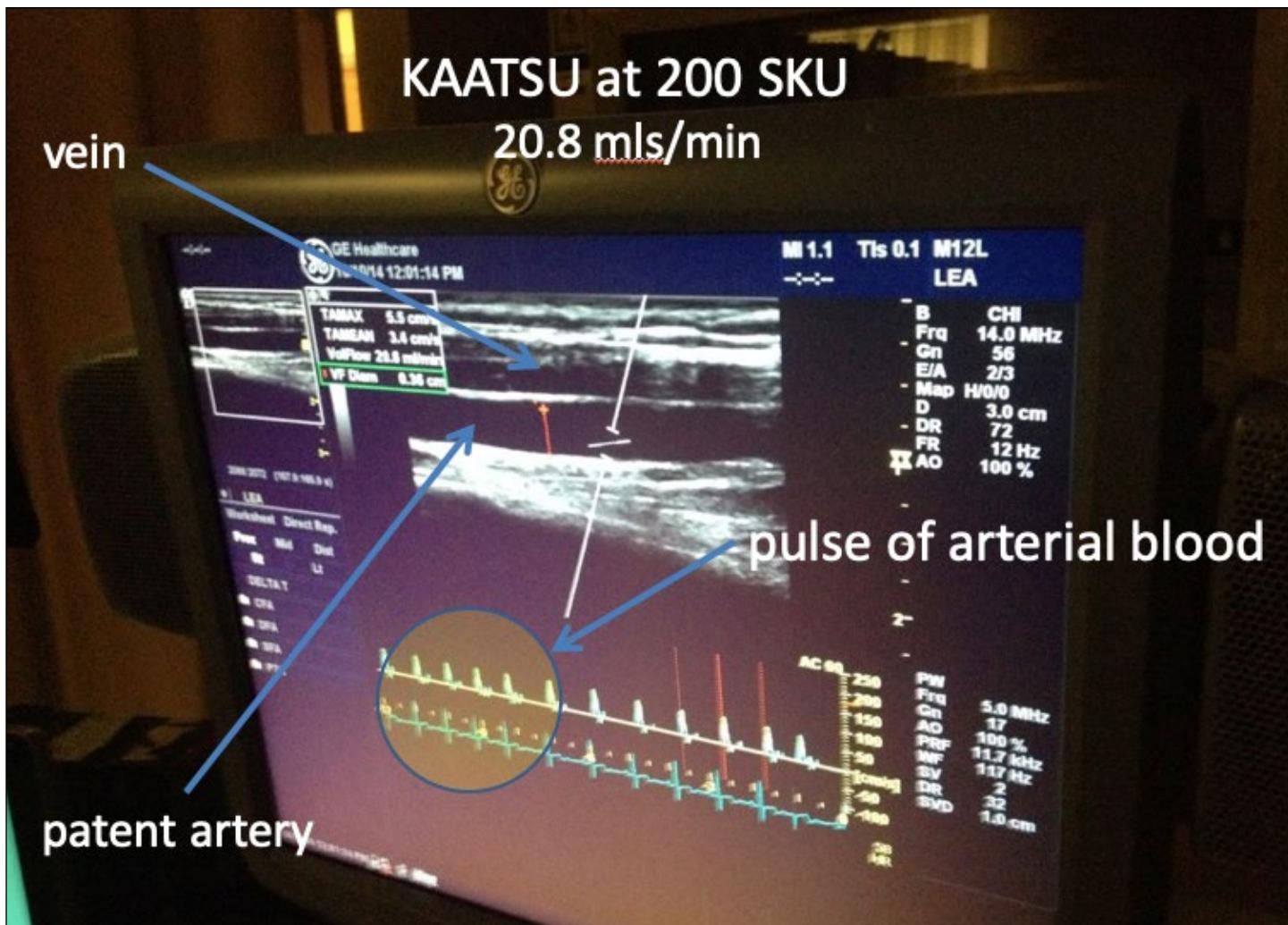
That is, an ideal set would be 25-30 repetitions on set #1, 10-15 repetitions on set #2, and 5-10 repetitions on set #3. Even if only 1-2 repetitions are completed on the last set, this failure signal sent to the central nervous system is one of the goals of KAATSU.

* Technical failure is defined when the individual starts to do improper technique (movement) due to an increasing sense of fatigue. At this point, the set is stopped.

WHY KAATSU IS NOT BFR



Many people interchangeably refer to KAATSU as BFR and BFR as KAATSU. This article serves to explain in easy-to-understand, non-medical terms, why this assumption is incorrect and this definition is medically and technically wrong. In summary, KAATSU is not BFR and BFR is not KAATSU ([read here](#)) for various reasons.



First, let's review the vernacular used for both BFR and KAATSU:

Restriction (noun): something that restricts, an act of restricting, the condition of being restricted from the Merriam-Webster online dictionary

Occlusion (noun): the act of occluding (or close up or block off or obstruct) from the Merriam-Webster online dictionary

Patent: open, unobstructed, affording free passage from MedicineNet

KAATSU (or 加圧 in Japanese): translated as additional pressure in English.

Blood Flow Restriction (or BFR): a training strategy that involves the use of blood pressure cuffs, tourniquets or occlusion wraps placed proximally around a limb that maintains some arterial inflow while occluding venous return during exercise or rehabilitation.

The Doppler ultrasound images above show the arm's artery and vein of a male using KAATSU Air Bands at different pressures. The ultrasound shows that the blood flow from the torso to the arm (arterial flow in the artery) and the blood flow back from the arm to the torso (venous flow in the vein) remain open and not occluded or restricted.



Second, how is the pressure in BFR and KAATSU determined?

BFR is commonly started by occluding the brachial systolic blood pressure in the arms or the femoral systolic blood pressure in the legs. Once this pressure, measured in mmHg, is determined, then the BFR bands are set at a certain percentage of that pressure measured in mmHg. In other words, BFR starts by cutting off the arterial flow from the torso to the limbs - and then proceeding with exercise or rehabilitation at a lower pressure.

Some BFR advocates, with inexpensive equipment, recommend using the Borg Scale; a simple self-determination of the perceived exertion on a scale of 1 to 10. The ideal tightness for these BFR (or Occlusion) bands is reportedly 7 on the

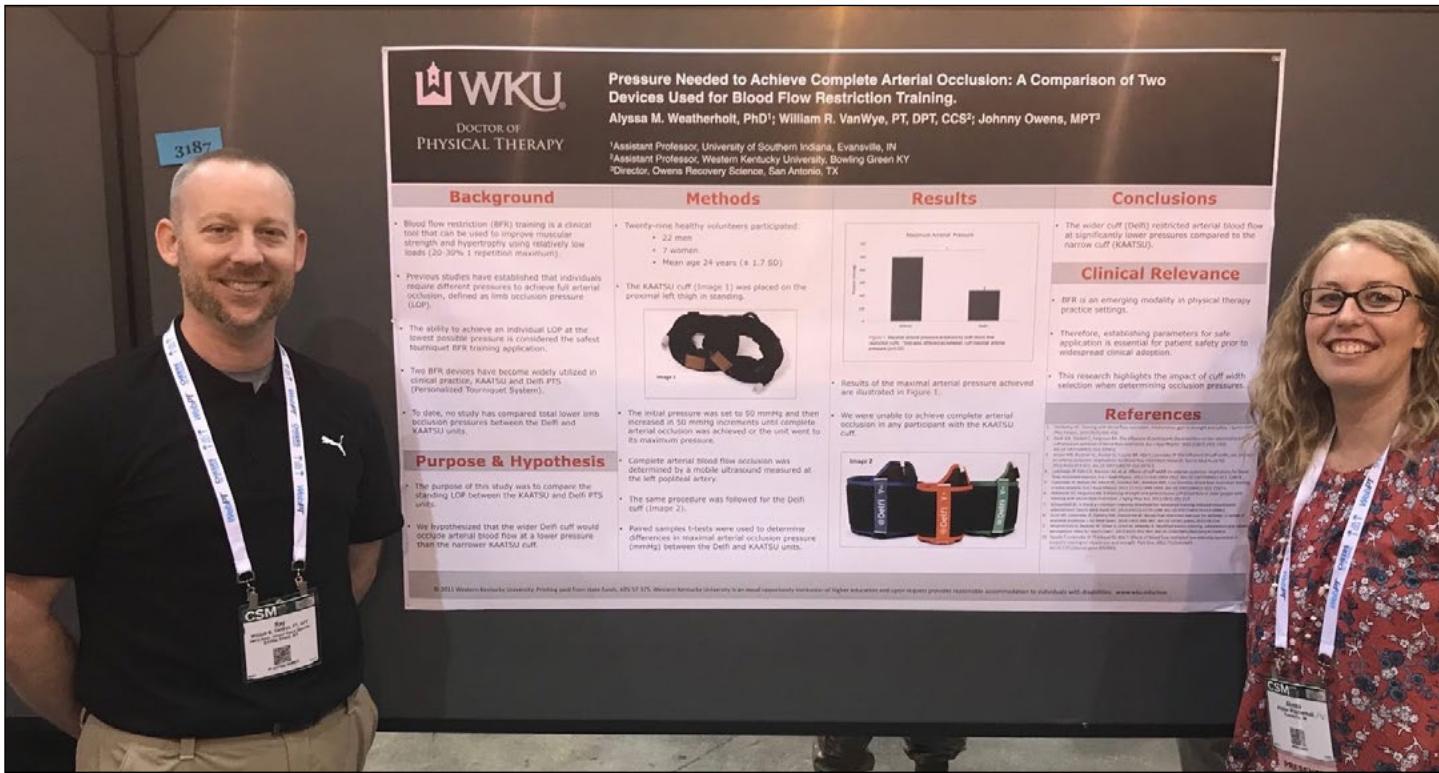
Borg Scale; but, if there is numbness, the BFR advocates recommend loosening the pressure.

