RUNNING TOWARD INNOVATION

ENERGIZING YOUR CARDIO SPACE WITH EXCITING EXERCISER EXPERIENCES



Life Fitness

THE SESSION WILL COVER

01

INTRODUCTION & INDUSTRY TRENDS

02

EXERCISER INSIGHTS AND RESEARCH RELATED TO CARDIO TRAINING SPACES

03

CARDIO FITNESS REIMAGINED





WE INSPIRE HEALTHIER LIVES

Inspiring healthier lives for more than 55 years.

Dedicated to creating fitness solutions for both facilities and exercisers.

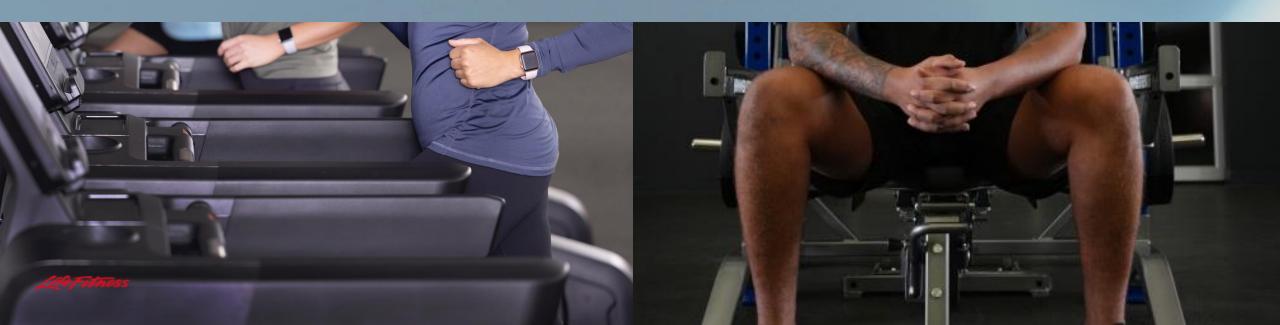
The industry's widest range of unique cardio, strength and group training products.





Life Fitness

HAMMER STRENGTH



LEIGH WIERICHS



ABOUT ME

Leigh brings over 26 years of experience in the fitness industry and a wealth of expertise across a wide array of health and wellness areas to her current role. Combining her indepth knowledge of the science behind exercise and human physiology with her passion for helping others, Leigh has trained hundreds of group fitness instructors and personal trainers around the world. She has previously worked for the US Navy, Les Mills and as the Account Executive for International Military and Government Sales for Life Fitness. To keep her "boots on the ground", she has also taught group fitness classes for over 24 years.

Job Title	International Military Segment Manager, Life Fitness
Education	Princeton University, AB Chemistry, Latin American Studies & Dance University of Arizona, MFA, Dance University of Texas, El Paso, MS, Kinesiology
Credentials	Certifications: ACE Personal Trainer & Group Fitness Instructor, Row House Row Coach, Les Mills
Fun Fact	Lived in Japan and love karaoke! Favorite Karaoke Song: Like A Prayer

INDUSTRY TRENDS



WEARABLE **EMPLOYING** 01 06 CERTIFIED FITNESS TECH **PROFESSIONALS** WORKSITE MOBILE 02 HEALTH **EXERCISE PROMOTION APPS** EXERCISE FOR 03 **FITNESS** 08 PROGRAMS FOR MENTAL HEALTH **OLDER ADULTS** EXERCISE FOR YOUTH ATHLETIC 04WEIGHT LOSS DEVELOPMENT PERSONAL REIMB. OF 05 QUALIF. FITNESS **TRAINING PFORESSIONALS**

TOP 5 TRENDS

2021

01 ONLINE TRAINING

02 WEARABLE TECH

03 BODYWEIGHT

O4 OUTDOOR ACTIVITIES

05 HIIT

2022

01 WEARABLE TECH

02 HOME EXERCISE GYMS

03 OUTDOOR ACTIVITIES

O4 STRENGTH
TRAINING WITH
FREE WEIGHTS

05 EXERCISE FOR WEIGHT LOSS

2023

01 WEARABLE TECH

02 STRENGTH TRAINING WITH FREE WEIGHTS

03 BODYWEIGHT TRAINING

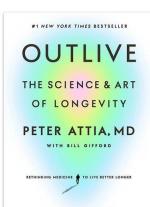
FITNESS
PROGRAMS FOR
OLDER ADULTS

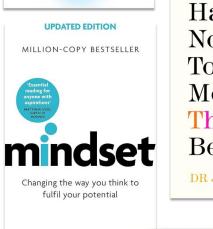
05 FUNCTIONAL FITNESS TRAINING

Source: ACSM

WELLBEING **UNLEASHED**

The industry is becoming more sophisticated at addressing performance, recovery, and longevity





