



Evolution

Competitive Squads

James Nock, Head Coach.

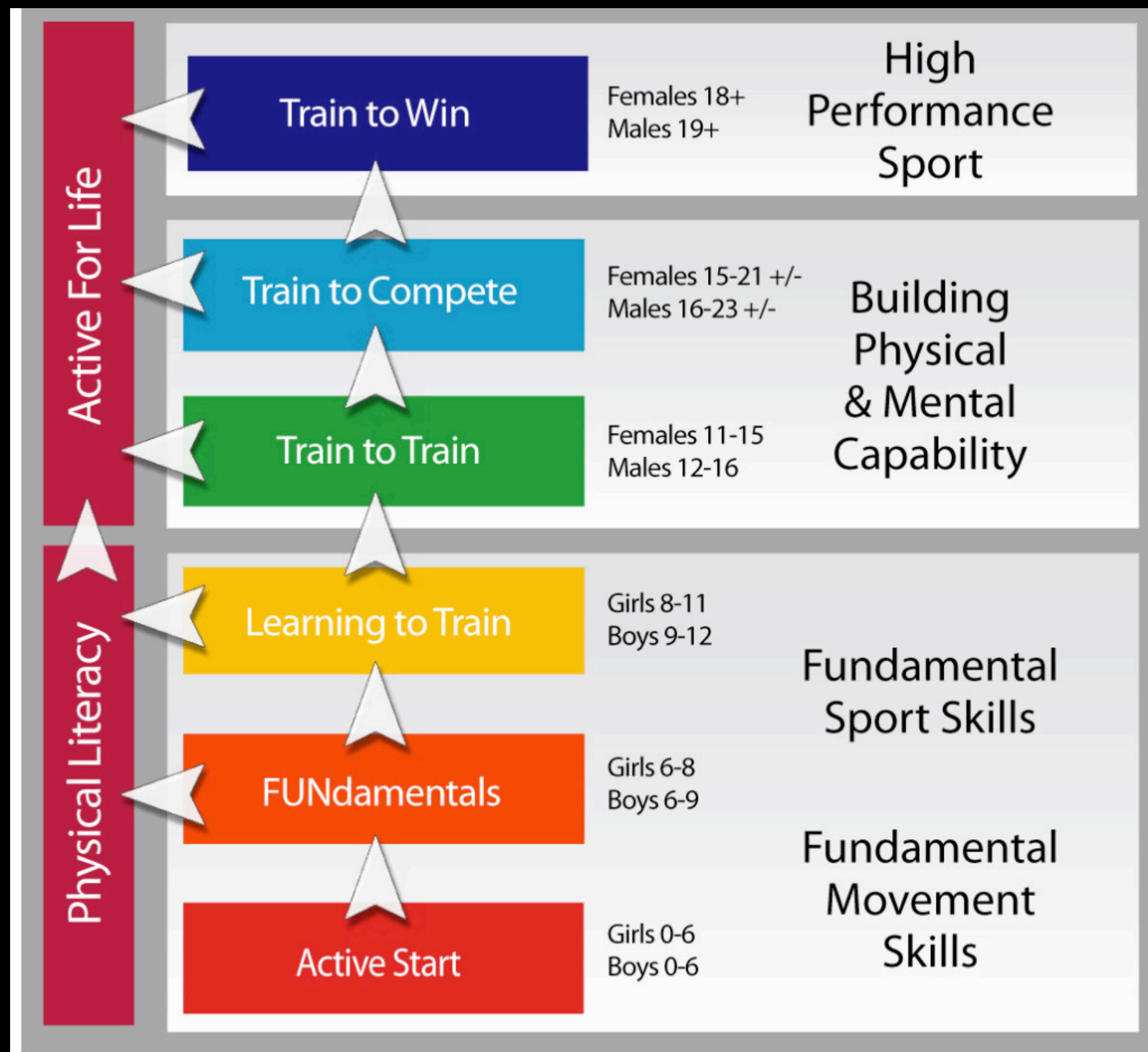
This presentation

A brain dump 🧠

- Long Term Athlete Development
- Focus
- Periodisation 📈
- Things you **really** need to know