In contrast, KAATSU starts at homeostasis or the stable state of equilibrium in the body with complete patent (i.e., open) arteries and veins. From this point, the "KAATSU Cycle" is used to very gradually and precisely increase the pressure until an "optimal pressure" for each person and each limb is reached (note: the pressure on each limb can be different if there is an injury or significant difference in limb strength, range of motion, or girth).

That is, BFR starts at the point of occlusion where there is no arterial blood flow to the limbs - but KAATSU starts at the point of homeostasis where there is complete and open arterial blood flow to the limbs.

Even when the KAATSU Air Bands have significant air pressure inside them, there is no occlusion of arterial or venous flow [see photos above and read [here](#)]. The KAATSU Air Bands are specifically designed to allow this condition to occur even at the highest KAATSU pressure possible.

Decades of trials and testing with different material types, material elasticities, and widths enabled the KAATSU inventor, Dr. Yoshiaki Sato to come up with this innovative design. KAATSU protocols were tested and studied at the University of Tokyo Hospital under the supervision of trained and experienced cardiologists including Doctors Nakajima and Morita.

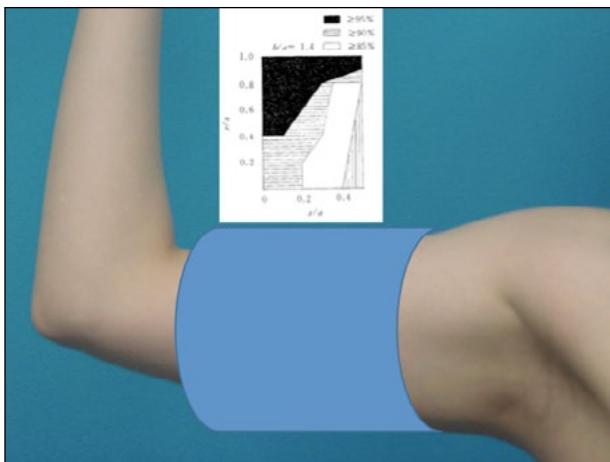


Third, the structure and composition of the bands are significantly different than all the other BFR and Occlusion Bands on the market today.

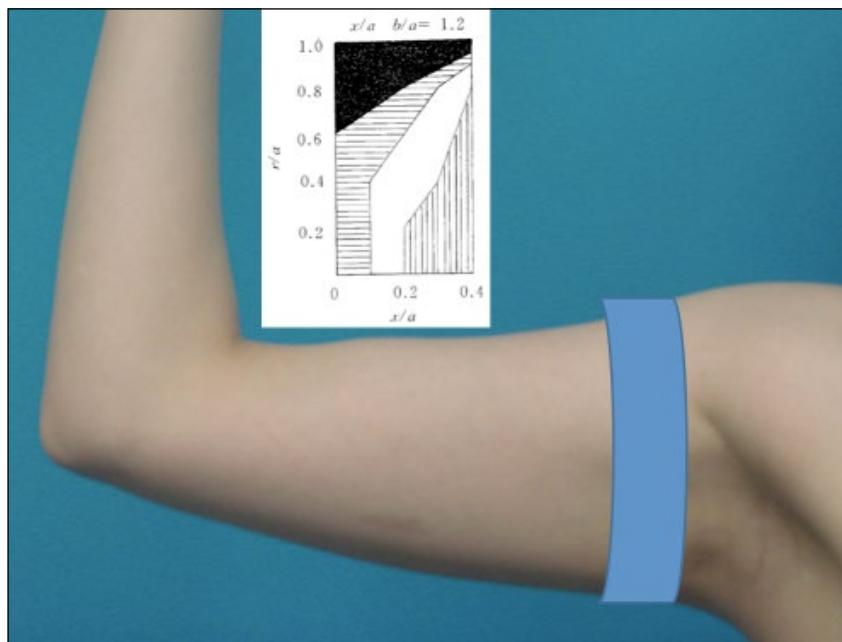
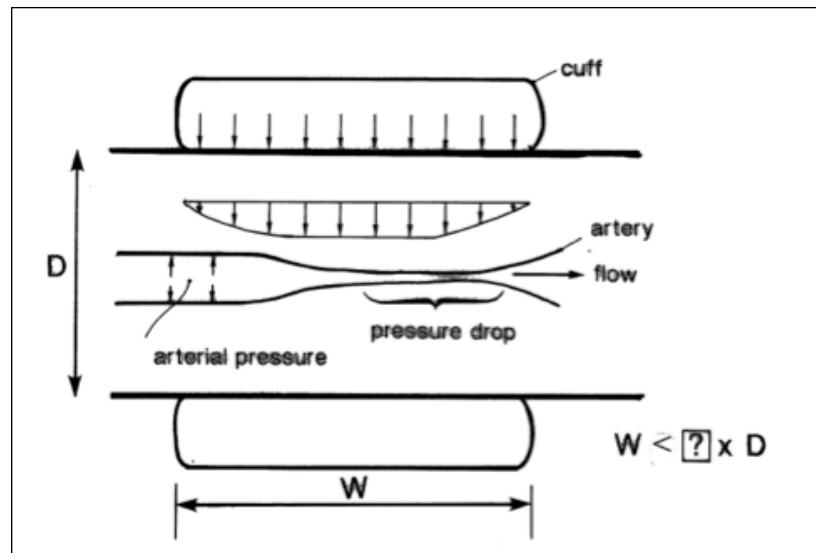
BFR or Occlusion bands are engineered to cut off or restrict blood flow - similar to blood pressure cuffs. Their structure and materials are purposefully designed to achieve this objective. The width of the bands apply a pressure that is effective in reducing or restricting arterial flow.



In contrast, the KAATSU Air Bands are specifically engineered to maintain arterial flow, and only modify the venous flow. The width and the center axis of the inflated KAATSU Air Bands are significantly different than BFR / Occlusion Bands or modified tourniquets / cuffs. This means that the pressure transmission region of the KAATSU Air Bands - especially within the limb on the arteries and veins, is significantly less than the larger / wider BFR bands.

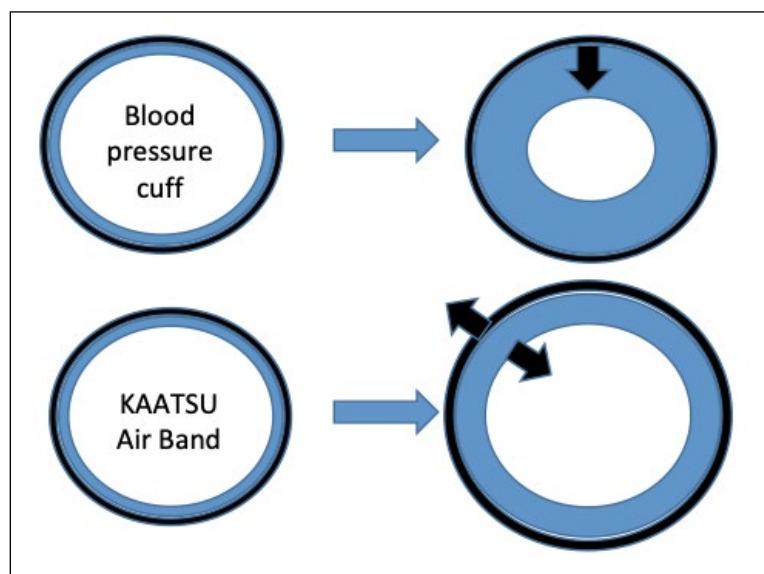


Larger pressure transmission region and effects of BFR bands.



Smaller, narrower pressure transmission region of KAATSU Air Bands.

When the optimal pressure is reached with the KAATSU Air Bands, the KAATSU users see a pinkness or a beefy redness in their limbs as the blood fills the capillary vascular space. When the limbs are moved in this state, there is alternating distension and emptying of the venous/capillary vascular space.



The KAATSU Air Bands gradually apply pressure to the veins. This modifies the venous outflow in the limbs. As the pressure increases during the KAATSU Cycle mode, this modification of the venous outflow eventually modifies the arterial inflow. As exercise or movement continues with the KAATSU Air Bands on, the blood flow into the limbs must soon match the (venous) blood flow out of the limbs. Given about 80% of the body's blood is in the venous system, there is some capacitance for holding extra blood in the limb, and when that capacity is reached, the blood flow in must match the blood flow out of the limb.

Physiologically, exercise becomes unsustainable when light and easy exercises or movement (e.g., KAATSU Walking or unweighted KAATSU limb movements) are conducted with this impeded circulation. The pO₂ and pH gradually (or quickly, depending on the KAATSU intensity) drop to critical levels with even mild exercise. Additionally, higher levels of lactate are generated during KAATSU (compared to non-KAATSU exercise). ATP levels drop as the ADP and Pi levels rise, and ATP dependant electrolyte pumps (e.g. Ca++) cannot maintain proper electrolyte gradients. In this state, there are a significant amount of metabolite and hormonal changes and increases that are subsequently realized.

The fact that KAATSU Air Bands do not approach occlusion pressure, nor result in Blood Flow Restriction, was identified by Professor Alyssa Weatherholt of the University of Southern Indiana,

Professor William VanWye of Western Kentucky University, and Johnny Owens of Owens Recovery Science (the exclusive distributor of the Delfi Portable Tourniquet System for Blood Flow Restriction equipment). They presented a study called Pressure Needed to Achieve Complete Arterial Occlusion: A Comparison of Two Devices Used for Blood Flow Restriction Training [see above].

The researchers concluded the wider cuff of the Delfi Portable Tourniquet System for Blood Flow Restriction is able to restrict arterial blood flow at significantly lower pressures compared to the narrow cuffs [KAATSU Air Bands] using the KAATSU Master. The key finding of this study is as follows:

"We were unable to achieve complete arterial occlusion in any participant with the KAATSU cuff."