Sleep

Sleep Stages

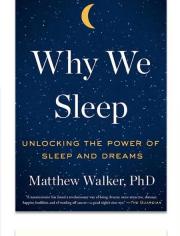
Awake

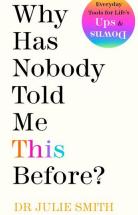
REM

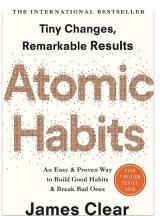
Core

DR CAROL S

This data is for general communication (no







Altered

Traits

Science Reveals How

Mind, Brain, and Body



39% (1)

i

RECOVERY STRAIN

RECOVERY

1 SHARE

Lifespan

Why We Age – and Why

We Don't Have To

David A. Sinclair PhD

with Matthew D. LaPlante

NATIONAL BESTSELLER





YOUR TARGET AUDIENCES

EXERCISER PERSONASSEGMENTATION

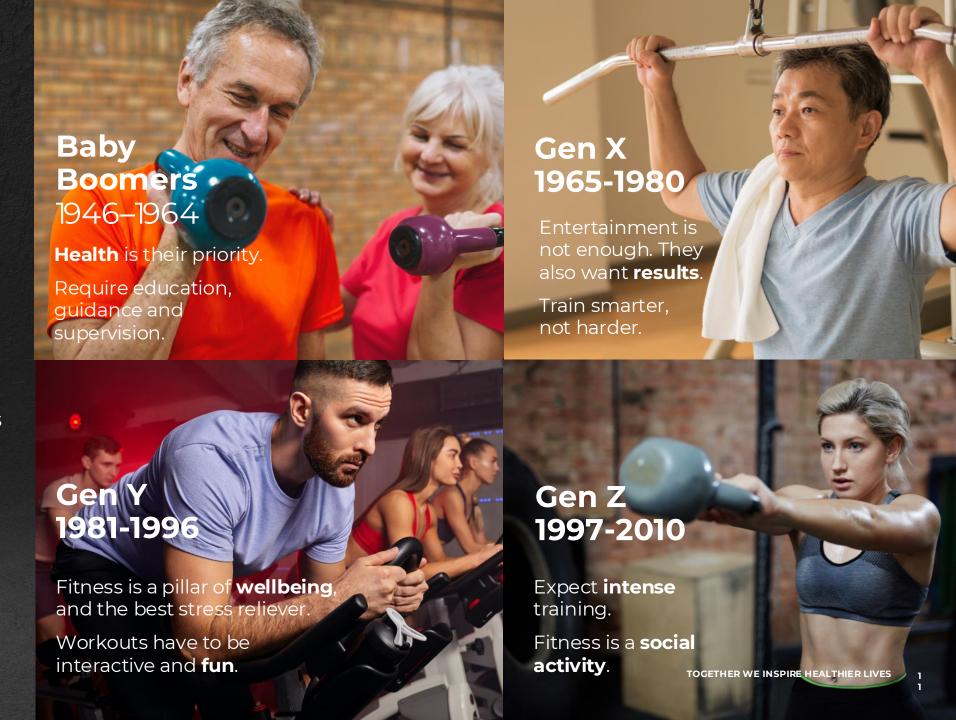




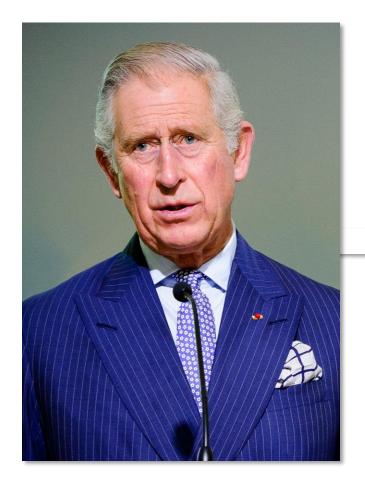
BEYOND **DEMOGRAPHICS**

Delving into fitness preferences, motivations and painpoints.

