

# Physical Fitness Development for Team Sports



“Keeping Players Fresh & Training Interesting”

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# My Own Perspective on this Theme ...

Changing the DNA Code ...

... from this:




→ Tradition

... to this:



→ Education



*"You must learn from the mistakes of others. You can't possibly live long enough to make them all yourself."*

Sam Levenson

**"You must learn from the mistakes of others.** You can't possibly live long enough to make them all yourself."

Sam Levenson





# Fitness Demands of Team Sports

- Team Sports such as Gaelic football, hurling/camògie, rugby, soccer, basketball, etc are inherently high intensity, multi-sprint, contact field sports
- All rely on a variety of different performance-related, or fitness-related, components or attributes
- Examples of such attributes include speed, power, agility, reaction time, coordination, strength, aerobic & anaerobic endurance



# A Closer Inspection ...

## 1. General Aerobic Capacity

... ability to sustain 40-90 mins of game time



# A Closer Inspection ...

1. General Aerobic Capacity

2. Anaerobic / Speed Endurance

... ability to perform repeated sprints at max. intensity



# A Closer Inspection ...

1. General Aerobic Capacity
2. Anaerobic / Speed Endurance
3. Speed - Sprinting

... ability to cover ground in the shortest possible time



# A Closer Inspection ...

1. General Aerobic Capacity
2. Anaerobic / Speed Endurance
3. Speed - Sprinting
4. Speed - Agility

... ability to negotiate obstacles at speed & with accuracy



# A Closer Inspection ...

1. General Aerobic Capacity
2. Anaerobic / Speed Endurance
3. Speed - Sprinting
4. Speed - Agility
5. Power

... the speed at which we can exert force – explosion!!!



# A Closer Inspection ...

1. General Aerobic Capacity
2. Anaerobic / Speed Endurance
3. Speed - Sprinting
4. Speed - Agility
5. Power
6. Reaction Time

... time elapsed between stimulation & the reaction to it



# A Closer Inspection ...

1. General Aerobic Capacity
2. Anaerobic / Speed Endurance
3. Speed - Sprinting
4. Speed - Agility
5. Power
6. Reaction Time
7. Strength / Strength Endurance  
... maximal force that can be exerted once/several times



# A Closer Inspection ...

1. General Aerobic Capacity
  2. Anaerobic / Speed Endurance
  3. Speed - Sprinting
  4. Speed - Agility
  5. Power
  6. Reaction Time
  7. Strength / Strength Endurance
  8. Flexibility
- ... the ROM available at a joint or multiple joints

