

# Active vs Exercise

# And how each impacts lifestyle goals

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Technogym Village, the new garage for the new era.

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Nerio and Pierluigi Alessandri Technogym, Oj to

Technogym, Official Supplier for the Paris 2024 Olympics and Paralympics, is launching a social campaign, together with athletes, to inspire us all to move more for a better, healthier world.

# LET'S MOVE FOR -> PARIS

# **Wellness Institute**



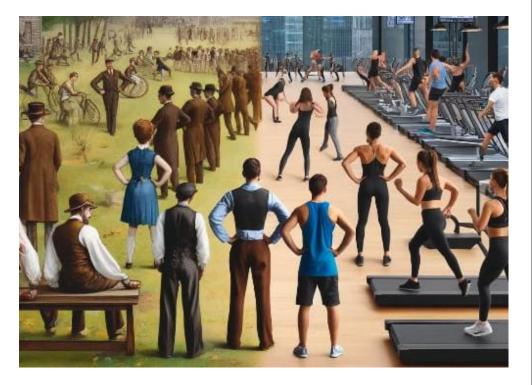
Technogym Wellness Institute provides fundamental educational content and resources to **all** industry professionals.

Aiming to provide evidence-based material to help enlighten and illustrate to users a variety of educational topics, to develop professionals from all communities.

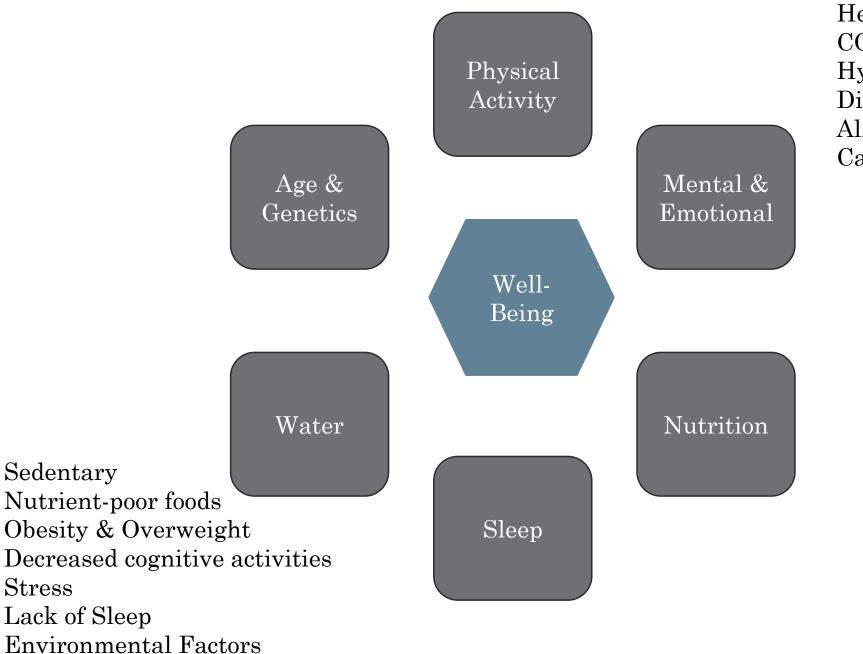
### Active vs Exercise and how it impacts lifestyle goals

Over the last 125 years our lives, being more dominated by technology and convenience, have drastically changed. From an era where manual labor was common and physical activity was the norm for daily life, we have had a considerable shift, where the we spend more time being sedentary and for some, physical activity is a choice or hobby.