Long Term Athlete Development

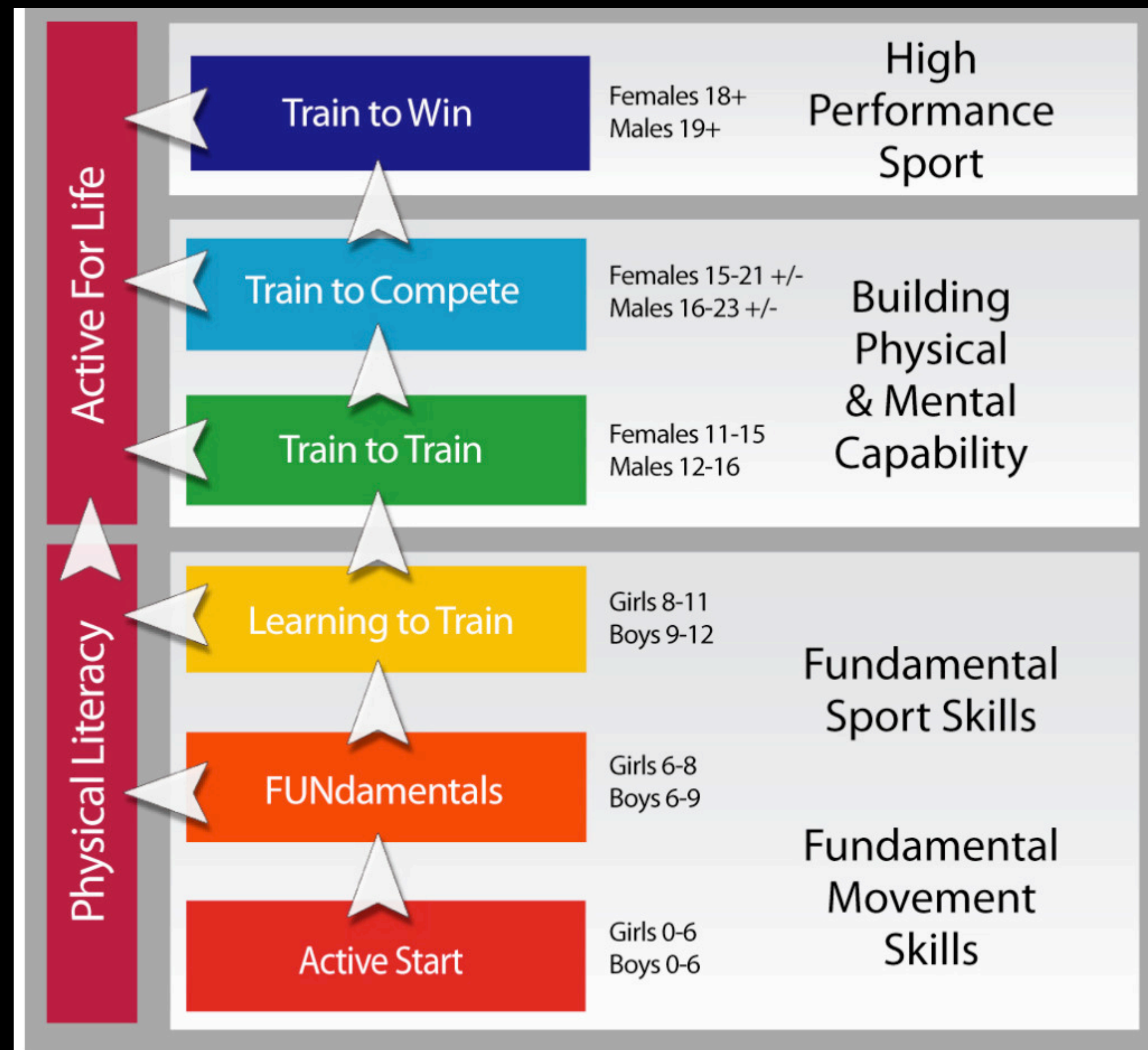
The bigger picture



Long Term Athlete Development

Competitions

- Why do we compete?
- It doesn't matter how fast you are right now
- Training is 100x more important than competition






The focus

Be intentional in the pool

- Make the most of your sessions
- IM approach
- Technique on all 5 strokes
 - Butterfly Kick Underwater = 5th Stroke
- Training volume/load
- Hydration 💧

The focus

Be intentional outside of the pool

- Nutrition 
- Sleep 
- Screen Time 
- Look after yourself
- Take ownership of your swimming
 - It's your swimming, no one else's
 - Pack your own bag

The plan

The background

- We can't train hard every session
- We can't always feel fast
- We know when we want to be fast...
 - Counties
 - Regionals
 - Nationals
 - British Championships
 - etc.

The plan

The how

!/? So how do we get there?

- Planned **cycles** of work (periodisation)
- **Swim through** Open Meets and Galas
 - You will learn at Swim Through Meets & Gala's and can PB in them too.
- **Targeted** Open Meets
 - This is where you are prepared to swim the best you can right now as you've tapered for it.
- By being **intentional** about what we are doing, and when

The plan

First, some definitions

Fitness - The ability to meet demands of your environment

Aerobic - With oxygen

Anaerobic - Without oxygen

The plan

And some more definitions




BRITISH SWIMMING TRAINING CLASSIFICATION

Description and Training Intensity Measurements

Training Zones	Name	Description	HR (bpm)	LA ⁴ (mM)	RPE
Zone 1	A1	Aerobic Low Intensity Base conditioning and technical training; warm-up and warm-down <i>Predominantly Fat Metabolism; largely slow-twitch fiber recruitment</i>	>50	< 2	<9
	A2	Aerobic Maintenance/ Development Base aerobic training <i>Improves cardio-respiratory system; enhances Lactate Removal</i>	40 - 50	2 - 4	10 - 12
Zone 2	AT	Anaerobic Threshold Maximal Lactate Steady State where Lactate production = Lactate removal <i>Optimal intensity for development of aerobic capacity</i>	20 - 30	3 - 6	14 - 15
Zone 3	VO ₂	Aerobic Overload High intensity work at approximately VO _{2max} This type of training includes Heart Rate and Vcrit sets <i>Improves VO_{2max} and aerobic power</i>	5 - 20	6 - 12	17 - 19
Zone 4	LP	Lactate Production Training intensity results in the maximal speed of lactate build up This type of training includes Race Pace training <i>Enhances rate of glycolytic energy production</i>	5 - 15	8 - 15	17 - 19
	LT	Lactate Tolerance High intensity work with medium rest to improve buffering <i>Developing the ability to tolerate lactate/ acidity in the muscle</i>	0 - 10	12 - 20	19 - 20
Zone 5	Speed	Sprinting – ATP-PC High intensity, short duration, long rest repeats <i>Designed to improve alactic energy production (ATP-PC), neuromuscular coordination and fast-twitch muscle fiber recruitment</i>	N/A	N/A	N/A

The plan

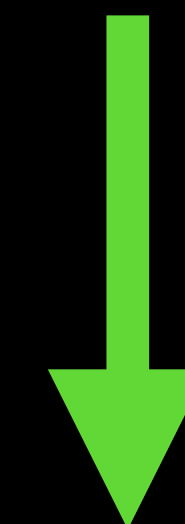
What does that mean though?

