

# Running Made Simple!

Running your best 2.4km

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# Start Running Safely!

- ❑ **Complete** Get Active Questionnaire
- ❑ **Watch** the 40-min Running Made Simple Webinar to understand running basics!
- ❑ **Read** running tips on shoes, nutrition, and more.
- ❑ **Use** Running Made Simple Calculator
  - ❑ To obtain **training zones** only
    - ❑ **Training Zone Calculator**
  - ❑ To obtain **race pacing** only
    - ❑ **Race Pace Calculator**
  - ❑ To obtain a **training program**
    - ❑ **2.4km Training Plan**
    - ❑ Click **Export as Image** to save your training program
- ❑ **Join** a trusted running club or find a coach for personalised guidance.
- ❑ **Ask** - Contact me with any queries!



## Running Made Simple

Built by Mok Ying Ren and Daniel Ching

Training Zone Calculator

Race Pace Calculator

2.4km Training Plan Generator



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An Initiative by  
**Spore**  
 SINGAPORE

Partner in Sport  
**tote**  
 board  
 SINGAPORE

Think Safe. Play Safe. Stay Safe.

## Running Made Simple - 2.4km Live Talk

This 40min webinar was recorded at a recent talk on 9 April 2024.



## 2.4km Training Program 4-Part Webinar

### Part 1 All About the 2.4km

Rest and Recovery for Better Performance

Training

Giving Blood not a barrier for Runners

Training

Recovery

Hydration Tips for Optimal Performance

Hydration

Training

Race Day Tips

### Part 2: Training Zones

Three Takeaways To Go A Long Way

Training

Marathon

### Part 3: Understanding the Program

### Recommended Clubs/ Coaches

Looking for a coach for personalized training or just a group to run with? Here are my recommendations!



ActiveSG Athletics Club  
 www.activesgathletics.club  
 Running Group  
 Free and easy 5km runs where you can test out  
 Coach



Park Run  
 www.parkrun.sg  
 Running Group  
 Free and easy 5km runs where you can test out  
 Coach



Mileage - Mr Lim  
 www.mileage.sg  
 Running Group  
 Coach  
 I have known Mr Lim



Running Department  
 www.runningdept.sg  
 Running Group  
 I have known Terence, founder of Running



# Contents

## 1. 3 Principles for Optimal 2.4km

### Training

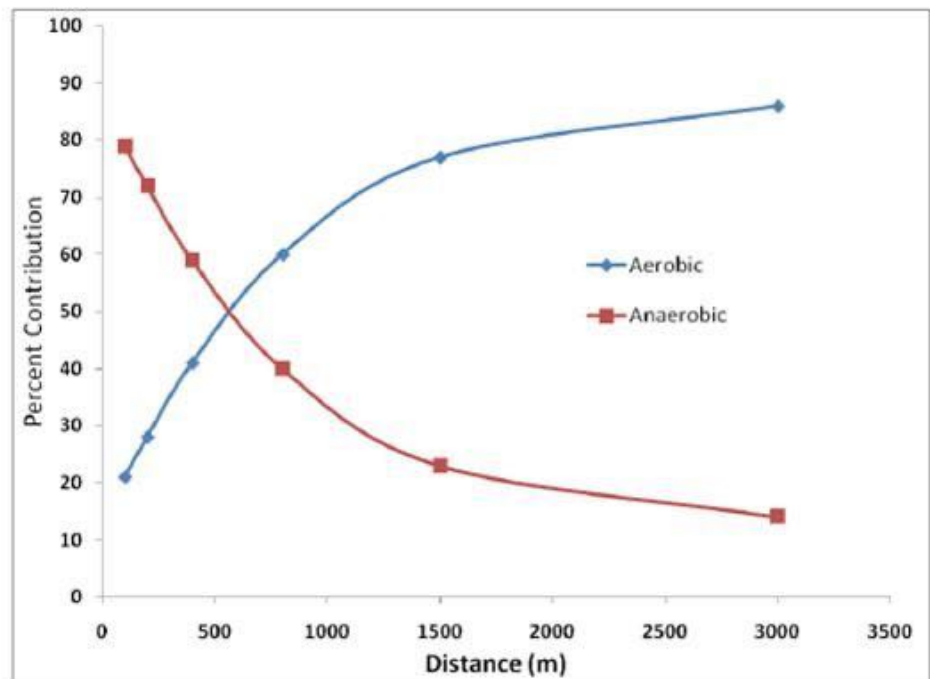
2. Putting it all together in a Plan
3. 3 Takeaways from my running journey