The KAATSU equipment is designed and is specifically manufactured to avoid arterial occlusion in the limbs. This fact is precisely why KAATSU was originally defined by Dr. Yoshiaki Sato, the KAATSU inventor, and leading Japanese cardiologists at the University of Tokyo Hospital as a Blood Flow Moderation (BFM) device. KAATSU equipment is specifically not a Blood Flow Restriction (BFR) device.

While the vernacular nuance between BFM and BFR may be overlooked by many (venous flow modification versus arterial flow restriction), the modification of venous flow is critical to understanding

"There is no part of the KAATSU protocols which tries to achieve arterial occlusion. This is why KAATSU is not BFR, occlusion training, tourniquet training, O-training, or any kind of blood flow restriction modality,"

the safety and goal of KAATSU, as certified KAATSU Specialists understand.

"There is no part of the KAATSU protocols which tries to achieve arterial occlusion. This is why KAATSU is not BFR, occlusion training, tourniquet training, O-training, or any kind of blood flow restriction modality," explains Steven Munatones. "This is why KAATSU equipment does not use blood pressure cuffs or surgical tourniquets that are specifically designed to occlude, or manufactured to restrict arterial flow. Rather, the stretchable KAATSU Air Bands are designed with flexible, elastic air bladders that inflate inwards, towards the limb, at very moderate pressures to minimally modify venous flow.

This pressure is gentle on the body and uniform, because the limb is evenly

and safely compressed by a bed of air. This principle and practical engineered solution leads to blood pooling in the limb - not arterial occlusion. This fact was independently determined by researchers and the leading Delfi proponent of BFR.

Furthermore, the patented KAATSU Cycle allows normal arterial and venous flow every 20 seconds which means it is safe, effective and gentle for people of all ages (including up to 104 years - see here).

In summary:

1. The purpose of KAATSU equipment and its protocols is a reduction in venous flow via blood flow moderation, a term first coined in the 1990s by Dr. Sato and Doctors Nakajima and Morita, cardiologists at the University of Tokyo Hospital.
2. The pneumatically controlled KAATSU

Air Bands are designed to achieve a reduction in venous flow, and is a very different approach from BFR and widely-promoted use of blood pressure cuffs that are specifically designed to achieve limb occlusion. KAATSU is not BFR.

3. When the KAATSU equipment is used, its users agree to follow the specific protocols as defined by its inventor, Dr. Sato. Specifically, KAATSU protocols and equipment are designed not to occlude.
4. The stretchable, pneumatically controlled KAATSU Air Bands are not (blood pressure) cuffs. A cuff is a term that refers to devices specifically engineered for limb occlusion.
5. KAATSU Specialists understand the importance of users to know both their Base SKU pressure and their Optimal SKU pressure while using in the KAATSU Cycle and KAATSU Training modes. To refer to KAATSU pressure without reference to both Base SKU and Optimal SKU pressures is misleading.

There is another paper written by Jeremy P. Loenneke, Christopher Fahs, Lindy Rossow, Robert Thiebaud, Kevin T. Mattocks, Takashi Abe, and Michael G. Bemben ([Blood flow restriction pressure recommendations: a tale of two cuffs](#)) that addresses this subject from another perspective.

Fourth, proper and safe KAATSU extensively (or exclusively in most cases) utilizes the patented KAATSU Cycle mode. In the KAATSU Cycle mode, there is only 20-30 seconds of pressure applied at a time. The pressure is regularly and intermittently released (turned off) - and, most importantly, the pressure starts off gently and only gradually increases to the user's optimal pressure levels. This enables the vascular system to become more elastic during the session, enabling a greater vascular capacity to handle higher pressure and increased blood circulation.



CASUAL KAATSU - INTENSITY CAN BE REDUCED WITH KAATSU CYCLE

Among many young men - especially those in the bodybuilding and strength-training worlds - believe that KAATSU needs to be painful and discomforting in order to realize its benefits and see improved results.

While this may be true for BFR (Blood Flow Restriction) training with occlusion bands or blood pressure cuffs, this is not true for KAATSU.



So while the young man in the above video is pushing himself to extremely high intensity levels, this level of exertion - or anything similar - does not need to be the case.

KAATSU benefits - performed at much lower levels of intensity - include improved recovery, increased speed of rehabilitation, effective warm-up and a metabolically efficient way to workout or finish off a training session.

RECOVERY

For recovery, the KAATSU Cycle mode provides a very convenient, easy-to-use, and very importantly easy-to-feel means to recover effectively and efficiently after a vigorous workout or intense competition.

With the KAATSU Cycle, blood pooling is mechanically enabled with the KAATSU equipment for between 20-30 seconds (i.e., when your hands are very pink, rosy or a beefy red with visible vein distension). Then a repeated and subsequent 5-second total release of the KAATSU Air Band pressure enables a large venous flow of blood that includes the waste products produced during the vigorous workouts or intensive competition. This alternate pooling-and-release repetition is an easy-to-use means to clear the muscles of waste products.

REHABILITATION

For rehabilitation, the KAATSU Cycle mode also provides a very convenient, easy-to-use, and very importantly easy-to-observe means to rehabilitate effectively and efficiently from an injury or surgery.

Benefits such as a lack of muscle atrophy and sustained strength and aerobic conditioning become obvious with two or three KAATSU Cycle sessions per day. The KAATSU Cycle sessions can be done at your home, your office or during travel, making rehabilitation a constant throughout the day instead of merely focusing on rehabilitation during periodic visits to a physical therapy office.

PERFORMANCE GAINS BEFORE WORKOUT OR COMPETITION

For performance gains, the KAATSU Cycle mode provides a very convenient, easy-to-use, and very importantly easy-to-feel means to prepare effectively and efficiently for a vigorous workout or intense competition. When the vascular system - especially the capillaries that are ubiquitous in your muscles are engorged with blood, the effectiveness of a warm-up is optimized.

That is, doing 3-5 KAATSU Cycles on your arms followed by 3-5 KAATSU Cycles on your legs while stretching or walking around the track, field, gym or pool is an optimal way to get your vascular system and therefore your muscles prepared for a workout or competition.

PERFORMANCE GAINS DURING WORKOUT

To experience the inevitable "race pain" experienced by athletes in competition, athletes can incorporate KAATSU in the middle or towards the end of their workouts on the track, field, gym or pool.

Ideally, KAATSU equipment is used to enhance the existing movements or sets performed in a workout, not necessarily as a replacement for proven workout

drills and sets that already exist. So, for example, a basketball player can take 10-20 jump shots with the KAATSU Air Bands on. As fatigue sets in, the vertical leap will steadily decrease. When the coach or athlete determines that form has degraded beyond which is useful, the KAATSU Air Bands should be removed. After a brief rest and perhaps a bit of hydration, the athlete should resume his jump shot drill and see how how and fast he or she elevates and how smooth his shooting motion becomes.

The same can be done with track athletes, swimmers or any athletes who are practicing specific movements (e.g., starts, wrestling moves, agility drills, jumps, throws, pitches, or sprints). That is, the athletes should fatigue their muscles and stress their vascular system for brief periods within a workout (5-15 minutes) with the KAATSU Air Bands on. Then they should remove the KAATSU Air Bands and do the same movements in an explosive or intense manner similar what they want to do in competition.

For example, runners and swimmers can practice their starts or do a few sprints with the KAATSU equipment to the point of fatigue, and then finish off their workout without the KAATSU equipment - so they finish a workout with optimal performances.

PERFORMANCE GAINS IN LIEU OF A WORKOUT

Special operators in the United States Air Force did KAATSU Walking with their KAATSU Leg Bands on for 3 weeks in a clinical test conducted at a U.S. military base under the supervision of researchers and scientists.

They did not run as part of their normal training as they typically do. But the increased vascular elasticity due to the KAATSU Walking led to physiological improvements. The improvements were demonstrated by increased VO2 max and faster mile run times across the tested special operators [see photo below].



The ability to significantly decrease the intensity of KAATSU while still seeing physiological and vascular improvements is a key to sustained use by athletes, people recovering from injuries or surgeries, older individuals, and those who may not be psychologically motivated to exercise intensely - or at all.

Of course, for those athletes who are entirely focused on KAATSU performance gains and are aiming for Olympic medals, world championships, NCAA or professional sport competitions, intense KAATSU sessions are part of their overall equation - but not the only part.

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
- \$799 (1-yr warranty on device, 6 mo on bands)
- \$875 (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 present 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.

QUICK START GUIDE



Thank you very much for your purchase of the KAATSU Cycle 2.0.

KAATSU CYCLE 2.0 COMPONENTS

- » KAATSU Cycle 2.0 unit with a removable belt/pants/shirt pocket clip
- » 2 KAATSU Air Bands for the arms
- » 2 KAATSU Air Bands for the legs
- » 2 translucent connector tubes
- » Power adapter
- » USB Type-C connector
- » Black carrying case

HEALTH PRECAUTIONS

Before you begin using KAATSU equipment, please confirm your use of the KAATSU Cycle 2.0 with your physician if you take medications, are pregnant or have any health or medical issues. You must always strictly follow the KAATSU usage protocols.

For more information, visit www.kaatsu-global.com and www.kaatsublog.com. If you have any questions, contact info@kaatsu-global.com.

KAATSU TRAINING

KAATSU Training is a patented, proprietary method where the KAATSU Air Bands stay inflated. Because the KAATSU Air Bands stay inflated, use is limited to 10 minutes on your arms or legs.

KAATSU CYCLE

KAATSU Cycle is a patented, proprietary method where the KAATSU Air Bands repeatedly inflate and deflate 8 times. The inflation continues for 30 seconds and the deflation continues for 5 seconds. This cycle of pressure on and pressure off continues for 8 repetitions (steps). One complete KAATSU Cycle with 8 repetitions is 4 minutes 40 seconds in duration.

