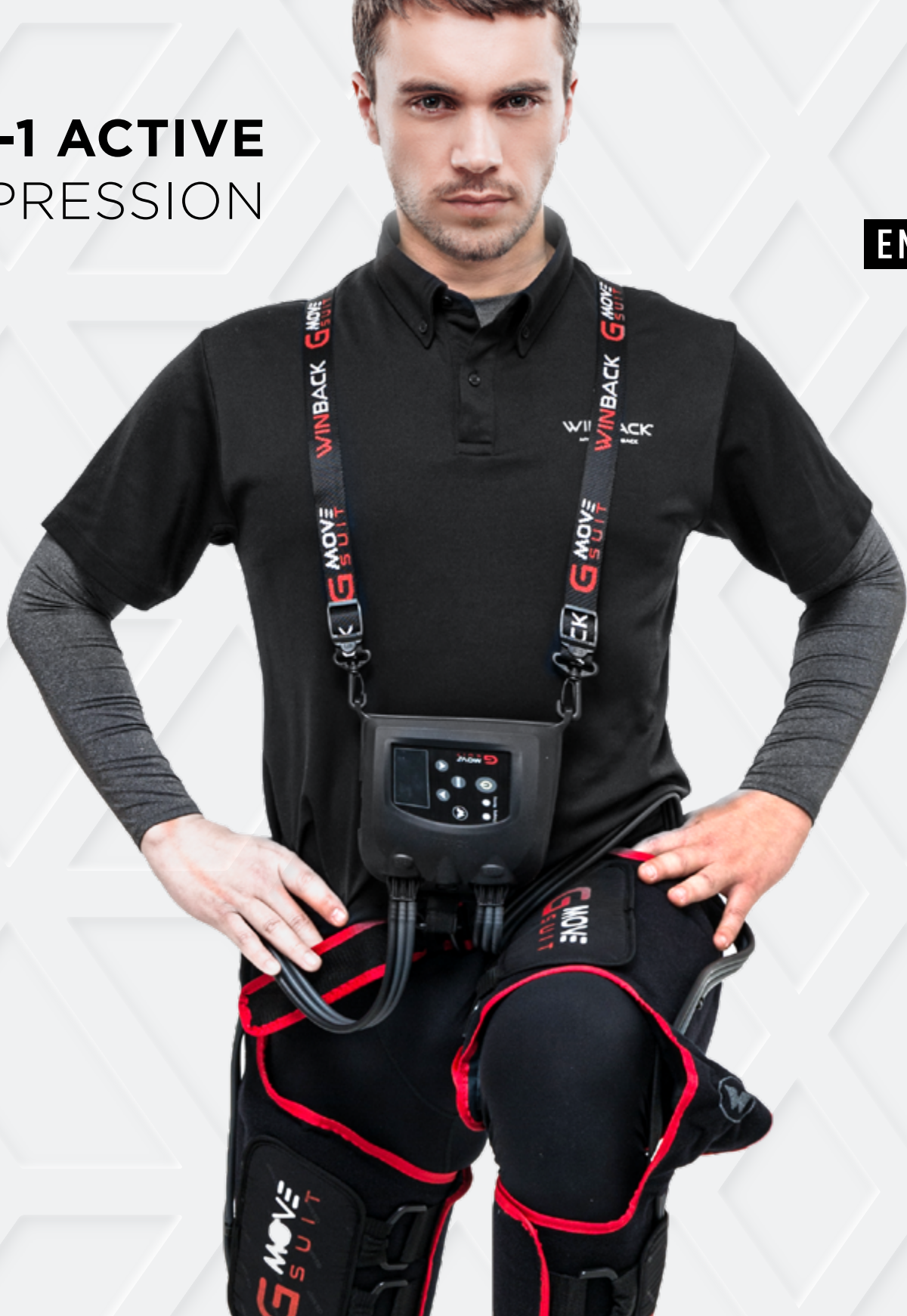


# 4-EN-1 ACTIVE COMPRESSION

EN



**G** MOVE  
S U I T



# ACTIVE COMPRESSION

## TECHNOLOGY BASIC STATEMENTS

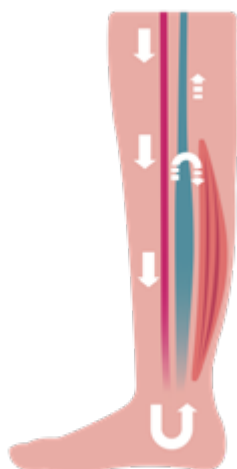
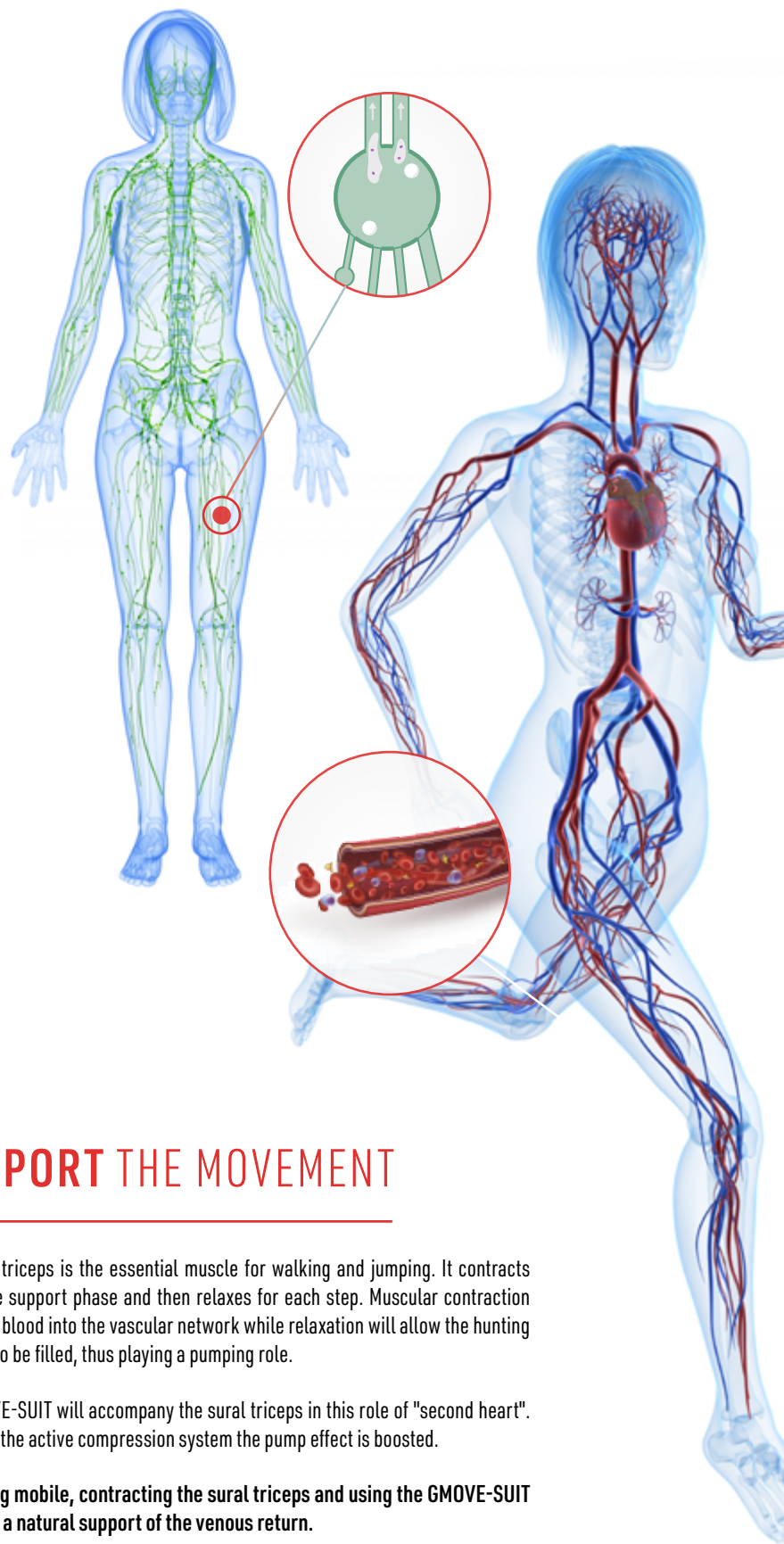
Active compression is a treatment method that helps to activate venous (stimulates blood exchange) or lymphatic (stimulates blood flow) circulation during movement.

It is used to treat limbs circulatory disorders, thanks to a sleeve which inflates and deflates automatically.

Its action consists in a movement of compression and decompression on the targeted tissues at a given rhythm and a regulated pressure. The interest is to use it while moving in order to support the venous return, thanks to the contraction of the sural triceps.