# #1 *Specificity*: Most Training Should be in Aerobic Zone

- Logic for the 2.4km: If ~ 80% of energy contribution from the race is from the **aerobic** system, then ~ 80% of weekly training should be in aerobic zone.
- Training must be **specific** to the distance you are training for



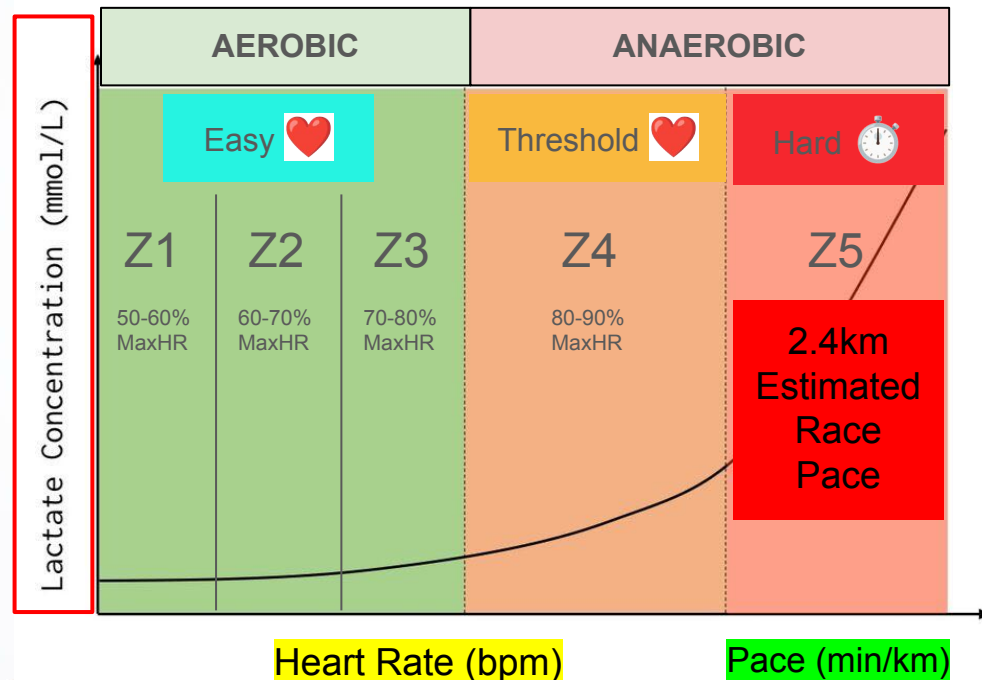
## #2 Precision: Train the in the correct zone

### • Aerobic = Zones 1, 2, 3

- [❤️ HR] **Easy** Z1= Warm Ups
- [❤️ HR] **Easy** Z2= Easy runs < 30 min
- [❤️ HR] **Easy** Z3= Easy runs after 30min