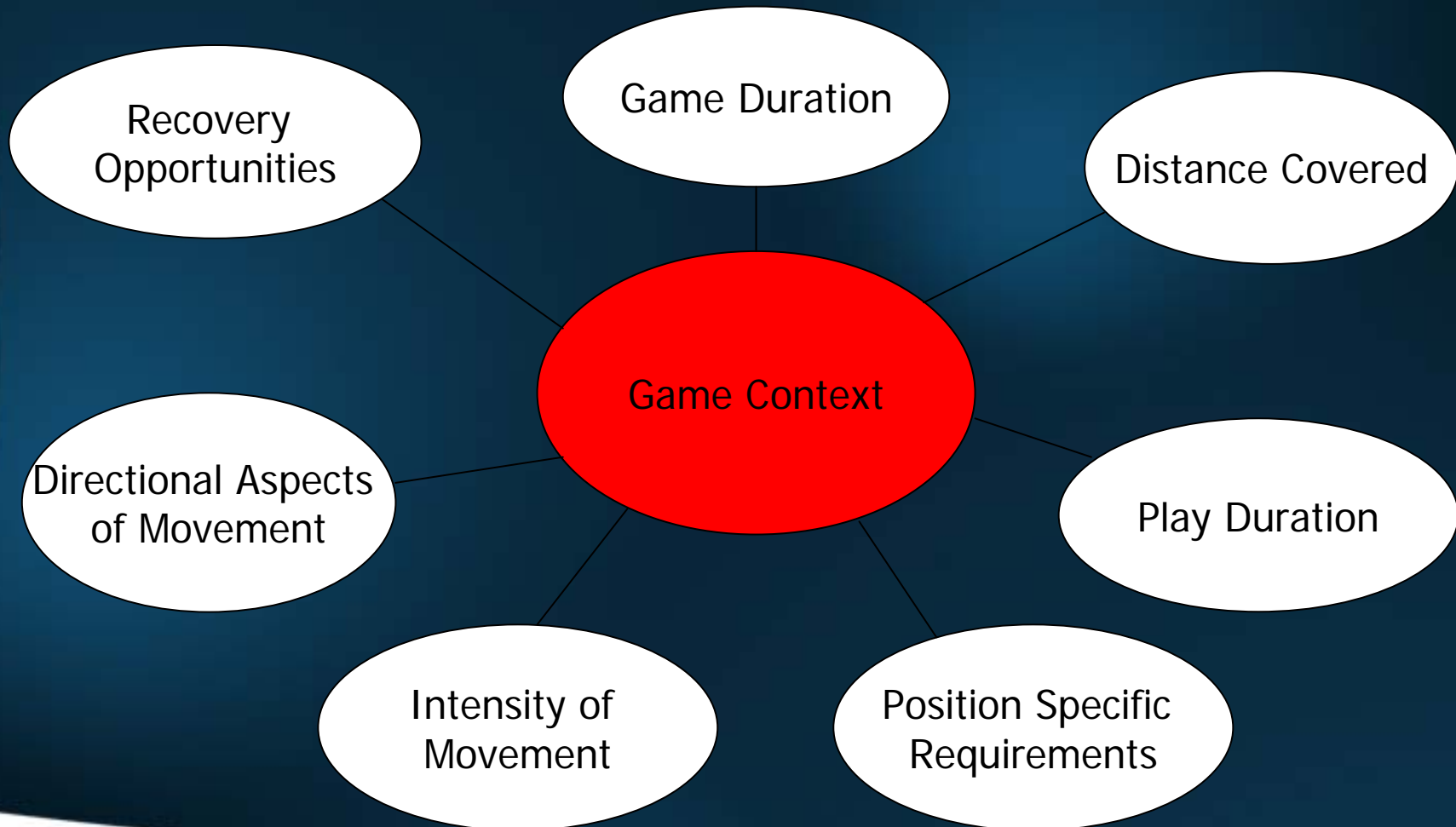


# A Closer Inspection ...

1. General Aerobic Capacity
2. Anaerobic / Speed Endurance
3. Speed - Sprinting
4. Speed - Agility
5. Power
6. Reaction Time
7. Strength / Strength Endurance
8. Flexibility
9. Body Composition

... the ratio of fat to fat free mass in the human body

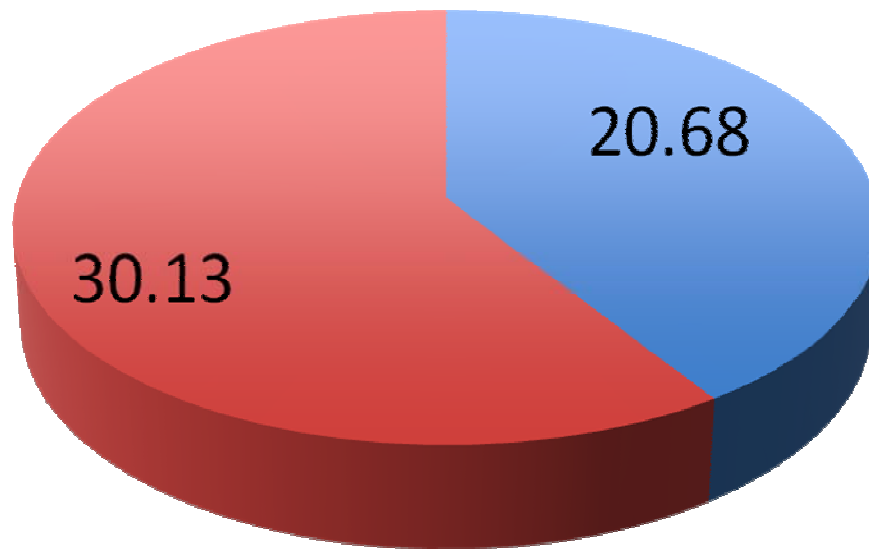
# General Game-Related Issues that should Influence Physical Preparation



