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Body Weight Tabata for the Traveling Service Member

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True Performance Realization

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Abstract

The modern battlefield still demands that Service members (SMs) be physically fit. However, many factors will compete with the SM's ability to maintain or improve personal fitness, to include routine travel. The purpose of this article is to describe a body weight Tabata exercise protocol that can be conducted by any SM, regardless of access to workout equipment, facilities, or areas, which will enable battlefield performance, lethality, and military readiness.

Introduction

Throughout the work-up cycle, military SMs routinely travel, such as during provided periods of leave, to include post-deployment leave, holiday leave, and pre-deployment leave, as well Temporary Duty Orders or Pre-Deployment Site Surveys. During their travels, SMs will have varying access to workout equipment and areas, with some SMs having minimal to no access to workout equipment and areas. We know that fitness not only influences performance but also that fitness is a predictor of injuries within the military,[1,2] to include those in Reserved Officer Training Programs.[3] Therefore, SMs must conduct physical training (PT) to maintain their fitness level while traveling to maintain their readiness to deploy.

The purpose of this article is to describe a body weight (BW) Tabata exercise protocol that can be conducted by any SM, regardless of access to workout equipment, facilities, and areas, as this workout can be conducted in a garage, hotel room, bunker, hangar, or outside. Of note, the author has applied the prescribed workout, or variations of this workout, to thousands of infantry United States Marines, typically before and after their respective leave blocks, or as coaching method for the SMs to understand aspects of PT and fitness. When applied around a leave block, this would be the last PT session prior to a leave block and the first PT session after the leave block. Therefore, this BW Tabata workout would be used as an assessment to see who conducted PT sessions over the leave block.

BW Tabata Overview

As discussed in the current issue of the *True Performance Realization Applied Journal*,[4] the Tabata protocol (named after the Japanese exercise scientist, Dr. Izumi Tabata)[5] has the ability to improve speed, muscular endurance, cardiovascular

Ex	R	Ex	R	Ex	R	Ex	R	Ex	R	Ex	R	Ex	R	Ex	R
20 s	10 s	20 s	10 s	20 s	10 s	20 s	10 s	20 s	10 s	20 s	10 s	20 s	10 s	20 s	10 s
Set 1 30 s		Set 2 30 s		Set 3 30 s		Set 4 30 s		Set 5 30 s		Set 6 30 s		Set 7 30 s		Set 8 30 s	

Table 1: Generic Tabata Round. Legend—Ex: exercise; R: rest; s: seconds.

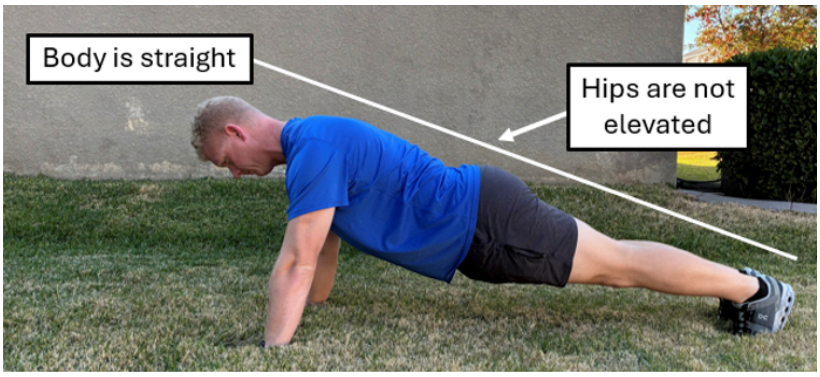


Image 1: Resting in the "Ideal" Up Position of the Mountain Climber and Push-Up During the Working Set. Regardless of fitness level, conducting mountain climbers or push-ups at full speed will result in fatigue. When resting in the working set, one should strive to rest with their body in a straight line.

endurance, explosive power, and strength.[6,7,8,9] Since "the modern-day warfighter must not only possess the strength and power capabilities that are required for anaerobic tasks but must also have well-developed aerobic fitness,"[10] the Tabata protocol is an effective training modality. In practical application, the Tabata protocol consists of a flexible number of rounds, with each round being four minutes total, consisting of eight sets of twenty second bouts, with ten-second rest periods between sets. For example, a round could be BW squats, where the individual would squat for twenty seconds (max effort), rest for ten seconds, repeated for a total of eight times in that round. The individual would then rest for one minute prior to the next round.

Table 1 displays a generic four-minute round consisting of exercising for twenty seconds, followed by a ten-second rest, conducted eight times in a row.



