

# Building the Elite — A 5-Day H2F Immersion Program

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In 2024, the Army fielded a Holistic Health and Fitness (H2F) Performance Team to the 3rd Mobile Brigade (MBDE), 25th Infantry Division as one of the first brigades to drive toward the program's goals: improve Soldier readiness, increase lethality, and prevent injuries.<sup>1</sup> Field Manual 7-22, *Holistic Health and Fitness*, defines the Army's H2F program as a comprehensive initiative designed to improve Soldier readiness by addressing physical, mental, nutritional, sleep, and spiritual domains of well-being.<sup>2</sup>

In May 2025, 2nd Battalion, 27th Infantry Regiment partnered with our H2F Performance Team to conduct a five-day H2F immersion program with 43 volunteer Soldiers from across the battalion ranging from specialist to first lieutenant.<sup>3</sup> Our target audience was team leader and above as the audience most likely to proliferate H2F knowledge across the battalion the fastest. We hoped to accomplish two things. First, we wanted every participant to leave the program with as much education and practical tips as possible to improve their sleep, nutrition, physical fitness, and mental and spiritual readiness. This ranged from H2F education to personalized health information, new therapies, or practices that could help build healthy habits. We aimed for our participants to feel like professional athlete-Soldiers for a week where resources came to them and not vice versa. Next, we wanted to provide

the best blueprint possible to other battalions wanting to try something similar. To do this, we collected personalized feedback from participants before, after, and throughout the five-day program to measure change and identify areas where we could improve the program.

Our H2F Performance Team consisted of 12 personnel in total: H2F program director, physical therapy team (7), occupational therapist (OT), nutrition team (2), and chaplain. Our team developed a simple schedule that any battalion could use.<sup>4</sup> We adopted a very practical agenda that limited the education to approximately 2.5 hours per day (not including physical training) so that participants could spend the rest of the day leading Soldiers and trying to incorporate or teach some of what they learned to others.

## Physical Fitness: Train Smart, Mobilize, and Get Less “Fragile”

For the physical domain, we leveraged our H2F program director, brigade OT, and six physical therapists (PTs). Our program director ran all our workouts that varied between aerobic, anaerobic, strength, and endurance and made them effective, fun, and competitive. Our OT taught recovery classes such as foam rolling, mobility, static stretching, and proprioceptive neuromuscular facilitation (PNF) stretching.<sup>5</sup>

Our physical therapy team administered three injury screening assessments: The Biering-Sorensen back test, the Lower Quarter Y-Balance Test (LQYBT), and the Upper Quarter Y-Balance Test (UQYBT).<sup>6</sup> These were selected to assess risk based on recent health of the force musculoskeletal injury (MSKI) pattern trends: low back pain (35 percent), hip-knee-foot pain (45 percent), and shoulder pain (16 percent). Soldiers scoring in the “risk” range immediately



*An instructor teaches stretching exercises to Soldiers from 2nd Battalion, 27th Infantry Regiment as part of a holistic health and fitness immersion program. (Photos by SPC Jonathan Melendez)*

met with PTs to receive exercise demonstrations and hands-on practice to mitigate risk for future injury right there on the spot.

Every Soldier took the InBody assessment and received a report with an accurate breakdown of body fat percentage, lean body mass, and other information to help determine one's estimated energy (caloric) needs.<sup>7</sup> Participants also received a cold-water immersion demonstration and were encouraged to use this battalion resource throughout the week as needed for recovery.<sup>8</sup> Lastly, we gave a class on heart rate (HR) zone training and then conducted a Zone 2 drift test on approximately half of participants on the second day of the study.<sup>9</sup> We issued Polar 300-Chest strap HR monitors to the Zone 2 group to facilitate the test.

#### **What We Learned:**

We received mostly positive participant feedback on the workouts. They liked the variety of the workouts, the quality warm-ups and cool downs, the difficulty, and the competition. A 2-27 IN team leader stated, "My favorite part of the week was the recovery. I thoroughly enjoyed the time the physical trainers stretched out before and after each workout. The mobility day helped me understand my weaknesses and gave me exercises to improve my flexibility score to prevent injury."