KAATSU CYCLE LEVELS

- » The KAATSU Cycle 2.0 has 6 pre-set Cycle levels.
- » The 6 Cycle levels are separated into GROUP (indicated by G) and PRO (indicated by P). See the SKU scale below.
- » Each GROUP (G) and PRO (P) level has a Low (L), Middle (M) and High (H) level.
- » It is recommended that users begin at a low SKU level and then use gradually higher pressures.
- » In each KAATSU Cycle, the pressure increases by 10 SKU in each repetition. This gradual increase in pressure is healthful and safe.

GROUP				PRO				
	CYCLE	SKU	CYCLE	SKU	CYCLE	SKU	CYCLE	SKU
LOW	1	80	5	120	1	180	5	220
	2	90	6	130	2	190	6	230
	3	100	7	140	3	200	7	240
	4	110	8	150	4	210	8	250
MEDIUM	1	130	5	170	1	280	5	320
	2	140	6	180	2	290	6	330
	3	150	7	190	3	300	7	340
	4	160	8	200	4	310	8	350
HIGH	1	230	5	270	1	330	5	370
	2	240	6	280	2	340	6	380
	3	250	7	290	3	350	7	390
	4	260	8	300	4	360	8	400

KAATSU AIR BANDS

- » Connect the translucent tubes to the connector on the KAATSU Air Bands. You should hear a small click when the tube connector is properly connected with the KAATSU Air Bands. This click ensures the lock is air tight.
- » The KAATSU Air Bands should be placed over your clothes.
- » The KAATSU Air Bands on your arms should be placed above your biceps and above your triceps below your deltoids (shoulder muscles) near your armpit.

- » The KAATSU Air Bands on your legs should be placed above your quadriceps and hamstrings high up on your legs near your groin.
- » The KAATSU Air Bands should be placed snugly on your limbs. You should be able to place one finger between your skin and the KAATSU Air Bands. But if you can place two or more fingers between your skin and the KAATSU Air Bands, you may want to slightly tighten the KAATSU Air Bands.

START AND USE CYCLE MODE

1. Hold the ON/OFF button down for 3 seconds to turn on KAATSU Cycle 2.0.
2. CYCLE appears on the screen.
3. To use the G (GROUP) mode, press the G button on the face of the KAATSU Cycle 2.0. GROUP appears on the screen.
4. To use the P (PRO) mode, press the P button on the face of the KAATSU Cycle 2.0. PRO appears on the screen.
5. In both the G and P mode, press the L button on top of the KAATSU Cycle 2.0 in order to use in the LOW setting.
6. In both the G and P mode, press the M button on top of the KAATSU Cycle 2.0 in order to use in the MEDIUM setting.
7. In either the G and P mode, press the H button on top of the KAATSU Cycle 2.0 in order to use in the HIGH setting.

HOW TO READ THE CYCLE MODES

- » In the G mode under LOW setting, GL1 first appears in the first step, GL2 appears during the second step GL3 appears in the third step, GL4 appears during the fourth step, GL5 appears in the fifth step, GL6 appears during the seventh step, and GL8 appears in the eighth step. G stands for GROUP; L stands for LOW; the numbers indicate the step number.
- » This same pattern is also used for the MEDIUM and HIGH settings. So GM1 is the first step of the GROUP MEDIUM mode; GM2 is the second step of the GROUP MEDIUM mode. Similarly, GH1 is the first step of the GROUP HIGH mode; GH2 is the second step of the GROUP HIGH mode.
- » This pattern is also used for the PRO mode. So PL1 is the first step of the PRO LOW mode; PL2 is the second step of the PRO MEDIUM mode. Similarly, PH1 is the first step of the PRO HIGH mode; PH2 is the second step of the PRO HIGH mode.
- » Three digits follow the mode settings. These numbers indicate the SKU (Standard KAATSU Units) pressure. So GM7 200 means that there is 200 SKU pressure in the GROUP MEDIUM mode and PH1 180 means that there is 180 SKU pressure in the PROFESSIONAL HIGH mode.

CHANGE BETWEEN CYCLE MODES

1. To change between the GROUP (G) mode and the PRO (P) mode, press either G or P with a short press (1 second).
2. Then press LOW (L) or MEDIUM (M) or HIGH (H) to start in a new mode.

STOP CYCLE MODE

1. The unit will stop automatically at the end of the eighth repetition. Each Cycle ends with a double beep.
2. If you wish to manually stop the unit during the KAATSU Cycle, press the ON/OFF button.

CHANGE CYCLE SKU LEVELS

The SKU levels should remain as is stored on the unit. However, in some situations, you or your KAATSU Specialist may want to decrease or increase the SKU levels. In this case, you can manually change the HIGH SKU levels in the GROUP or PROFESSIONAL mode.

1. To change the SKU levels, go to either GROUP (G) or PRO (P).
2. Press the HIGH (H) button in a long press (3 seconds) to set a new SKU level.
3. The pre-set SKU level will flash on the screen. For example, in the PH8 mode, the pre-set SKU level is 400 SKU. On the screen PH8 400 will appear flashing.
4. To decrease the pre-set SKU level by 10 SKU, press the G button and press the ON/OFF button. Repeatedly press GROUP (G) to decrease the SKU levels by more than 10 SKU. Each press will decrease the SKU by 10.
5. To increase the pre-set SKU levels by 10 SKU, press the P button and press the ON/OFF button. Repeatedly press PRO (P) to increase the SKU levels by more than 10 SKU. Each press will increase the SKU by 10.
6. When you reach your desired SKU level, press the H button again to set the new SKU level.

SOUNDS

- » The compressors make an inflating sound when the bands are being pumped with air.
- » There is always a small bit of air that finds its way out of the bands and connectors. In these cases, the compressors automatically refill to the appropriate pressure with small bursts of air as required.

CHANGE FROM CYCLE TO TRAINING MODE

1. To change from the KAATSU Cycle mode to the KAATSU Training mode, press the ON/OFF button so the Red Light is on. The G and P lights should not be on. CYCLE appears on the screen.

2. Press the LOW (L) button on a Long Hold for 3 seconds. TRAINING will appear in the screen.
3. Press PRO (P) on a Short Hold. T 15-200 appears with the 200 flashing. T indicates the Training mode. 10 indicates a maximum of 10 minutes to use. 200 indicates the SKU level in the Training mode.
4. Press the ON/OFF button to start KAATSU Training (at 200 SKU for 10 minutes in this example).
5. To stop the KAATSU Training mode, press the ON/OFF button.

CHANGE SKU LEVEL ON TRAINING MODE

1. Change to the KAATSU Training mode. Press the ON/OFF button so the Red Light is on while the GROUP (G) and PRO (P) lights are not on. CYCLE appears on the screen.
2. Press the LOW (L) button on a Long Hold for 3 seconds. TRAINING will appear in the screen.
3. Press PRO (P) on a Short Hold for 1 second.
4. Press GROUP (G) to decrease the SKU level by 10 SKU. Repeatedly press GROUP (G) to decrease the SKU levels by more than 10 SKU. Each press will decrease the SKU by 10.
5. Press PRO (P) to increase the SKU level by 10 SKU. Repeatedly press PRO (P) to increase the SKU levels by more than 10 SKUs. Each press will increase the SKU by 10.
6. To set a new SKU level, press the ON/OFF button. The unit will automatically inflate to your new desired SKU.

STOP TRAINING MODE

Press the ON/OFF button in the KAATSU Training mode to stop the inflation and deflate the KAATSU Air Bands.

CHANGE FROM TRAINING TO CYCLE MODE

1. Press the LOW (L) button on a Long Hold for 3 seconds. The screen will change from TRAINING to CYCLE.
2. Press GROUP (G) or PRO (P) and select LOW (L) or MEDIUM (M) or HIGH (H) to start KAATSU Cycle.

CHECK AND RECHARGE THE BATTERY

- » Four bars on the right side of the screen indicate a full battery life.
- » When the bars decrease, the battery life is reduced.
- » To recharge the battery, plug in the USB Type-C connector to a laptop or to the Power Adapter that is plugged into an electric outlet.

TURN OFF THE KAATSU CYCLE 2.0

Press the ON/OFF button on a Long Hold (3 seconds).



USING THE KAATSU CYCLE 2.0 -

KAATSU BASICS



The new KAATSU Cycle 2.0 is the second-generation KAATSU equipment.

The KAATSU Cycle 2.0 is the smallest, quietest, most powerful KAATSU device yet - enabling people of all ages, abilities and backgrounds - to comfortably, safely and effectively do the patented KAATSU Cycle modality or the original KAATSU Training.

The new device can accelerate training when time is of the essence - at home, on the road during travel, at an airport, in the office while increasing strength, stamina, speed and range of motion, and improving circulation. Users can exercise, recover from jetlag, vigorous workouts and competition, and rehabilitate from injuries and surgery anytime and anywhere at their convenience.

Ageing Baby Boomers can tone muscle and improve their BMI (Body Mass Index) and Olympic athletes can gain strength without using weights while lessening the risk of injury to joints and muscles.

The pneumatic KAATSU Air Bands can also be untethered (disconnected) from the KAATSU Cycle 2.0 device so athletes and physical therapy patients can train bilaterally and separate from the device itself - with personally customized pressures appropriate to the age, condition and goals of the user.

USING THE KAATSU CYCLE 2.0 -

TURNING ON AND OFF



KAATSU was invented by Dr. Yoshiaki Sato of Tokyo, Japan in a flash of inspiration in 1966.