> Source: Murphy Research. IHRSA, Gym Insight, Global Web Index



DEMOGRAPHIC SEGMENTATION









MARRIED TWICE

LIVES IN A CASTLE

₩ WEALTHY AND FAMOUS





CONSUMER SEGMENTS ARE MORE DISTINCT THAN EVER, EACH REPRESENTING DIFFERENT NEEDS AND VALUES

We distinguished 4 types of fitness customers clustered around elements like motivation, personalization, price consciousness, time sensitivity, and desire for innovation

In order to win in the future, fitness players should know their clients' archetype and fulfill the customers' needs

WELLNESS ENTHUSIAST (23%)



- Mental & physical wellbeing as a priority in life
- Motivated by performance, identity or balance

RESEARCHER-EXPERIMENTER (10%)



- Looking for innovation and unique experiences
- Early adopters of new products or services

TRADITIONALIST (11%)



- Loyal to their sport routines and habits
- Do not adjust easily to changes

PASSIVE PARTICIPANT (55%)



- Fitness is not a priority, but can try some fitness offering
- After building intrinsic motivations, change into one of the other archetypes



FITNESS **PERSONAS**

I love going to the gym



LOVES FITNESS, NON-REGIMENTED APPROACH.

Fitness is fun.

- Not a serious fitness goal, working out for fun or health.
- Medium frequency of visit: fitness not a top priority

LOVES FITNESS, REGIMENTED APPROACH.

Fitness is a lifestyle.

- Fitness goals matter to them.
- High frequency of visit and high willingness to pay – if they see the value.



Regimented





HAVE TO DO FITNESS, NON-REGIMENTED APPROACH.

Fitness is a struggle.

- Health-oriented goal linked to external factors: doctor, wedding,...
- Require attention, motivation and education.
- Low frequency of visit.

Sources

- The evolving fitness consumer, McKinsey, 2021.
- · State of our Health, Murphy Research, 2020.
- Life Fitness internal research.

HAVE TO DO FITNESS, REGIMENTED APPROACH.

Fitness is a habit.

- Fitness is an *enabler* to do something that matters to them: a sport, taking care of others, feeling well,...
- Medium frequency of visit.



I have to go to the gym



FITNESS **PERSONAS**

I love going to the gym





Fitness is a lifestyle.

- Fitness goals matter to them.
- High frequency of visit and high willingness to pay – if they see the value.



Regimented

APPLY THE STATE OF THE STATE OF

- Health-oriented goal linked to external factors: doctor, wedding,...
 - equire attention, motivation and education.
- Low frequency of visit.



Fitness is a habit.

- Fitness is an *enabler* to do something that matters to them: a sport, taking care of others, feeling well,...
- Medium frequency of visit.



I have to go to the gym



FITNESS **PERSONAS**





I love going to the gym



The weightlifter

The disconnector



The trendy



The socializer

The wellness



The optimizer



The cardio athlete

Not regimented



The instructor fan.



The athlete that needs to do some gym work.

Regimented



The average member lost in the gym floor.



The disciplined amateur



I have to go to the gym



The recovering from an injury.



OPERATOR TRENDS

- Automatization
- Technology integration
- Sustainability
- Consolidation
- Experience
- Upskilled staff
- Niche offerings,
- Boutiquization

Holistic wellbeing





A UNIQUE OPPORTUNITY

- Fitness is increasingly recognized as a crucial pillar in society, aligning with values that people deeply care about.
- It is our job to understand exercisers and to co-create the right workout experiences for them.



EXERCISER INSIGHTS & RESEARCH

MURPHY RESEARCH

DR. SARAH MARION

QUANTITATIVE

- Online survey with continuous data collection of 1,000 U.S. respondents per month, starting in July 2018
- Teens and adults, age 13 and older

FITNESS ENGAGED

 Do any of the following weekly or more often: exercise, wear a fitness tracker, or use a smartphone app to track physical activity

GENERATIONS

- Gen Z (born between 1997-2009)
- Millennials (born between 1981-1996)
- Gen X (born between 1965-1980)
- Boomers (born between 1946-1964), Silent (born 1945 or earlier)





FITNESS ENGAGEMENT & GYM MEMBERSHIP BY GENERATION

FITNESS ENGAGEMENT

GYM MEMBERSHIPS

2019 **67%** 2024 Q3 **69%**

2019 **33%** 204 Q3 **35%**

FITNESS ENGAGEMENT BY GENERATION

2019 **Z 71% Mill 70% X 64% Boomer 64%** 2024 Q3 **Z 74% Mill 72% X 66% Boomer 66%**