Image 2: Resting in the "Acceptable" Up Position of the Mountain Climber and Push-Up During the Working Set. Regardless of fitness level, conducting mountain climbers or push-ups at full speed will result in fatigue. When resting in the set, the individual can elevate their hips, if needed. However, one should never drop to their knees during the set.

The reader should note that maximum effort is prescribed for each set. Meaning that the SM should not pace their repetitions but rather accomplish as many repetitions in each set as possible, as the intent is to build the utmost muscular endurance.

Exercise Selection

The author chose eight exercises that could be performed anywhere, without any equipment, that challenges both the cardiovascular and muscular systems, with numerous level changes. The intent of the level changes (i.e., standing to lying face down (prone) to standing to lying face up (supine) was to mimic the demands of the modern battlefield, which requires SMs to sprint from cover to cover, conduct the cycle of the infantryman, crawl, drag, carry, entrench, etc. In addition to the level changes, focus on the lower body musculature was emphasized, as leg strength, endurance, power, and power endurance are needed for those serving in the military, especially those in ground combat arms who are expected to carry high loads.[11] The eight exercises were specifically: (1) up-downs; (2) squats; (3) mountain climbers; (4) running-in-place; (5) push-ups; (6) reverse lunges; (7) rolling crunches; and (8) modified bootstrappers.

Exercise 1—Up-Downs

The first exercise was the up-down, as this exercise mimics the cycle of the infantryman (also referred to as buddy rushing). The cycle of the infantryman involves the repeated process of one or more warfighters laying down suppressive fire (typically in the prone), with fellow warfighter(s) sprinting (bounding) toward cover while exploiting the suppressive fire provided by their "buddy." The roles reverse upon the formerly sprinting (bounding) warfighter now providing suppression for their buddy, who now closes toward the enemy or breaks contact away from the enemy. Thus, the up-down effectively mimics the suppressive fire stage (i.e., down in the prone) and the movement phase of bounding/sprinting (i.e., jumping up) of buddy rushing quite well without any equipment, partners, or excessive space needed.

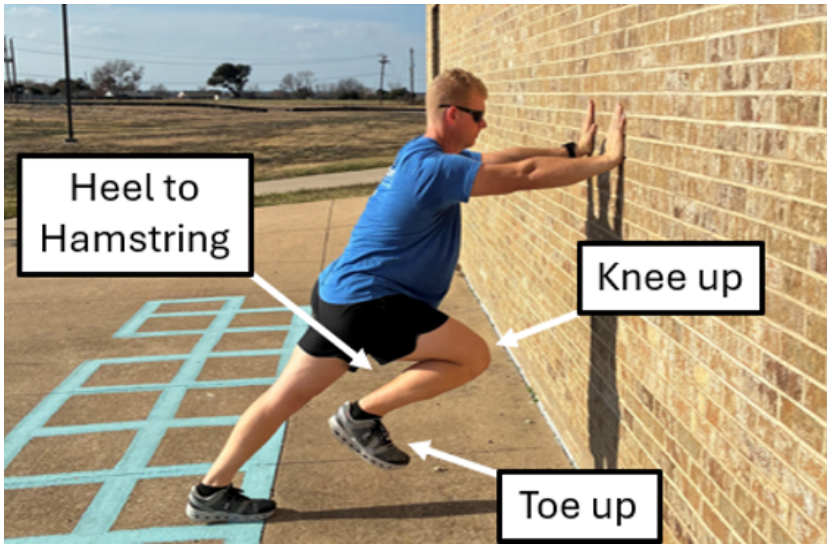


Image 3: Example of Knee Up, Toe Up, Heel Up Used in Acceleration Mechanics. Above shows a drill that isolates the correct mechanics for acceleration by providing a forward body lean, while focusing on lower body acceleration mechanics. In this drill, the individual drives the knee up, flexes their foot up, and the heel drives to the hamstrings.

