Running Made Simple!

Running your best 2.4km

MOK Ying Ren

Consultant, Sports Surgery, NUH

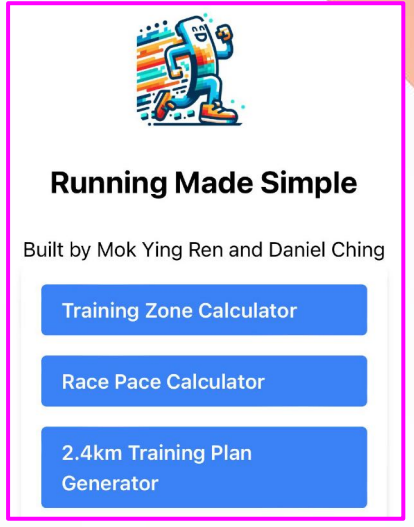
Adj. Asst. Prof, NUS Medicine

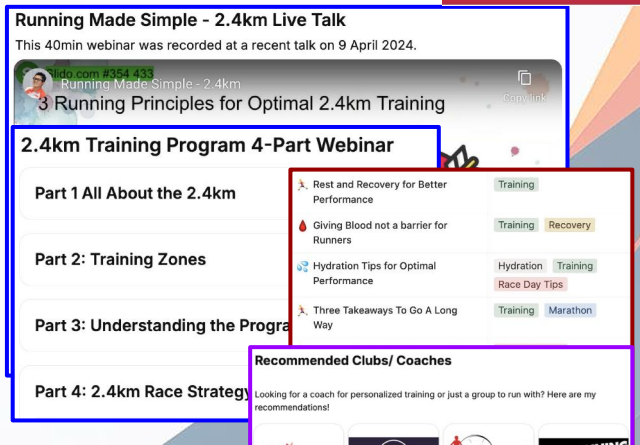
MBBS (Singapore), MRCS (Edinburgh), MMed(Ortho), FRCSed (Ortho), MSpMed (Queensland)

mokyingren.sg @mokyingren

Start Running Safely!

- ❑ ***Complete*** Get Active Questionnaire
- ❑ ***Watch*** the 40-min Running Made Simple Webinar to understand running basics!
- ❑ ***Read*** running tips on 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!





mokyingren.sg @mokyingren

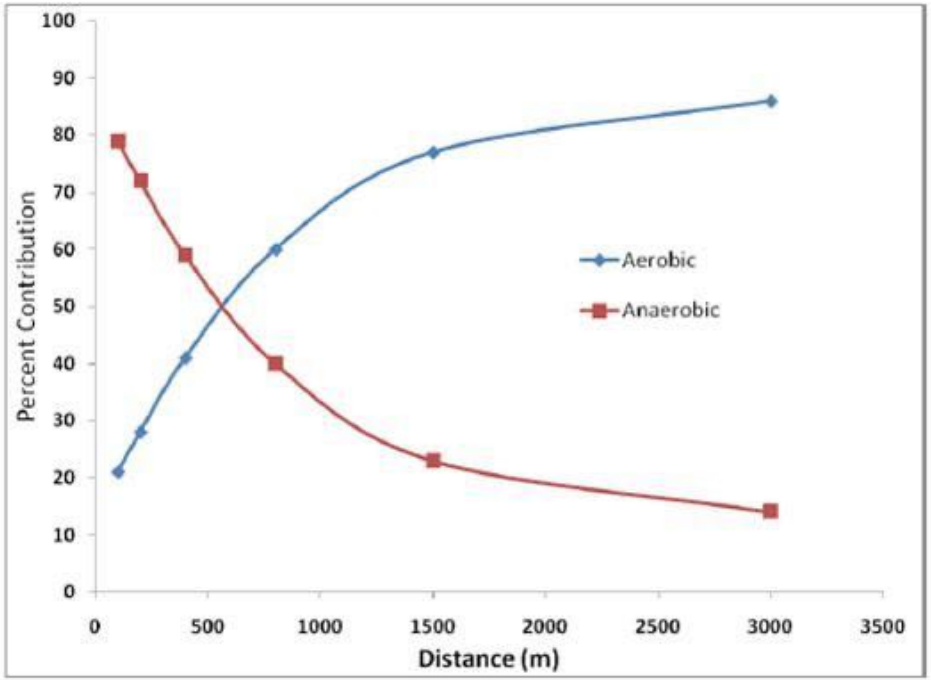
Contents

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.

