



Four Elements Energy Biotech. Co., Ltd.

CARO CARE TEXTILE

Revolutionizing Sleep Through Science



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WHAT IS CARO CARE'S MISSION?

Combining trace elements zinc, selenium, and magnesium helps our bodies maintain balance, activates biological mechanisms, recharges well at night, and stays energized throughout the day. Caro care designed to improve sleep quality.

ENHANCING WELL-BEING WITH ZINC, SELENIUM, AND MAGNESIUM

BENEFITS OF HAVING A GOOD SLEEP

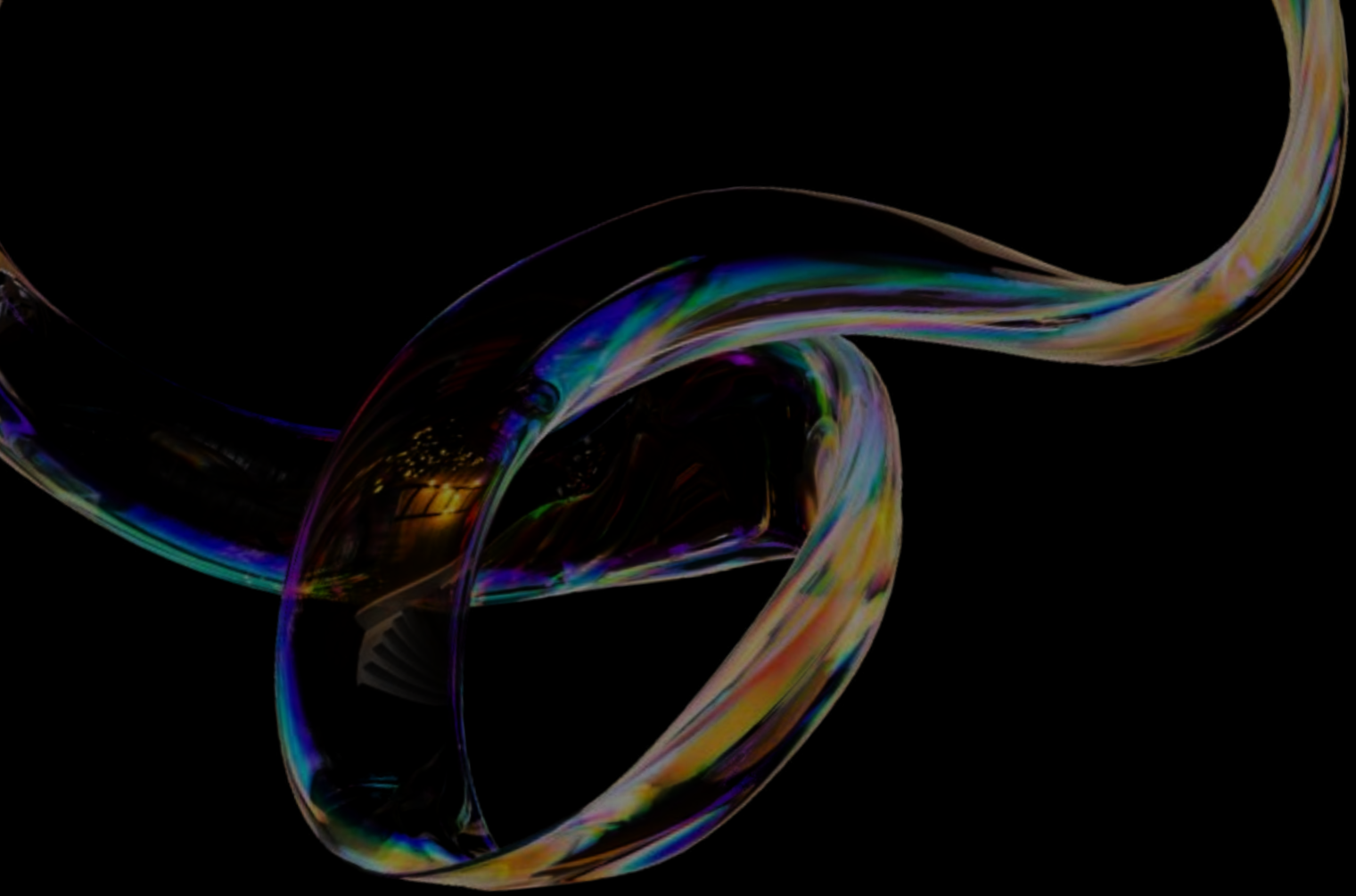


Let our nervous system reset, promote the balance between the sympathetic and parasympathetic nervous systems, and help the body reach its initial state of equilibrium.

BRINGS GOOD RESTORATION

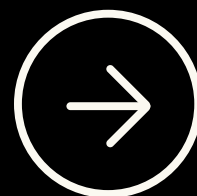


Sleep is associated with around 80 different types of diseases. Good sleep quality allows the body to smoothly carry out various repair processes.