Coaching cues for this exercise when used in the Tabata are to: (1) have quick, rapid transitions from each position (i.e., rapidity of action); (2) ensure the chest completely touches the ground in the prone; (3) ensure full range of motion on the jump phase; and (4) rest between each set by standing (not resting on the ground). In addition to mimicking the cycle of the infantryman, the up-down exercises stresses the

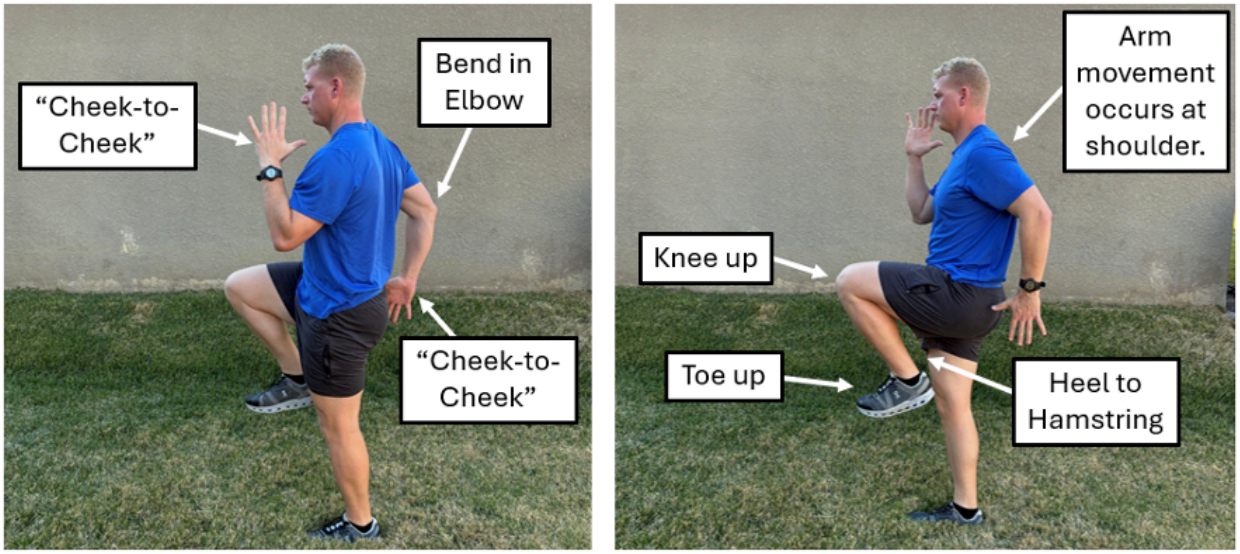


Image 4: Example of Knee Up, Toe Up, Heel Up and Cheek-to-Cheek Used in Body Weight Tabata. When running-in-place, once the foot contacts the ground, the foot should immediately get off the ground, by driving the knee up, toe up, and heel up. The arms should cycle rapidly, with movement occurring at the shoulder, not the elbow.



Image 5: Example of the Up Position in the Rolling Crunch. When conducting the rolling crunch, the individual should never cross their feet and try to maintain their knees as close to their shoulders as possible (i.e., "be tight" or "get small"). In the up position, the feet do not touch the ground.

cardiovascular system due to the level changes. Of considerable note, the cardiovascular stress of level changes is needed in preparation for combat and is not replicated with long slow distance running that often comprises an unneeded proportion of a SM's training regimen.

Exercise 2—Squats

Sprinting from cover to cover, dragging an injured warfighter out a kill zone, conducting loaded movements, and many more military tasks require that a SM has leg endurance, strength, power, and power endurance. The BW squat engages the lower body muscle groups (e.g., quadriceps, hamstrings, and gluteus maximus) needed for most physical tasks in the ground combat arms' profession. Coaching cues for this exercise when used in the Tabata are to: (1) maintain full range of motion; (2) conduct proper form; and (3) rest between each set in the standing position.

Exercise 3—Mountain Climbers

The modern battlefield requires low crawling, high crawling, movement under and over obstacles, clearing of subterranean spaces, and many more feats where movement is required in the horizontal position. Thus, these movements must be replicated in PT, with the mountain climber exercise replicating the cardiovascular and muscular demands of these movements in minimal space. Coaching cues for this exercise when used in the Tabata are to: (1) conduct as many repetitions with a full range of motion as possible; (2) rest in the up position during the working set (see Images 1 and 2) when needed; and (3) rest on your knees between the working sets.

Note that this exercise followed the BW squat by design as the squat is going to elicit a higher cardiovascular strain, measured by heart rate (HR), compared to the mountain climber. Being in the prone position, the cardiovascular system is less stressed as it does not need to overcome the resistance caused by gravity in the standing position.[12] This concept is clearly seen in Figure 1 and is why there is an emphasis on level changes prescribed in this workout.

Exercise 4—Running in Place

SMs come from all walks of life, with some coming from safe neighborhoods, and others coming from unsafe neighborhoods, where the idea of running in their neighborhoods on leave is dangerous. Additionally, when traveling, SMs may not have the ability to

In 1885, Walter George ran a four-minute, 10.2-second mile, which was the world record for nearly fifty years. Notable to George's story is that he worked fourteen-hour days in a chemist's shop, which required a considerable portion of George's training to consist of running-in-place with "*high knee lifts*" in a small room in the chemist shop. The "*high knee lifts*" were carried out with high intensity and supplemented with runs on dirt tracks that closely resembled fields.