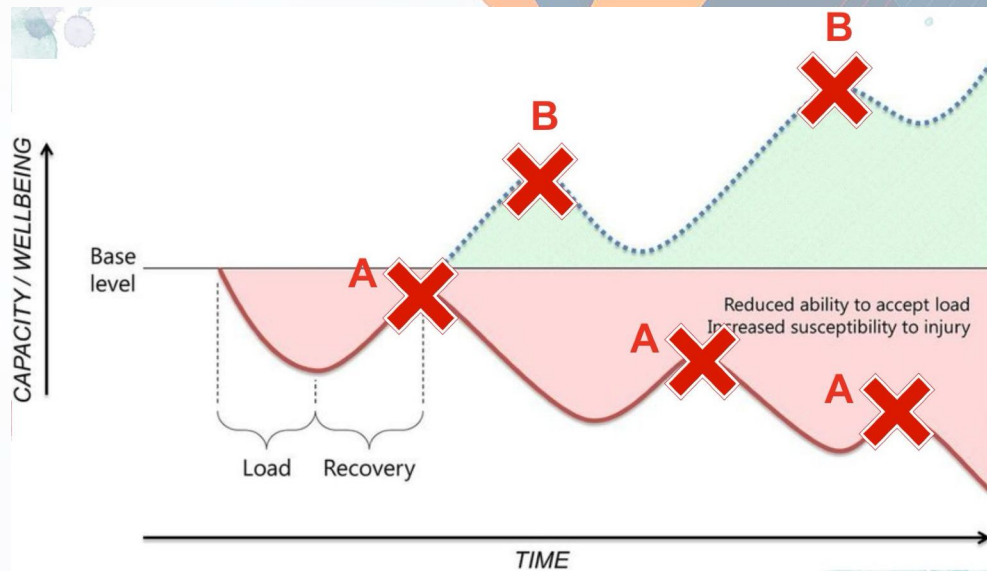
### • Anaerobic = Zones 4, 5

- [❤️ HR] **Threshold** Z4 = Threshold Runs
- [🕒 Pace] **Hard** Z5 =  $VO_2$ Max  
Estimated 2.4km Race Pace



# #3 *Supercompensation: Rest Appropriately*

- Need to have rest days between sessions
  - But... too many rest days will reduce effectiveness
- Need to consider other life stresses that inhibit supercompensation → goal setting and setting expectations
- Consistency over long duration is key



# Running Made Simple 2.4km Summary

## 1. Specificity

- Obey the Aerobic: Anaerobic Ratio

## 2. Precision

- Train in the appropriate zones guided by ❤️ HR and 🕒 Pace

## 3. Supercompensation

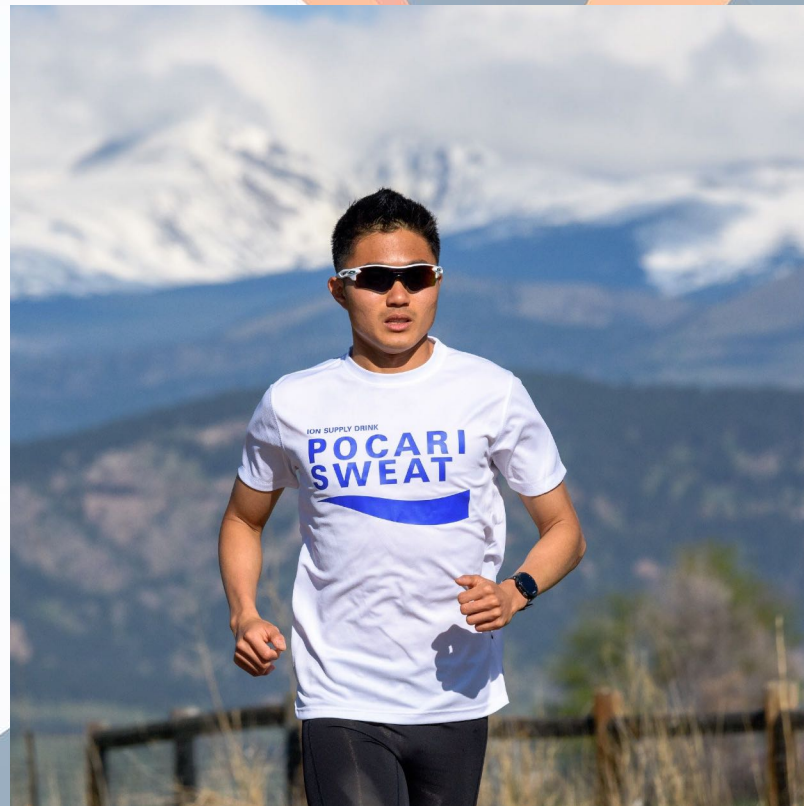
- Give sufficient recovery time between sessions