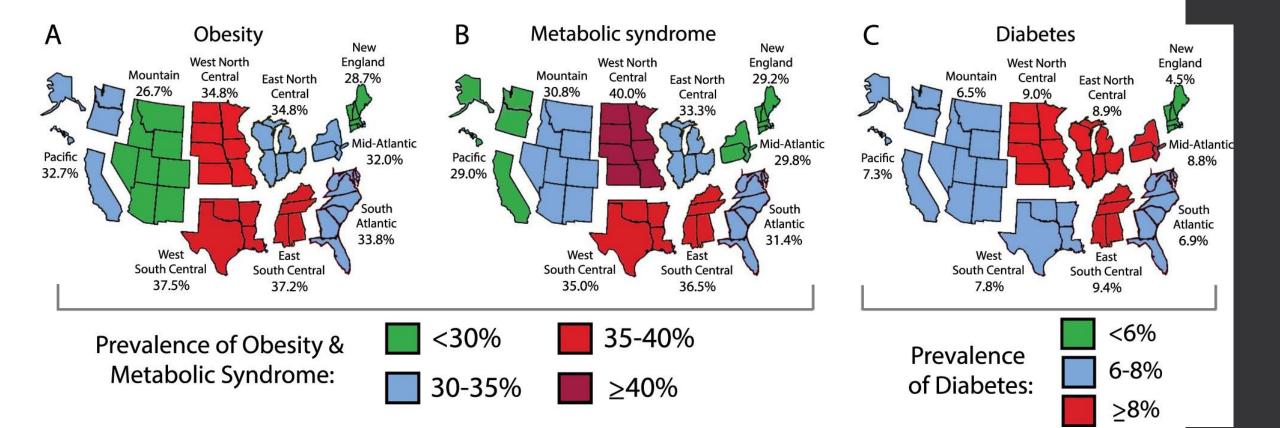
Physical activities like walking, running, and riding a bicycle became the go-to for people who wanted to be active with little hassle. Formal exercise at fitness clubs, and sports like tennis and pick-up basketball became the go-to for improved overall well-being and being fit.







Heart Disease & Stroke COPD Hypertension Diabetes Alzheimer's & Dementia Cancers



### Active vs Exercise and how it impacts lifestyle goals

With all the information out there on weight management, improved eating habits, improve sleep quality, physical activity, people have more information than ever. While doctors making the same recommendations as 10-15-25 years ago, "eat better and exercise," or "be more active," we haven't yet determined what that means. There is still a gap between medical advice and real exercise prescription.

Why do we need the distinction? Lifestyle Goals

Stamina. Longevity. Pain Free. Mobility & Strength. Enjoy time with Family. Get up after a fall. Memory and Comprehension.

Being Active has not made a shift in how to increase and improve time spent being active, while exercise has had an explosion in ways to implore it and opportunities to participate. While 30% of Americans fit into the category of both physically active and exercise, they are split 70/30 between those who are active/exercise.

My goal today is to provide a understanding of GOOD. BETTER. BEST. In relation to active vs exercise



It is health that is real wealth and not pieces of gold and silver.

Soulveda.com

## Active vs Exercise

Active is about incorporating physical activity into your daily routine





**Exercise** is a structured, repetitive, and purposefully focused on improvement

## Having an Active Lifestyle--GOOD





### **Active Lifestyle**

CDC, NHS and & AHA all recognize the 150 minutes a week of moderate intensity activity for better health and maintenance.

Every activity that you perform that results in a calorie burn can be termed physical activity; low to moderate intensity that slightly to moderately elevates the heart-rate and breathing  $\rightarrow$  50-70% of target HR; RPE 10-13 \* you can still hold a conversation

Always looking for a way to move or are on the move.

Pedometers & Fitness trackers keep people accountable for movement and step goals. 10,000 steps a day, brought to us by the Manpo-kei which translates into 10,000 step meter was a Japanese company that invented the pedometer.



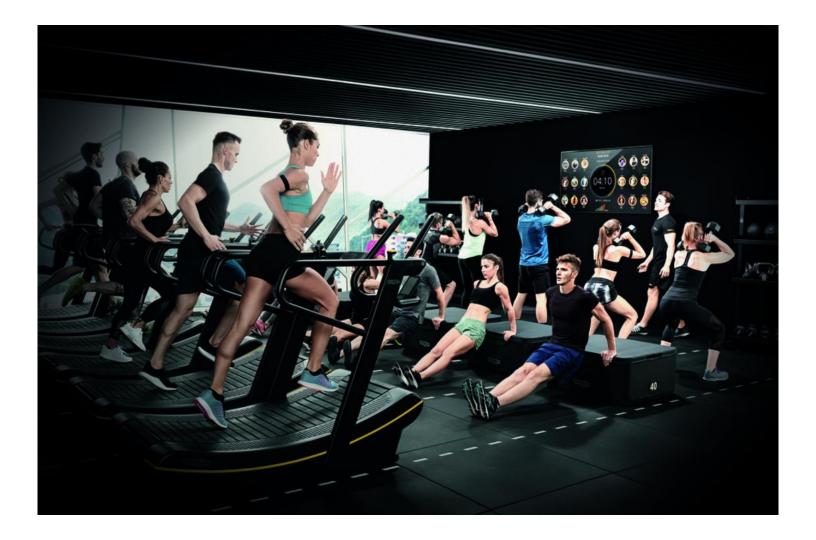
## Active Lifestyle

Study by Calestine et. al looked at college students and how physical activity, fitness and academic achievement were correlated. It found that higher course load, increased study time and social media use were all negatively associated to physical activity and cardiovascular endurance, and showed relative higher body fat and BMI.