Case Study 1: Walter George's Running-in-Place Regimen.

conduct running PT or run for various reasons. However, the ability to conduct sprinting and distance jogging (i.e., for the purpose of cardiovascular endurance) is needed for combat. Furthermore, sprinting and running are assessed in each Service's fitness assessments in some capacity. Therefore, the SM must maintain, or potentially improve, their ability to run while traveling.

Therefore, the fourth exercise is to run-in-place. Coaching cues for this exercise when used in the Tabata are to: (1) apply acceleration mechanics; (2) conduct as many high-quality repetitions as possible; and (3) engage the upper body by swinging the arms back and forth as one would do in sprinting. While describing acceleration mechanics is beyond the scope of this article, the author will describe three additional coaching cues for accelerating that can be replicated in this exercise, specifically: (1) "on the ground, off the ground;" (2) "knee up, toe up, heel up;" and "cheek-to-cheek."



Image 6: Example of the Down Position in the Rolling Crunch. When conducting the rolling crunch, try to remain as "tight" or "small" as possible by attempting to have your knees reach your shoulders. In the down position, do not let your shoulders touch the ground.

Regarding the coaching cue *on the ground, off the ground*, once the SM contacts the ground with their foot, they should immediately remove their foot off the ground by intentionally starting the next leg cycle of running. The more rapid a SM can get their foot "on the ground, off the ground," the greater acceleration and running velocity will occur. For the coaching cue *knee up, toe up, heel up*, when accelerating the *knee* must drive up (which stretches the hamstrings and gluteus maximus muscles, thus creating elastic energy when the leg drives to the ground), the *toe* must be up (which stretches the calf muscles and places the foot in the optimal position to land with a positive shin angle), and the *heel* must drive to the hamstring (further stretching the hamstrings and gluteus maximus muscles and placing the leg in



Image 7: Example of Resting During the Rolling Crunch. Few individuals will be able to conduct the entire round in the "tight" or "small" position by keeping their knees close to their armpits with continuous movement. When resting during the set, the individual keeps their feet off the ground, allows their knees to move away from their shoulders and holds this position (isometrically). When able to continue, the individual gets "small" or "tight" and continues the exercise.

the optimal position to create a positive shin angle). Images 3 and 4 show the knee up, toe up, heel up in action.

For the coaching cue *cheek-to-cheek*, the SM should be moving their palms from their facial cheek to their gluteal cheek. The movement that causes the palm to move "cheek-to-cheek" occurs at the shoulder, with the elbow remain at approximately a 90° position. When accelerating or sprinting, the more rapidly that one moves their arms cheek-to-cheek, the faster that their legs will turnover, thus increasing their running velocity.

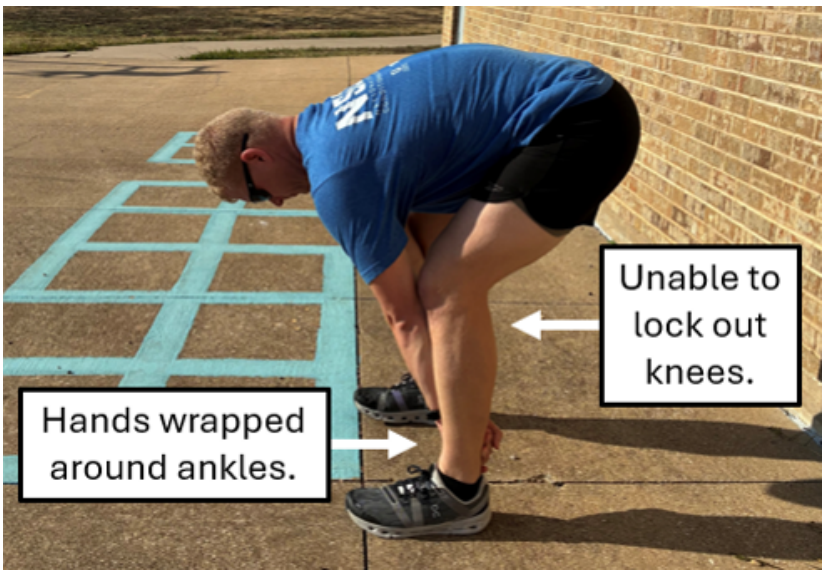


Image 8: Example of Modified Bootstrapper in Up Position. In the modified bootstrapper, the individual wraps their hands around the inside of their ankles and does not let go during the entire working set. Rest in the working set can occur in the up or down position, but the individual does not let go of their inside ankles.