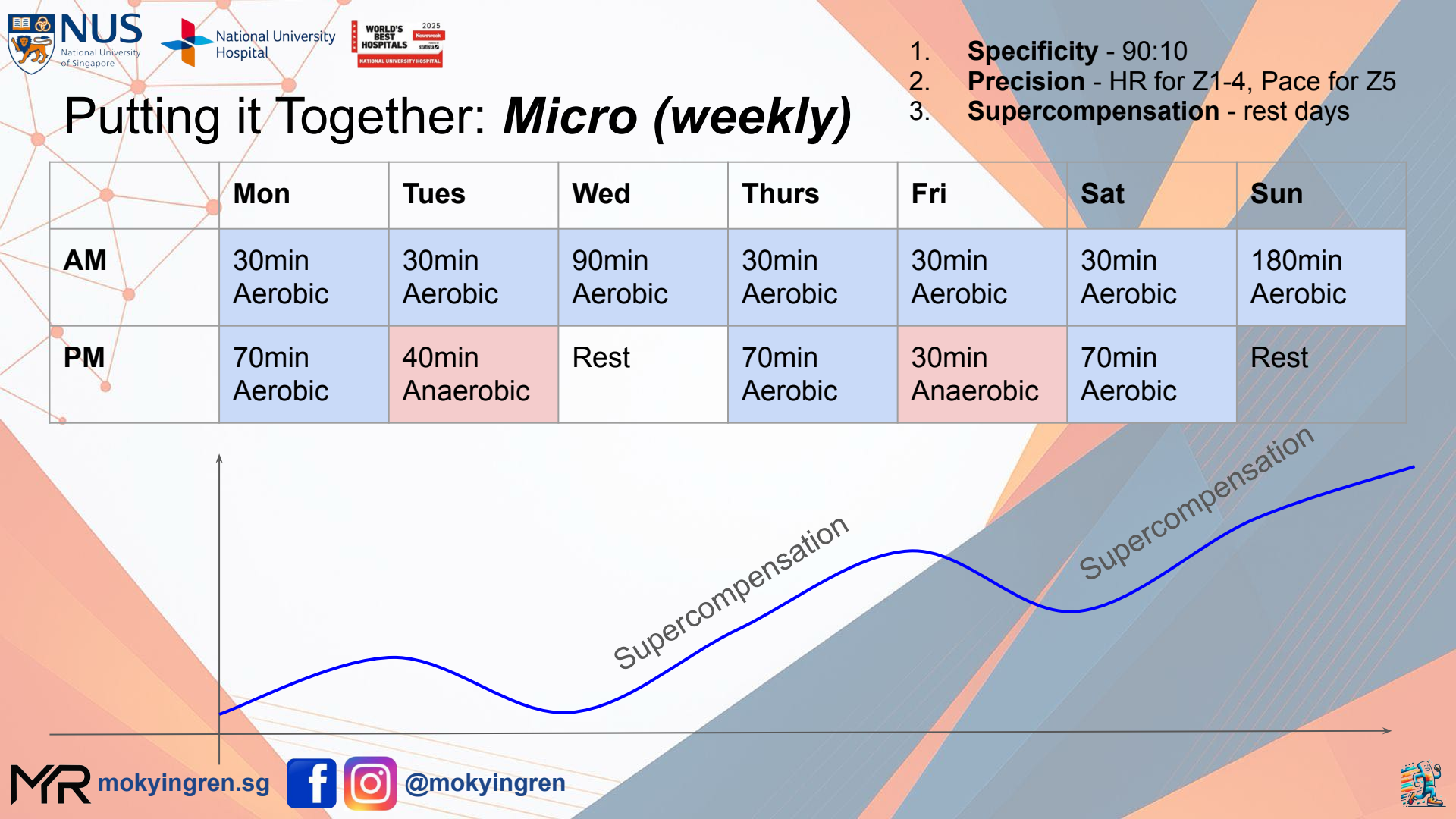


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2. Putting it all together in a Plan
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journey