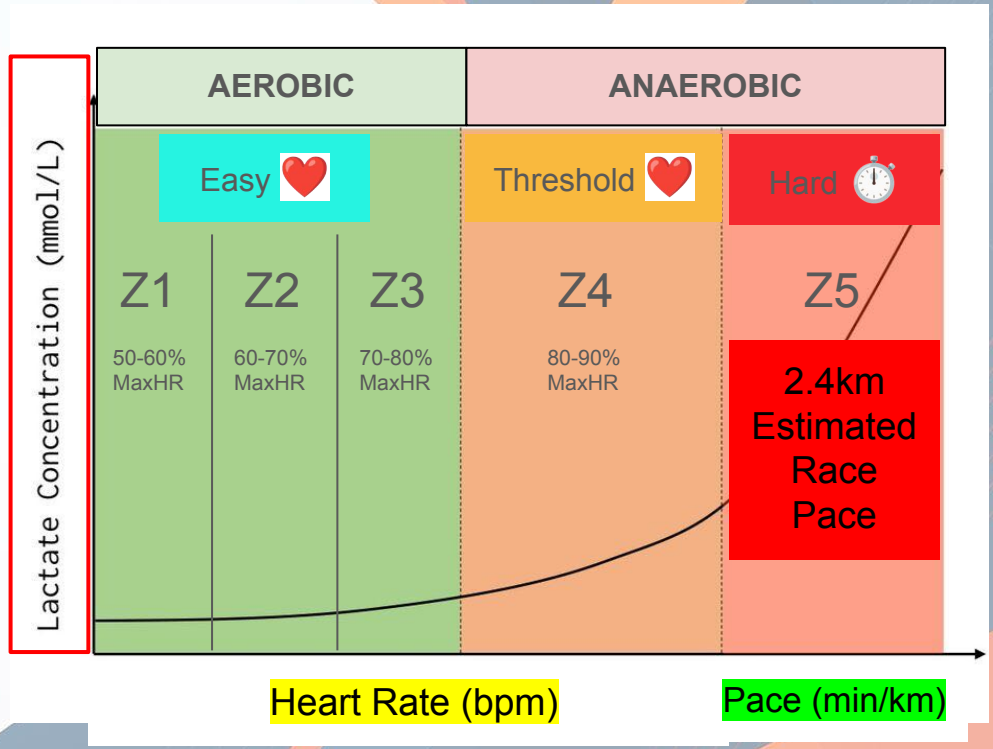
- Training must be ***specific*** to the distance you are training for



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

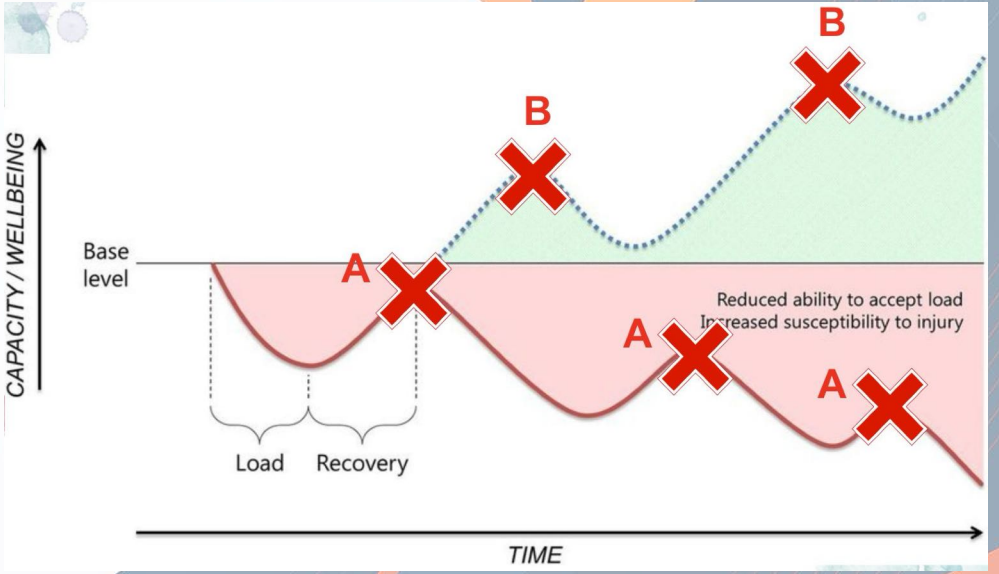
- **Aerobic = Zones 1, 2, 3**
  - [❤️HR] **Easy** Z1= Warm Ups
  - [❤️HR] **Easy** Z2= Easy runs < 30 min
  - [❤️HR] **Easy** Z3= Easy runs after 30min

