

“Super 8” Indoor Cycling Profile

How to Introduce a Power Training Periodization Program Part 2

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Training Type: High Intensity

Power Zone Target: VO2 max

Total Class Length: 60 minutes

Objective:

This profile can be used to introduce your class to the incredible world of power and also be used as a Functional Threshold Power test. It will also turn light bulbs on for your students, and they will get very excited about taking power training to the next level, including personal power zone prescriptions. We will also be implementing a “modified” Tabata protocol, to further explore power and complete a full 1 hour training session beyond just the FTP testing. For this ride you can leave your HR monitor at home, due to the short work intervals. Allow your students to focus on one thing, watts.

Who Is Tabata?

Izumi Tabata is a researcher who devised a training protocol for endurance athletes. If you Google “the Tabata protocol” you will find numerous variations with work/recovery ratios and set lengths. The original protocol involved work efforts at 150% of VO2max for 20 seconds followed by 10 seconds recovery, for 4 minutes. The results showed significant improvements in anaerobic capacity, AND similar improvements in aerobic capacity compared to a group that did steady state lower intensity training. In simple terms the tabata method “*killed two birds with one stone*” in less time. However, execution of this method is very, very hard and carries a warning label, “for highly trained athletes only.” We will not be doing this.

Profile Description:

The profile begins with a progressive warmup while getting to know power. Drills include Gear Ladders (increasing resistance while maintaining cadence), Seated/Standing Climb “Adjustment” Drill, Flat to Climb Transitions, and two short hard efforts to prepare for the FTP test.

Students will then complete a 8 minute FTP test and remember their score. After recovering students will complete two rounds of a modified Tabata protocol. We will be using the general idea of the Tabata method. The focus for this profile will be the average power students can produce for 8 minutes. This will most likely fall in their VO2 max range. Typical intervals in the VO2max power zone range from 2-8 minutes, depending on fitness levels. The 8-minute score will be the “reference interval.” After recovering, students will begin the modified Tabata protocol, attempting to reach their 8-minute wattage number multiple times in a round.

The protocol works like a switch, the instructor will cue “*On*” or “*Off*.” “*On*” means students are trying to reach and maintain their 3-minute score. “*Off*” direct students to recover, and pedal easy with little resistance. The “on” and “off” periods are very short, 15-60 seconds. This is repeated over the entire round, followed by a full recovery, then repeated again.

My version of the Tabata protocol is a very, very loose interpretation, but will get students talking and peak interest in your class. The idea is for students to “dip into the well” of their attainable 8-minute power output multiple times, and simply focus on attaining target power. Metabolic/muscular failure may occur especially as the Tabata round progresses over time. Be sure to communicate this to your students and encourage them to continue getting as close as possible.

Music:

The music I have chosen for this profile is aggressive, with lots of energy and big transitions. The music utilizes Tunemap™ integrating the emotion/energy transitions of each song with the efforts. This works extremely well with the modified Tabata protocol, and provides extra motivation. However, each song dictates the length of the work and recovery intervals, so providing lots of variety and “power play.”

I am a big supporter of editing music to fit the needs of the profile. Although initially time consuming (gets faster with practice!), it provides exceptional motivation and flow. In some cases it even makes it easier to pick the right music. A play list of all songs is provided at the end. If a song ends with “(dmx)” it means “Doug Mixed” and has been edited(length, order, loops etc.).

Summary

Tabata Power Play is a great way to “flip the switch” and introduce power training. It can be done at any time without prior FTP testing and zone calculations. In this manner no student feels left out. The work intervals in the Tabata rounds also yield multiple successes. Since the durations are 1/3 or less of the reference interval, most students should be able to attain their numbers. At the same time, the reference intervals and the tail end of the Tabata rounds, will command true hard effort. Student’s eyes will be opened, and they will know immediately that power is a game changer!

Notes:

- Terrain is flat unless otherwise stated
- Cadence, resistance and body position is self selected to reach desired wattage.
- The modified Tabata protocol requires frequent and heavy shifting from very little resistance to a lot, especially on climbs. Keiser M3’s rock at fast shifts, making it very easy. If you are using a bike with a turn knob you may need to instruct students to start adding resistance before you cue “*On*.” For a stronger, heavier rider this may become a pain in the a#\$, so you may also consider longer work/recovery intervals, and eliminating climbs altogether.

-Zone Calculations: For future classes, multiply the 8-minute FTP score by .90. This is the student's "estimated" Functional Threshold Power. This number can then be used for power zone calculations

Effort scale (for Warm-up)

Effort	Energy Zone
60-65%:	Basic Endurance
70-75%:	Primary Endurance
80%:	Threshold
85-90%	VO2 max
95%	Anaerobic Capacity
100%	Neuromuscular Capacity

Playlist

"Drive"	Paul Kelley
"Stroke"	Billy Squire
"Elements/Night Scene(dmx)"	Data Romance
"Palladio"	Silent Nick
"Better?"	Propellerheads
"Two Step(dmx)"	Dave Mathews Band
"Woman(dmx)"	Wolfmother
"Drum Trip(dmx)"	Rusted Root
"The Echo Game"	Kathleen Battle/Shigeru Umebayashi
"The Long Road to Athens"	Haik Nalchatyan
"Joker and the Thief(dmx)"	Wolfmother
"James Bond Theme(dmx)"	Moby
"James Bond Theme(Moby ext mix)(dmx)"	Moby
"American Trash(dmx)"	Innerparty Sound System
"Think(dmx)"	Aretha Franklin
"Diamond Eyes(dmx)"	Shinedown
"Electric head Pt.2 rmx(dmx)"	Rob Zombie
"High Roller(myagi mix)(dmx)"	Crystal Method
"Cannonball"	The Breeders
"The Sound(J. M. Perkin Blues)"	Switchfoot
"Show Me What I am Looking For"	Carolina Liar