Participants also liked the more advanced recovery classes. A platoon leader stated, "The time spent in the foam rolling class was surprisingly brutal, but I felt amazing after the fact. I will be using these techniques in the future."

A few squad leaders and senior NCOs asked for more strength exercises and education on programming, prudent additions to future five-day H2F programs.

HR zone training was also popular and proved beneficial among participants. According to surveys, only 36 percent of our participants were familiar with HR zone training before the study. After a one-hour class, this number rose to 88 percent, which indicates 23 additional participants now understand HR zone training. For the Zone 2 drift test, all 15 participants demonstrated less than a 5-percent pace drift (deviation between first and second 20-minute run). This indicates a well-developed aerobic base where a runner's body can effectively deliver oxygen and maintain consistent output with minimal fatigue. With the solid foundation in place, these Soldiers can start to build toward more advanced conditioning with less risk of injury or burnout.

Participants all said to sustain the three PT-led injury screening assessments as part of the five-day H2F immersion program. The average participant scores were above the threshold from an injury screening and injury control perspective, indicating a healthy population. However, males (E-4 and below) and females (E-4 and below, E-5, and E-9),



*A physical therapist administers a Lower Quarter Y-Balance Test.*

scored slightly below average on the LQYBT, indicating an increased potential risk of injury. These Soldiers immediately met with PTs to receive exercise demonstrations and hands-on practices to mitigate risk for future injury on the spot. Participants appreciated the personalized feedback, and all walked away with practical tips on how to prevent injuries in the future. One E-4 stated, "The guidance was really beneficial. I learned more about myself and what changes I should make."

InBody scores range from 1-100 with 100 being the most ideal body composition. Our average InBody score was 80, suggesting a positive body composition balance. When broken down by rank, E4 and below averaged 75, while E5 and above averaged 85, indicating that more junior Soldiers may need the most H2F support and education. Participants had above average skeletal muscle mass (81 pounds) and an above average body mass index (BMI) of 27.8, suggesting a larger build amongst participants. When comparing participants against the weight for height table from Army Regulation 600-9, *The Army Body Composition Program*, 53 percent exceeded the maximum allowable weight, and 72 percent of participants were classified as overweight, which contradicts the InBody results. This suggests the need to update these tables to reflect a more precise assessment like the InBody score.

Lastly, only 38 percent of our participants used the cold plunge at least once, despite many complaining of muscle soreness during the week. One participant stated, "The time I spend in the cold plunge tub steadily improved my mental focus, helped me physically recover, and added structure to my day," suggesting the need for more exposure to this great resource.

## Nutrition: Garbage In, Garbage Out

We front-loaded education in the nutrition domain with a class from our brigade registered dietitian focused on healthy eating habits, macronutrients, fad-diet myth busters, supplementation 101, and fueling for performance. We also implemented the 25th Infantry Division's Meal-Prep Program (MPP) to deliver quality, macro-balanced pre-made meals for each participant throughout the week (breakfast/lunch/dinner) to help mitigate the common nutrition concerns and risks.<sup>10</sup> Our dietitian leveraged feedback from InBody assessments to determine each participant's daily caloric needs and then developed a meal plan based on their performance goals. During the span of five days, four highly trained 92G culinary specialists provided participants with 645 nutrient-dense meals. The MPP is an exceptional resource that has helped 25th ID Soldier-athletes to not only fuel for competitions such as Best Ranger but also assisted others to get healthier and leaner.

### What We Learned:

Pre-study, only 42 percent of Soldiers reported eating three meals a day. This number jumped to 74 percent at the end of the program, suggesting that approximately 14 participants made changes after receiving some nutrition education and having easy access to a healthy meal. One E-4 stated, "Having ready-to-go meals saved me a lot of time that was normally used for preparing meals. They also gave me an extra meal (breakfast) that I do not normally eat." A team leader added, "The Meal-Prep Program was a sustain. I got all the calories I needed in a matter of four minutes. It saved me a trip to the DFAC [dining facility], and it tasted good."