GYM MEMBERSHIPS BY GENERATION

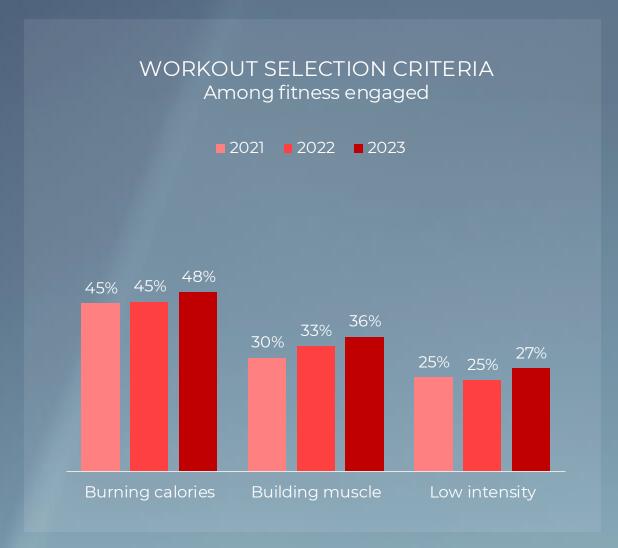
2019 **Z 33% Mill 41% X 30% Boomer 27%** 2024 Q3 **Z 49% Mill 45% X 29% Boomer 25%**



WORKOUT SELECTION CRITERIA & MOTIVATIONS

- Something I can do on my own 57%
- Having Fun 48%
- Burning Calories 42%
- Being Outside 38%
- Building Muscle 36%
- Breaking a sweat 29%
- Low intensity 27%
- Variety 24%
- Something I can do with others 17%

IN FITNESS MOTIVATIONS, FEEL BETTER COMES IN AT FIRST PLACE WITH 55%.

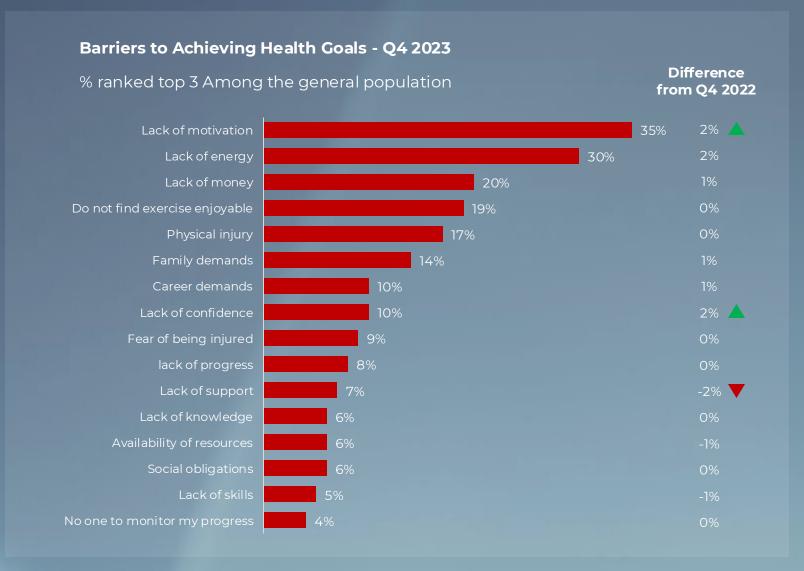


*Murphy Research SOOH Q3 202



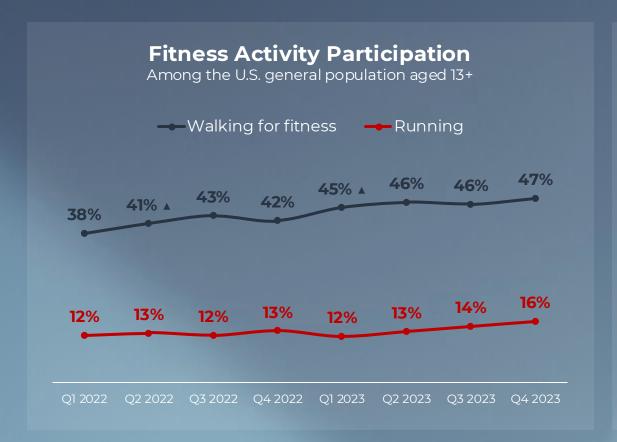
BARRIERS TO FITNESS THAT WE CAN HELP OVERCOME:

- Motivation
- Energy
- Not enjoyable
- Physical Injury
- Lack of confidence
- Fear of being injured
- Lack of progress