After decades of self-experimentation, testing at the University of Tokyo Hospital, and vetting by hundreds of physicians, academic researchers and scientists in Japan and China, KAATSU was introduced in the United States in 2014. KAATSU has since expanded to 48 countries around the world with many users expected to participate in the 2020 Tokyo Olympic Games - thereby, bringing back a Japanese invention to Tokyo where it all began.

The KAATSU Cycle 2.0 is the most recent culmination of over 50 years of expertise of Dr. Sato, his medical and scientific colleagues and collaborators, and thousands of coaches, therapists and trainers worldwide.

It can fit in the palm of your hand or in your pocket, but it also has a clip so you can use it in the gym or while walking, running, spinning, skating, stretching or doing any number of movements from yoga to physical therapy.

To turn on and off the KAATSU Cycle 2.0, press the ON/OFF button on a Long Hold (3 seconds).

In order to check and recharge the battery, there are four bars on the right side of the LED screen indicate a full battery life. When the bars decrease, the battery life is reduced. In order to recharge the battery, plug in the USB Type-C connector to a laptop or to the Power Adapter that is plugged into an electric outlet.

USING THE KAATSU CYCLE 2.0 -

KAATSU *SAFETY*

The KAATSU Cycle 2.0 is the next-generation KAATSU equipment based on 5 decades of testing and use by individuals up to the age of 104 years.



It has a unique and unprecedented safety track record with over 20 million individual KAATSU session in 48 countries around the globe to date.

The KAATSU protocols, including those for cardiac rehabilitation patients, were

tested and proven by cardiologists at the University of Tokyo Hospital over a 10-year period. Their work resulted in several dozens of academic papers published in peer-review journals.

USING THE KAATSU CYCLE 2.0 -

SIX PRE-SET KAATSU PRESSURES

The KAATSU Cycle 2.0 has six pre-set pressures for individuals to use.

KAATSU Cycle is a patented, proprietary method where the KAATSU Air Bands repeatedly inflate and deflate 8 times ("repetitions"). The inflation period is 30 seconds and the deflation period is 5 seconds. One complete KAATSU Cycle with 8 repetitions is 4 minutes 40 seconds in duration.

On top of the device, users can select Low, Medium and High levels. On the face of the device, users can either select the G (Group) mode that offers lower pressures) or P (Professional mode that offers high pressures).

The KAATSU Cycle 2.0 uses a combination of G or P pressures at either the Low, Medium or High levels.

So GL means Group Low. GM means Group Medium. GH means Group High. Likewise, PL means Professional Low. PM means Professional Medium. PH means Professional High. Each level offers incrementally higher pressures. KAATSU users should only use the optimal pressures appropriate to them. But everyone should start at the GL level and then increase as they see fit.



In the midst of the KAATSU Cycle, the pressure increases by 10 SKU (Standard KAATSU Unit) in each subsequent repetition. There are 8 repetitions per each Cycle. This gradual increase in pressure is safe and optimal - and leads to a healthful production of metabolites and hormones. The pressures of each of the 8 repetitions are as follows (from lowest to highest):

- » Group Low SKU pressure: 80 - 90 - 100 - 110 - 120 - 130 - 140 - 150
- » Group Medium SKU pressure: 130 - 140 - 150 - 160 - 170 - 180 - 190 - 200
- » Group High SKU pressure: 230 - 240 - 250 - 260 - 270 - 280 - 290 - 300
- » Professional Low SKU pressure: 180 - 190 - 200 - 210 - 220 - 230 - 240 - 250
- » Professional Medium SKU pressure: 280 - 290 - 300 - 310 - 320 - 330 - 340 - 350
- » Professional High SKU pressure: 330 - 340 - 350 - 360 - 370 - 380 - 390 - 400

PREPARING TO USE THE KAATSU CYCLE 2.0

PLACING THE KAATSU AIR BANDS ON YOUR ARMS



The proper placement of the KAATSU Air Bands is absolutely critical to the safety and efficacy of the KAATSU equipment. There is only one proper position for the KAATSU Air Bands on the upper body.

Place the KAATSU Air Bands over your clothes.

The KAATSU Air Bands on your arms should be placed above your biceps and above your triceps, but below your deltoids (shoulder muscles) near your armpit.

Even if you have tendonitis in your elbow and are rehabilitating, or broke your finger or ribs, or want to develop your trapezius muscle, you still place the KAATSU Air Bands in the same position:

- » above your biceps
- » above your triceps
- » below your deltoids (shoulder muscles)
- » near your armpit

The effects of KAATSU are systemic. That is, there are only two places where you should position the KAATSU Air Bands: on your upper arms and upper legs. Any other location is wrong and can lead to problems.

The pneumatic KAATSU Air Bands must be connected to the KAATSU Cycle 2.0 device with the translucent connector tubes.

You should hear a small audible click when the tube connector is properly connected with the KAATSU Air Bands. This click ensures the lock is air tight.

PREPARING TO USE THE KAATSU CYCLE 2.0

PLACING THE KAATSU AIR BANDS ON YOUR LEGS



The proper placement of the KAATSU Air Bands is absolutely critical to the safety and efficacy of the KAATSU equipment. There is only one proper position for the KAATSU Air Bands on your lower body.

Place the KAATSU Air Bands over your pants or shorts.

The KAATSU Air Bands on your legs should be placed should be placed above your quadriceps (i.e., front of your leg) and hamstrings (i.e., back of your legs), high up on your legs at an angle near your groin.

Even if you rehabilitating from a knee surgery, or broke your toe or tibia, or want to develop your calf muscles, you still place the KAATSU Air Bands in the same position:

- » above your quadriceps
- » above your hamstrings
- » high up on your legs at an angle (that follows a bikini or briefs line)
- » near your groin

The effects of KAATSU are systemic. That is, there are only two places where you should position the KAATSU Air Bands: on your upper arms and upper legs. Any other location is wrong and can lead to problems.

The pneumatic KAATSU Air Bands must be connected to the KAATSU Cycle 2.0 device with the translucent connector tubes.

PREPARING TO USE THE KAATSU CYCLE 2.0

CHECKING YOUR CORRECT ARM BAND PRESSURE



The KAATSU Air Bands should be placed snugly on your upper arms. Snug - but not tight.

When you put on the KAATSU Air Bands on your arms, you should be able to place one finger between your skin and the KAATSU Air Bands. If you can place two or more fingers between your skin and the KAATSU Air Bands, the bands are too loose and you may want to slightly tighten the KAATSU Air Bands.

However, if you manually tighten the KAATSU Air Bands too much, you will not be able to place a finger between your skin and the KAATSU Air Bands. In

this case, slightly loosen up the bands. KAATSU Air Bands are elastic Blood Flow Moderation bands with an inner air bladder; KAATSU Air Bands are neither a tourniquet or blood pressure cuff.

Occlusion training or blood flow restriction (BFR) training use tourniquets and blood pressure cuffs in order to restrict arterial flow (i.e., blood flow from the torso to the limbs). This is NOT what KAATSU Air Bands do. KAATSU Air Bands were specifically designed and engineered to modify venous flow (i.e., blood flow from the limbs back to the torso). This is a major and very important difference.



In order to confirm that your pressure is safe and optimized and your bands are on adequately tightly enough, you can check your Capillary Refill Time (CRT). On your arms, press your thumb into the base of the palm of your hand. The skin will temporarily blanch (i.e., go white) and then will refill back up with blood and return to normal color.

The duration of time for the blood to refill and the blanched spot to return to

color should be between 1-3 seconds. If your skin does not turn back to its normal color within 3 seconds, the bands are on too tightly and should be loosened. If your skin is so engorged with blood that the blanched spot returns to color less than a second, that is OK too. When the color of your arms turns pink (or becomes rosy red or even a purple color), it means that your capillaries are thoroughly engorged in blood, thereby improving your circulation.

PREPARING TO USE THE KAATSU CYCLE 2.0

CHECKING YOUR CORRECT LEG BAND PRESSURE



The KAATSU Air Bands should be placed snugly on your upper legs. Snug - but not tight.

When you put on the KAATSU Air Bands on your legs, you should be able to place one finger between your skin and the KAATSU Air Bands. If you can place two or more fingers between your skin and the KAATSU Air Bands, the bands are too loose and you may want to slightly tighten the KAATSU Air Bands.

However, if you manually tighten the KAATSU Air Bands too much, you will not be able to place a finger between your skin and the KAATSU Air Bands. In this case, slightly loosen up the bands. KAATSU Air Bands are elastic Blood Flow Moderation bands with an inner air bladder; KAATSU Air Bands are neither a tourniquet or blood pressure cuff.

Occlusion training or blood flow restriction (BFR) training use tourniquets and blood pressure cuffs in order to restrict arterial flow (i.e., blood flow from the torso to the limbs). This is NOT what KAATSU Air Bands do. KAATSU Air Bands were specifically designed and engineered to modify venous flow (i.e., blood flow from the limbs back to the torso). This is a major and very important difference.

In order to confirm that your pressure is safe and optimized and your bands are on adequately tightly enough, you can check your Capillary Refill Time (CRT). On your legs, press your thumb into your thigh (quadriceps) just above your knee (patella) if you are wearing shorts. If you are wearing leggings or long pants, press your thumb into your calf near your ankle. The skin will temporarily blanch (i.e., go white) and then will refill back up with blood and return to normal color.

The duration of time for the blood to refill and the blanched spot to return to color should be less than 3 seconds. If your skin does not turn back to its normal color within 3 seconds, the bands are on too tightly and should be loosened. When your leg turns a pink color (or rosy red or even a purple tone), this means that your capillaries are thoroughly engorged in blood, thereby improving your circulation.



USING THE KAATSU CYCLE 2.0

KAATSU 3-POINT EXERCISES FOR YOUR ARMS



KAATSU 3-point Exercises are a fundamental part of the standard KAATSU protocol for the arms.