Participants all liked the nutrition class and voted to sustain this education in any future immersion program. One squad leader stated, "The class on nutrition as well as the meals that were given to me were a bit of a wake-up call to what I needed to be fueling my body with daily." However, some of the more senior participants stated that they already meal-prep on their own or eat quality, wholesome meals at home. While these participants are unlikely to use the MPP, it remains an outstanding resource for the average Soldier on a budget with limited options in the barracks and limited time.

## Sleep: Rem Cycles, Techniques, and Gains

Like nutrition, we front-loaded sleep education on Day 1. This helped our participants understand how critical sleep is to their overall health and provided them with practical tips on how to improve sleep quality. Every morning, we collected feedback on how much sleep participants had gotten and their sleep quality. Additionally, we administered the Pittsburgh Insomnia Rating Scale (PIRS) and the Sleep Hygiene

Index (SHI) to assess severity of insomnia symptoms and sleep hygiene behaviors.<sup>11</sup>

### What We Learned:

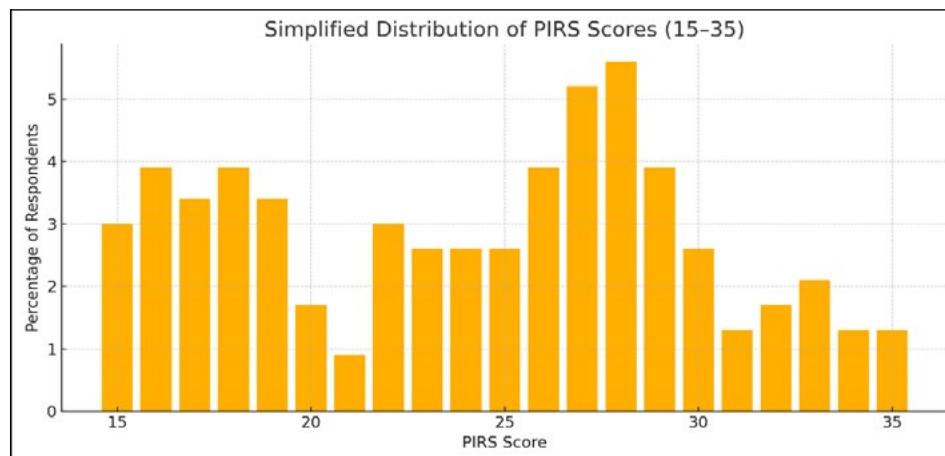
Surveys suggest the average amount of sleep per night increased during the immersion program by 36 minutes (6.2 to 6.8 hours/night), indicating education may have led to some positive change. Before the study, 19 participants reported it was "very difficult" for them to fall asleep at night. After the study, this dropped to only five, suggesting that the sleep hygiene classes may have helped with sleep onset. An E-4 participant stated, "My sleep improved throughout this week by three hours. I get more sleep in a better environment, and I am thinking how I should continue sleeping this way moving forward. I learned that I sleep better in a clean room with the lights off, doors closed, and with no noise. Pillows and blankets help a lot. I would like to look into investing in a better mattress too."