- Every “Cycle” starts off easy
- Gradually builds
- Is hard in the middle
- Taper’s off
- Race day (targeted meet) 

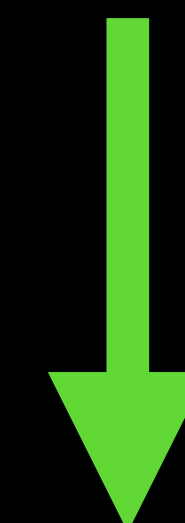
The plan

Week	Start Date	End Date	Main Focus			Secondary Focus	Notes	
1	01/09/2025	07/09/2025	6 A2		1 LP/T	Turns & Distance Off Walls	Club Champs Session 5 & Masters Champs	
2	08/09/2025	14/09/2025	5 A2	1 A3	1 LP/T	Kick	Brighton Ken Deeley	
3	15/09/2025	21/09/2025	4 A2	2 A3		1 LP/T	Turns & Distance Off Walls	Club Champs Session 6
4	22/09/2025	28/09/2025	3 A2	2 A3	1 VO ₂ MAX	1 LP/T	Pull	Eastbourne Open Meet
5	29/09/2025	05/10/2025	3 A2	2 A3	1 Speed	1 LP/T	Turns & Distance Off Walls	Inter-county team championships
6	06/10/2025	12/10/2025	3 A2	1 A3	2 Speed	1 LP/T	Relay takeovers	Arena League Round 1
7	13/10/2025	19/10/2025	2 Speed	4 A2		1 LP/T / Comp	Starts/Finishes/Relay takeovers	Winter Counties

Easy



Hard



Easy

Saturday mornings are key sessions for P1 and P2

I only really like sprinting though

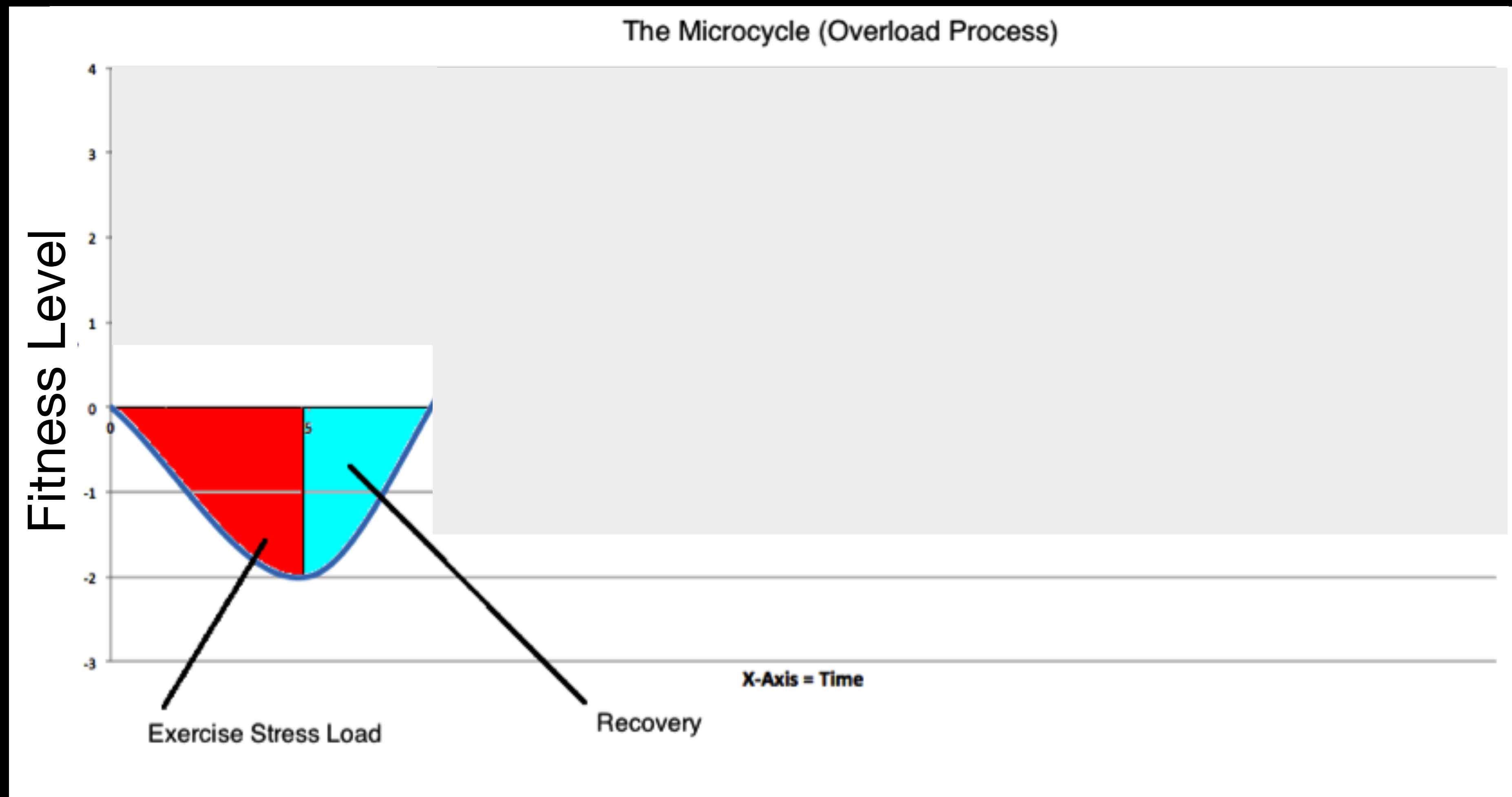
Why can't we just do sprints?