# Game Time Defined

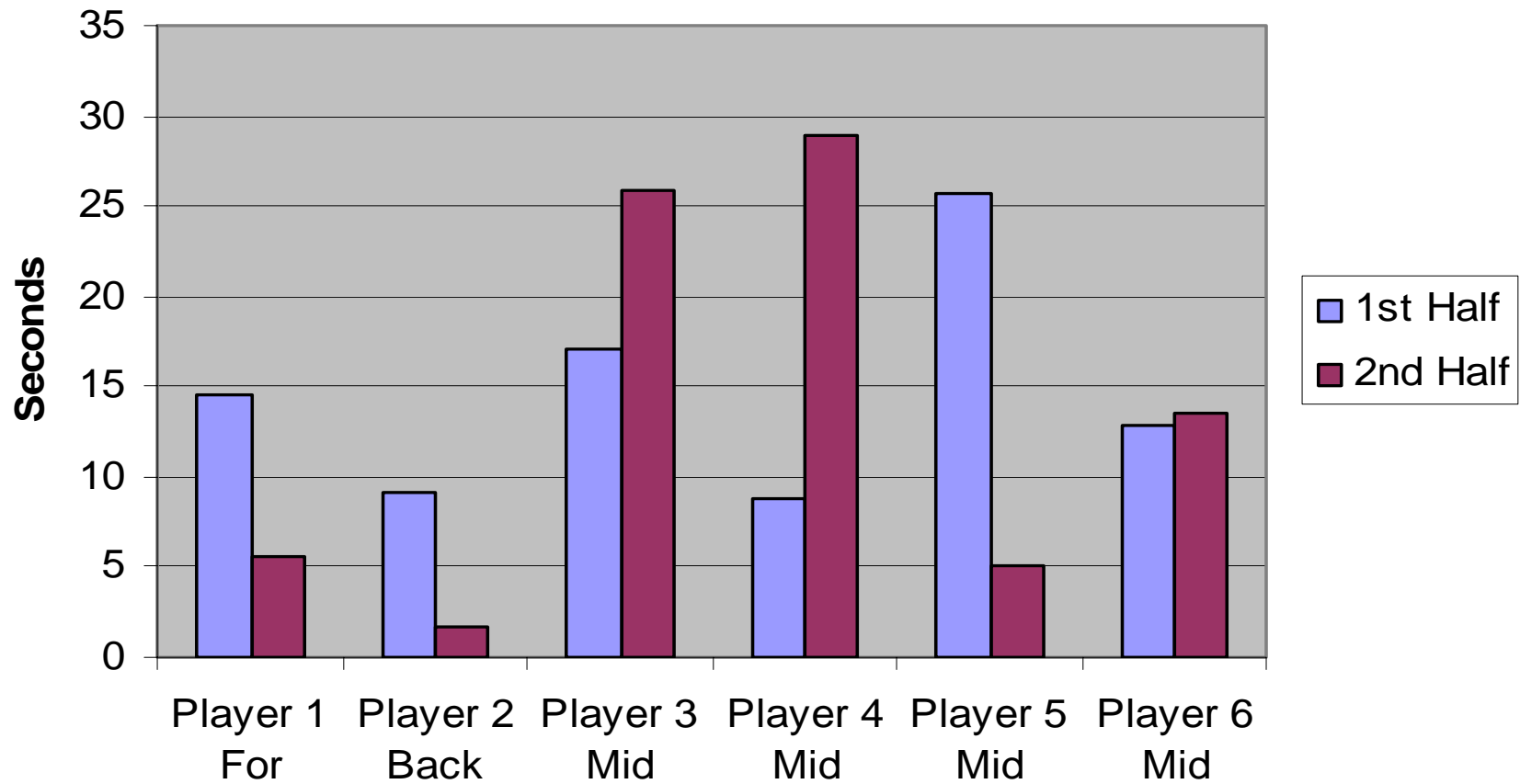
Activity	1st Half	2 <sup>nd</sup> Half	Overall
<b>Game time</b>	36m 54s	37m 40s	74m 34s
<b>Ball in play time</b>	13m 53s	17m 15s	31m 8s
<b>Ball out of play time</b>	23m 01s	20m 25s	43m 26s