The KAATSU 3-point Exercises were invented in the 1970s by Dr Sato. These simple exercises have been performed safely and effectively among millions of individual KAATSU sessions among people

of all ages and abilities with myriad physical conditions or ailments.

The KAATSU 3-point Exercises can be performed while you are either doing KAATSU Cycles (tethered or connected to the KAATSU Cycle 2.0) or KAATSU Training (untethered or disconnected to the KAATSU Cycle 2.0).

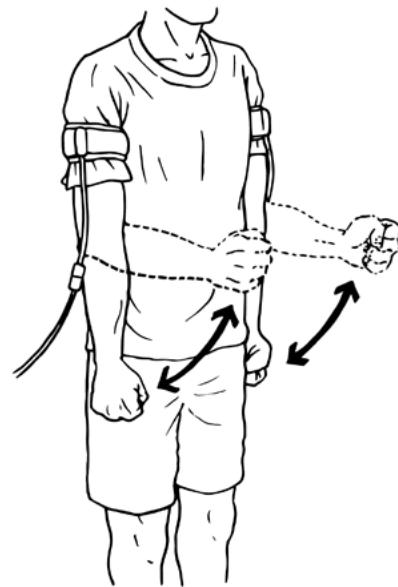
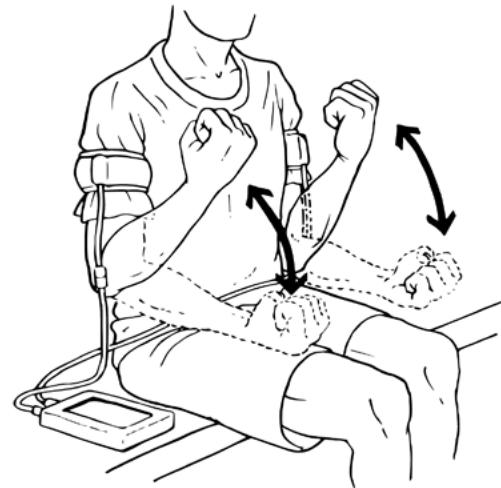
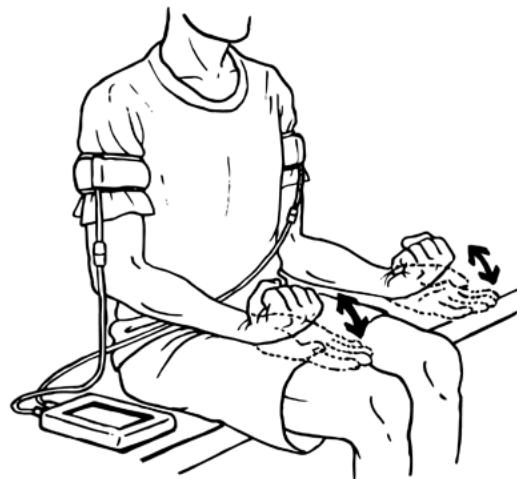
KAATSU ARM 3-POINT EXERCISES

The KAATSU 3-point Exercises for the arms involves Hand Clenches, Biceps Curls and Tricep Extensions [illustrations on left].

Each set of exercises can be done 3-4 times each with a maximum of 20 seconds rest between each set. Ideally, the number of repetitions for each exercise decreases before you reach muscular or technical failure* (or fatigue).

That is, an ideal set would be 25-30 repetitions on set #1, 10-15 repetitions on set #2, and 5-10 repetitions on set #3. Even if only 1-2 repetitions are completed on the last set, this failure signal sent to the central nervous system is one of the desired outcomes of KAATSU.

** Technical failure is defined when you start to do improper technique (movement) due to an increasing sense of fatigue. At this point, the set should be stopped.*



USING THE KAATSU CYCLE 2.0

KAATSU 3-POINT EXERCISES FOR YOUR LEGS



KAATSU 3-point Exercises are a fundamental part of the standard KAATSU protocol for the legs.

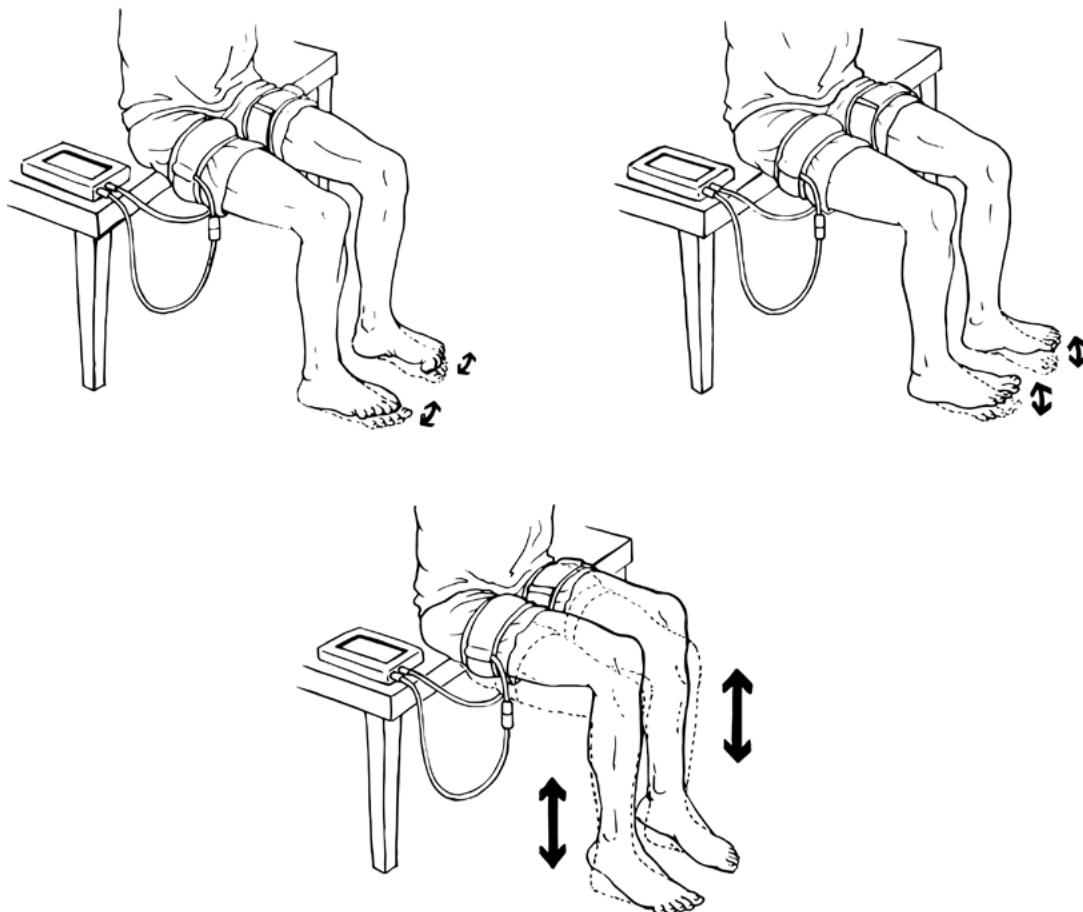
The KAATSU 3-point Exercises were invented in the 1970s by Dr Sato. These simple exercises have been performed safely and effectively among millions of individual KAATSU sessions among people of all ages and abilities with myriad physical conditions or ailments.

The KAATSU 3-point Exercises can be performed while you are either doing KAATSU Cycles (tethered or connected to the KAATSU Cycle 2.0) or KAATSU Training

(untethered or disconnected to the KAATSU Cycle 2.0).

The KAATSU 3-point Exercises for the legs are either defined as Standard or Advanced.

The Standard KAATSU 3-point Exercises for the legs involves Toe Curls, Toe Raises, and Heel Raises. These exercises are all performed while you are seated comfortably with good posture on a chair. In general, these exercises are preferred for older or less fit individuals or those just starting an exercise program or KAATSU.



The Toe Curls and Toe Raises can be done without shoes on. The Heel Raises can be performed while either sitting or standing.

Especially for Baby Boomers and adults who are being reconditioned back to a state of wellness through a simple exercise program, the KAATSU 3-point Exercises can consist of their entire KAATSU training program.

Each set of exercises should be done 3-4 times each with a maximum of 20 seconds rest between each set. Ideally, the number of repetitions for each exercise decreases before you reach muscular or technical failure* (or fatigue).

That is, an ideal set would be 25-30 repetitions on set #1, 10-15 repetitions on set #2, and 5-10 repetitions on set #3. Even if only 1-2 repetitions are completed on the last set, this failure signal sent to the central nervous system is one of the desired outcomes of KAATSU.

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USING THE KAATSU CYCLE 2.0

ADVANCED KAATSU LEG EXERCISES



KAATSU 3-point Exercises are a fundamental part of the standard KAATSU protocol for the legs.