FITNESS ACTIVITIES

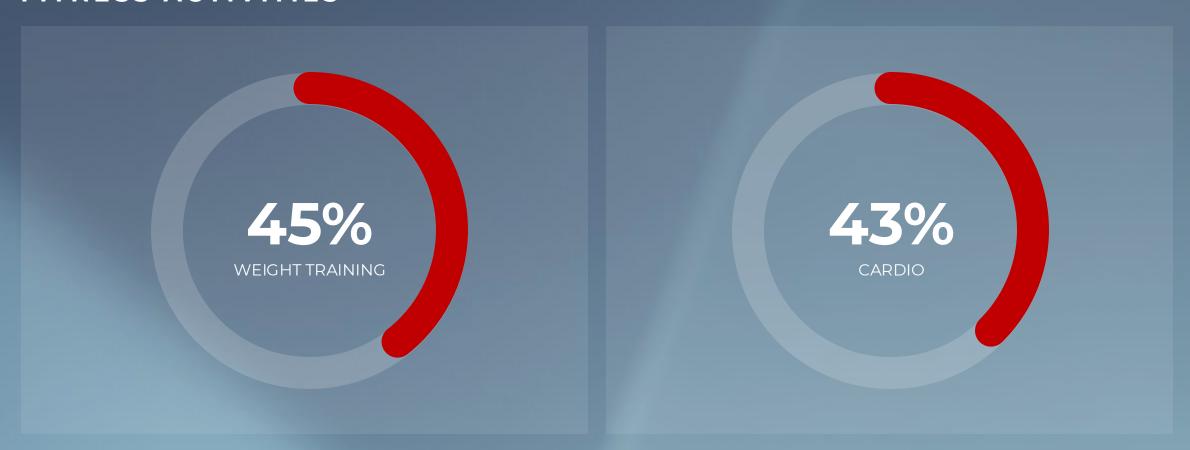




Classic cardio activities are trending alongside weight training. Of all fitness activities, walking has seen the most growth.



FITNESS ACTIVITIES



Question: Which activities do you typically engage in at the following location(s)? - Conventional/big box gym that requires membership (e.g., Planet Fitness, LA Fitness) · **Base:** Fitness engaged and works out at location monthly or more

FITNESS ACTIVITIES: ECOFIT DATA





Data from: 300 US membership based facilities using EcoFit· Strength: Selectorized, Cable Motion, Plate-Loaded



THIS DATA TELLS US THAT EXERCISERS WANT:

- A varied **physical experience**.
- An experience that provides **data and metrics**.
- **Guidance, motivation, & inspiration** to overcome their barriers to exercise.
- Personalization so that they can tailor their workout to their individual needs and goals.
- Simplicity and ease of use.



INNOVATION

To do something in a new way

A new idea, concept, or process



TO CREATE THE EXPERIENCE EXERCISERS WANT...

WE HAVE TO INNOVATE.



SYMBIO

FITNESS REIMAGINED



Life Fitness

THE SYMBIO RUNNER: **ELECTRONICALLY ADJUSTABLE FIRMNESS**

Give your exercisers the ultimate in comfort and performance.

- Patented Adaptive Flex Deck® allows the firmness of the deck to adjust to a wide range of soft to firm settings with one simple key press at any time during the workout
- Auto-terrain automatically adjusts the surface according to the terrain in outdoor courses
- 1-Touch Control Pad with quick speed and incline keys are programmable and personalized to each exerciser

RESEARCH HIGHLIGHTS

72%

seek out a facility with adjustable cushioning 37%

initially either neutral or apprehensive at the idea of adjustable cushioning feature 96%

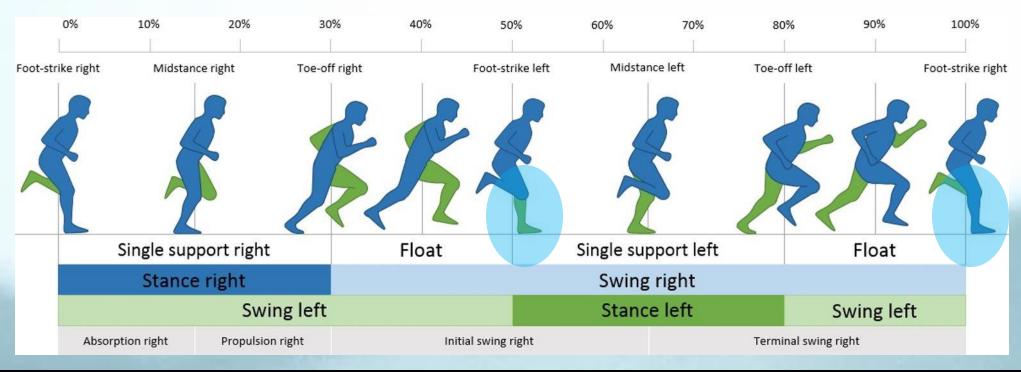
left with positive impressions after experiencing the feature