- **Anaerobic = Zones 4, 5**
  - [❤️HR] **Threshold** Z4 = Threshold Runs
  - [⏱️Pace] **Hard** Z5 = VO_2Max 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

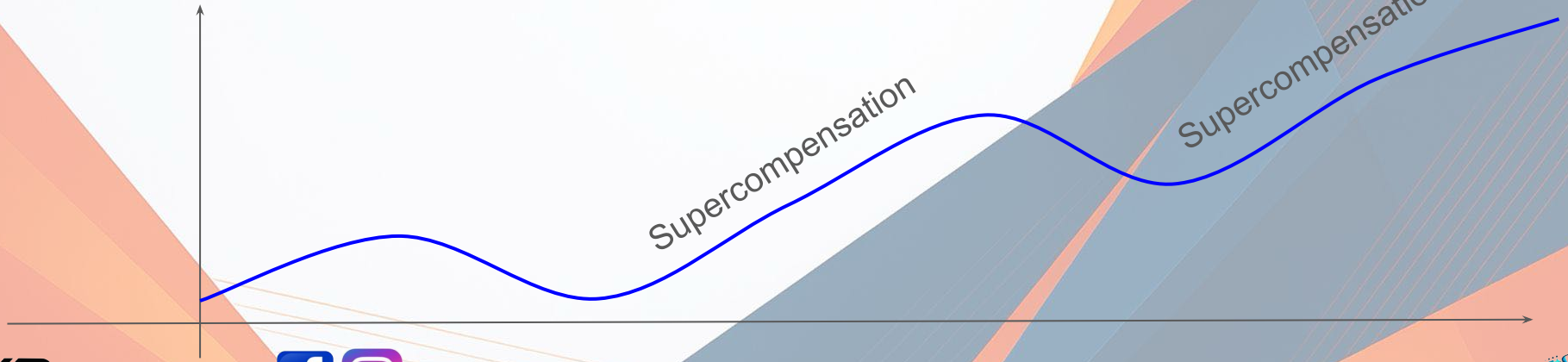
Contents

1. 3 Running Principles for Optimum 2.4km Training
2. Putting it all together in a Plan
3. 3 Takeaways from my running journey

Putting it Together: ***Micro (weekly)***

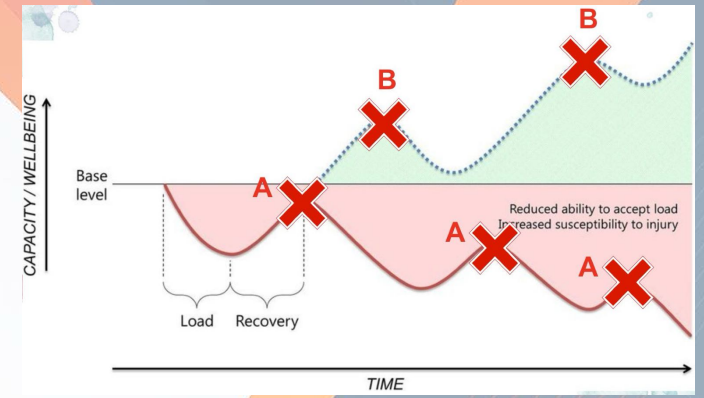
1. **Specificity** - 90:10
2. **Precision** - HR for Z1-4, Pace for Z5
3. **Supercompensation** - rest days

	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
AM	30min Aerobic	30min Aerobic	90min Aerobic	30min Aerobic	30min Aerobic	30min Aerobic	180min Aerobic
PM	70min Aerobic	40min Anaerobic	Rest	70min Aerobic	30min Anaerobic	70min Aerobic	Rest