Lastly, the reader must note that intensity is key, as intensity is the key variable for improving performance, especially in trained individuals.[13] Thus, the SM is not jogging in place but is truly running in place trying to make as many good repetitions as possible in the twenty-second working set. Case study 1 reveals how powerful this exercise can be when applied with high intensity.[14]

Exercise 5—Push-Ups

Every SM is familiar with the push-up exercise. Additionally, many several Services use the push-up, or a variation of the push-up, to assess fitness. Coaching cues for this exercise when used in the Tabata are to: (1) rest in the up position during the working set when needed (with Image 1 being the ideal position, and Image 2 being the acceptable position); (2) rest on your knees between the working sets; and (3) ensure full range of motion.



Image 9: Example of Modified Bootstrapper in Down Position.

Exercise 6—Reverse Lungs

Like the push-up exercise, each SM is familiar with the lunge. The author recommends the reverse lung (i.e., the body moves backward rather than forward) as the reverse lunge places less patellofemoral stress on the knee.[15] As the knee is a common injury for SMs, when possible, training stress should be minimized for the knee joint to

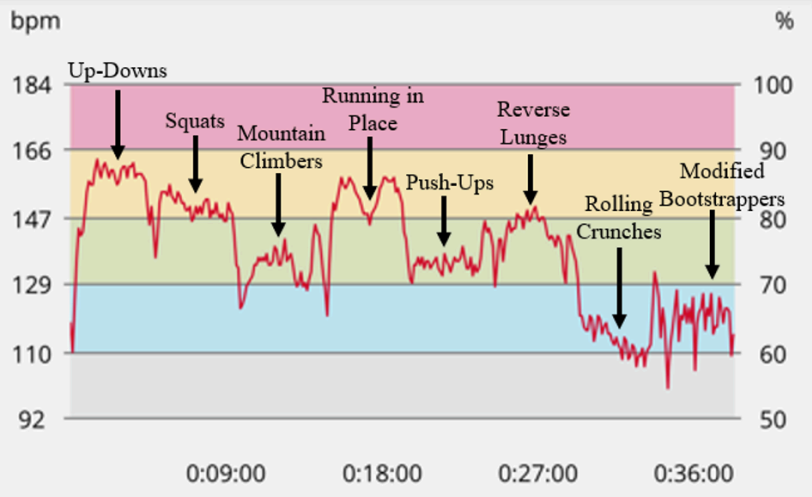


Figure 1: Author's Heart Rate Measured in Prescribed Tabata Protocol Using Vertical (Consistent) Sets.

Legend: bpm: beats per minute for heart rate; %: Percent of Heart Rate Max; 90–100%: Zone 5, "Maximum" (Light Red); for the author 166–184bpm; 80–90%: Zone 4, "Hard" (Light Yellow); for the author 147–165 bpm; 70–80%: Zone 3, "Moderate" (Light Green); for the author 129–146 bpm; 60–70%: Zone 2, "Light" (Light Blue); for the author 110–128 bpm; 50–60% Zone 1, "Very Light" (Light Gray); for the author 92–109 bpm.

Heart rate (HR) recorded with the Polar H10 heart rate monitor. The image provided is from the Polar application. HR zones and categories are based on Polar's classifications.

preserve longevity, health, fitness, and performance.

Exercise 7—Rolling Crunches

Images 5 and 6 show the rolling crunch. When conducting this exercise, the SM should try to have their knees reach their shoulders and hold this position as tight as possible for the duration of the set. While holding this position tightly, the SM rocks back and forth, never letting their feet touch the ground and never letting their shoulders touch the ground. Coaching cues for this exercise are to: (1) try to have your knees touch your shoulders (i.e., "be tight" or "get small"); (2) never let your feet touch the ground; (3) never let your shoulders touch the ground; (4) conduct as many reps as possible; (5) do not cross your feet; (6) when resting during the set (working period), rest in the "hold the world" position (Image 7); and (7) when resting between the sets (rest period), rest sitting up with your feet on the ground.