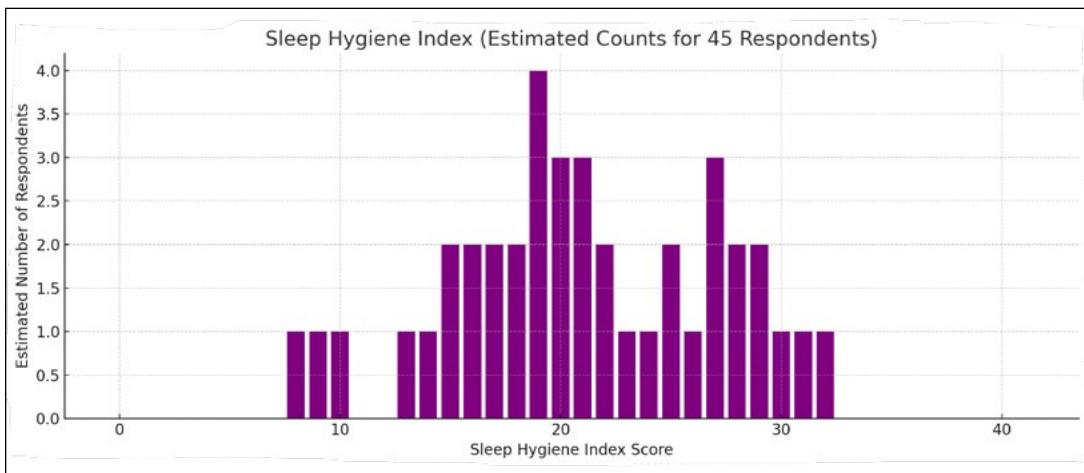
Feedback on the sleep class was overwhelmingly positive. A 2-27 IN squad leader stated, "The sleep readiness class was the most beneficial for me. It identified issues in sleep rhythm and the negative habits I have associated with it. I enjoyed learning how to better implement sleep with recovery. The more I followed the instruction given in the class the more energetic I felt, and my morale was surprisingly boosted as well."

Most of the scores on the PIRS fell within the 15-35 score range, which is indicative of mild to moderate insomnia symptoms (see PIRS scores below). Few respondents scored in the extremes of no sleep issues or severe insomnia. The bell-shaped curve of the data implies a relatively normal distribution of insomnia severity. In the tested population of 43 individuals, approximately 30-34 showed signs of insomnia. This highlights the value of implementing targeted sleep interventions, including sleep hygiene education, cognitive behavioral therapy for insomnia (CBT-I), and mindfulness-based practices.

Similarly for the SHI, most respondents — roughly 25 to 30 people — have moderate to poor sleep hygiene. This is reflected in the clustering of scores between 17 and 29, which

Figure 1 — Pittsburgh Insomnia Rating Scale Scores





**Figure 2 — Sleep Hygiene Index Scores**

are commonly associated with inconsistent or counterproductive sleep habits (see Figure 2). Fewer individuals scored below 10 or above 35, indicating that very few participants have either excellent or severely poor sleep hygiene. For this group of 43, the results suggest a widespread opportunity to improve sleep hygiene practices. Interventions such as conducting sleep hygiene education, establishing regular bedtimes, reducing screen time before sleep, and minimizing caffeine and alcohol intake could meaningfully improve overall sleep quality and reduce the risk of sleep-related issues. Given the association between poor sleep and readiness, mood, and performance, addressing these behaviors is especially important in high-performance or military populations.

### **Spiritual and Mental Fitness: Slay The Dragons in Your Mind**

The two most elusive and complex domains to integrate into our training were spiritual and mental readiness. We spent an ample amount of time to incorporate these two domains because spiritual and mental warfare are as real as physical warfare, and it takes an army to address these topics. During the process, we leaned heavily on our battalion chaplain, brigade OT, and senior mentor to deliver one-hour blocks of instruction followed by some homework assignments.

We asked participants to find time to escape the noise and practice quiet reflection daily. We needed a space where people could escape from the noise to pray, meditate, or just take in the view so we built the No Fear Oasis, a small 15-foot by 10-foot space next to our battalion gym. It was walled off and closed to through traffic and had a commanding view of the Hawaiian mountains. We asked participants to strive to do three 10-minute “reflection/quiet time” sessions per day.

We also asked participants in our pre-study survey about the biggest stressors in their lives to help us identify our problem areas. Lastly, we recruited an Army senior mentor from outside of the unit to speak about some of the most common responses (work stress, family stress, work/life balance) to provide mentorship and coaching.

### **What We Learned:**

The spiritual and mental domains are elusive and extensive. In general, participants wanted more than we could provide in five days on these pillars. One platoon leader stated, “The mental readiness pillar was great; it helped me understand how to tackle difficult tasks, but it was too short.” Similarly, a team leader stated, “The spiritual class really helped expand my knowledge on

how to better calm my mind, but I think we need more of this.” To have true transformation in the mental and spiritual domains, it takes time, patience, and lots of practice.