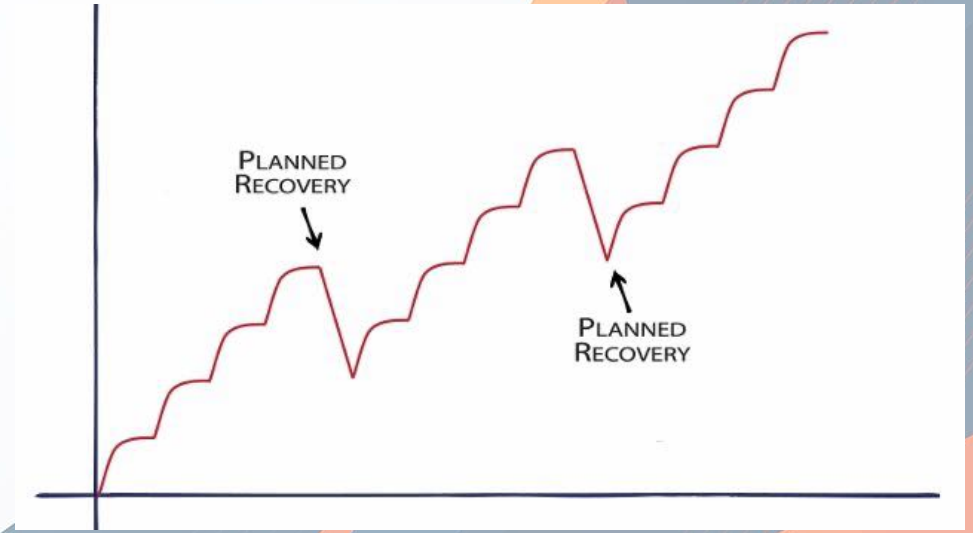


Putting it Together: ***Macro (Weeks)***

- Planned recovery weeks to prevent injury

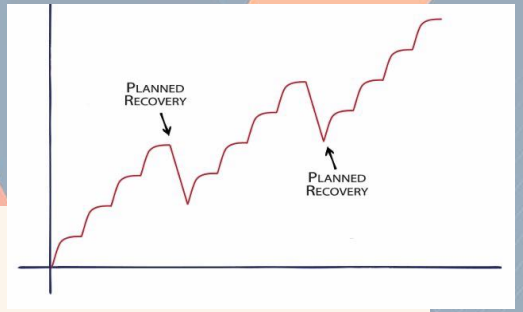


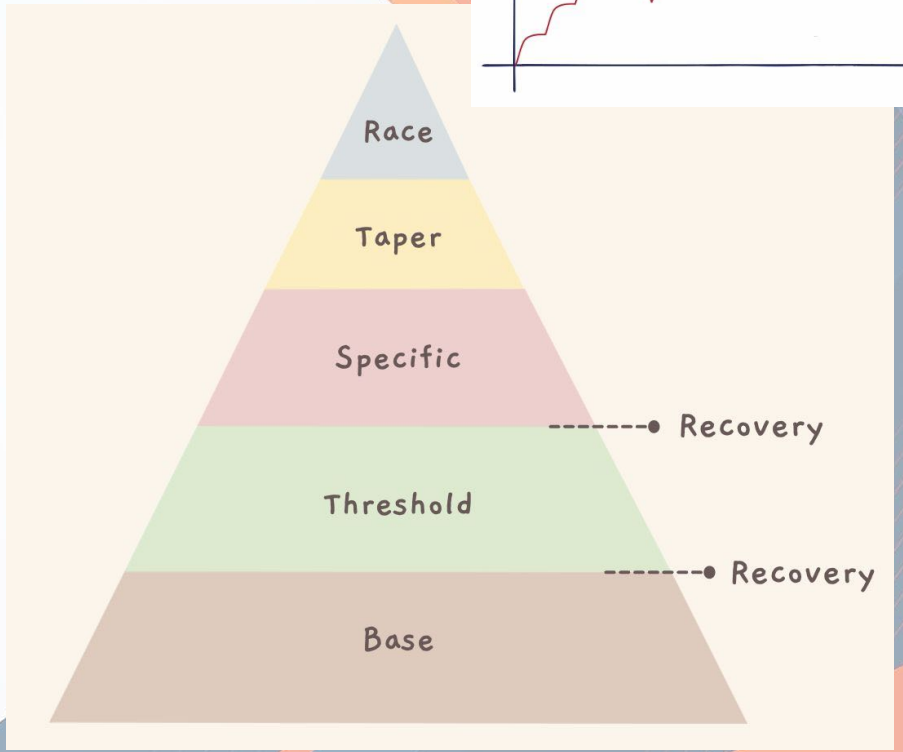
- Musculoskeletal adaptations ***always*** lag behind cardiovascular adaptation!