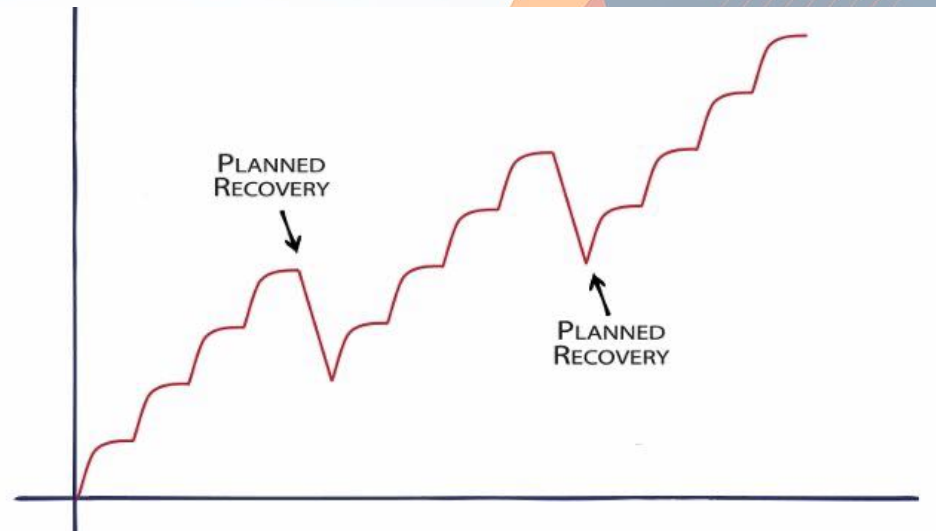
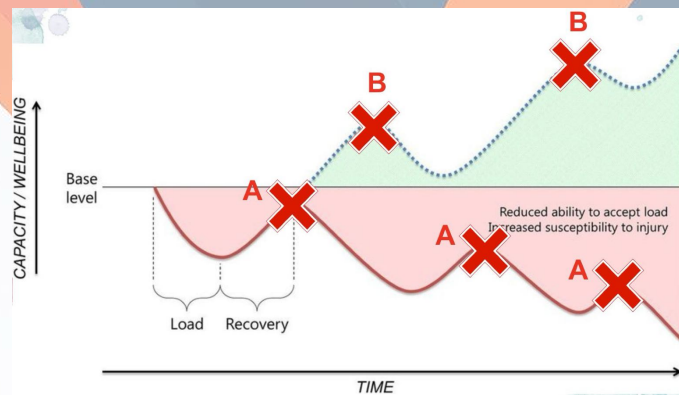






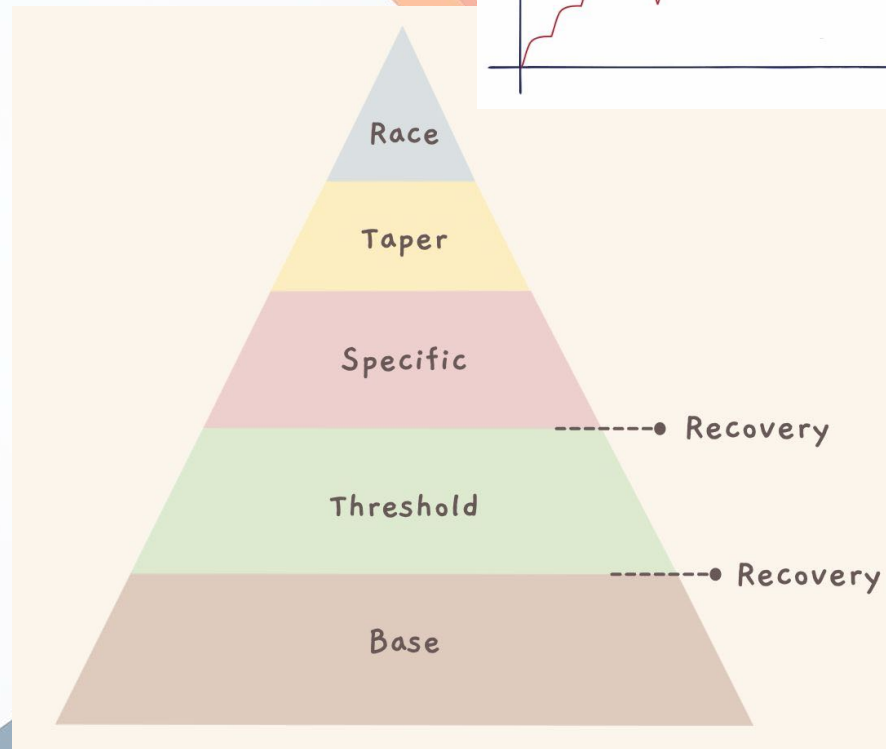
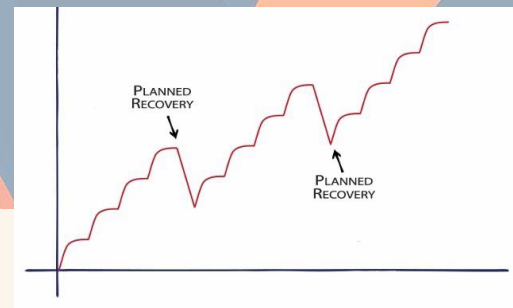
# Putting it Together: *Macro (Weeks)*