# Duration of Ball in Play (sec's)

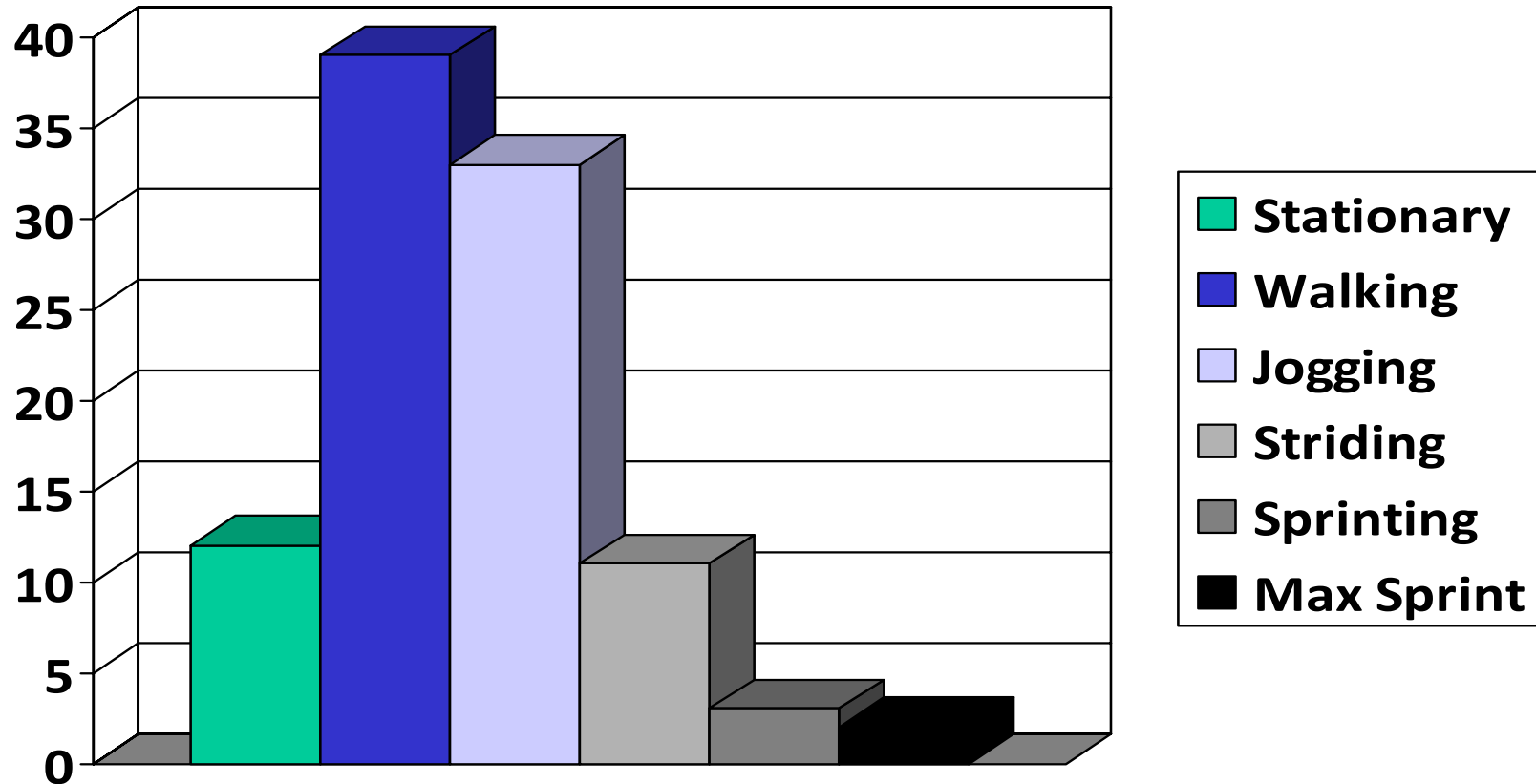


- Duration of ball in play phase
- Duration of ball out of play phase

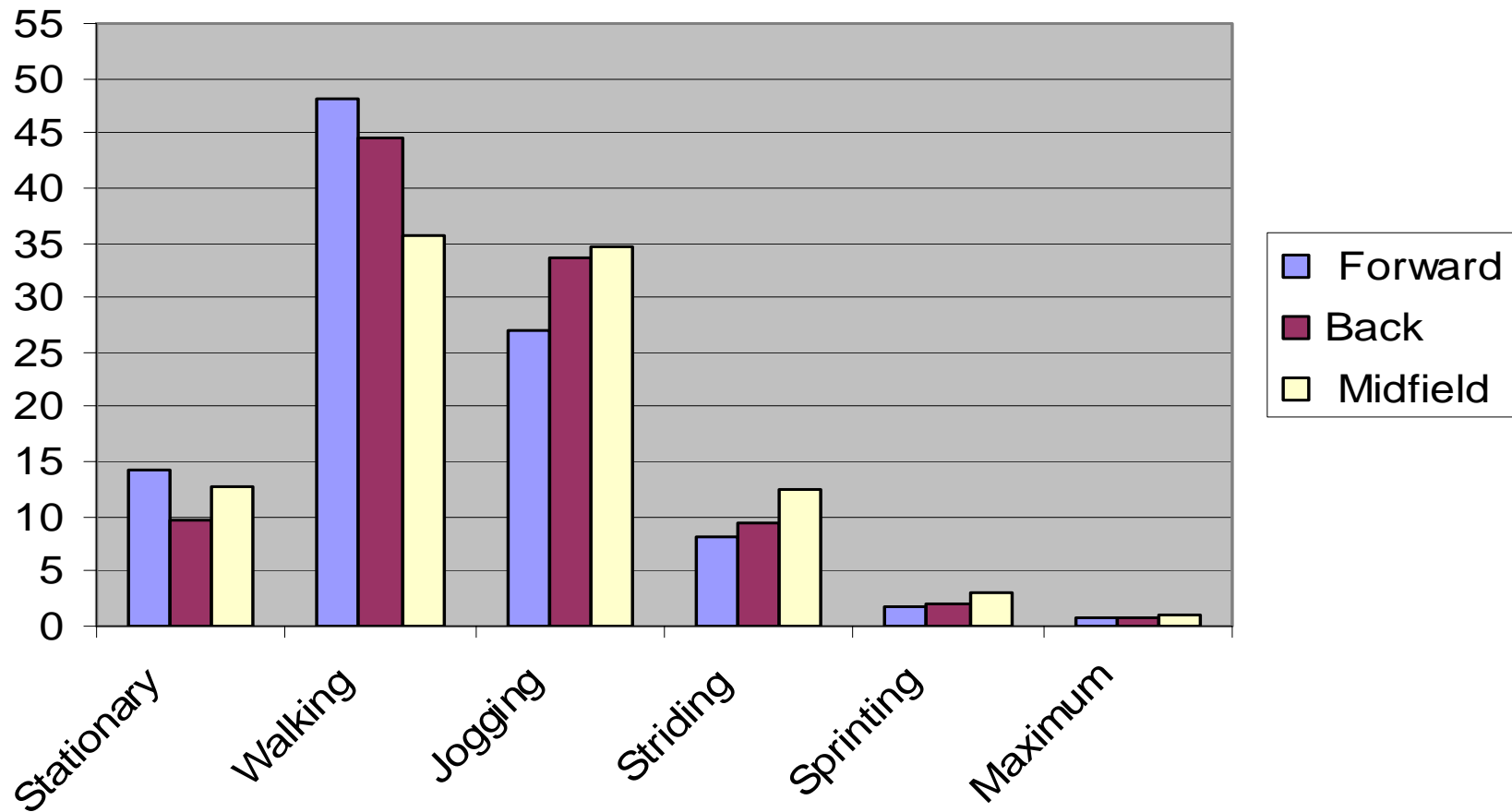
# Total Time in Possession



# Intensity of Movement



# Position-Specific Movement Intensities



# “Win the War, Fight the War”

Sun Tzu



# So What Exactly is 'Freshness'???

Straight from the horses mouth:

*"not driving 600 miles a week to train"*

Sigerson Cup Player

*"balance between college and county"*

Fitzgibbon Cup Player

*"not playing 3 matches in 3 weekend days ...  
after a week of hard training!!!"*