GAIT CYCLE: RUNNING

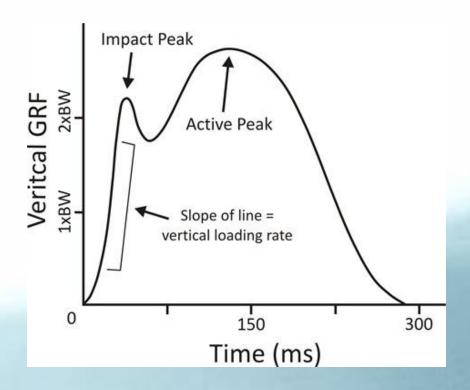
- Stance Phase: the foot that is in contact with the ground
- **Swing Phase:** the foot that is in the air
- Float Phase: the moment when both feet are off of the ground
- Foot Strike: the moment your foot hits the ground and enters the stance phase
- Toe off: the moment your foot leaves the ground and enters the swing phase



Key Takeaway: Most of our kinetics research was focused on the foot strike with the ground given highest impact load.

FORCES DURING GAIT CYCLE

- Force = mass X acceleration (gravity)
- Ground Reaction Force (GRF): the force exerted by the ground on a body in contact with it
- During the gait cycle, the Ground Reaction Forces (GRF) increase rapidly upon the foot strike (impact with the ground) an create the impact peak.
- The rate of this increase is called the impact loading rate: how quickly vertical forces increase upon foot strike.
- The greatest force, the active peak, occurs during midstance when your entire body weight is supported by the foot in contact with the ground.



Key Takeaway: Research to understand the how different surfaces affected these forces.

SHOCK ABSORPTION

- With every step, the impact of the foot striking the ground generates a shock wave the moves throughout your body.
- **Shock attenuation:** the process by which impact shocks are absorbed and scattered as they travel up the kinetic chain from the foot. This is accomplished by:
 - Active movements: joint motions (i.e. slight knee bend) when the foot hits the ground
 - Passive mechanisms: running surface, running shoes, tissues in the body that absorb the shock waves as they pass.
- How much force occurs in the cycle in the active peak?
 - Walking up to 1.5x body weight on one or two feet during stance phase
 - Running up to 3x body weight on one foot

Key Takeaway: The running surface is important because it is a passive mechanism of shock attenuation that the exerciser can now choose and control.

RUNNING SURFACES

- Scientists have closely analyzed the biomechanics of human walking and running for decades and have used that knowledge to improve running performance.
- In the 1970s, the concept of **fine-tuning running surfaces** became popular after researchers at Harvard University sought to create an indoor track that would allow runners to run faster than ever before.
- They learned that there is a range of ideal surface firmness where the track compliance works with the natural mechanics of human running, providing the optimal balance of energy return that increases speed and improves performance.
 - Springy & compliant track = comfort & energy return
 - Too springy = runner spends too much time in the air
 - Too hard = no energy return benefits

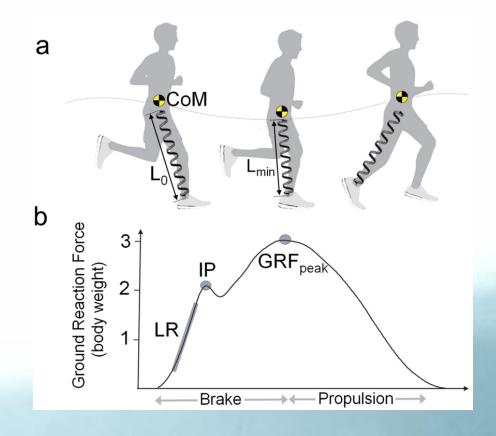


Greene et al. (2019) Compliant surface dynamics, the Harvard tuned track McMahon et al. (1979) The influence of track compliance on running