- ATP-PC lasts ~ 10 seconds
- No swimming event is **truly** a sprint
- Aerobic capacity underpins every event
- 99% chance that you are not a “sprinter”
- A 50m event is **NOT** easier than a 100/200/400m one

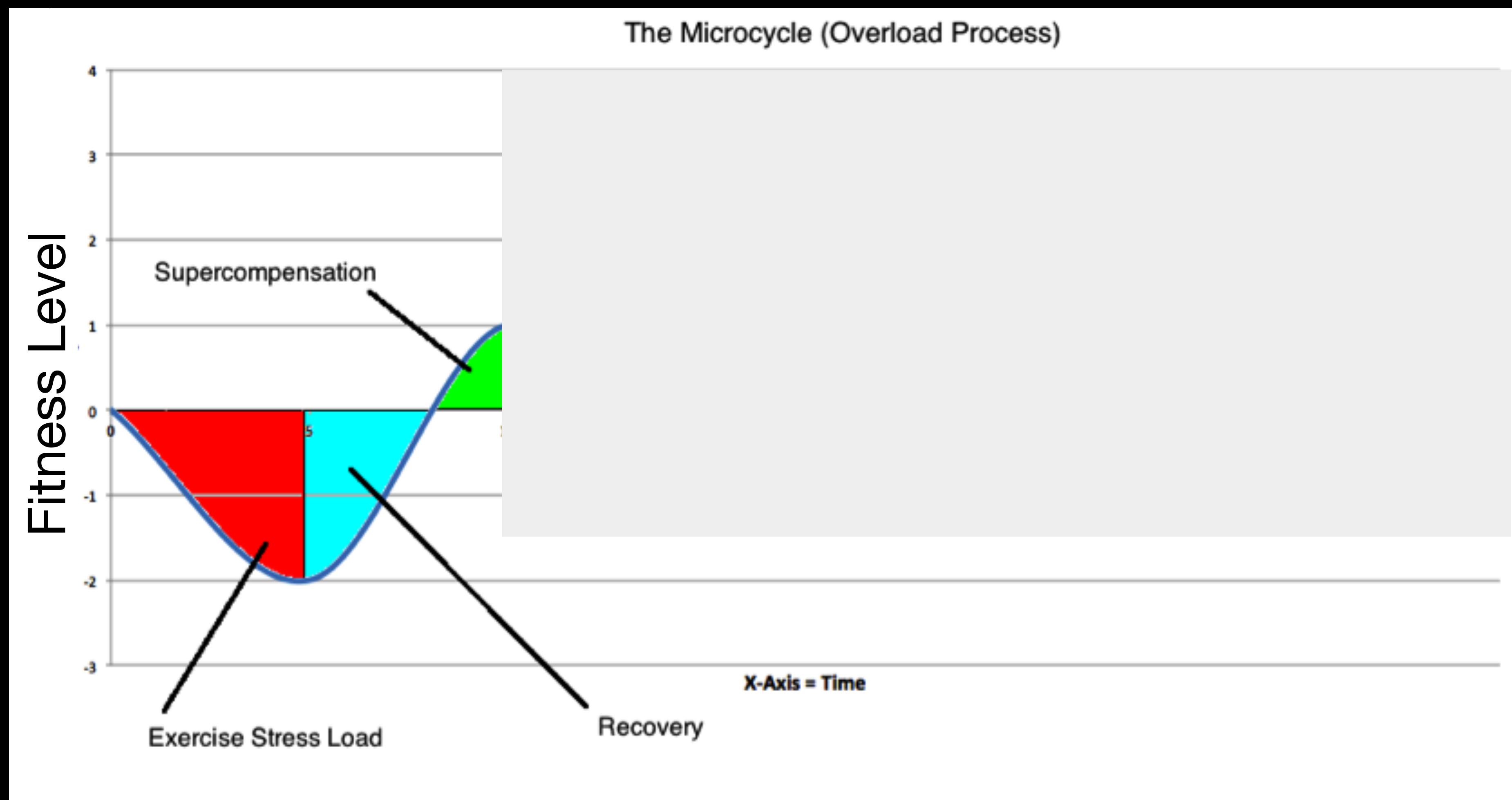
Periodisation

How does it work?