If the SM or strength and conditioning professional were to replace one exercise, this would be the exercise to replace. The author chose this exercise because one of his high school football coaches was a Marine and would make the team do this exercise at the very end of the workout, as his football coach performed this in the Marine Corps. Thus, to honor his coach, the Marines would do the rolling crunch when conducting this PT session. However, there are notable other exercises that are

	Starting HR	Set 1	Set 2	Set 3	Set 4	Set 5	Set 6	Set 7	Set 8	Average HR	Standard Deviation
Up Downs	100	138	145	157	160	160	159	159	159	154.6	8.4
Squats	150	152	154	153	150	148	149	148	147	150.1	2.6
Mountain Climbers	133	129	134	135	135	134	136	130	127	132.5	3.3
Running in Place	131	147	157	158	153	148	149	157	157	153.3	4.6
Push- Ups	133	134	133	135	131	132	135	133	133	133.3	1.4
Reverse Lunges	141	142	145	145	147	150	148	142	141	145.0	3.2
Rolling Crunches	132	116	115	117	114	111	109	110	111	112.9	3.0
Modified Bootstrappers	116	115	120	123	121	121	117	119	113	118.6	3.4

Table 2: Author's Heart Rate (HR) in Prescribed Tabata Protocol Using Horizontal (Consistent) Sets.

better for abdominal endurance than the rolling crunch, such as the plank. Of note, both the Marine Corps and Army use the plank in their fitness assessments; therefore, the plank could replace this exercise with better results on fitness assessments.

Exercise 8—Modified Bootstrappers

Within the military, this exercise has another name. However, the name is not appropriate for a professional setting. Thus, the author is referring to this exercise as "modified bootstrappers."

The reason this exercise was chosen was twofold. First, it is a lower body exercise. As emphasized, it is critical for all SMs to develop their lower body endurance, power, and strength. Additionally, the modified bootstrapper, due to the grabbing of the ankles, placing a great strain on the hamstrings. Second, the modified boot strapper is very uncomfortable, due to the amount of blood lactate that accumulates, primarily in the hamstrings. Therefore, conducting this exercise towards the end of the workout takes mental fortitude to continue to conduct as many repetitions as possible in good form during each working set.

Modified bootstrappers involve the SM wrapping their hands around their ankles. Throughout the entirety of this exercise, the SM will hold their ankles and conduct as many repetitions in the squatting motion as possible. Of note, few, if any, SM will be able to fully lock out their knees in the up position while holding their ankles (Image 8). Coaching cue for this exercise is to: (1) never let go of your ankles during the working set; (2) if resting during the working set, rest while holding your ankles; (3) rest between working sets in the standing position; (4) conduct as many good repetitions as possible.

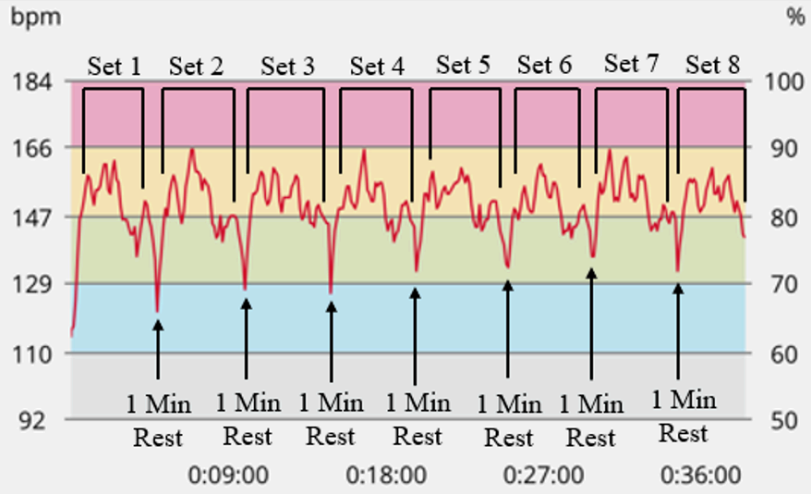


Figure 2: Author's Heart Rate During the Tabata Protocol Using Vertical (Varied) Sets.

Legend: bpm: beats per minute for heart rate %: Percent of Heart Rate Max; 90–100%: Zone 5, "Maximum" (Light Red); for the author 166–184 bpm; 80–90%: Zone 4, "Hard" (Light Yellow); for the author 147–165 bpm; 70-80%: Zone 3, "Moderate" (Light Green); for the author 129–146 bpm; 60–70%: Zone 2, "Light" (Light Blue); for the author 110–128 bpm; 50–60% Zone 1, "Very Light" (Light Gray); for the author 92–109 bpm.

Heart rate (HR) recorded with the Polar H10 heart rate monitor. The image provided is from the Polar application. HR zones and categories are based on Polar's classifications.