About 57 percent of our participant population did at least one 10-minute “reflection/quiet time” session per day. A team leader stated, “The mental readiness pillar helped me better deal with the most stressful thing in my life right now. I always have some stress, but when I started taking the time to meditate each day, it kind of helped me deal with things better.”

Despite these domain’s weaknesses, surveys showed that participant confidence in managing stress and setting goals rose from 55 to 93 percent from pre- to post-study. Soldiers also reported increased awareness of anxiety and stress triggers, especially regarding workload, school, and family, which implies improved self-regulation.

We suggest a steady drumbeat of exposure in the spiritual and mental fitness domains will work best. This could be monthly Spiritual Fitness PT with the chaplain, a fun marriage counseling group session, or even a financial planning class. These results affirmed how important our battalion chaplains, OTs, and leaders in general who are tuned to spiritual and mental readiness are to the health of our Soldiers.

### **Final Thoughts: If You Build It, They Will Come**

As we examine this five-day H2F immersion program across all the domains of sleep, nutrition, physical fitness, and mental and spiritual readiness, there are three hard truths:

1. The sleep and nutrition domains are the H2F’s low hanging fruit. Grab it! Before starting our program, only 48 percent of our participants felt equipped with information/training in the sleep domain, while 67 percent felt equipped in the nutrition domain. After only 90 minutes of instruction, these improved dramatically to 87 and 97 percent, respectively. Looking at our sleep test scores and nutrition surveys, many of our Soldiers do not sleep or eat very well or enough. While other battalions may have addressed this gap more

directly than 2-27 IN, we recommend programming a nutrition and sleep class with your H2F experts as soon as possible (separate from any five-day immersion program).

2. Information is Power. H2F Performance Teams have a wealth of information, experience, and resources to offer, not to mention master's degrees and PhDs. They also bring resources such as the InBody 770, MPP, assessments, and more. Take advantage. Our fantastic team of physical therapists took the simple task of "personalized, injury prevention education" to a whole new level by researching countless movement screenings and injury trends to find the best three assessments. They also brought the much-needed precision and professionalism to this H2F program. Nearly every brigade has these professionals — we must simply empower and use them.

3. Spiritual and mental fitness unlock superpowers. While these domains are more challenging to address directly, we must continue to train them. Nothing beats engaged leadership, a cohesive squad, and trusted mentors in helping individuals through difficult times and letting them know they are not alone. GEN George C. Marshall famously said, "The soldier's heart, the soldier's spirit, the soldier's soul, are everything. Unless the soldier's soul sustains him, he cannot be relied on and will fail himself and his commander and his country in the end." According to GEN Marshall, these pillars are "everything" and could be the secret to unlock superpowers in each and every Soldier.

Success in H2F may be hard to define as it doesn't always mean higher Army Fitness Test scores or faster 12-mile ruck times. It may look like an entire platoon doing the world's greatest stretch, fewer Soldiers going to sick call with knee or shoulder pain, or possibly a company's Soldiers discussing their "whys" with the battalion chaplain after summiting Mount Ka'ala.<sup>12</sup> No matter what it looks like, if you build it, they will come.

**"The soldier's heart, the soldier's spirit, the soldier's soul, are everything. Unless the soldier's soul sustains him, he cannot be relied on and will fail himself and his commander and his country in the end."**

— GEN George C. Marshall

## Notes

<sup>1</sup> "Unit Resources," Holistic Health and Fitness website, <https://h2f.army.mil/Unit-Resources/>.

<sup>2</sup> Field Manual 7-22, *Holistic Health and Fitness*, October 2020, [https://armypubs.army.mil/epubs/DR\\_pubs/DR\\_a/ARN30964-FM\\_7-22-001-WEB-4.pdf](https://armypubs.army.mil/epubs/DR_pubs/DR_a/ARN30964-FM_7-22-001-WEB-4.pdf).