Key Takeaway: This analysis supported the range of adjustability we created

HOW DOES THE BODY RESPOND TO DIFFERENT SURFACES

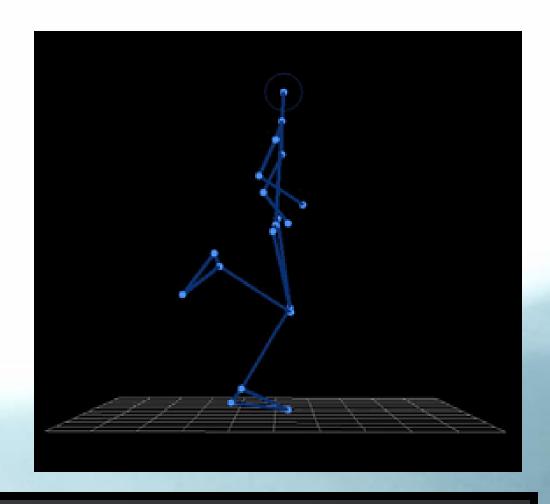
- Literature supports the theory of leg spring firmness: runners will adjust the firmness of their leg to adjust to different surfaces.
- Literature shows the body makes micro changes in kinematics to adjust for the running surface.
- People often are not even aware they are making these adjustments.
- There are also proprioceptive benefits to changing surfaces as your body has to first sense the change in surface firmness and then adapt.
- This all happens very quickly in the body.
- Jonathan T. Finnoff, DO, Mark A. Harrast, MD (2016): Sports Medicine. Study Guide and Review for Boards, Springer, p. 34
- David J. Magee (2014): Orthopedic Physical Assessment, Elsevier, p. 984
- Christopher L. Vaughan (1984): 'Biomechanics of Running Gait' in *Critical Reviews in Biomedical Engineering*, Volume 12, Issue 4, p. 6



Key Takeaway: The body makes micro-adjustments to changes in the surface firmness. These changes happen quickly and without the runner even being aware they are happening.

CHANGES TO DECK STIFFNESS & IMPACT ON RUNNING PATTERN

- Despite deck stiffness adjustments, there is no overall change in gait pattern or center of mass oscillation across running surfaces of different firmness.
- Micro-adjustments vary how the tendons, ligaments, muscles, bones, etc. absorb impact forces, helping the body build resilience and robustness.
- Metabolic requirements are the essentially same across different levels of firmness.

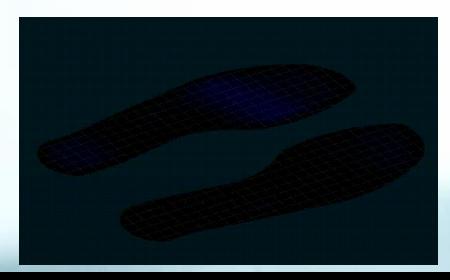


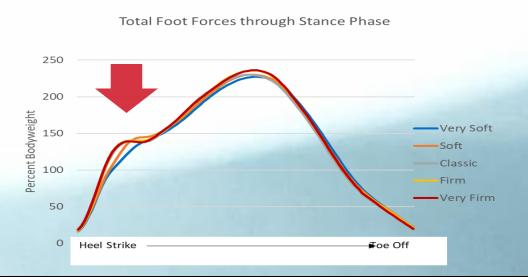
Key Takeaway: Runner can seamlessly transition between surface settings with consistent form and changes support building resilience to injury

CHANGES TO DECK STIFFNESS AT FOOT STRIKE

- Softer settings decrease loading rates, spreading impacts over a longer amount of time, and reduce the magnitude of impact loading at the heel.
- Harder settings increase impacts more rapidly and over a shorter amount of time, resulting in increased responsiveness (decreased ground contact time / increased cadence)







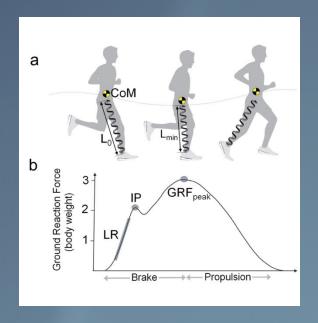
Key Takeaway: Softer settings decrease load on joints and harder settings encourage shorter ground contact time and faster running speeds

ADAPTIVE FLEX DECK

How does the body respond?

Foot strike

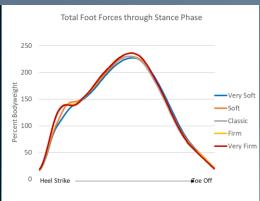
- When the foot strikes the ground upon initial landing, the impact loading rate and magnitude change depending on the running surface firmness.
- Softer settings decrease loading rates, spreading impacts over a longer amount of time, and reduce the magnitude of impact loading at the heel. Harder settings increase impacts more rapidly and over a shorter amount of time, resulting in increased responsiveness (decreased ground contact time / increased cadence)



Lower body adjustments

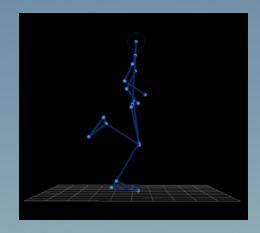
- The body makes subconscious micro-adjustments in response to running surface firmness, with slightly stiffer and straighter leg on softer surfaces and a slightly less stiff and more bent leg on harder surfaces.
- These micro-adjustments vary how the tendons, ligaments, muscles, bones, etc. absorb impact forces, helping the body build resilience and robustness.