- Planned recovery weeks to prevent injury
- Musculoskeletal adaptations *always* lag behind cardiovascular adaptation!



# General Phases in Endurance Running

- 5-phase training program with different emphases in each phase
  - **Base** = Focus on Z2-3 Training
  - **Threshold** = Increase Z4 training
  - **Specific** = Increase Z5 training
  - **Taper** = Reduce Z5 while maintaining fitness
  - **Race** = Reduce volume, maintaining fitness
- Planned recovery week every 4 weeks



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# 3 Takeaways

- Be **Patient**
  - We are greedy!
  - Common cause of injury is “too much too soon”
- Be **Humble**
  - We still do not know alot of things about marathon training
  - Outcomes not within our control
- Be **Grateful**
  - Running is a gift from God
  - Looking to the left and right breeds discontent

## The training—injury prevention paradox: should athletes be training smarter *and* harder?




Tim J Gabbett<sup>1,2</sup>




### Summary

- AC joint – most controversial joint in the body
  - Biomechanics – **Restudy!!!**
  - Classification – **Reclassified!!!**
  - Diagnosis – **Reconsider!!!**
  - Treatment strategies – **Rethink!!!**

Need more information.






### ACL RECONSTRUCTION. LESSONS LEARNED

THE FACTS

50 YEARS AFTER THIS SURGERY WAS DESCRIBED WE HAVE NOT BEEN ABLE TO MODIFY:

1. FAILURES
2. ASSOCIATED LESSIONS POST SURGERY
3. SPORTS RETURN RATES.
4. ARTRHRITIS INCIDENCE



# How to do it: *Running Made Simple* Guide in 1 Slide

1. Apply **Specificity** - Determine distance and energy contribution ~80:20
  - a. Decide time to commit - **60** minutes a week?
  - b. Apply the ratio ~
    - i. Aerobic - **48** minutes (80%)
    - ii. Anaerobic - **12** minutes (20%)
2. Apply **Precision**
  - a. **Easy** Zones 1, 2 & 3 and **Threshold** Zone 4 by ❤️ HR
  - b. **Hard** Zone 5 by 🕒 Pace (2.4km race pace)
3. Apply **Supercompensation**
  - a. Plan out 2 sessions a week that obey the principles on a **micro** level
  - b. Apply phases to plan for supercompensation on a **macro** level

Session 1	Session 2
<b>30min Easy Z2</b>	WU 10min Z1 <b>Anaerobic</b> 15min CD 10min Z1
	Total = 35min

2 sessions/ week = 50:15 (77%:23%)

## Variations for **Anaerobic** workout

- **Hard** 2.4km Race Pace Intervals on the track - 200m/ 400m/ 500m
- **Threshold** Runs at HR Zone 4

# RMS Calculator: 3 Functions

## 1. **Training Zone** Calculator

- Zone 1-4 by ❤️ Heart Rate
- Zone 5 by 🕒 Pace

## 2. **2.4km Training Plan Generator**

- Twice a week, 30 minutes Each, obeying all principles
- Optional 3rd run a week
- Plans from 8-16 weeks (Optimal is 12 weeks)