Inter County Minor Player

*"knowing when to load and unload your own training"*

Inter County Senior Player



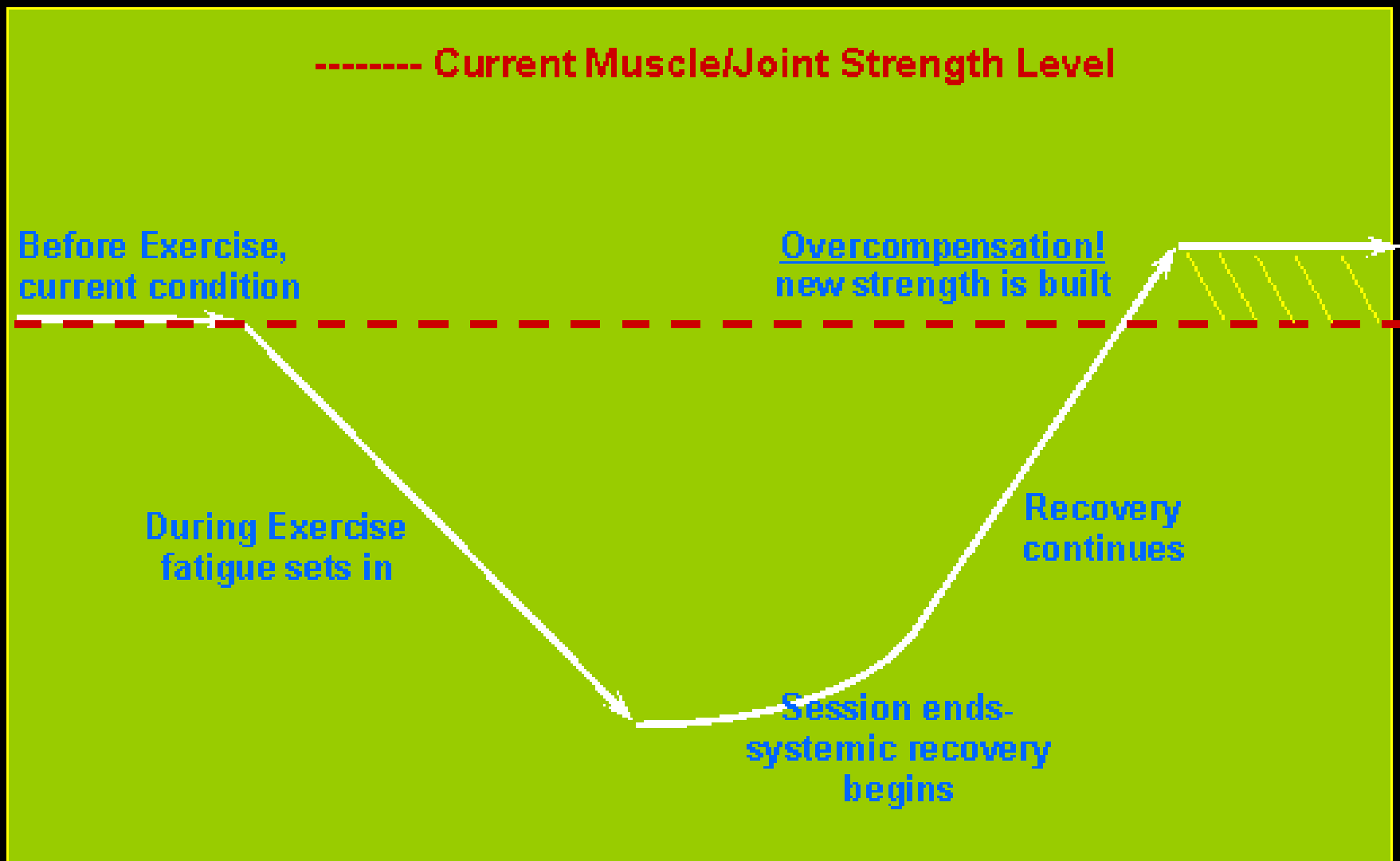


# How do we keep our Athletes Fresh?

## 1. Physical:

- Educate yourself as to how your athletes grow & develop ... it's not mere coincidence!!!

# General Adaptation Syndrome





# How do we keep our Athletes Fresh?

## 1. Physical:

- Educate yourself as to how your athletes grow & develop ... it's now mere coincidence!!!
- Develop an understanding of the critical difference between 'over-reaching' & 'over-training'