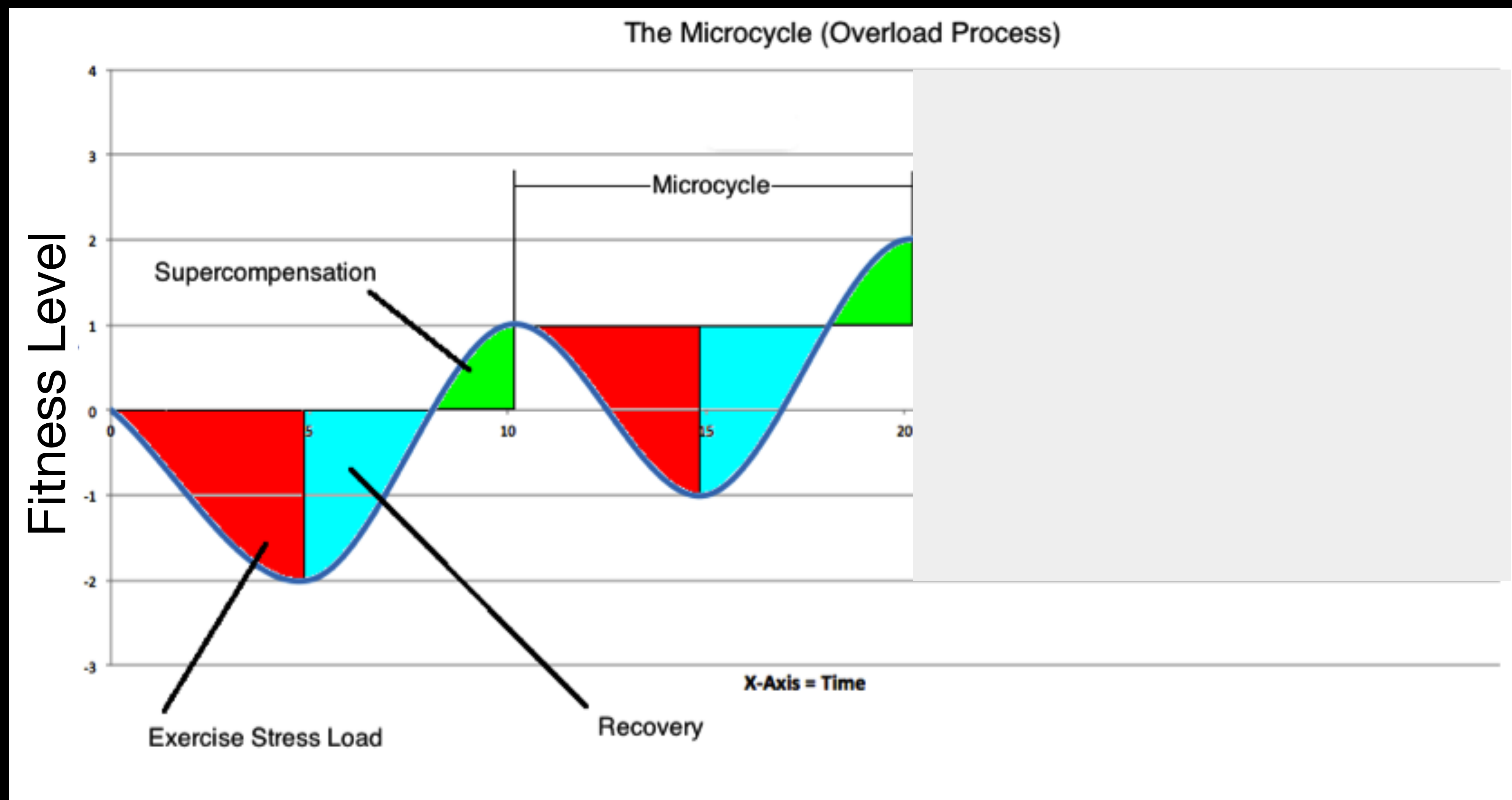
Periodisation

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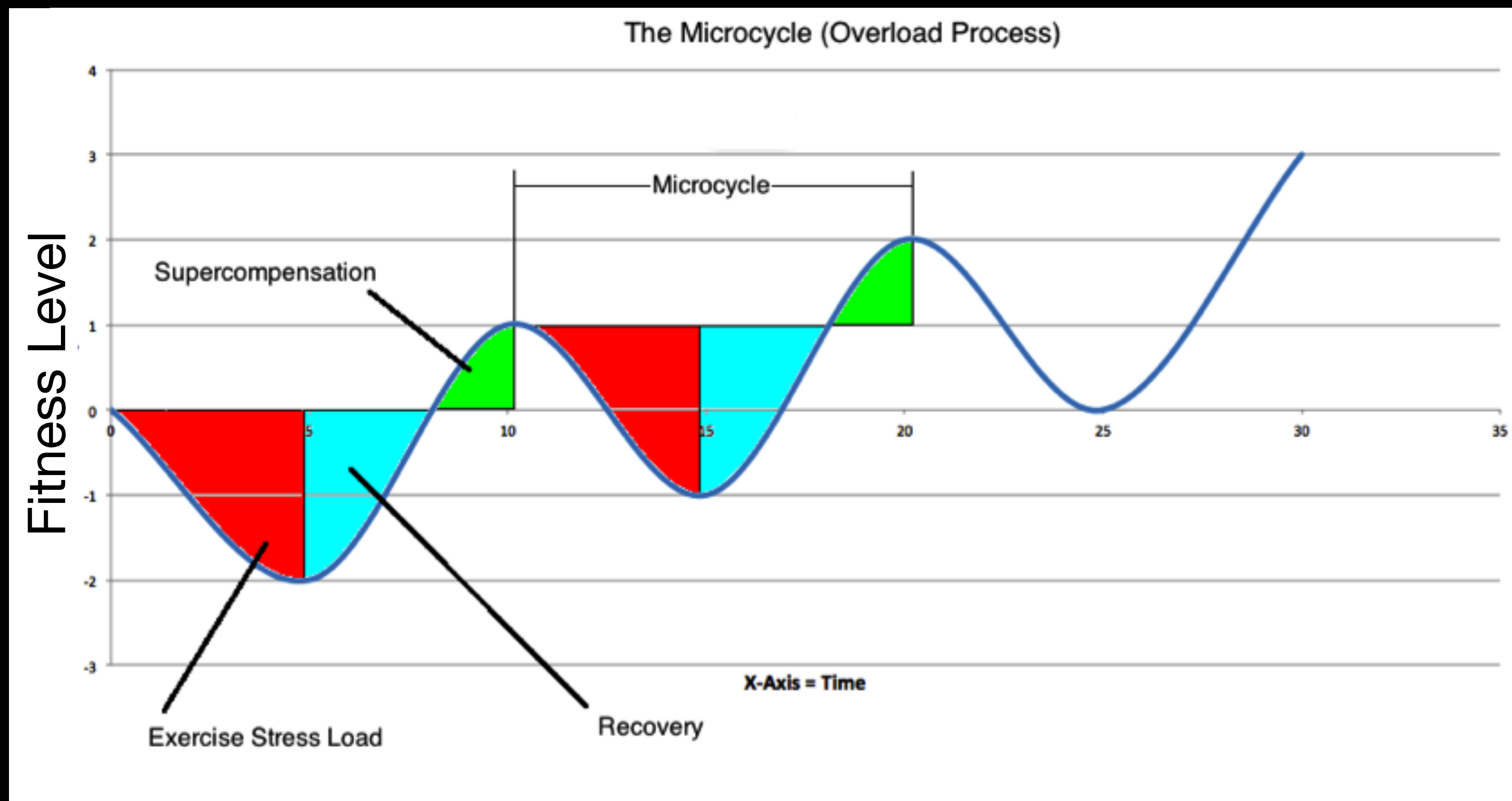
Periodisation