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



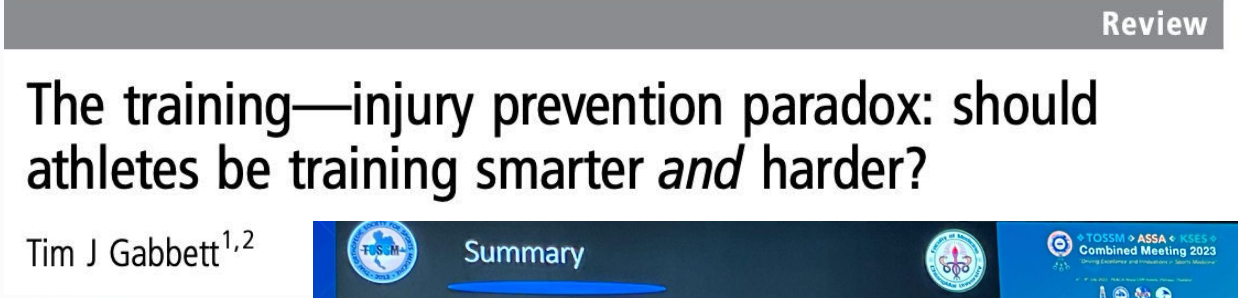


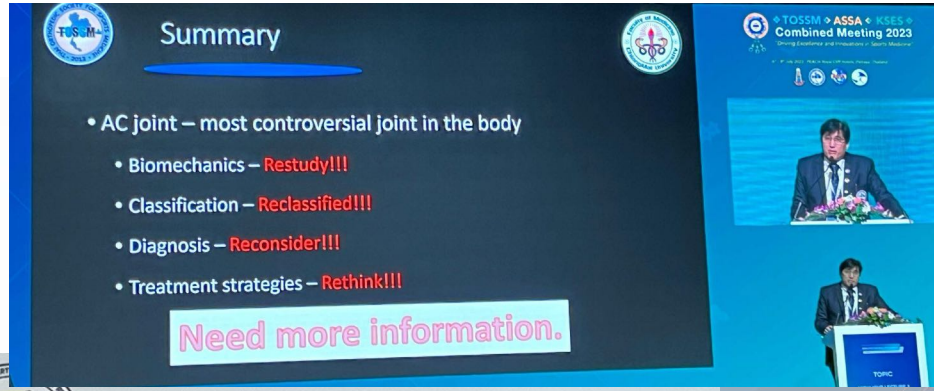
Contents

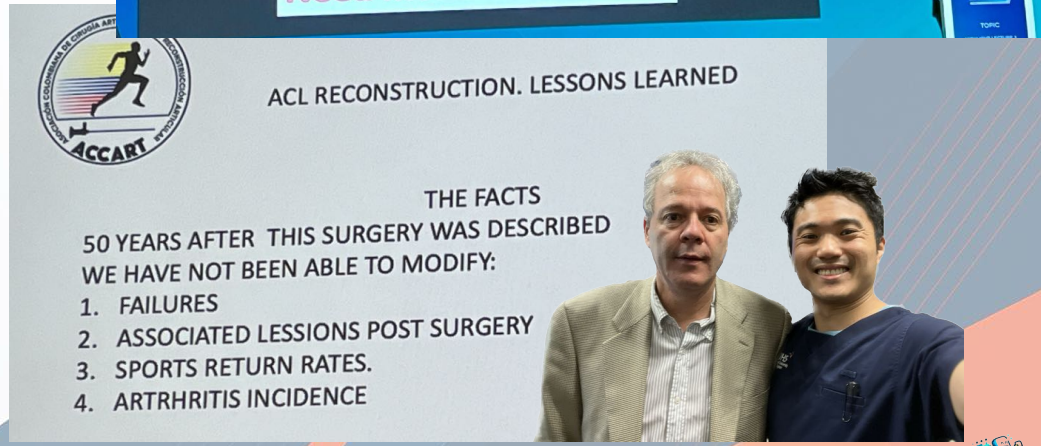
1. 3 Principles for Optimal 2.4km Training
2. Putting it all together in a Plan
3. 3 Takeaways from my running journey

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







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**
30min Easy Z2	WU 10min Z1 **Anaerobic** 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