Exercise Order

The exercises can be performed with either horizontal sets or vertical sets. Horizontal sets are when the individual conducts the same exercise for the entire four-minute round (i.e., Round 1: up-downs; Round 2: squats; Round 3: mountain climbers) and will be referred to as consistent sets from here on out for simplicity, as you are consistently performing one exercise. Vertical sets are when the participant rotates through each exercise in a four-minute period and will be referred to as a varied set for simplicity, as you are varying the exercises in each round.

Figure 1 and Table 2 display the prescribed workout conducted by the author using the consistent set method (i.e., each round consists of only one exercise). The reader should note that when the author is exercising in the upright position (e.g., running-in-place, squats, and reverse lunges), his HR is higher than when exercising in the

	Rd 1	Rd 2	Rd 3	Rd 4	Rd 5	Rd 6	Rd 7	Rd 8	Avg HR	Standard Deviation
Starting HR	114	137	137	146	145	140	144	147	**142.3**	**4.2**
Up-Downs	138	144	145	143	148	145	151	145	**144.9**	**3.8**
Squats	156	156	157	150	157	150	159	156	**155.1**	**3.3**
Mountain Climbers	150	145	149	150	150	148	151	147	**148.8**	**2.0**
Running in Place	161	161	**159**	162	153	158	161	157	**159.0**	**3.0**
Push-Ups	160	159	153	153	156	155	153	154	**155.4**	**2.8**
Reverse Lunges	150	156	156	156	157	156	157	157	**155.6**	**2.3**
Rolling Crunches	143	143	147	143	145	142	143	150	**144.5**	**2.7**
Modified Bootstrappers	139	143	144	142	143	143	145	141	**142.5**	**1.9**
Average HR	**149.6**	**150.9**	**151.3**	**149.9**	**151.1**	**149.6**	**152.5**	**150.9**		
Standard Deviation	**9.0**	**7.8**	**5.8**	**7.1**	**5.5**	**6.2**	**6.4**	**6.1**		

Table 3: Author's Heart Rate (HR) in Prescribed Tabata Protocol Using Vertical (Varied) Sets.

horizontal position (e.g., mountain climbers, push-ups, rolling crunches). Additionally, the reader will note that the up-down and running-in-place rounds caused the highest cardiovascular strain. Lastly, the dip in set five and six of running-in-place, seen in Figure 1 and Table 2, was due to fatigue. However, the author's HR monitor allowed him to observe the decrease in his intensity (determined by a decrease in HR), which allowed him to push harder for sets seven and eight of running-in-place.

Figure 2 and Table 3 display the prescribed workout conducted by the author using the varied set method (i.e., each round consists of each exercise conducted once). When comparing consistent sets (one exercise per round) to the varied sets (eight different exercises per round), the consistent sets elicited an average HR of 137 beats per minute (BPM) (to include the one-minute rest intervals), whereas the varied sets (each exercise per round) caused an average HR of 149 BPM (to include the one-minute rest intervals). Therefore, the greater cardiovascular strain, measured by HR, occurs in the varied sets (i.e., each exercise one time per round).

Thus, if the SM's primary goal was to have the highest level of cardiovascular strain, the SM should conduct varied sets (Figure 2). However, if the SM goal is to focus on local muscular endurance, the SM should conduct consistent sets (Figure 1). Neither the consistent or varied sets are superior and should be based off the SM's goals. Furthermore, the SM could vary the exercises while traveling, with a PT session using consistent sets and the next PT session using the varied sets. The author typically prescribed consistent sets (one exercise for four minutes) to his SMs due to the increased rate of perceived exertion from the local muscle fatigue.

Practical Application

The workout needs to be conducted following a warm-up. The purpose of the warm-up is to help transition the body from rest to physical activity (i.e., increased HR, sweat rate, breathing rate, muscle blood flow). As this workout was designed to be conducted anywhere, without the requirement of a large exercise area, the author recommends the following two-part warm-up as a way transition the body to exercise. The reader should note that this method is one way to



Figure 3: Author's Heart Rate during the Described Warm-Up.

Legend: bpm: beats per minute for heart rate %: Percent of Heart Rate Max; 90–100%: Zone 5, "Maximum" (Light Red); for the author 166–184 bpm; 80–90%: Zone 4, "Hard" (Light Yellow); for the author 147–165 bpm; 70–80%: Zone 3, "Moderate" (Light Green); for the author 129–146 bpm; 60–70%: Zone 2, "Light" (Light Blue); for the author 110–128 bpm; 50–60% Zone 1, "Very Light" (Light Gray); for the author 92–109 bpm.