Being active, due to its constant and consistent engagement, has shown improved result to cardiorespiratory function.

Unlike formal exercise, can be performed at any time and anywhere, with little to no equipment. By incorporating small changes to daily habits, increased activity become the norm for people looking for improved health benefits without negative effects.

### **Exercise-BETTER**



### Exercise

According to Dr. Anthony Puopolo, exercise is something that elicits and aerobic and or anaerobic response. Training the body to improve its function and gradually increase its fitness

CDC, NIH, and ACSM recognize moderate to vigorous activity as exercise. 75 minutes a week with a target heart rate above 75% and RPE above 14

M. Stults-Kolehmainen & R. Sinha did a review of stress and exercise. Overall they found correlation with people who exercise habitually will do so when faced with stress or will fair better than those who exercise less often or intensely, will limit or refrain from exercise. It also recognized that exercise, when partnered with stress management can help reduce stress.

In two separate studies published by the Journal of the American Geriatrics Society, found that exercise, not physical activity (based on caloric expenditure) accounted for improvements in overall bodily function and inflammation.

## Cardiorespiratory fitness (VO<sub>2</sub>max)

### **Predictors of mortality:**

- $\rightarrow$  Smoking.
- $\rightarrow$  High blood pressure.
- $\rightarrow$  Diabetes.
- $\rightarrow$  High cholesterol.
- $\rightarrow$  Cardiorespiratory fitness.

VO₂max decreases at a rate of approximately 10% per decade, this decline accelerates after age 60.

1-2 MET increase associated with 10-30% fewer cardiac events.



## Muscle mass and muscular strength

Research comparing different age groups has revealed rate of muscle mass decline:

- $\rightarrow$  Females 3.7% per decade.
- $\rightarrow$  Males 4.7% per decade.

A study tracking healthy older adults found a 3x greater loss in strength compared to muscle mass over:

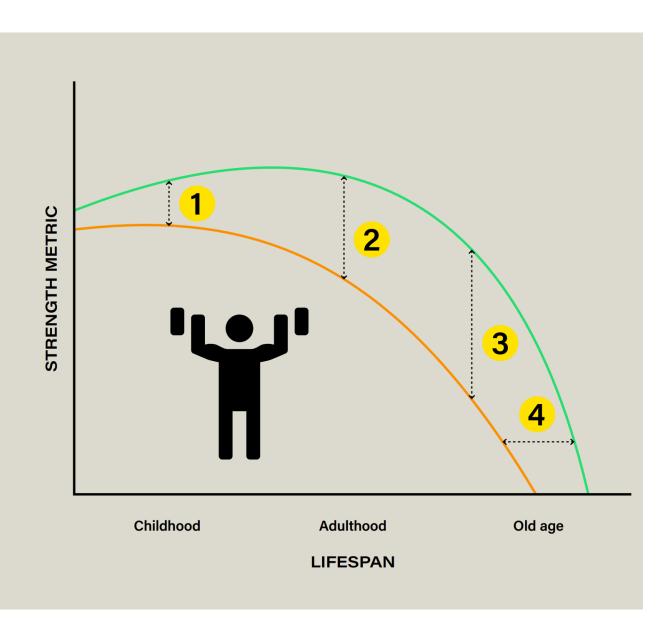
- $\rightarrow$  Females 2.6% per year.
- $\rightarrow$  Males 3.6% per year.

Compared to adults who report no resistance training, adults who participate in resistance training have:

- $\rightarrow$  15% lower risk of all-cause mortality.
- $\rightarrow$  17% lower risk of cardiovascular disease.

## Bridging the gap between strengthspan and lifespan

- 1 → Greater strengthspan leads to greater strength reserve.
- 2 → Greater strengthspan leads to greater health and well-being.
- 3 → Greater strengthspan leads to greater function and independence.
- 4  $\rightarrow$  Greater strengthspan leads to greater lifespan.