# Training Processes & Outcomes

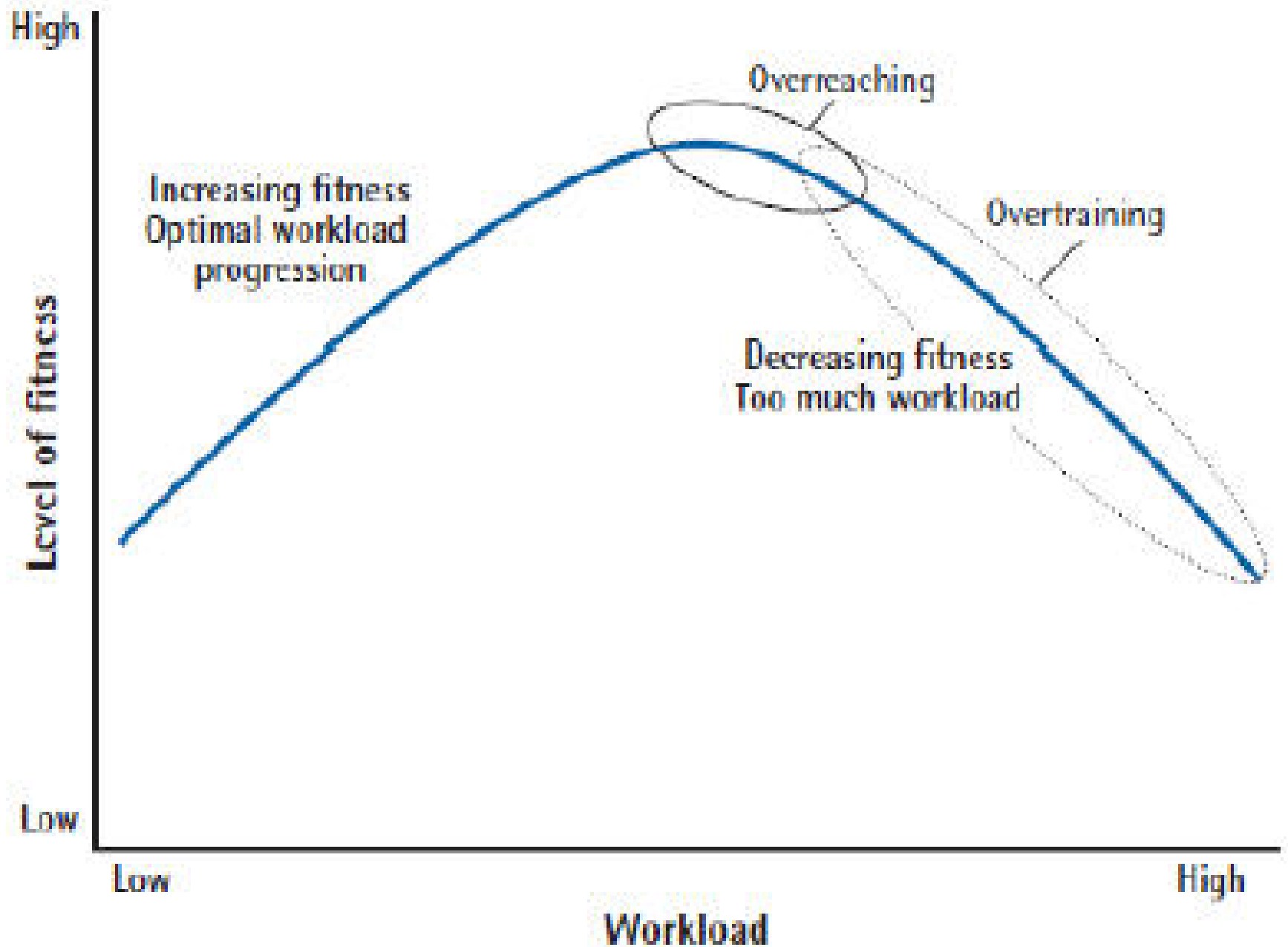
Process	Training	Intensified training →		
Outcome	Acute Fatigue	Functional Overreaching (short-term OR)	Non-functional Overreaching (extreme OR)	Overtraining Syndrome (OTS)
Recovery	Day(s)	Days-weeks	Weeks-months	Months
Performance	Increase	Temporary performance decrement	Stagnation decrease	Decrease



# How do we keep our Athletes Fresh?

## 1. Physical:

- Educate yourself as to how your athletes grow & develop ... it's now mere coincidence!!!
- Understand the critical difference between 'over-reaching' & 'over-training' ... educate yourself!!!
- Avoid any form of 'over-training' that traditionally developed from the 'more is better' coaching mentality