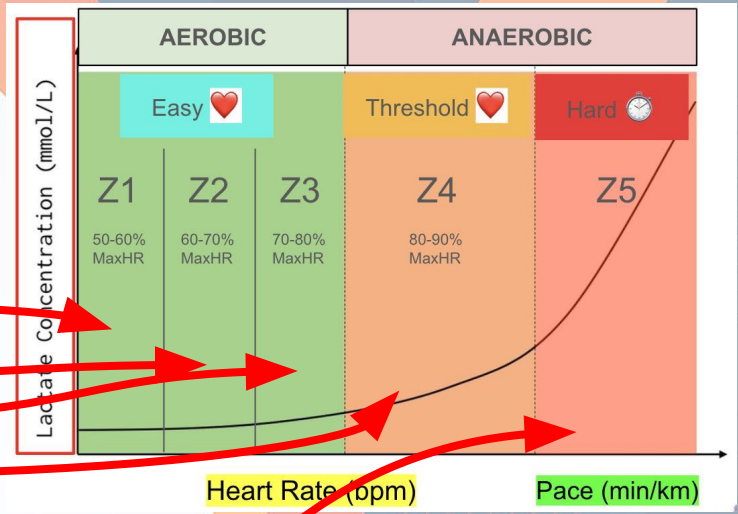
Zone Type	Heart Rate Zone	HR Range
Easy	Z1 (51-60%)	<115bpm
	Z2 (61-70%)	from 115bpm - 132bpm
	Z3 (71-80%)	from 132bpm - 151bpm
Threshold	Z4 (81-90%)	from 153bpm - 170bpm
We don't use HR for hard sessions, but if you insist:		
Hard *	Z5 (91-100%)	from 170bpm - 189bpm

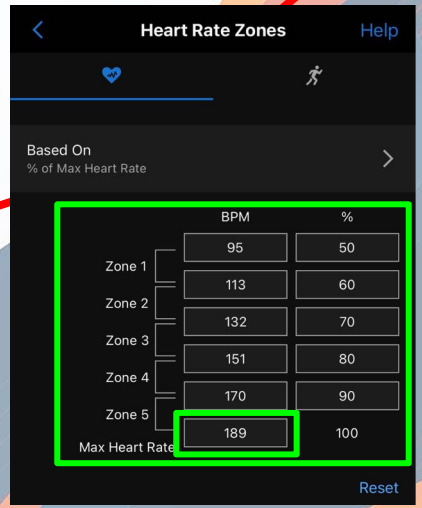
Z5 Pacing

Estimated 2.4km Race Time: 8m 42s

Track Pacing

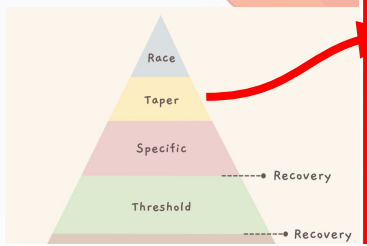
Distance	2.4km Pacing
100m	22s
200m	0m 43s
300m	1m 5s
400m	1m 27s
1000m	3m 37s

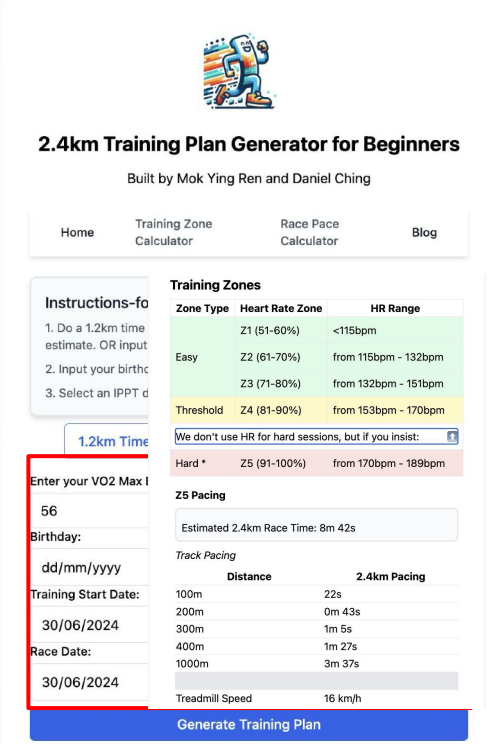




RMS 2.4km Training Plan

- ***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_2Max 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!