How does it work?



Periodisation

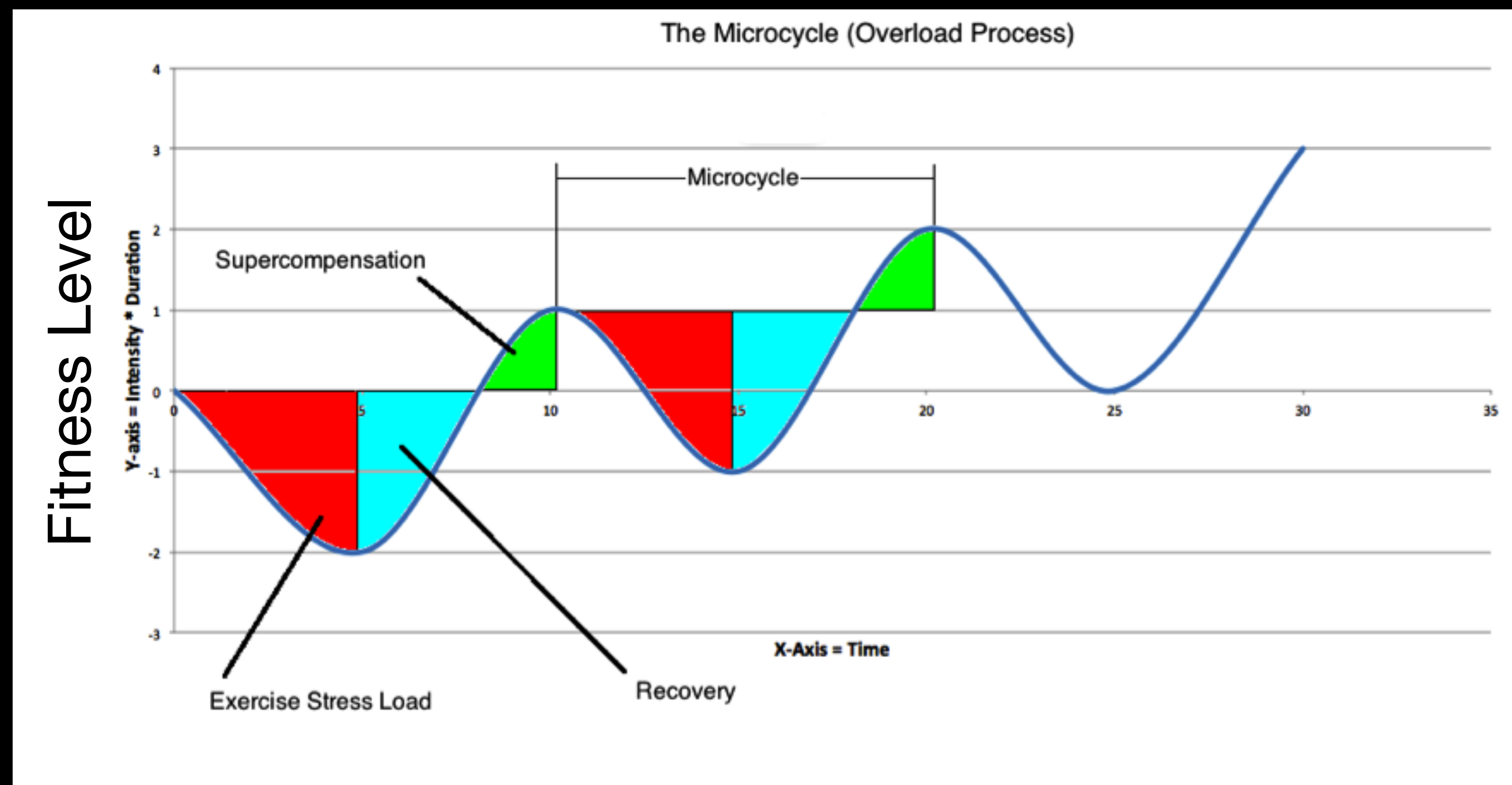
How does it work?



But why do I have to do more or less?

I'm glad you asked...

