# IPPT Training Guidelines 

## PUSH UPS

- Start with the correct form. This is essential for avoiding injury. Make sure core is engaged and elbows are at a 45-degree angle.
- Progress with different variations. Regress/Progress to more different variations such as incline push-ups, knee push ups and regular push ups.

- Do speed training. This challenge yourself to do more push-ups in a set. Start with a set of 20 s, do as many push ups as possible in a targeted time (e.g., 20 reps) and increase the duration progressively. (Use different variations based on individual fitness)
E.g. Timed Set (using 30 reps in 60 s as example, adjust repetition according based on progression)

| Time | 20s | 30s | 40s | 50 s | $\mathbf{6 0 s}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Repetitions | 10 | 15 | 20 | 25 | 30 |

## SIT UPS

- Start with the correct form. Make that knees are bent at 90 degree, core is engaged, and both hands are cupped behind your ears.
- Train with different variations. Sit ups can be improved by training a combination of different variations such as upper abs crunches, isometric hold and lower abs crunches. You should be able to do more sit ups as your abdominal muscles get stronger.

- Do speed training. This challenge yourself to do more sit ups in a set. Start with a set of 20 s , do as many sit ups ( 10 reps every 2 secs) as possible in a targeted time and increase the duration progressively.
E.g. Timed Set (using 30 reps in 60 s as example, adjust repetition according based on progression)

| Time | 20s | 30s | 40s | 50s | $\mathbf{6 0 s}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Repetitions | 10 | 15 | 20 | 25 | 30 |

## Understanding 2.4km Run

- Safety Reminders
- Energy Systems
- Pacing
- Training phases
- Phase 1 (Base Conditioning)
- Phase 2 (Speed Work)
- Phase 3 (Tapering)


## Safety Reminders

Adjust it based on your fitness level and goals. Listen to your body and take rest days when needed. And most importantly, have fun!

Here are some additional tips for training for a 2.4 km run:

- Warm up before each run with dynamic stretches and cool down with static stretches.
- Pace yourself and don't try to go too fast too soon.
- Breathe deeply and evenly.
- Drink plenty of fluids (4-7L/ days) and eat a healthy diet.
- Get sufficient sleep (7hrs of uninterrupted rest).
- Cross-train with other activities, such as swimming or biking.
- Set realistic goals and track your progress.
- Plan your training time according to the IPPT test timing (e.g. 7pm).

With hard work and dedication, you can reach your goal of running 2.4 km safely

## Energy Systems

The 2.4 km run taps into 2 main energy systems

- Aerobic system (Primary):
- uses oxygen to break down carbohydrates and fats to create energy.
- is slow to start up but is sustainable for prolonged running.
- Anaerobic system (Secondary):
- uses stored energy without oxygen.
- provides burst of energy for short duration before producing lactic acid, which causes muscle fatigue.

Relative contribution of each energy system to a 2.4 km run:

| Energy System | Contribution |
| :--- | :--- |
| Aerobic | $70-80 \%$ |
| Anaerobic | $20-30 \%$ |

## PACING

There are several benefits to even pacing during a 2.4 km run. These include:

- Reduced risk of injury.

Lesser stress on muscles and joints. This can help to prevent injuries such as shin splints, stress fractures, and muscle cramps.

- Improved performance.

Able to maintain speed for longer periods of time.

- Improved endurance. Builds endurance and ability to run for longer periods of time without getting tired. This is an important skill for any runner, regardless of their goal race distance.

Pace-Zone Training (using 10 mins for 2.4 km as example)

| Distance | $\mathbf{1 0 0 m}$ | $\mathbf{4 0 0 m}$ | $\mathbf{8 0 0 m}$ | $\mathbf{1 . 2 k m}$ | $\mathbf{1 . 6 k m}$ | $\mathbf{2 . 0 k m}$ | $\mathbf{2 . 4 k m}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Target Time | 25 s | $1: 40 \mathrm{~s}$ | $3: 20 \mathrm{~s}$ | 5 min | $6: 40 \mathrm{~s}$ | $8: 20 \mathrm{~s}$ | 10 min |

## Training Phases

Generally, there are 3 phases of 2.4 km training:
Phase 1: Base Conditioning (Aerobic System)
The goal is to build aerobic fitness and endurance by doing easy runs at a conversational pace.

Tips: Incorporate some cross-training as active recovery, such as swimming or biking, to help prevent injuries.

## Phase 2: Speed Work (Anaerobic \& Aerobic System)

With a good base of aerobic fitness, speed work improve running economy to effectively utilise oxygen. Some common speed work workouts include interval training, tempo runs, and fartleks

## Phase 3: Taper

Tapering allows the body to rest and for muscles to recover. Gradually reduce the amount of running during this phase.