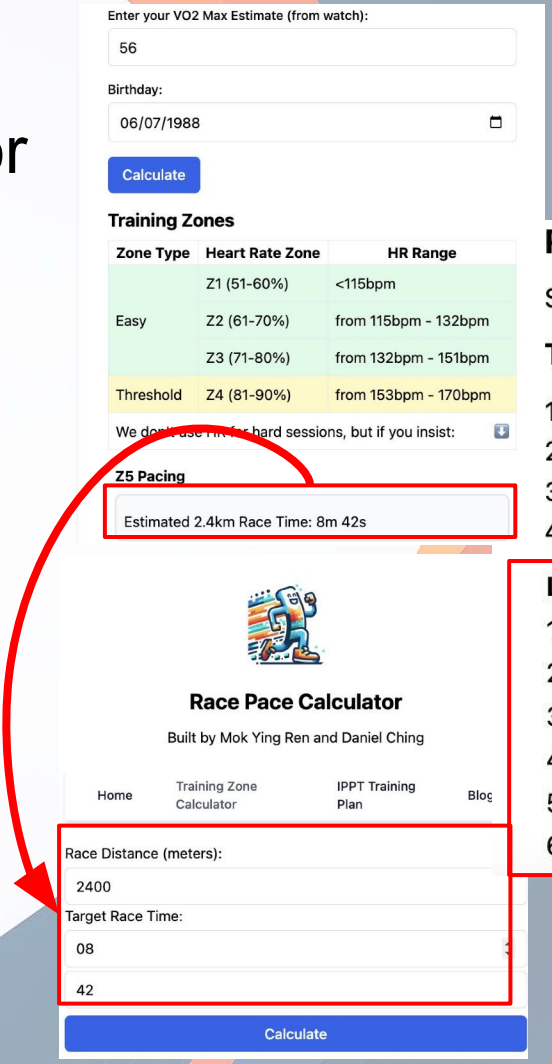


Phase	Weeks to 2.4km	Session 1	Session 2
Base	12	30min at Z2	30min at Z2
Base	11	30min at Z2	30min at Z2
Base	10	30min at Z2	30min at Z2
Recovery	9	30min at Z2	30min at Z2
Threshold	8	3 x (4min at Z4, 2min recovery)	3 x (4min at Z4, 2min recovery)
Threshold	7	2 x (5min at Z4, 5min recovery)	2 x (5min 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)

mokyingren.sg @mokyingren

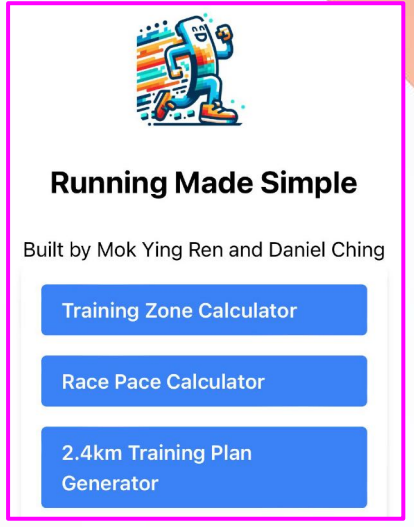
RMS 2.4km Pacing Calculator

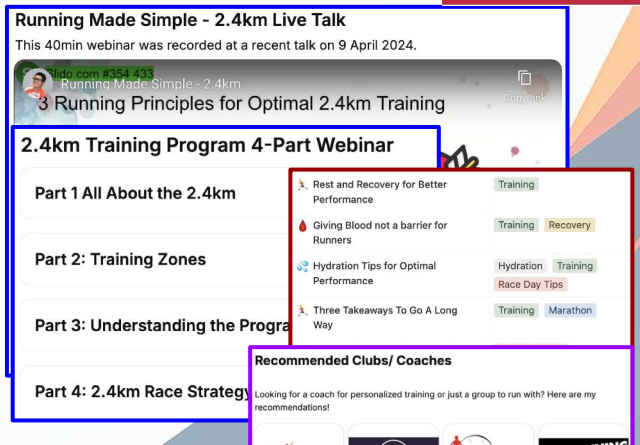
- Target Race Time to put?
  - Use Estimated 2.4km time from training zones calculator
- Recommended Race Strategy
  - Keep to prescribed lap times for the first 4 laps even if feeling good - this requires discipline!
    - Be even more precise by controlling the pace by per 100m
  - Go faster in the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



Start Running Safely!

- ❑ ***Complete*** Get Active Questionnaire
- ❑ ***Watch*** the 40-min Running Made Simple Webinar to understand running basics!
- ❑ ***Read*** running tips on 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!





mokyingren.sg @mokyingren