- Fitness Level
 - Injury
 - Illness
 - Time out
- Exercise stress load
 - Load capacity
- Maturity
- etc.



Expectation vs Reality

Everyone's journey is different



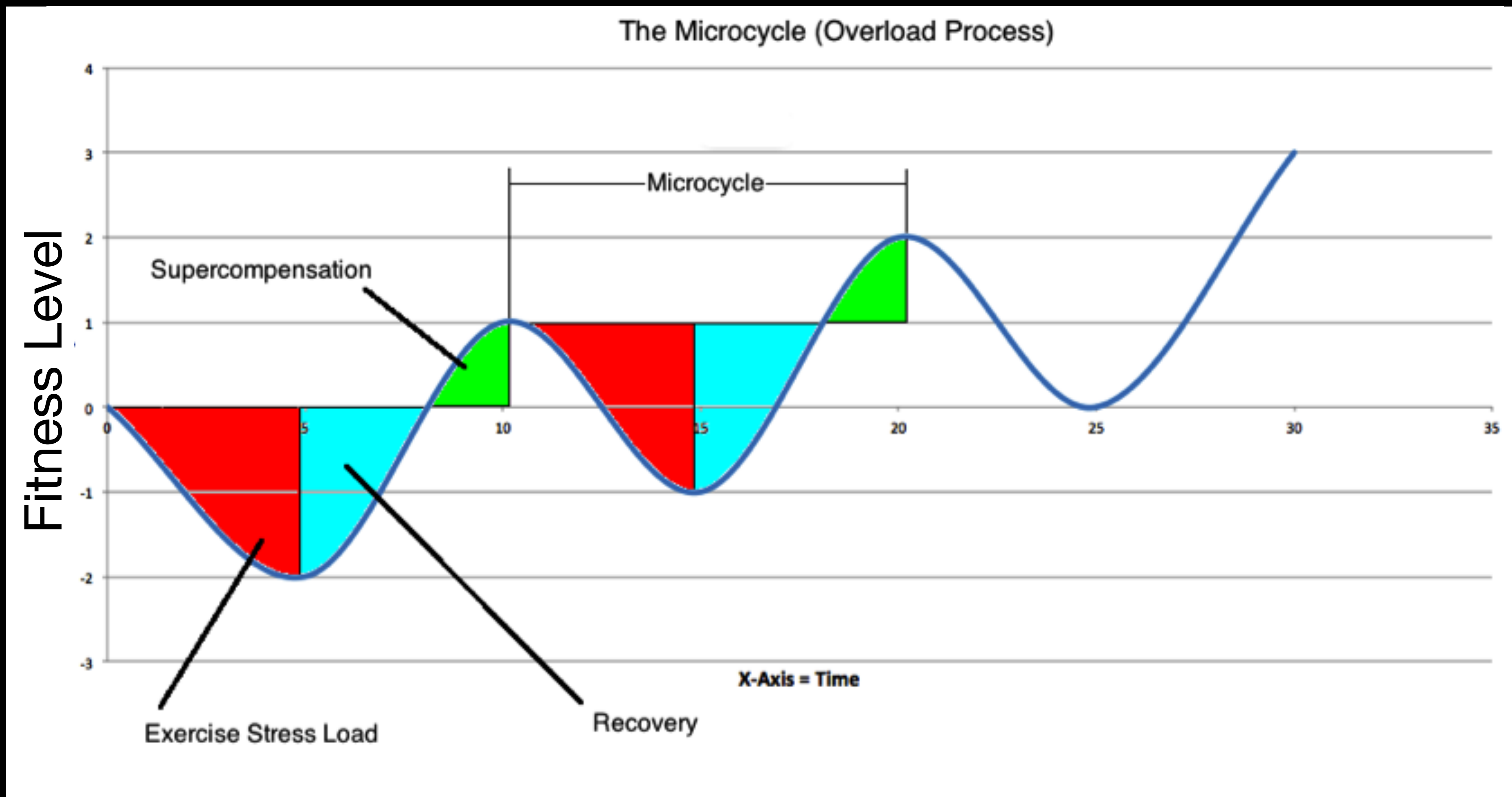
Remember Hidden Training

Rest 

Hydration 

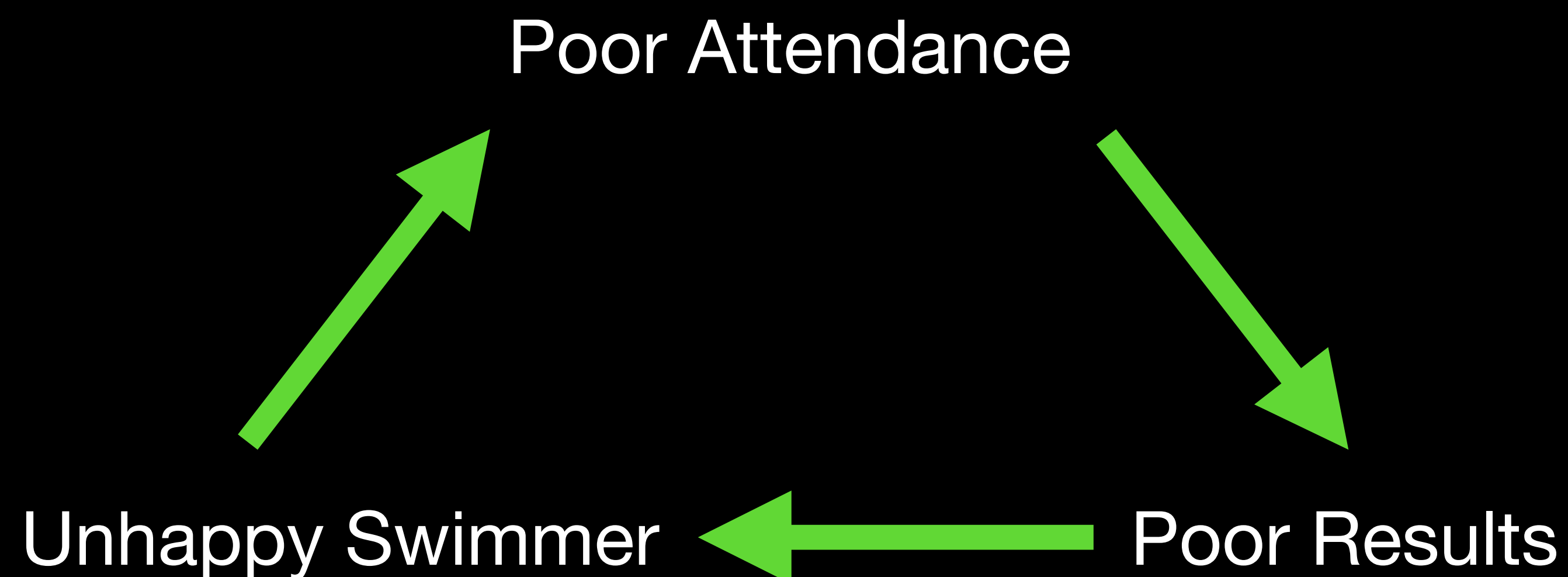
Nutrition 

Screen time 



The Poor Attendance Paradigm

Don't fall into this loop...



If you do fall into this loop, try and get out of it quickly.

Core beliefs

- Attendance is important but simply turning up is not enough.