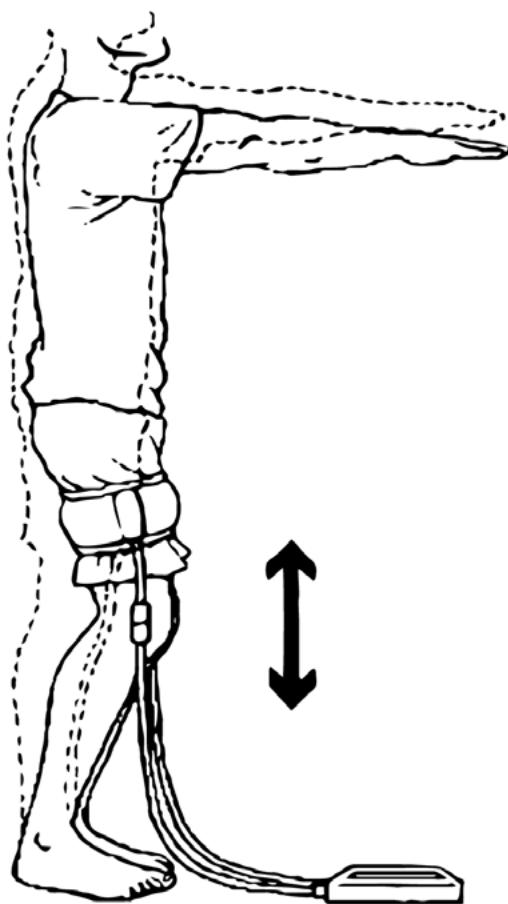
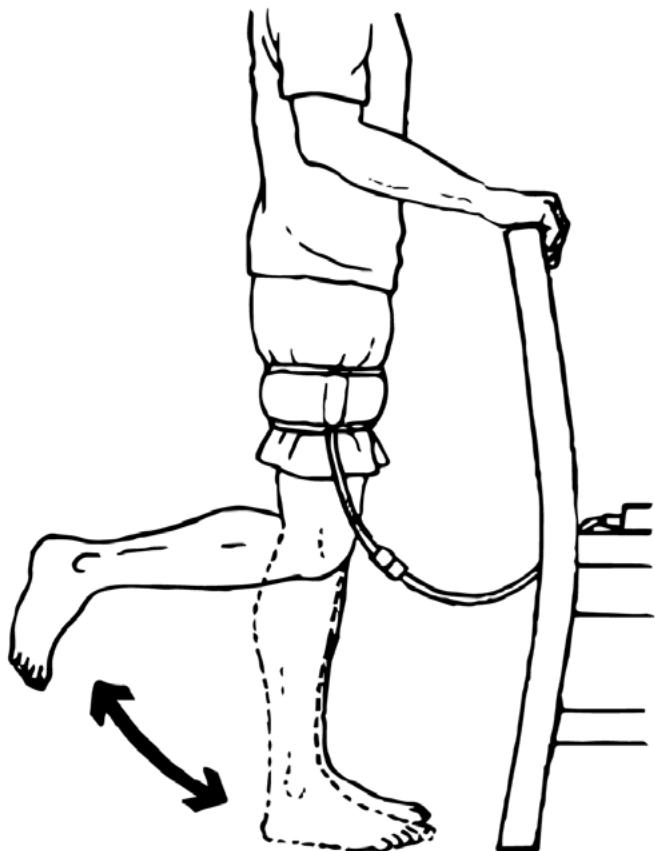
The KAATSU 3-point Exercises were invented in the 1970s by Dr Sato. These simple exercises have been performed safely and effectively among millions of individual KAATSU sessions among people of all ages and abilities with myriad physical conditions or ailments.

The KAATSU 3-point Exercises can be performed while you are either doing KAATSU Cycles (tethered or connected to the KAATSU Cycle 2.0) or KAATSU Training (untethered or disconnected to the KAATSU Cycle 2.0).

The KAATSU 3-point Exercises for the legs are either defined as Standard or Advanced.

The Advanced KAATSU 3-point Exercises for the legs are performed by more fit or active individuals or for those individuals with more experience in KAATSU. The 3 Advanced Exercises includes Heel Raises, Standing Leg Curls, and Non-lock Quarter Squats.

The Heel Raises can be done while sitting or standing. The Standing Leg Curls can be performed while standing and holding onto a chair or balancing against a wall.



The Non-lock Quarter Squats (or "chair touches") can be performed while bending the knees to touch a chair and then popping back up.

Ideally, the squats are "non-lock" (partial extension) so that your muscles are constantly engaged without rest while your knees are not locked straight (i.e., in a full extension). This will build up fatigue more quickly.

Especially for Baby Boomers and adults who are being reconditioned back to a state of wellness through a simple exercise program, the KAATSU 3-point Exercises can consist of their entire KAATSU training program.

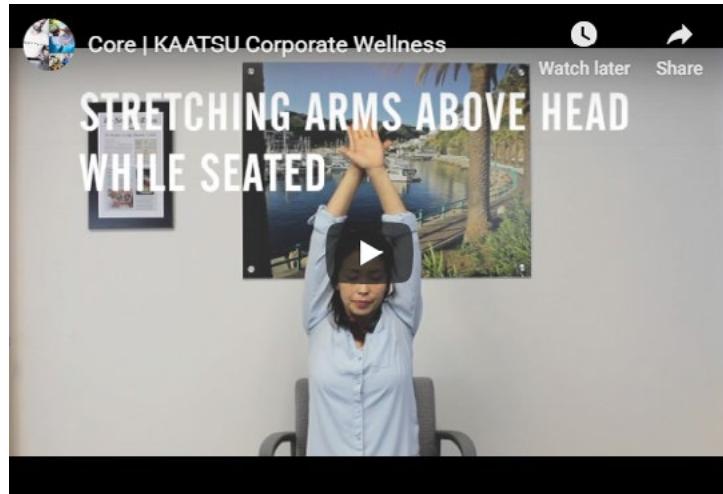
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That is, an ideal set would be 25-30 repetitions on set #1, 10-15 repetitions on set #2, and 5-10 repetitions on set #3. Even if only 1-2 repetitions are completed on the last set, this failure signal sent to the central nervous system is one of the desired outcomes of KAATSU.

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USING THE KAATSU CYCLE 2.0

KAATSU CORE EXERCISES



It is not intuitive, but KAATSU Air Bands can be placed on your upper arms and upper legs for systemic effects that are felt and seen throughout your body, including your core and lower back.

Many individuals are not motivated to do planks, crunches and other forms of abdominal work. Instead, KAATSU users can do a number of simple KAATSU exercises to strengthen their lower back and tighten their core.

Core and lower back exercises can comprise of your entire KAATSU training session for the day. Alternatively, core and lower back exercises can be an addition to your typical KAATSU sessions.

CORE & LOWER BACK #1 EXERCISE

1. Manually tighten your KAATSU Air Bands on your legs at your appropriate Base SKU.
2. Inflate your KAATSU Air Bands on your legs to your Optimal SKU.

3. Sit straight up in a chair or couch with your hips near the edge.
4. Slowly exhale and slowly lean forward, tightening your abdominal muscles as strongly as possible until your stomach is close to your legs.
5. Hold and then slowly inhale air on your return to a sitting position with good posture.
6. Repeat as desired.

CORE & LOWER BACK #2 EXERCISE

1. Manually tighten your KAATSU Air Bands on your legs at your appropriate SKU.
2. Inflate your KAATSU Air Bands on your legs to your Optimal SKU.
3. Stand on one foot, balancing only on your other leg for as long as possible.
4. When your balance is lost, rest for 10-20 seconds and repeat two more times.
5. After 3 times, balance on your other foot.
6. This act of balancing will create instability in your core and will help strengthen your stomach and lower back.

CORE & LOWER BACK #3 EXERCISE

1. Manually tighten your KAATSU Air Bands on your legs at your appropriate Base SKU.
2. Inflate your KAATSU Air Bands on your legs to the Optimal SKU.
3. Place a book on your head and walk slowly until the book falls off.
4. Rest 10-20 seconds and repeat the walk again two more times with the

book on your head.

5. Walking straight slowly, especially on an uneven surface like a sandy beach, will create instability in your core and will help strengthen your stomach and lower back.

CORE & LOWER BACK #4 EXERCISE

1. Manually tighten your KAATSU Air Bands on your legs at your appropriate SKU.
2. Inflate your KAATSU Air Bands on your legs to your Optimal SKU.
3. Stand on one foot while holding a water bottle in each hand.
4. Hold the water bottle in your outstretched arms and stand as long as possible on one leg.
5. When your balance is lost, rest 10-20 seconds and repeat two more times.
6. After 3 times, balance on your other foot.
7. In order to make this exercise more difficult, move your outstretched arms left and right, and up and down in an asymmetric manner while balancing on one foot.

CORE & LOWER BACK #5 EXERCISE

1. Manually tighten your KAATSU Air Bands on your legs at your appropriate Base SKU.
2. Inflate your KAATSU Air Bands on your legs at your Optimal SKU.
3. Do planks as usual.
4. Alternatively, tighten the KAATSU Air Bands on your arms at your Optimal SKU and do planks as normal.

CORE & LOWER BACK #6 EXERCISE

1. Tighten your KAATSU Air Bands on your legs at your appropriate Base SKU.
2. Inflate your KAATSU Air Bands on your legs at your Optimal SKU.
3. Lie on your back and slowly bring one leg one up to your stomach and hold. Grab your knee with your arms to stretch your back.
4. Repeat as desired.
5. Continue to lie on your back and slowly pull both your legs up to your stomach and hold. Grab your knees with your arms to stretch your back.
6. Repeat as desired.

CORE & LOWER BACK #7 EXERCISE

1. Tighten your KAATSU Air Bands on your legs at your appropriate Base SKU.
2. Inflate your KAATSU Air Bands on your legs at your Optimal SKU.
3. Lie on your back and slowly lift your hips off the floor and hold. Bring your hips to the ground and repeat as desired.

CORE & LOWER BACK #8 EXERCISE

1. Tighten your KAATSU Air Bands on your legs at your appropriate Base SKU.
2. Inflate your KAATSU Air Bands on your legs at your Optimal SKU.
3. Lie on your back and slowly lift both your feet off the ground and hold. Repeat as desired.

4. Lie on your back, lift both your feet off the ground, and kick your feet slightly off the ground. Repeat as desired.

CORE & LOWER BACK #9 EXERCISE

1. Tighten your KAATSU Air Bands on your legs at your appropriate Base SKU.
2. Inflate your KAATSU Air Bands on your legs at your Optimal SKU.
3. Lie on your back and slowly pandiculate (i.e., stretch and stiffen your trunk and limbs, extending your toes, feet, arms and hands as you do upon waking).
4. Repeat as desired.