Gait and running pattern

- Despite small micro-adjustments, there is no overall change in gait pattern or center of mass oscillation across running surfaces of different firmness.
- Runners can seamlessly transition between different surface firmness setting with consistent form.





RUNNER

SOFTER SETTINGS

More impact absorption. Easier on joints, ideal for beginner runners, recovery or those who just prefer a softer feel. Softer surface options provide lower impact for individuals new to running, injured runners returning to running, or those with joint pain.

FIRMER SETTINGS

More responsiveness. Firmer toe-off, reduced ground contact time and increased cadence. This setting is ideal for more advanced runners. Firmer surface options encourage elastic and dynamic strides, shorter ground contact times, and faster running speeds. Great for interval training.

VARIABLE SETTINGS

The body makes micro-adjustments to changes in surface firmness, constantly adjusting and adapting to build resilience and robustness. All this without changing the gait pattern. Interactive Terrains automatically adjust the deck firmness to provide surface feel changes throughout the workout.



ADDITIONAL RESEARCH SAYS...

ON-DEMAND CONTENT

58% of members say that having on-demand fitness on the equipment is a top reason to stay at their facility.

53% of exercisers said they are likely to join a gym that offers ondemand content featuring in-house instructors on the cardio equipment

PERSONALIZATION & METRICS

74%

Value both personalization and muscle targeting in an elliptical workout

74%

of weekly gym users say "it motivates me when I can measure my workout results"

ENVIRONMENT & AESTHETICS

62%

of weekly gym users say "I am willing to spend more money to work out in an environment I enjoy"

LF Research, Murphy Research







Create a personalized on-demand experience that resonates with your members and keeps them coming back!



RUNNING TOWARDS INNOVATION



CREATE CUSTOM CONTENT THAT RESONATES WITH YOUR AUDIENCE

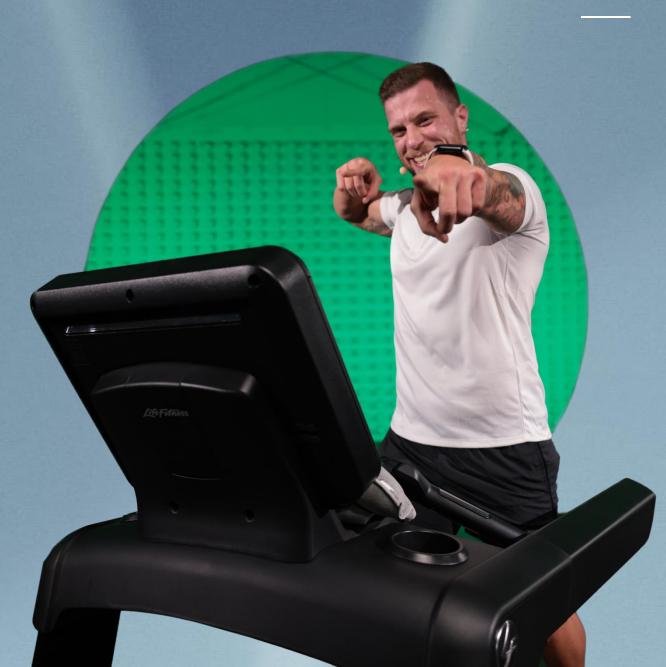
We surveyed 1,000+ gym members and asked them what type of on-demand content they'd like to see, here's what we learned:

- Nutrition classes
- Mental health/mindfulness content
- Educational content about exercise
- On-demand workouts featuring in-house instructors
- New member onboarding videos



FIVE WAYS YOU CAN USE CONTENT CUSTOMIZATION:

- 1. Create on-demand workouts with your **in-house instructors.**
- 2. Create new member **onboarding videos.**
- 3. Promote services in the facility to drive **additional revenue.**
- 4. Connect your **community.**
- 5. Create content to update your members on **events** and happenings.



QUESTIONS?





SYMBIO

FITNESS REIMAGINED



SCAN TO LEARN MORE



CONNECT

LEIGH WIERICHS



LEIGH WIERICHSInternational Military Segment
Manager, Life Fitness

Leigh.Wierichs@lifefitness.com

IG: leighwierichs