- Swimming is hard, and we love that.
- You are probably **not** a “sprinter”.
- Coaches are allies.
 - Friends will tell you what you **want** to hear, coaches will tell you what you **need** to hear.
- Growth comes from outside of the comfort zone.

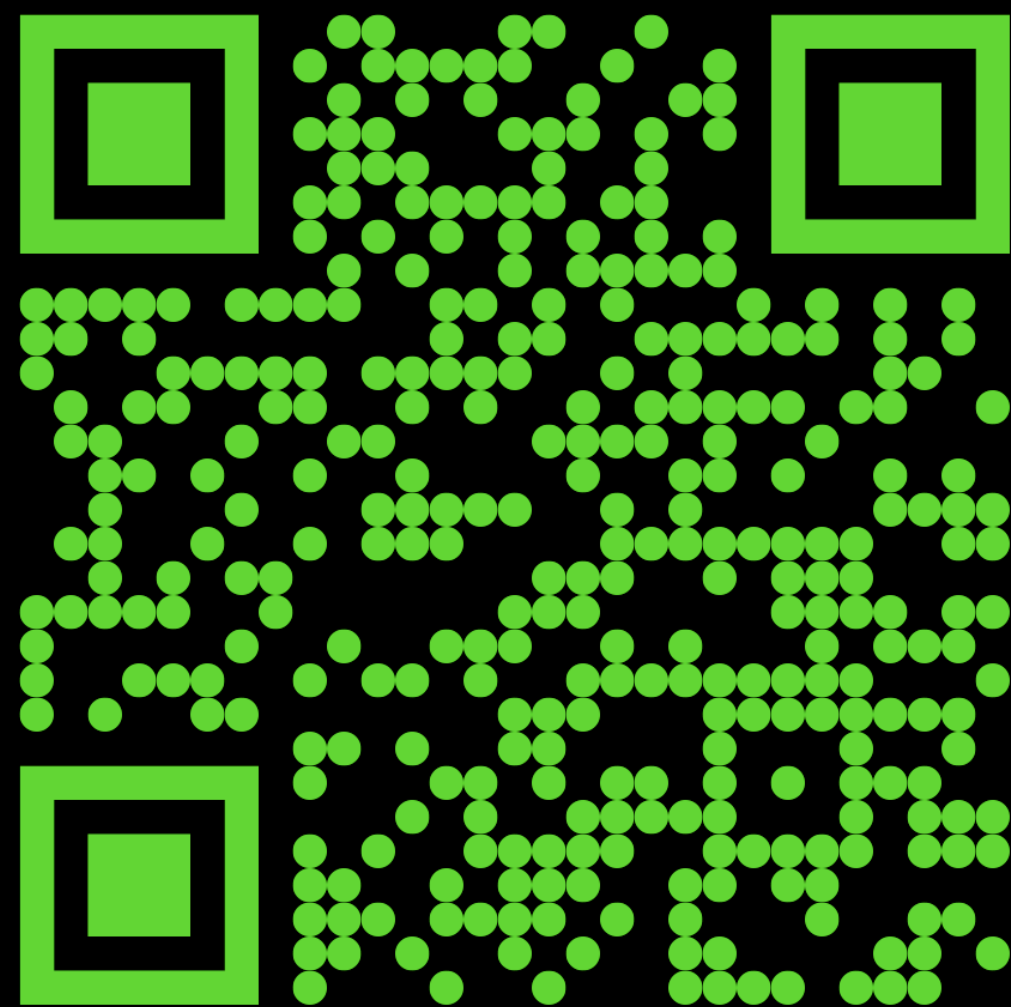
Help us on our journey



Let's do this!
Swim like you mean it

Thank you.

Any Questions?



Our Website

www.sussexswimming.org

www.swimmingresults.org



iOS and Android