The goal is to accompany patients or athletes at the muscular level, whether in their rehabilitation, recovery or to improve performance.

**By these virtues, the active compression helps the disappearance of edemas and swellings, but also the feelings of tiredness and heavy legs.**



## SUPPORT THE MOVEMENT

The sural triceps is the essential muscle for walking and jumping. It contracts during the support phase and then relaxes for each step. Muscular contraction will pump blood into the vascular network while relaxation will allow the hunting chamber to be filled, thus playing a pumping role.

The GMOVE-SUIT will accompany the sural triceps in this role of "second heart". Thanks to the active compression system the pump effect is boosted.

**Remaining mobile, contracting the sural triceps and using the GMOVE-SUIT activates a natural support of the venous return.**

The muscular contraction will propel the blood into the vascular network while the slackening will allow the filling of the hunting chamber, acting as a pump.

## G-MOVE SUIT, ORIGINS

To prevent a sudden drop in blood pressure, the U.S. army has created a suit that incorporates pneumatic chambers in the pilot's calves, thighs and abdomen.

A valve inflates the chambers when G forces increase. The constriction of the chambers on the arteries increases blood pressure and helps to maintain the blood supply to the brain. The prototype suit was successfully tested by Dr. Wood and others in a bomber during flights requiring steep descents.

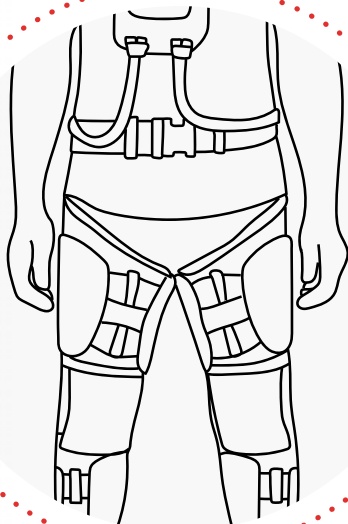


## INSPIRED BY THE G-SUIT

On the roots of the G-SUIT and research work in GPS and AOS, Winback has developed a new suit, with the objective of getting all the benefits of compression for the lower limbs when the user is in motion.

G-SUIT inspired the GMOVE-SUIT to express the athlete's movement during its use. The goal is to improve performance in both training (inspired by the KAATSU method) and recovery (Gradual Pressure). The very large potential of the Gradient protocols or the KAATSU-inspired method opens up new possibilities.

Whether in the quest for performance, recovery or rehabilitation, it is a powerful and innovative approach.



## APPLICATION

1

TRAUMATOLOGY

2

SPORT

3

ORTHOPAEDICS

4

PATIENTS  
SUFFERING FROM  
NEUROLOGIC DISEASE



## Rehabilitation for patients with neurological disorders

The interest of the GMOVE-SUIT is to make walking easier by offering better motor control and better stability. The effects on balance and coordination come from intermittent compression at different levels.

1

### 1<sup>ST</sup> EFFECT

Compression stimulates the skin's baroreceptors. These stimuli are then transmitted to the brain, allowing patients to focus attention on the lower limbs..

2

### 2<sup>ND</sup> EFFECT

Muscle compression facilitates the recruitment of motor units.

Effect 1 and 2: Targeted attention and effective contraction lead to better coordination!

3

### 3<sup>RD</sup> EFFECT

Compression activates the mechanoreceptors located in the fascias, which are essential for proprioception.

4

### 4<sup>TH</sup> EFFECT

Most patients with balance disorders generally have limited autonomy and walking range. GMOVE-SUIT improves venous return, thus optimizing the rehabilitation session by reducing tiredness and the pause time between each exercise.



- Instability
- Pain
- Poor proprioception
- Walking difficulty

- Stability
- Pain relief
- Better proprioception
- More confident walk

- Stability
- Pain relief
- Enhanced proprioception
- Muscle Strengthening
- Coordination work

BENEFITS



- + PAIN RELIEF
- + EDEMA DRAINAGE
- + PROPRIOCEPTION
- + INCREASED STABILITY
- + FASTER RESUMPTION OF WALKING
- + MUSCULAR STRENGTHENING
- + ORTHOSTATIC DISORDERS



2H  
of autonomy

120  
mmHg of pressure

750  
grams



IN MOTION



ON BATTERY



COMPACT



ROBUST



POWERFUL



TIME GAIN



Impression & design - www.winback.com - Version D3 - Octobre 2020 - A - EN

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