## Exercise

Next generation of training

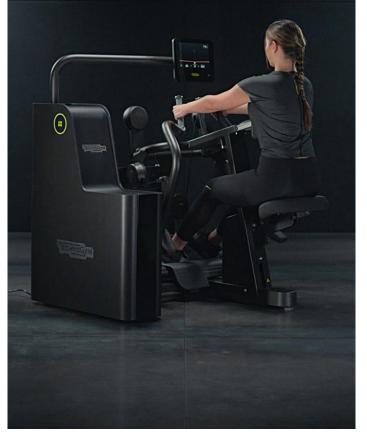
Biodrive System which controls workload, range of motion, and resistance modalities

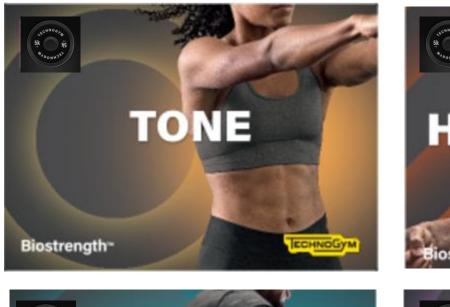
Technogym Coach tracks compliance and engagement

Advanced exercises provide additional challenges to programming



### BIOSTRENGTH™ ADAPTS TO YOU











#### **Goal Programs**

Select the program that best matches your goal

#### **Custom Exercises**

Choose among 6 resistance types to meet your needs

#### Advanced techniques made easy

#### TONE

Elastic resistance gives you more muscle tone with less strain.

#### POWER

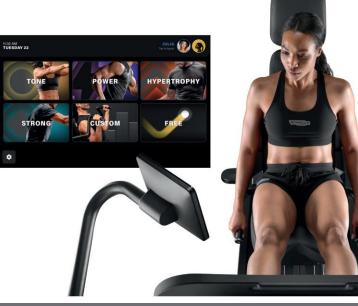
Resistance with no inertia allows you to exert maximum force with total control and safety.

#### **HYPERTROPHY**

Promotes the breakdown of muscle fibers and builds mass by adding extra load to the eccentric phase of movements.

#### STRONG

Employs viscous resistance, so the faster you push, the more challenging the resistance becomes.



#### ELASTIC

Improve speed with resistance that progressively adjusts through the full ROM.

#### VISCOUS

Maximize muscle engagement with resistance that gets more challenging the harder you push.

#### ISOTONIC

Increase muscle mass gradually with constant tension through the full ROM.

#### **ECCENTRIC REDUCTION**

Prevent muscle soreness by incrementally reducing load during the eccentric phase of movements.

#### ECCENTRIC OVERLOAD

Speed up muscle development by incrementally adding load during the eccentric phase of movements.

#### **NO INERTIA**

Protect joints by reducing load at the start of movements and lowering speed at the end.













#### PYRAMID

The amount of reps and load automatically varies with each set to boost strength and muscle mass.

#### **DROP SET**

After reaching the maximum reps, the load decreases allowing users to push muscles to exhaustion.

#### **TONE EXPRESS**

training.

power.

CONTRAST

**REST-PAUSE** 

increase muscle mass.

In a single set, loads vary with each rep to increase muscle tone and mass, while saving time.

Alternating heavy weights with high-speed

movements improves both strength and

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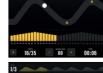