Heart rate (HR) recorded with the Polar H10 heart rate monitor. The image provided is from the Polar application. HR zones and categories are based on Polar's classifications.

warm-up, not the only way to warm-up.

Part 1 is to jog in place for three minutes, with each minute increasing in intensity (i.e., faster pace and higher knees). Following jogging in place for three minutes, the individual(s) will conduct each exercise to be conducted in the Tabata for one repetition with a rapid transition between each exercise, followed by two repetitions of each exercise, then three, four, five, and six repetitions (vertical sets). Figure 3 shows the author's HR using this warm-up protocol.

The reader should note that the author's HR climbed to over 130 BPM via Part 1 (i.e., jogging in place with an increased intensity each minute), then dropped when the author started conducting each exercise for one repetition each. Over time, and as the repetitions increased (i.e., one repetition to six receptions), the author's HR climbed to a maximum of 166 BPM. The warm-up took a total of eight minutes and thirty-seven seconds, had an average HR of 138 BPM, with the final three minutes and forty-two seconds in Zone 4 (i.e., 80–90 percent of HR Max). Following the warm-up, the participant(s) should rest for one minute, then start the first round of their Tabata.

If using this workout as an assessment before and after leave blocks, the SMs could circle up to see who did not train over their leave blocks (i.e., accountability via a shame-based culture). Steven Pressfield notes that shame-based cultures were applied in such warrior cultures as Sparta, Bushido, Roman, and Macedonia, as well as the modern-day United States Marine Corps.[16] Additionally, this workout does not have to be conducted around leave blocks but can be used throughout the entire workup and/or on deployment.

While a true Tabata uses the ratio of 20:10 (i.e., 20 seconds of exercise; 10 seconds of rest), SMs can use different work-to-rest ratios. For example, both 15:15 (i.e., 15 seconds of exercise; 15 seconds of rest),[17] and a 10:5 ratio (10 seconds of work; 5 seconds of rest)[18,19] have improved various fitness metrics. Finally, this workout can be applied in the field (i.e., at shooting ranges (before or after marksmanship training), stress shooting (within marksmanship training), or throughout various training events), in transit, and in whole (i.e., eight rounds of eight exercises) or in parts (e.g., four rounds of eight exercises; four rounds of four exercises). For SMs who lack the time to conduct eight rounds, research has shown that less than twenty minutes of applying a Tabata protocol is able to create the cardiorespiratory and metabolic responses needed for health, aerobic, and anaerobic performance.[20,21]

Limitations

The most notable limitation to this described BW Tabata is the lack of upper body pulling

exercises (e.g., pull-ups, dumbbell rows, bent-over flies, etc.). Adding upper body pulling exercises can be added into this routine in numerous ways, to include adding pulling exercises at the end of each round (i.e., five to ten pull-ups after each round), conducting pulling exercises at the beginning or end of the workout (i.e., twenty-five pullups before and/or after the routine), or having pulling exercises as one of the exercises. However, the described workout was designed for any SM to be able to complete regardless of access to workout equipment, which is why there is the limitation of upper body pulling in this specific prescribed workout.

Conclusion

Fitness does not equal battlefield performance, as battlefield performance involves other notable attributes (e.g., cognition, skills, abilities, leadership, culture, and will). However, a decrease in fitness will likely lead to a decrease in performance, lethality, and military readiness. By applying this BW Tabata, SMs can maintain and/or increase their fitness, regardless of the situation, which has the potential to enable battlefield performance, lethality, and military readiness.

The reader should note that the author applied this workout, as well as variations of the workout, while traveling for an eight-week period. The pictures in the article are the author conducting this workout in different locations while traveling. Notably, the author, after his extended travels, was able to get a perfect score on the Marine Corps' Combat Fitness Test by using this workout, variations of this workout, and the principles discussed in this issue of TPRAJ.

Author Biography

Jeremy Carter (featured right) is the Founder, Owner, and President of True Performance Realization (TPR), and serves as the Editor-in-Chief for the *TPR Applied Journal*. With over eighteen years of experience in human performance, Jeremy has earned numerous certifications, including the National Strength and Conditioning Association's (NSCA's) Certified Strength and Conditioning Specialist with Distinction and the American College of Sports Medicine's Exercise Physiologist. He is a current reviewer for the NSCA's *Strength and Conditioning Journal* (*SCJ*), a founding member and editor for the *Journal of Sport and Human Performance*, and a recipient of the NSCA's *SCJ*'s 2023 Editorial Excellence Award.



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