

Exercise
is Medicine®
Singapore

Integrating Fitness & Health in Healthcare

Following COVID-19

**Case study of patient between
Doctor & Exercise Physiologist**

What is Fitness?

- Varies from individual sedentary people
- Broadly defined as the level of adaption to the stressors of a given lifestyle (Frank. W Dick, 2014)
- Essential component in the concept of 'wellness', defined as the ability to achieve an improved well-being (Paoli A & Bianco A, 2015)

Fitness Trends through the Ages

Functional fitness

Cardio-boxing

Spin class

Bootcamp + Circuit
Training Type

Callisthenic
Movement

CrossFit

HIIT era

Distance running
(fitness trackers)

Yoga Movement

Class Pass
(all encompassing
access to above
mentioned)

TABATA

Spartan Races

Fundamental questions to the fitness quest

- What is your current lifestyle?
- Is your lifestyle able to support changes?
- What are your motivating factors? (Zimmerman et al, 2000)
- What are your fitness & health goals?

What are the critical components of Wellness?



Steps to building fitness & improving health

1. Establish foundational level of fitness
 - i. Outcome measures
 - ii. Needs analysis
2. Please seek medical clearance if known to be at risk of coronary disease, musculoskeletal or potential neurological disorders
3. Intensity should be modified to an individual's own acceptable level and not just followed
4. Adequate warm up & cool down should be planned into the program

Process of getting in during Circuit Breaker (Flexibility)

- Good starting point to getting the body attuned to discomfort
- Begin with bigger joints

Frequency	Daily would be the most effective
Intensity	Stretch to the point of feeling tightness or slight discomfort
Time	Hold stretch for 10 to 30 seconds
Type	Series of flexibility exercises for a variety of joints
Volume	Reasonable target is to perform 30 seconds of total stretching time , progress as able

Process of getting fit during Circuit Breaker (Resistance/ Strength)

- Resistance training should make daily activities less physiologically stressful
- Begin with fundamental movement patterns

Frequency	Each major muscle group should be trained 2-3 times a week . At least more than 48 hours rest between sessions
Type	Multi-joint resistance exercises potentially involving more than one muscle group
Sets	Single set , or more than 2 sets if tolerated. 2 to 4 mins rest - longer if need be
Repetitions	10-15 repetitions is effective in improving strength for Middle & Older age individuals, who are beginning to exercise

Process of getting fit during Circuit Breaker (Aerobic)

- Start low & go slow
- 30 mins of low intensity aerobic exercise
 -  Walking → Increase walking pace (brisk walk) → Uphill walking
 -  Cycling → Resistance → Gradient → Increase either component
 -  Jogging → Increase jogging pace (running) → Running uphill → Interval training

Process of getting fit during Circuit Breaker (Aerobic)

Frequency	4 to 5 days a week, as tolerated with adequate rest in between
Intensity	Start slow , progress as able
Time	At least 20 mins of aerobic exercise per day can be beneficial to sedentary individuals
Type	See previous slide. However should be regular & continuous movement
Volume	Use activity trackers to monitor distance & step count Aim to achieve a minimum of at least 5000 steps daily initially , to progress when able

Dangers

- Pacing your patient
- Understanding your patient's body and its limitation
- Dangers of following online workouts or fitness trend at present
 - ⌘ i.e. Rhabdomyolysis in the untrained
- Not to get caught in the hype or be influenced by peer pressure
- Don't hop on the bandwagon off social media, i.e. respond to challenges

Challenges during Covid-19

From an Exercise Physiologist perspective

When seeing a patient;



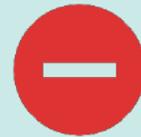
Emphasis on hand hygiene



To maintain social distancing measures



To wipe down all equipment used with alcohol wipes



No handshakes



Recommended for patients to not wear mask during intense sessions



Limit contact. If required to show correction for exercise forms, to use verbal cues or demonstration as much as possible