KEY ELEMENTS

The Science Behind CARO CARE"
Content: Break down the three
elements.



Zinc: Essential for immune function and tissue repair.



Selenium: Supports overall health and may protect against oxidative stress.



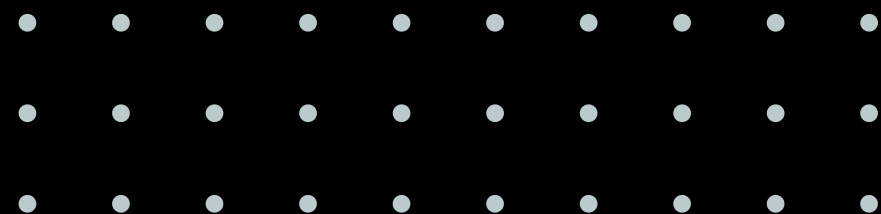
Magnesium: Helps relax muscles and nerves, promoting deeper sleep.

SLEEP WELL

WITH MAGNESIUM

Magnesium has the following benefits to help us achieve a comfortable state:

- Helps increase serotonin and melatonin (sleep hormone) levels in the body.
- Aids in relaxing muscles, the digestive tract, and bones.
- Reduces adrenaline levels.
- Anti-inflammatory properties.
- Reduces the risk of heart problems.
- Decreases cramping, spasms, and alleviates menstrual pain.



SLEEP WELL

WITH ZINC AND SELENIUM



ZINC HELPS WITH BRAIN NEUROTRANSMISSION AND ALSO...

- Beneficial for the functioning of the locus coeruleus in the brain.
- Helps with the functioning of melatonin.
- Calms the central nervous system.



SELENIUM IS AN ELEMENT THAT CAN PREVENT CANCER, AND IT ALSO...

- Prevents Alzheimer's disease.
- Prevents Parkinson's disease.
- Prevents neurodegeneration.
- Aids in antioxidation.
- Reduces heart problems.

INDUCTIVELY COUPLED PLASMA

Combining the elements zinc, selenium, and magnesium, known for their anti-insomnia properties, into the raw material and perfectly blending them in the right proportions into the yarn.

SGS

紡織實驗室

Test Report 報告號碼: TX80831 /2023 /SP 日期: 2023 年 08 月 21 日頁數: 二 之 二 頁

測試結果:

元素分析

測試方法: 參考美國環保署標準 US EPA 3052. 使用感應耦合電漿-光學放射光譜儀分析 (ICP-OES).

結果
(毫克/公斤)

鎂 (Mg)
硒 (Se)
鋅 (Zn)

備註: 方法偵測極限: 2 毫克/公斤
符合客戶引用之 (Deng et Al., 2023) 睡眠品質改善研究, 鋅與硒要求的比值大於 6 倍。
鋅硒比值結果計算: $653/84=7.7$ 倍

由 SGS 相關實驗室執行

*** 結 束 ***

HOW CARO CARE ENHANCES EVERYDAY LIFE

ANTIBACTERIAL

Elements fused into the fibers ensure that the antibacterial function remains effective even after washing.

Intertek

Test Report

Number: TWNT01424384-S1

Tests Conducted (As Requested By The Applicant)

1 Antibacterial Activity Test (After 50 Washing)

As per applicant's request with reference to AATCC test method 100-2012.

Prewash for 50 cycles as per AATCC 135-2015, machine wash at **80°F**, normal cycle, tumble dry.
Test Organism : *Staphylococcus aureus* (ATCC 6538)

Sterilization Of Sample Before Test : Autoclave At 121°C, 15 Minutes
Neutralizing Solution : 0.85% Sodium Chloride Solution
Contact Time : 24 Hours
Incubation Temperature : 37°C
Incubation Period : 48 Hours
Agar Medium : Nutrient Agar

Tested Specimen : Submitted Sample (8 pieces of swatches with 4.8 cm in diameter)

Result :

Name Of Test Bacteria (Strain Number)	<i>Staphylococcus aureus</i> (ATCC 6538)
Initial count	1.61 X10 ⁵ CFU/ml
The number of bacteria recovered from the inoculated tested sample swatches immediately after inoculation ("0" contact time) (B)	1.40 X10 ⁵ CFU/Sample
The number of bacteria recovered from the inoculated tested sample swatches incubated over 24 hours contact period (A)	7.50 X10 ² CFU/Sample
Percent reduction of Bacteria (R)	99.46%

Calculation of percent reduction of Bacteria:
 $R = (B-A)/B \times 100\%$

Remark : CFU = Colony forming unit

ODOR CONTROL

It can reduce over 70%
and more of the body
odor emitted by humans.