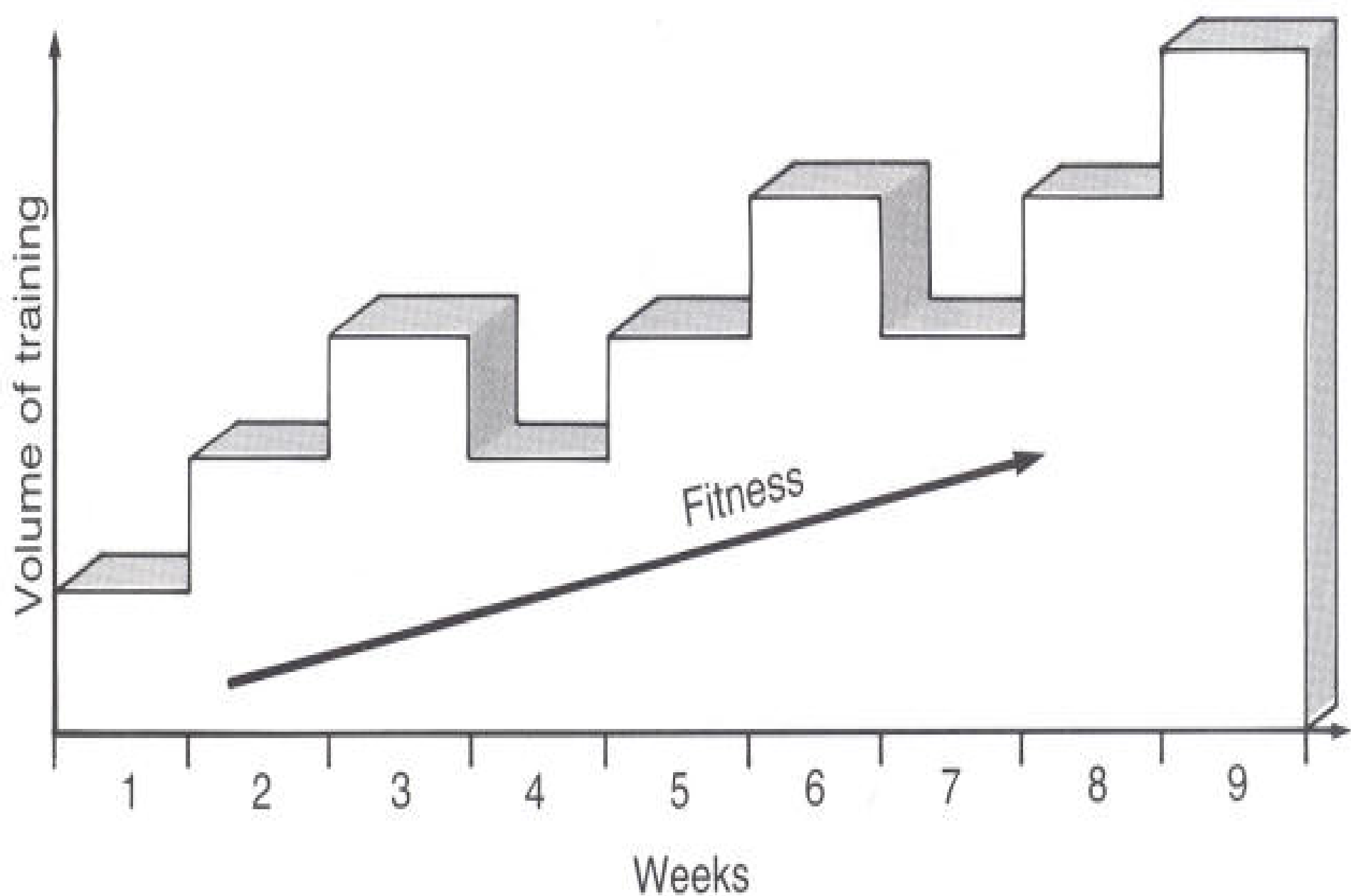
(Frequency, intensity and duration of training and life's responsibilities)



# How do we keep our Athletes Fresh?

## 1. Physical:

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- Understand the critical difference between 'over-reaching' & 'over-training' ... educate yourself!!!
- Avoid any form of 'over-training' that traditionally developed from the 'more is better' coaching mentality
- In essence, develop an understanding of the role of periodisation in training, relative to volume & intensity



Increase in volume of training



# How do we keep our Athletes Fresh?

## 2. Mental:

- Ensure that they remain motivated to succeed
  - Shared responsibility
  - Defined direction
  - Mutual respect
  - Self starters
  - Daily focus
  - Develop & enhance your relationships
  - Constantly setting performance goals



# MOTIVATION

IF A PRETTY POSTER AND A CUTE SAYING ARE ALL IT TAKES TO MOTIVATE YOU, YOU PROBABLY HAVE A VERY EASY JOB. THE KIND ROBOTS WILL BE DOING SOON.



# How do we keep our Athletes Fresh?

## 2. Mental:

- Ensure that they remain motivated to succeed
- Avoid unnecessary repetition
- Keep training varied so as to stimulate interest

# Is this Game Specific?





# How do we keep our Athletes Fresh?

## 2. Mental:

- Ensure that they remain motivated to succeed
- Avoid unnecessary repetition
- Keep training varied so as to stimulate interest
- Constantly strive to further develop a team spirit

# But Not Too Much!!!





# How do we keep our Athletes Fresh?

## 2. Mental:

- Ensure that they remain motivated to succeed
- Avoid unnecessary repetition
- Keep training varied so as to stimulate interest
- Constantly strive to further develop a team spirit
- Ensure high levels of fun & enjoyment in your sessions ...

Where possible ...



If at all possible ...



It's more difficult during games though ...



There ya go!!!