<sup>3</sup> The Wolfhound Pack, U.S. 27th Infantry Regimental Historical Society, <https://wolfhoundpack.org/>.

<sup>4</sup> An example H2F five-day schedule is available at [https://armyitaas-my.sharepoint-mil.us/:p/g/personal/noah\\_m\\_kingsbury\\_mil\\_army\\_mil/Ed6ipfbk0gVDIM7QRzXci00B3UnOf9ls2lpyUxqW8\\_kTwQ?CID=30101787-FBA2-4069-8D14-8102967B24C3&wdLOR=cE53614B0-BE32-4CEF-9352-D37C562E9DA9](https://armyitaas-my.sharepoint-mil.us/:p/g/personal/noah_m_kingsbury_mil_army_mil/Ed6ipfbk0gVDIM7QRzXci00B3UnOf9ls2lpyUxqW8_kTwQ?CID=30101787-FBA2-4069-8D14-8102967B24C3&wdLOR=cE53614B0-BE32-4CEF-9352-D37C562E9DA9).

<sup>5</sup> "Proprioceptive Neuromuscular Facilitation," Physiopedia, [https://www.physio-pedia.com/Proprioceptive\\_Neuromuscular\\_Facilitation](https://www.physio-pedia.com/Proprioceptive_Neuromuscular_Facilitation).

<sup>6</sup> "Biering-Sorenson Test," Physiopedia, [https://www.physio-pedia.com/Biering-Sorenson\\_Test](https://www.physio-pedia.com/Biering-Sorenson_Test); "Y Balance Test," Science for Sport, <https://www.scienceforsport.com/y-balance-test/>; "Y Balance Test," Physiopedia, [https://www.physio-pedia.com/Y\\_Balance\\_Test](https://www.physio-pedia.com/Y_Balance_Test).

<sup>7</sup> "InBody body composition analyzer," <https://inbodyusa.com/products/inbody770/>.

<sup>8</sup> Ibid.

<sup>9</sup> Steve House, "Understanding the Heart Rate Drift Test: A Practical Guide for Endurance Athletes," *Uphill Athlete*, 12 July 2024, <https://uphillathlete.com/aerobic-training/heart-rate-drift/>.

<sup>10</sup> Brian Beall, "Army Food Service in Hawaii Prioritizing Soldier Nutrition, New Dining Options," Army News Service, 22 March 2024, [https://www.army.mil/article/274773/army\\_food\\_service\\_in\\_hawaii\\_prioritizing\\_soldier\\_nutrition\\_new\\_dining\\_options](https://www.army.mil/article/274773/army_food_service_in_hawaii_prioritizing_soldier_nutrition_new_dining_options).

<sup>11</sup> "Pittsburgh Insomnia Rating Scale (PIRS)," University of Pittsburgh Office of Industry and Economic Partnerships, <https://inventions.pitt.edu/technologies/pittsburgh-insomnia--02570>; "Sleep Hygiene Index," PsyPack, <https://psypack.com/assessments/sleep-hygiene-index/>.

<sup>12</sup> Tiffany Ayuda, "This 60-Second Stretch Opens Your Hips While Relieving Neck and Back Tension," Livestrong.com, <https://www.livestrong.com/article/13729132-worlds-greatest-stretch/>.

**LTC Tyler Patterson** currently commands 2nd Battalion, 27th Infantry Regiment, 3rd Mobile Brigade, 25th Infantry Division, Schofield Barracks, HI, and served in this position during the five-day Holistic Health and Fitness (H2F) immersion program. LTC Patterson has taught at the U.S. Military Academy at West Point, NY, and served in multiple assignments in the Infantry, the interagency, and the special operations community.

**CPT Nathaniel Piser** is an Infantry officer in 2-27 IN and assisted in the planning and execution of the H2F immersion program. He has served as a platoon leader in 2-27 IN and is motivated to pursue a degree in medicine to serve as a future Army physician's assistant.



*The 25th Infantry Division's Meal-Prep Program delivered quality, macro-balanced pre-made meals for each participant during the five-day immersion program.*