TTRI 財團法人紡織產業綜合研究所 Taiwan Textile Research Institute				正本 ORIGINAL	
試驗報告 TEST REPORT					
日期 Date: 2013.08.15		收件日期 Date of Receipt: 2013.08.06			
報告編號 Report No.: TC208102		數量 Quantity: 1件		報告頁次/頁數 Page Order/Pages: (P1/1)	
報告抬頭 Report Title: 三加一能量科技股份有限公司(T8726)		試件類別 Item: 襪襪		來文字號 Ref. No.: FE13-27	
地址 Address: 104 台北市中山區吉林路150號2樓之6					
試驗項目			試驗結果		試驗方法
			空白試樣	測試樣	
氨氣消臭 性能	0 hr	初始濃度(ppm)	100	100	FTTS-FA-018-2008
	2 hr	殘留濃度(ppm)	95	18	
		消臭率(%)	...	81	
註: 1. 參照FTTS-FA-018之消臭加工紡織品驗證規範試驗方法: 將10x10cm樣品, 置入含有3L-100ppm初始濃度氣體之5L-Tedlar袋中, 再以檢知管測定濃度變化。					
2. 消臭率(%) = (空白試樣的殘留濃度-試樣的殘留濃度)/空白試樣的殘留濃度x100%					
註: 依委託者所提供來樣資料為: 90% Nylon, 10% Spandex (Maxlon 滅菌龍襪)					

FAR-INFRARED

Far-infrared radiation aids in internal circulation and muscle relaxation and repair. When the body is comfortable and relaxed, it's easier to fall asleep and improve sleep quality.

Test Results and Descriptions

I. Test Results

1. Sample identification ^{Note 1}: 92% I-Mydrive Polyester 8% Spandex
2. Sample condition: The appearance of sample was shown in Figure 1



Figure1 Photo of test sample

3. Test Data ^{Note 2}

Measurement principle	Temperature (°C)	Total Normal Emissivity @ (8~14) μm	Total Normal Average Emissivity @ (8~14) μm
ASTM E1933-14 (2018)	33.9	0.92	0.92
	34.1	0.92	
	34.0	0.92	
	36.5	0.91	0.91
	36.4	0.90	
	36.5	0.91	
	45.6	0.89	0.89
	45.7	0.89	
	45.7	0.88	

Note 1: The test sample with its identification and information is provided by the client,

TEMPERATURE REGULATION

In addition to instant cooling, it also has the effect of rapidly warming up and retaining heat, so you can quickly feel warm when hiding under the covers during winter.

Cool Feeling Textiles (FTTS-FA-019 - Version 3.0 Clause 3 & 4)

As received

Skin contact side(Back side)

Q-max(W/cm²)

0.195

- Test Conditions:
1. Thermo Labo II B, TYPE : KES-F7
 2. Room Temperature : 20±2℃, Humidity : 65±2%
 3. Cool plate temperature: 25±0.1℃
Hot plate temperature: 35±0.1℃
 4. Test as received sample as per client's request

Remark: Performance specification

Cool Feeling Textiles	
Knitted	≥ 0.130
Woven	≥ 0.170

測試程序

1. 裁剪適當大小之樣品,並固定在樣品架上.
2. 將樣品放置在攝氏 20±1 度,相對溼度 65±5%的環境條件下測試.
3. 在樣品中心點上方離布面 100 公分之距離,以 500 瓦特的燈源照射樣品 10 分鐘.
4. 記錄樣品溫度.

測試結果:

樣品表面之溫度(℃)