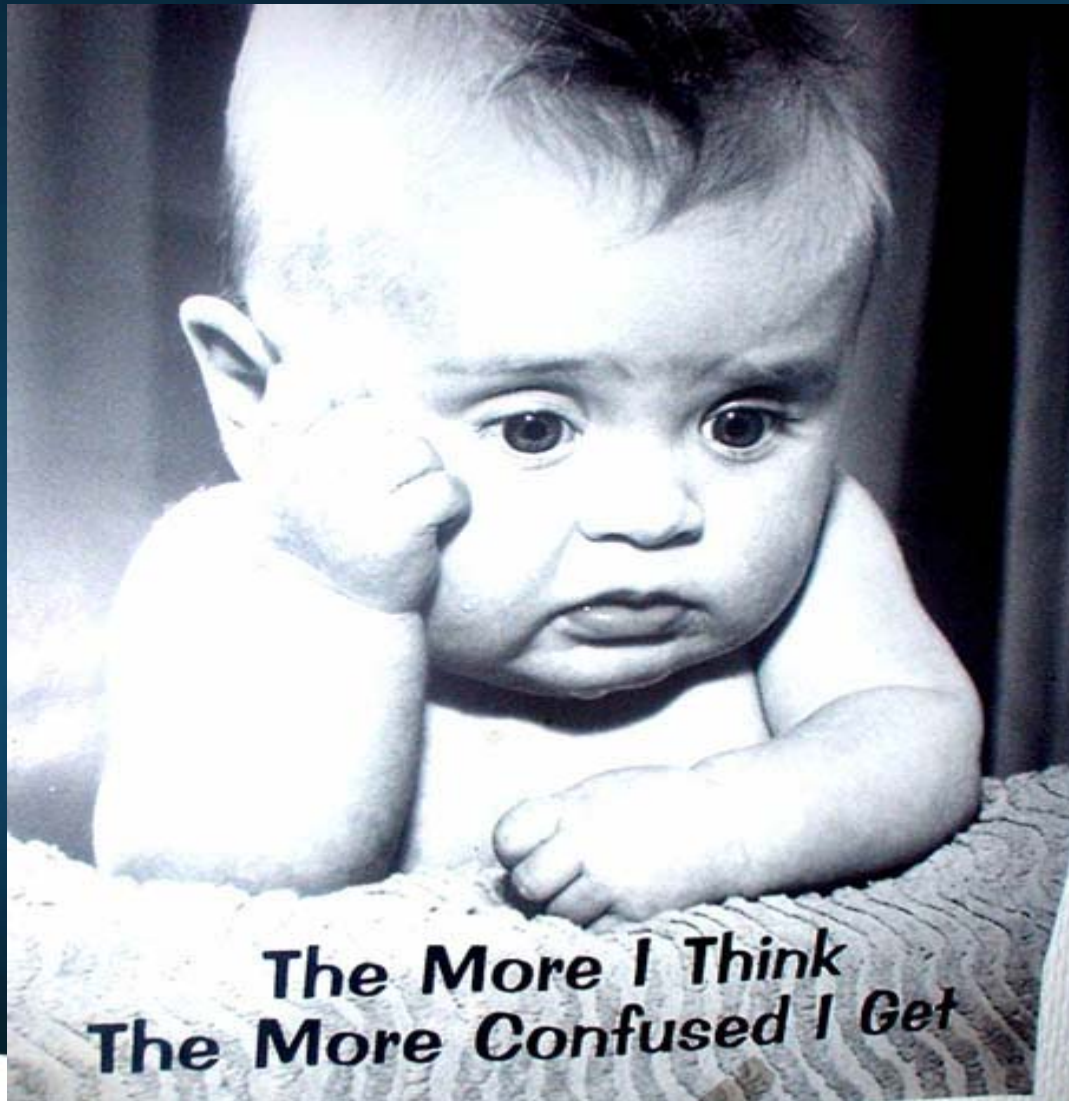


# How do we keep our Athletes Fresh?

## 2. Mental:

- Ensure that they remain motivated to succeed
- Avoid unnecessary repetition
- Keep training varied so as to stimulate interest
- Constantly strive to further develop a team spirit
- Ensure high levels of fun & enjoyment in your sessions ...
- Don't give them all the answers, all of the time ...  
let them challenge their own thoughts from time to time ... what happens on the field???

But not at half time in a C/ship Match!!!



**The More I Think  
The More Confused I Get**



# Will This Ensure an Interesting Session?

- They certainly are some of the main ingredients ...
  - ✓ Educate yourself as to how your athletes grow & develop ... it's now mere coincidence!!!
  - ✓ Understand the critical difference between 'over-reaching' & 'over-training' ... educate yourself!!!
  - ✓ Avoid any form of 'over-training' that traditionally developed from the 'more is better' coaching mentality
  - ✓ In essence, develop an understanding of the role of periodisation in training, relative to volume & intensity
  - ✓ Ensure that they remain motivated to succeed
  - ✓ Avoid unnecessary repetition
  - ✓ Keep training varied so as to stimulate interest
  - ✓ Constantly strive to further develop a team spirit
  - ✓ Ensure high levels of fun & enjoyment in your sessions ...
  - ✓ Don't give them all the answers, all of the time ... let them challenge their own thoughts from time to time

# Critical Additions ...





## Critical Additions ...

- Match specific concept plays – train relative to area's of improvement from the previous match(es), while also looking forward to the next match ... this will also introduce freshness!!!
- Vary your training match (a) selections and (b) positions when deemed appropriate .. Task cohesion
- Introduce **COMPETITION** in all aspects of your training, not just the match situations ... this will also create an atmosphere of fun ...

# Typical Aussie Rules eh ...





## In Conclusion


- In order to keep your players ‘fresh’, & your training ‘interesting’, you must adopt a multifaceted approach ...
- Develop an awareness of the (fitness) demands of the game
- Understand how different variables may impact on these demands & how to react to this
- Design your training programme based on such understandings, taking cognisance of the necessity of ‘freshness’
- Ensure training is stimulating, challenging & enjoyable to ensure player interest is maximised



One final point ...

It's not always about the players remaining fresh ...

**YOU Must Stay Fresh Too!!!**



"Just remember this:  
No one ever won the olive wreath  
with an impressive training diary."

*Marty Liquori*



# Thank You

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