## 3. **Race Pace Calculator**

- Optimal Pacing for your race



## Running Made Simple

Built by Mok Ying Ren and Daniel Ching

[Training Zone Calculator](#)

[Race Pace Calculator](#)

[2.4km Training Plan  
Generator](#)

[Blog](#)





# RMS Training Zone Calculator



## Training Zone Calculator

Built by Mok Ying Ren and Daniel Ching

Home

Race Pace Calculator

2.4kmTrainingPlan

Blog

1.2km  
Time Trial

VO2 Max (from  
watch)

Enter your VO2 Max Estimate (from  
watch):

56

Birthday:

6 Jul 1988

Calculate

## Training Zones

Zone Type	Heart Rate Zone	HR Range
Easy	Z1 (51-60%)	<115bpm
	Z2 (61-70%)	from 115bpm - 132bpm
	Z3 (71-80%)	from 132bpm - 151bpm
Threshold	Z4 (81-90%)	from 153bpm - 170bpm
Hard *	Z5 (91-100%)	from 170bpm - 189bpm

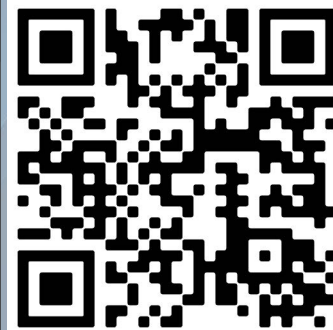
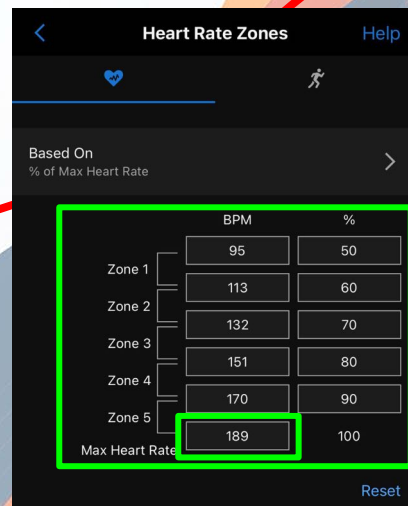
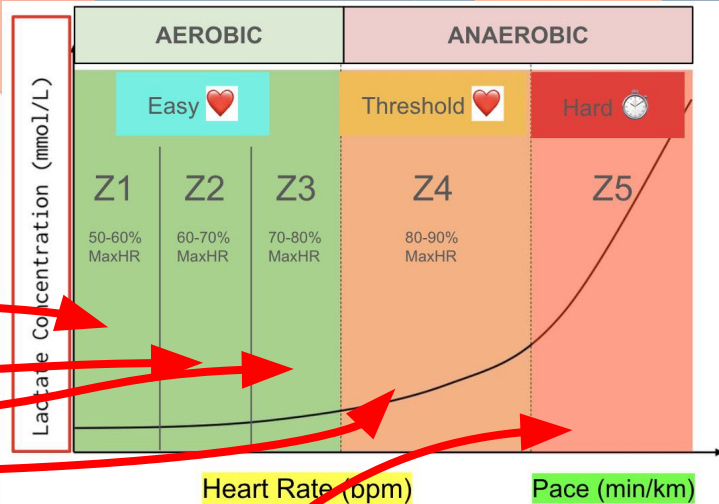
We don't use HR for hard sessions, but if you insist:

## Z5 Pacing

Estimated 2.4km Race Time: 8m 42s

## Track Pacing

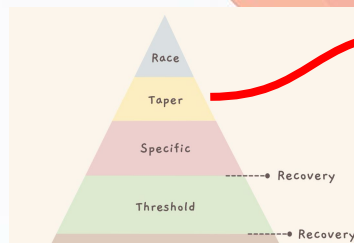
Distance	2.4km Pacing
100m	22s
200m	0m 43s
300m	1m 5s
400m	1m 27s
1000m	3m 37s





# RMS 2.4km Training Plan

- **Warm Up and Cool Down** with 10min in Z1 for Z4 and Z5 runs in red.
- **Recovery** = walk / jog slowly to allow HR to drop to Z3.
- **During recovery / benchmark week**, either repeat time trial or re-input VO<sub>2</sub>Max value and input the same date of generation.
- Give yourself at least 2-3 days of rest between hard workouts.
- Feel free to add another 30min Z2 if you're feeling good!