## Phase 1（Base Conditioning）

| Week／Day | Mon | Tue | Wed | Thu | Fri |  | Sat |  | Sun | Push up／ Sit ups |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Rest | 15 mins easy run | Rest | 15 mins easy run | Rest | Cros | $s$－train | ing | Rest |  |
| 2 | Rest | 15 mins easy run | Rest | 15 mins easy run | Rest | Cros | $s$－train | ing | Rest | S |
| 3 | Rest | 20mins easy run | Rest | Fartlek $4 \times(60: 120)$ | Rest | Cros | $s$－train | ing | Rest | 30s each |
| 4 | Rest | 20 mins easy run | Rest | Fartlek $5 \times(60: 120)$ | Rest | Cros | $s-t r a i n$ | ing | Rest |  |
| －Easy Run：Done at conversational paceHeartrate zone 2－3／60\％－80\％effort |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Nozimunt | $\begin{aligned} & 90-100 \% \\ & 171-190 \mathrm{bpm} \end{aligned}$ | Lest than | Benefits：Increases maximum sprint race speed <br> Feels like：Very exhausting for breathing and musclès <br> training background |  |  |
|  | Fartlek： |  |  |  |  | $80-90 \%$ $152-171 \mathrm{bpm}$ | $\underbrace{}_{\substack{\text { 2－10 } \\ \text { minutes }}}$ | Benefits：Increases maximum performance capacity Feels like：Muscular fatigue and heavy breathingRecommended for：Fit users and for short exercises |  |  |
| $\circ \text { 60s }$ |  | $\text { ng (90\% effort): } 1$ | covery | Walk／jog） | ngizeraty |  | 10．40 | Benefits；Improves aerobic fitness <br> Feels like：Light muscular fatigue，easy breathing，moderate sweating Recommended for：Everybody for typical，moderately long exercises <br> ong exercises |  |  |
| $\begin{array}{ll} \circ & 17 \\ - & a d j \end{array}$ | $\begin{aligned} & -180 \text { st } \\ & \text { st runnit } \end{aligned}$ | s／min recovery during | ding to | to individual fitness | पथ⿵冂人 | $\begin{gathered} 0.70 \% \\ 114-13 \mathrm{bom} \end{gathered}$ |  | Benefits：Improves basic endurance and helps recovery Recommended for：Everybody for longer and frequently repeated shorter exercises |  |  |
| Cross－T | ining： |  |  |  | Zier uent | $\begin{aligned} & 50.50 \% \mathrm{Sam} \\ & 104-114 \mathrm{dam} \end{aligned}$ |  |  | enefits：Improves overall health and metabolism，helps recovery <br> Recommended for：Basic training for novice exercisers，weight <br> nanagement and active recovery |  |
| Swimming／Cycling／Strength Training／Sports etc． |  |  |  |  | $H_{\text {max }}=$ Maximum heant rate（220－sgo）．Example： 30 years olv，220－30 $=190 \mathrm{bpm}$（beats per minute）． |  |  |  |  |  |

## phase 2 (Soeed Mork)

| Week/Day | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Push up/ Sit ups |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Rest | 20 mins easy run | Rest | Fartlek $6 \times(60: 120)$ | Rest | 10 mins Tempo | Rest | 40s each before runs |
| 2 | Rest | 25 mins easy run | Rest | $4 \times 400 \mathrm{~m}$ Interval | Rest | 12 mins Tempo | Rest |  |
| 3 | Rest | $25 m i n s$ easy run | Rest | $6 \times 400 \mathrm{~m}$ Interval | Rest | 14mins Tempo | Rest | 50s each before runs |
| 4 | Rest | 25 mins easy run | Rest | $4 \times 600 \mathrm{~m}$ Interval | Rest | 16mins Tempo | Rest |  |

- Interval:
- Run at goal pace
- Heartrate zone 4-5 (>90\% effort)
- 1 min Recovery
- Tempo:
- Heartrate zone 4/80\% effort continuous running



## Phase 3 (Tapering)

| Week/Day | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Push up/ Sit ups |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Rest | 30 mins easy run | Rest | $3 \times 800 \mathrm{~m}$ Interval | Rest | Active Recovery | Rest | 60s each before runs |
| 2 | Rest | 30 mins easy run | Rest | $2 \times 1200 \mathrm{~m}$ Interval | Rest | Active Recovery | Rest |  |
| 3 | Rest | 25mins easy run | Rest | 2.4km Trial | Rest | Active Recovery | Rest | 60s each before runs |
| 4 | Rest | 20 mins easy run | Rest | 10mins Tempo Run | Rest | Active Recovery | Rest |  |

- Interval:
- Run at goal pace
- Heartrate zone 4-5 (>90\% effort)
- 1 min Recovery
- Tempo:
- Heartrate zone 4/ 80\% effort continuous running

| Target zom | Intensity \% <br> of HR max: bpm | Example duration | Tramine beeneta |
| :---: | :---: | :---: | :---: |
| Noximumb | $\begin{aligned} & 90-100 \% \\ & 171-190 \mathrm{bpm} \end{aligned}$ | Less than 5 minute | Benefits: Increases maximum sprint race speed <br> Feels like: Very exhausting for breathing and muscles <br> Recommended for: Very fit persons with athletic training background |
| $f$ | 80-90\% $152-171 \mathrm{bpm}$ | $\begin{aligned} & 2-10 \\ & \text { minutes } \end{aligned}$ | Benefits: Increases maximum performance capacity Feels like: Muscular fatigue and heavy breathing Recommended for: Fit users and for short exercises |
| PERATE | 70-80\% 133-152 bpm | $\begin{aligned} & 10-40 \\ & \text { minutes } \end{aligned}$ | Benefits: Improves aerobic fitness <br> Feels like: Light muscular fatigue, easy breathing, moderate sweating Recommended for: Everybody for typical, moderately long exercises |
| $K$ | 60-70\% <br> 114-133 bpm | $\begin{aligned} & 40.80 \\ & \text { minutes } \end{aligned}$ | Benefits: Improves basic endurance and helps recovery <br> like: Comfortable, easy breathing, low muscle load, light sweating Recommended for: Everybody for longer and frequently repeated shorter exercises |
|  | 50-60\% <br> 104-114 bpm | $\begin{aligned} & 20-40 \\ & \text { minutes } \end{aligned}$ | Benefits: Improves overall health and metabolism, helps recovery like: Very easy for breathing and muscles <br> Recommended for: Basic training for novice exercisers, weight management and active recovery |

## TRAIN SMART PASS SAFELY