In summary

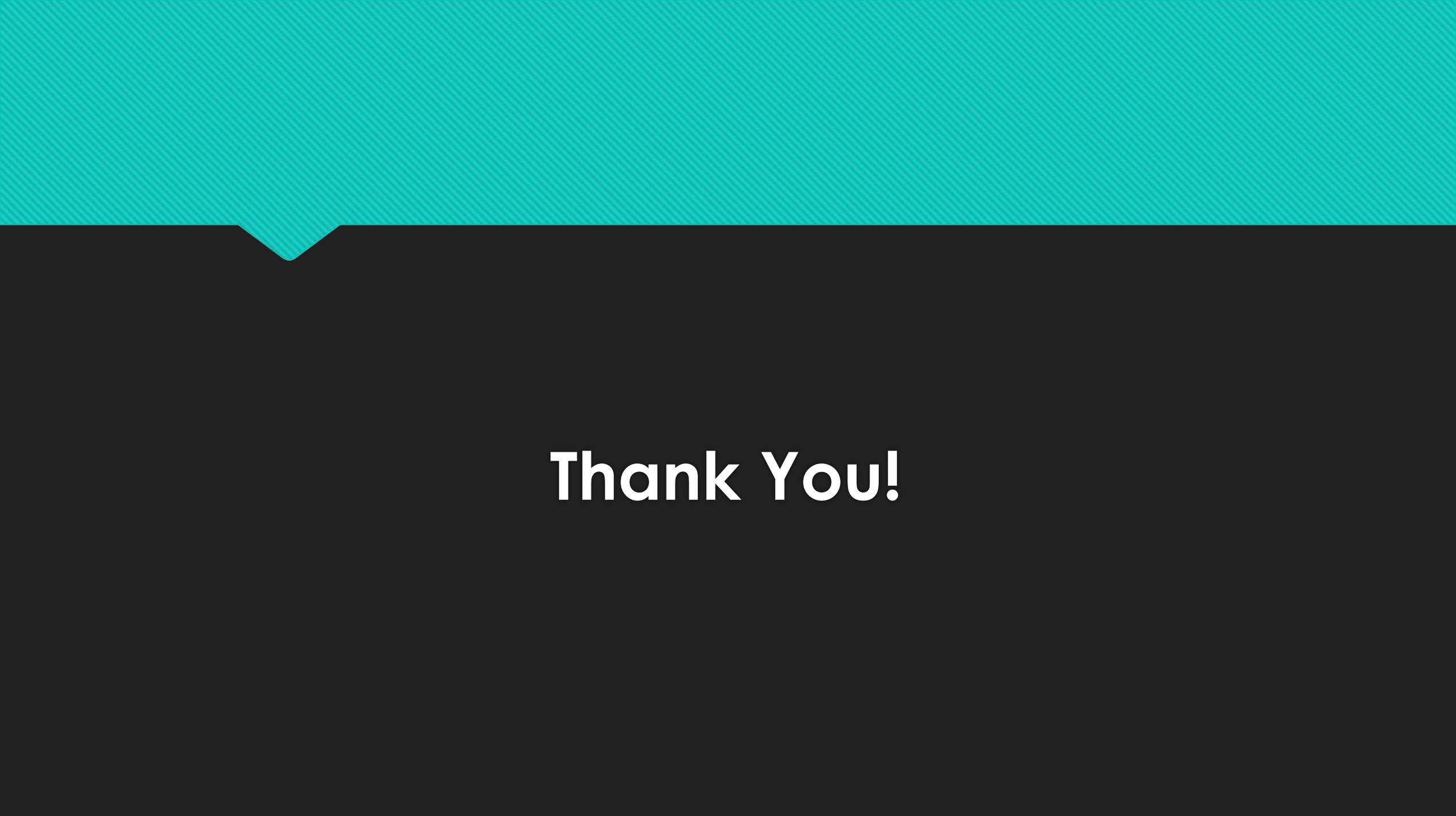


In order to promote long-term participation to sustainable exercise, **communication** is vital because;

- ✓ Effective fitness & lifestyle changes must cater to the specific individuals needs & purpose
- ✓ Should cater to the stages of life corresponding to respective lifestyles and individual stressors
- ✓ Establishing goals and achieving them through a journey/process would bring fitness contentment + probable continuity & compliance

References

1. Tan B, Ng CS & Lim I. (2015) Exercise is Medicine Singapore: Exercise prescription guide. Singapore: Marshall Cavendish Editions
2. American College of Sports Medicine. (2014). ACSM Guidelines For Exercise Testing & Prescription 9th Edition
3. Dick FW. (2014) Sports Training Principles: An introduction to Sports Science 6th edition
4. Paoli A & Bianco A. (2015) What is Fitness Training? Definitions & Implications: A systematic Review.
5. Zimmerman GL, Olsen CG, Bosworth MF. (2000) 'Stages of change' approach to helping patients change behavior. American family physician.

The image features a teal-colored top section with a fine, repeating pattern of small, light-colored lines. Below this is a solid black section. A jagged, white-outlined shape separates the two sections, resembling a stylized mountain range or a speech bubble tail. The text "Thank You!" is centered in the black section.

Thank You!