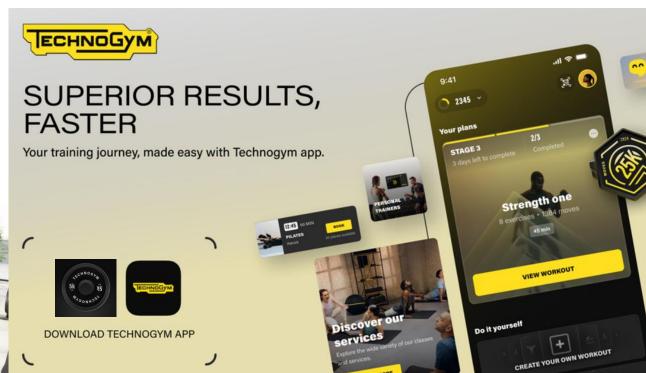
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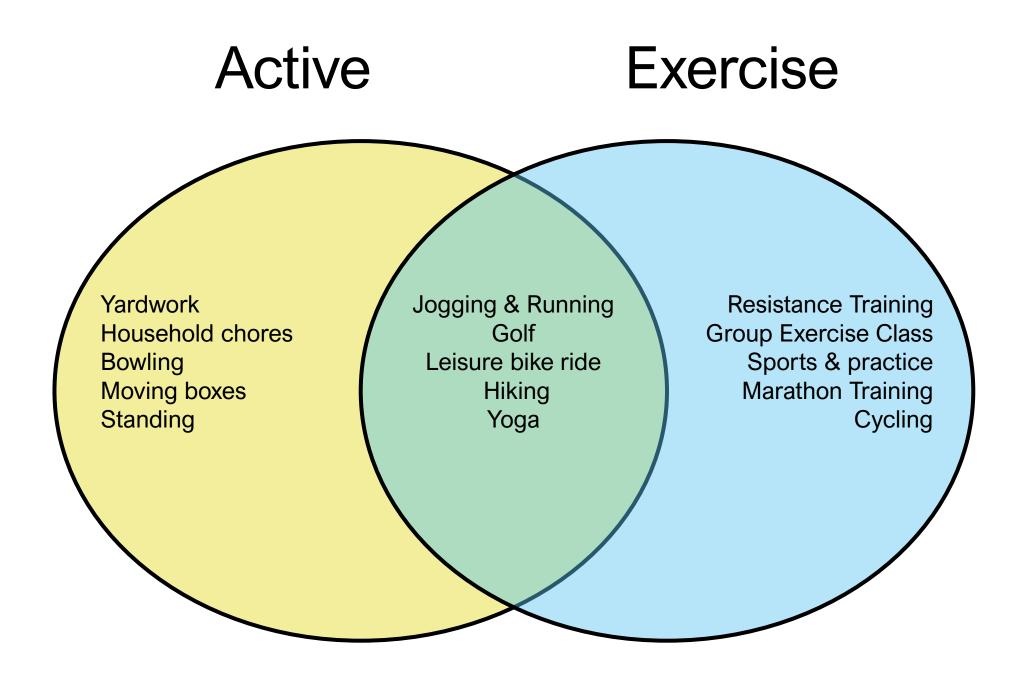




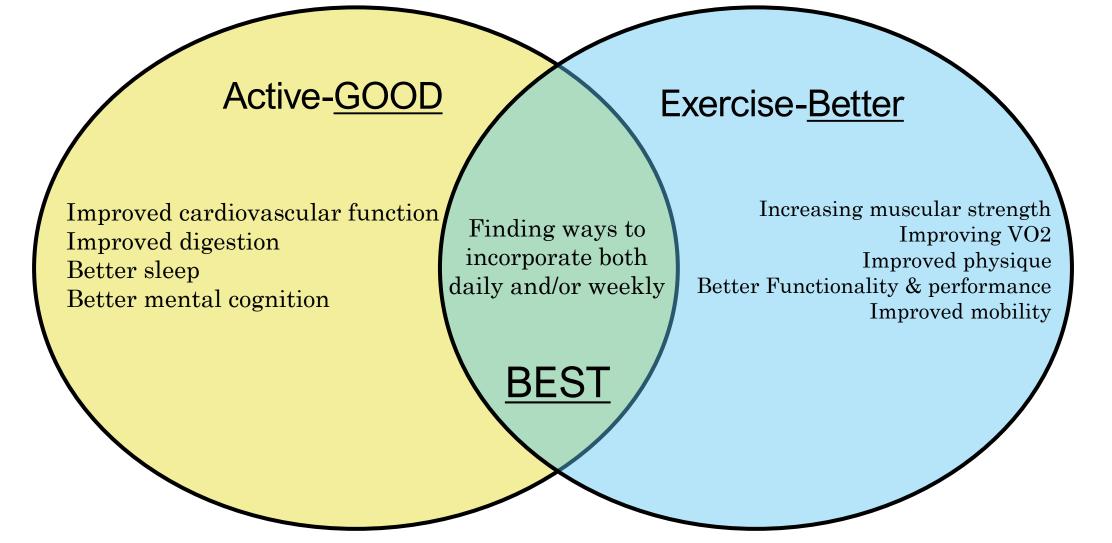
### Exercise → Biostrength







### Active vs Exercise, which is BEST?



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(https://www.stylecraze.com/articles/difference-between-physical-activity-and-exercise/)



# Thank you

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