CORE & LOWER BACK #10 EXERCISE

1. KAATSU Aqua Sit-ups are used by competitive aquatic athletes with a Bosu Ball. 2. Start horizontal in the water while grabbing onto a Bosu Ball; then climb on top of the Bosu Ball. Do 3 sets to failure.



USING THE KAATSU CYCLE 2.0

BEDTIME KAATSU



In order to reduce the effects of jet lag and battle insomnia, or to relieve stress before bedtime, especially when traveling internationally or crossing several time zones, the KAATSU Cycle 2.0 can work wonders.

Before bedtime or after checking into your hotel during travel, you can properly utilize the KAATSU Cycle 2.0 as follows:

- » Be very well-hydrated before doing KAATSU Cycles.
- » Do KAATSU Cycles in your hotel room before going to bed on your first few evenings in your new location.
- » Be conservative with your pressure. The effects will occur despite a lower-than-normal pressure.
- » Rest at least 20 seconds between each set and each exercise.
- » Do not go to muscular failure with these protocols; the goal is to become relaxed.

UPPER BODY EXERCISES:

1. Place the KAATSU Air Bands on your upper arms.

2. Do 2-4 KAATSU Cycles while doing any the following exercises:
 - » Forward Shoulder Rolls
 - » Backward Shoulder Rolls
 - » Head Rotations
 - » Tricep Muscle Stretches
 - » Deltoid Muscle Stretches
3. Do 20-30 Forward Shoulder Rolls in a steady motion. Breathe deeply and relax while the bands are deflated. Repeat as desired.
4. Do 20-30 Backward Shoulder Rolls in a steady motion. Breathe deeply and relax while the bands are deflated. Repeat as desired.
5. Slowly roll the head forwards and backwards. Then slowly roll your head to the left and then to the right. Then slowly roll your head in a clockwise direction and then in a counterclockwise direction while the bands are inflated. Breathe deeply and relax while the bands are deflated. Of

course, skip this exercise if rotating your head causes dizziness.

6. Stretch your triceps muscles on your left and right arms while the bands are inflated.
7. Stretch your deltoid muscles on left and right shoulders while the bands are inflated.
8. Stretch your upper body or torso as you desire and are able.

LOWER BODY EXERCISES:

1. Place the KAATSU Air Bands on your upper legs.
2. Do 2-4 KAATSU Cycles while simply sitting or stretching, meditating, reading or watching entertainment.

Some of these exercises are demonstrated below. These same exercises can be done in your office while at work to relieve stress and get some exercise during the day when you are sitting and being sedentary all day long.



USING THE KAATSU CYCLE 2.0 - KAATSU TRAINING MODE



While the KAATSU Cycle modality is the primary feature of the KAATSU Cycle 2.0, the device is also versatile and can also be used for KAATSU Training.

In order to change from KAATSU Cycle to the KAATSU Training mode, place the device in its "neutral position". That is, press the middle ON/OFF button so only the Red Light is on. The G and P lights should be off. CYCLE appears on the LED screen.

Press the LOW (L) button with a Long Hold for 3 seconds. TRAINING will automatically appear on the LED screen.

Press PRO (P) on a Short Hold for 1 second. T 15-200 appears with the number 200 flashing. T indicates the Training mode. 10 indicates a maximum of 10 minutes to use. 200 indicates the default SKU level in the KAATSU Training mode.

Press the ON/OFF button to start KAATSU Training at the default level of 200 SKU for 10 minutes. To stop KAATSU Training, press the ON/OFF button.

In order to increase the pressure level from the default 200 SKU in the KAATSU Training mode, press the PRO (P) button to increase the SKU level by 10 SKU. Repeatedly press PRO (P) button to increase the SKU levels by more than 10 SKU. Each press will increase the SKU by 10.

In order to decrease the pressure level from the default 200 SKU in the KAATSU Training mode, press the GROUP (G) button to decrease the SKU level by 10 SKU. Repeatedly press GROUP (G) to decrease the SKU levels by more than 10 SKU. Each press will decrease the SKU by 10.

To set a new SKU level, press the ON/OFF button and the device will automatically inflate to your new desired KAATSU Training SKU level.

USING THE KAATSU CYCLE 2.0 - KAATSU TRAINING UNTETHERED



While the KAATSU Cycle modality is the primary feature of the KAATSU Cycle 2.0, the device is also versatile and can also be used for KAATSU Training.

Only use the KAATSU Training mode for a maximum of 15 minutes on your arms and a maximum of 20 minutes on your legs. This should be more than sufficient time to achieve your goals - whether it is a runner, swimmer or cyclist sprinting or doing some interval workouts, or to build muscle with resistance exercises, or to

work on certain movements or athletic techniques (for a dancer, a golfer, tennis player, or basketball player).

The KAATSU Air Bands are made of neoprene and can get wet or be used in a pool. But do not depress the connector valve in the water or else water will seep into the internal air bladder.

Use the KAATSU Training mode until you have reached your maximum fatigue or your technique is failing within the maximum time limit.

TWICE DAILY KAATSU USAGE BY BULLETPROOF



Purple Heart recipient Joe Lowrey of Long Beach Wilson High School in Long Beach, California has been using KAATSU daily for nearly two years.

While serving with the 7th Special Forces Group on July 7th 2014, the U.S. Army Green Beret took a bullet to the head in 2014 (read his story [here](#)). The injury occurred during Lowrey's third deployment as he was manning the gun turret on top of a truck during an intense firefight against Taliban insurgents.

After surprising his colleagues and the medical staff in hospitals in Afghanistan and Germany, then later the Walter Reed Army Medical Center in Washington D.C. by surviving the traumatic brain injury,

his ability to do simple movements - standing up, walking, using his left arm - was significantly hampered or impossible.

But after two years of twice daily KAATSU Cycles and KAATSU Training (morning and night on both arms and legs), the retired Sergeant 1st Class has improved dramatically, both physically and cognitively.

"I started eating right, going keto, and getting good sleep," says Lowrey. "I use all kinds of biohacks, but I always try to do KAATSU in the morning with my caregiver and before I go to bed at night. I jokingly tell my buddies that Dave Asbrey of Bulletproof took my name. I am the one who is bulletproof."

THE FUTURE IS NOW WITH KAATSU



HASHTAGS: EQUIPMENT, KAATSU WEARABLES

Back during the planning and execution of the 22nd Century Project at the University of Tokyo Hospital in the early 2000s, Dr. Sato and Dr. Nakajima led research on KAATSU.

They - along with Japanese government demographic specialists - were preparing for Japan's future when its population would start to decrease for a number of societal factors.

Well, the future is now.

The number of newborn babies born in Japan reached a record low of 918,397 in 2018. It was the third year in a row the number of newborns were under 1 million.

Japan is the oldest and most rapidly aging country on the planet. Since 1899, the Japanese government has been conducting a census, but 2018 saw the largest overall decrease in its population in history.

In post World War II Japan, the average number of children born to women was 4.54. Now it is only 1.42 children which is higher than Japan's historic low of 1.26 in 2005, but still well below the fertility rate necessary to maintain its current population levels.

The total fertility rate has been hovering around 1.4 since 2012 after hitting a low of 1.26 in 2005. The rate fell below 2.00 in 1975, a large decrease from the rate of 4.54 seen in 1947.

"With an increasingly aging population, easy-to-use, convenient modalities such as KAATSU are becoming ever more important to the Baby Boomer population - and their elderly parents," observes Steven Munatones, Chief Executive Officer of KAATSU Global. "This is why far forward thinking companies in Japan - like their counterparts in the U.S. and Europe - are making plans and implementing innovative programs to expand the use of KAATSU with new Bluetooth-enabled, wireless handheld products in the latter half of 2019."

KAATSU

In The News

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



VOGUE FASHION BEAUTY CULTURE LIVING RUNWAY

BEAUTY > HEALTH & FITNESS

Is 30 Minutes a Week Enough for a Better Body? The Cult Workout You Can Now Try at Home

FEBRUARY 1, 2016 7:20 PM by MACKENZIE WAGONER



►►► Click HERE...

"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.

►►► Click HERE...

"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.

►►► Click HERE...

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.

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NEXT-GENERATION KAATSU MASTER 2.0

AVAILABLE
IN Q4 2018



- ◆ **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

AVAILABLE IN Q4 2018

NEXT-GENERATION KAATSU MASTER 2.0

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: less than 18 km (7.06 inches)

Medium: 18 - 28 cm (7.06 - 11.02 inches)

Large: 28 - 38 cm (11.02 - 14.96 inches)

Extra Large: 38 - 48 cm (14.96 - 18.89 inches)

LEGS

Small: less than 40 cm (15.74 inches)

Medium: 40 - 50 cm (15.74 - 19.68 inches)

Large: 50 - 60 cm (19.68 - 23.62 inches)

Extra Large: 60 - 70 cm (23.62 - 27.55 inches)

LIFEFORCE IQ PRESENTS KAATSU



"Our goal is to awaken human potential by sharing precise effective tools and methods to maximize the health, happiness and performance of people who want to realize their potential," explains David Weinstein of LIFEFORCE IQ and OASIS in Boca Raton, Florida.

Weinstein was an investment banker for 35 years, specializing in biotechnology and medical companies. With that background and knowledge, combined with his lifelong interest in athletics and anti-aging, he and his wife Leidy are offering their lifestyle design via LIFEFORCE IQ.

"We continuously monitor scientific advances and are quick to adjust products and protocols to assist our clients in optimizing their lifestyles."

In addition to KAATSU equipment including the new 2.0 and KAATSU Aqua, the Weinstein's offer Juvent Health Micro-Impact Platform, LiveO2, Viome, Tower Garden, and One Truth 818.

For more information, [visit here](#).

For additional examples of how people of all ages have improved themselves, [visit here](#).



MR. UNIVERSE MASTERS KAATSU

