

Case Study

AUTHOR

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Burn 707 Blood Flow Restriction Training With OT Bands

BURN 707 is a fun, innovative company whose mission is to pioneer and lead the introduction of new types of cross-sports training products to optimize the way people see fitness.

BURN 707 is the manufacturer of Optimizing Training Bands (OT Bands), designed to maximize health and well-being during sports preparation (active user), daily activity (passive user) or the healing phase of injury recovery (therapeutic user).

BURN 707 is economically and socially conscientious about two goals: (1) supporting individuals where they are in their health & well-being, while (2) making superior products at an affordable price.

BURN 707 saw the opportunity to optimize a training lifestyle for consumers and athletes, while improving the health and well-being of others with a product for daily use. Thus, the creation of Optimization Training Bands (OT Bands). We wanted a product that works! So, we went above and beyond the manufacturing process to seek the opinions and results from subject matter experts and consumers.



The study objectives were to:

- **Understand the science and use of the OT Bands as a product.**
- **Utilize the OT Bands during active, passive and therapeutic activity to determine its effectiveness in reaching fitness or personal health goals and overall well-being.**
- **Have fitness and wellness subject matter experts evaluate the OT Bands using current industry standards and guidelines for safety.**
- **Make recommendations for marketing the OT Bands based on scientific use for BURN 707 active, passive and therapeutic users.**

Consumers and subject matter experts (SMEs) participated in a six-week program using OT Bands in active-sports training or recreation championships, passive-daily activities and therapeutic training. Men and women were ages 20 to 69 years with consumers residing in the Southeast, and SMEs representing all U.S. regions.

Data collected for the study population included information regarding design of the product, benefits of use in various fitness modalities and targeted cardio, muscle strength and endurance performance, health and well-being measures, as well as their commentary. Percentages stated below are from a small sample size, encompassing both the consumers and SMEs noted above.

Health & Well-Being Results

With band use, changes in biometric measures after six weeks included decreases in resting heart rate, weight loss with increases in muscle size, endurance/stamina, and improved sleep

Summary of Changes in Health & Well-being Using BFR-AE and BFR-RE

Decreased Resting Heart Rate in Beats Per Minute (BPM)	1-3 BPM	4-7 BPM
Overall Improvement:	23.81%	23.81%
Decreased Weight in Pounds (lbs.)	1-3 LBS.	4-7 LBS.
Overall Improvement:	28.5%	9.52%
Increased Muscular Hypertrophy in inches(“)	.25”	.50”
Overall Improvement:	57.14	14.29
Increased Muscular Endurance and Stamina in minutes (mins.)	1-5 MINS.	6-10 MINS.
Overall Improvement:	19.05%	28.57%
Increased Amount of Restful Sleep in minutes (mins.)	30 MINS.	60 MINS.
Overall Improvement:	9.52%	14.29%

Burn 707 has designed a product that has efficacy in both fitness and health indices. The feedback received from SMEs and the general population are poignant and congruent with research studies. Everyone was excited about the benefits of the BFR method. Using the Optimizing Training Bands begins to change the sentiments of non-exercisers, improve health indices, while enhancing human performance of exercise enthusiasts, professionals, and athletes. Trainers now have one more effective tool for their toolbox!

Consumer Testimonials

“My sleep has improved so much I have not needed to use my CPAP machine for sleep apnea.”

“My biceps are as big as they were when I was running a soft drink route for Pepsi decades ago.”

“When I went to my rugby team’s 50th reunion five of my teammates were there. I was the only one who was asked if I wanted to play in the alumni game. I declined!”

Master Trainers/ Subject Matter Experts

“improved cardio flow and recovery, running.”

“reached a steady state quicker; method enhanced performance in sport competitive activities.”

“felt the benefits during and after the workout activity, with less discomfort.”

“worked great for H.I.I.T. training using kettlebells in a circuit training format.”

“For strength training this method is perfect! Also helped with previous injuries, that allowed me to perform lifts I had not been able to do because of limitations.”

“Method provided the ability to strength train more intensely. It seemed to reduce discomfort to the area while training and reduce post exercise discomfort due to inflammation.”

“The HUGE thing I noticed is I generally experience extreme delayed onsite muscle soreness (DOMS) when

changing over to different kinds of programming or using exercises I have not used in a while. OT Bands GREATLY diminished the DOMS I would have experienced in the past. For example, when I deadlift for the first time in a while, my hamstrings will be on fire for days from simply

lifting 95 lbs. On my first deadlift day in over 6 months, I pulled 175 for 6 sets of 6 and never had any soreness in my hamstrings or glutes. I was generally sore, but not the “I can’t walk up the stairs” kind of sore that I was expecting. Pretty remarkable honestly.”

“While workouts were taken to failure no soreness (DOMS) was experienced. I have become stronger and can start off with the same weights in lbs. even after a 3-day break; no way before.”

“There is a definite increase of fat-free mass, while muscles became more toned; legs more noticeable than arms.”

“This method makes me feel as if I can do more without getting hurt! To have no to minimal soreness, a plus!

“Psychologically, I felt more hyped up and when the bands felt tighter around my arms, it pushed me past my normal limits. I believe this aspect of the bands may be overlooked and should not be.”

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Master Trainer

Subject Matter Experts.

Amanda Boyd, BS, CFT, FNBFE

Chad Hallet, CPT, SSC, USAW SPC, LMT, FNBFE

Charles DeFrancesco, Owner, The Arena Fitness, Fit & Functional Management

Jason Pierce, CWO USMC, CPT, FNBFE

Jeff Bush, MS, CPT, FNBFE

J.R. Smith, Owner Fit Maxx, CPT, FNBFE

Lee Schimmelfing, MS

Nancy Gillette, MS

Nelson Brown, PsyM, Ret USAF