**2.4km Training Plan Generator for Beginners**  
Built by Mok Ying Ren and Daniel Ching

Home Training Zone Calculator Race Pace Calculator Blog

**Instructions-for**

1. Do a 1.2km time estimate. OR input
2. Input your birthc
3. Select an IPPT d

**1.2km Time**

Enter your VO<sub>2</sub> Max I  
56

Birth day:  
dd/mm/yyyy

Training Start Date:  
30/06/2024

Race Date:  
30/06/2024

**Training Zones**

Zone Type	Heart Rate Zone	HR Range
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Hard \* Z5 (91-100%) from 170bpm - 189bpm

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**Track Pacing**

Distance	2.4km Pacing
100m	22s
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1000m	3m 37s

Treadmill Speed 16 km/h

**Generate Training Plan**

Phase	Weeks to 2.4km	Session 1	Session 2
Base	12	30min at Z2	30min at Z2
Base	11	30min at Z2	30min at Z2
Base	10	30min at Z2	30min at Z2
Recovery	9	30min at Z2	30min at Z2
Threshold	8	3 x (4min at Z4, 2min recovery)	3 x (4min at Z4, 2min recovery)
Threshold	7	2 x (5min at Z4, 5min recovery)	2 x (5min at Z4, 5min recovery)
Threshold	6	2 x (6min at Z4, 3min recovery)	2 x (6min at Z4, 3min recovery)
Recovery/ Benchmark	5	30min at Z2	30min at Z2
Specific	4	3 x (4min at Z4, 2min recovery)	3 x (4min at Z4, 2min recovery)
Specific	3	3 x (3min at Z4, 3min recovery)	3 x (3min at Z4, 3min recovery)
Specific	2	5 x (2min at Z4, 2min recovery)	5 x (2min at Z4, 2min recovery)
Taper	1	30min at Z2	30min at Z2
Taper/ Race Week	0	2 x (200m in 0m 40s, 1m 30s recovery)	2 x (200m in 0m 40s, 1m 30s recovery)

# RMS 2.4km Pacing Calculator

- Target Race Time to put?
  - Use Estimated 2.4km time from training zones calculator
- Recommended Race Strategy
  - Keep to prescribed lap times for the first 4 laps even if feeling good - this requires discipline!
    - Be even more precise by controlling the pace by per 100m
  - Go faster in the final 2 laps if feeling good!

Enter your VO2 Max Estimate (from watch):  
56

Birthday:  
06/07/1988

**Calculate**


**Training Zones**

Zone Type	Heart Rate Zone	HR Range
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**Z5 Pacing**

Estimated 2.4km Race Time: 8m 42s



**Race Pace Calculator**  
Built by Mok Ying Ren and Daniel Ching

Home Training Zone Calculator IPPT Training Plan Blog

Race Distance (meters):  
2400

Target Race Time:  
08  
42

**Calculate**

## Results:

Speed: 16.55 km/h

## Time per

100m: 21.8 seconds  
200m: 0 minutes 43 seconds  
300m: 1 minutes 5 seconds  
400m: 1 minutes 27 seconds

## Lap Cumulative Time

1	1 minutes 27 seconds
2	2 minutes 54 seconds
3	4 minutes 21 seconds
4	5 minutes 48 seconds
5	7 minutes 15 seconds
6	8 minutes 42 seconds

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Recovery

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Race Day Tips

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Three Takeaways To Go A Long Way

Training

Marathon

### Part 4: 2.4km Race Strategy

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Coach



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Mileage.sg - Mr Lim Kien Mau  
www.mileage.sg  
Coach  
I have known Mr Lim



Running Department  
www.runningdept.com  
Running Group  
I have known Terence, founder of Running