0 分鐘	20.8℃
10 分鐘	29.6℃
溫差	8.8℃

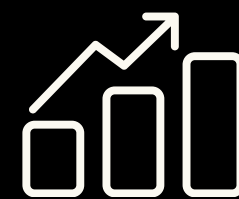
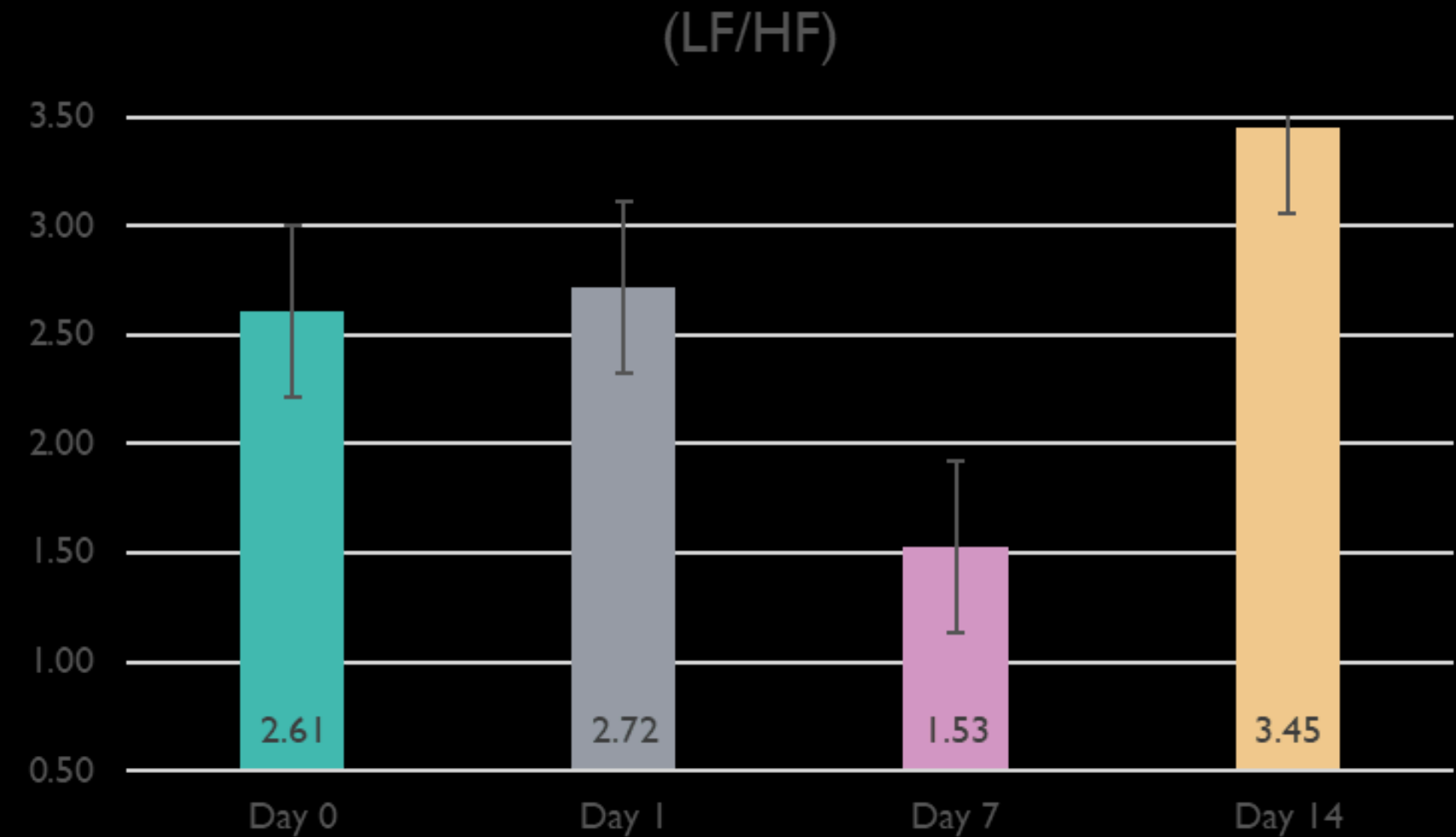
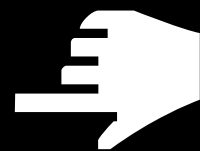
備註: 疊層次數 一 層

CLINICAL TEST

Real-World Testing with CARO CARE

Textile function combined with biotechnology to balance the autonomic nervous system for improving sleep quality.

complete
information



Briefly describe your collaboration with a doctor. Explain the study involving 15 participants with sleep issues.

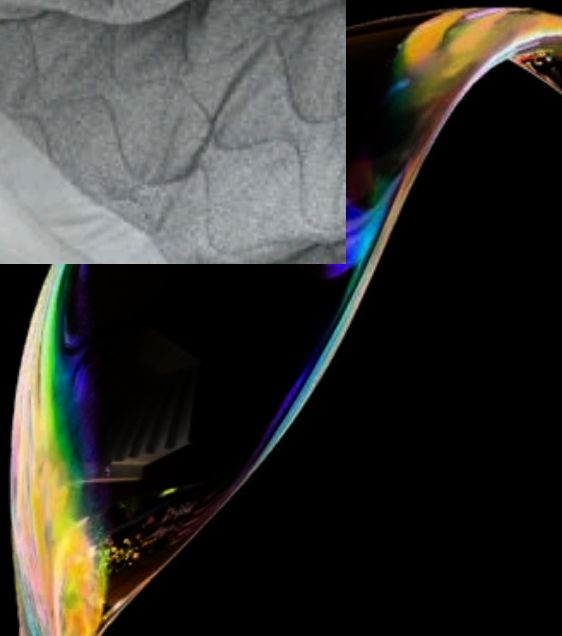
Results: 90% of participants experienced improved balance in their nervous system after using pillowcases made from CARO CARE yarn.

VERSATILE USES OF CARO CARE

PRODUCT THAT TOUCH THE SKIN



SLEEP-RELATED PRODUCTS





Four Elements Energy Biotech. Co., Ltd.

THANK YOU

for your time and attention

Present by Mavis Chen



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