

SERPENTINE MARATHON SEMINAR:
YOUR FIRST MARATHON – FROM TRAINING TO RECOVERY

1st February 2010

Andrew Reeves and John Cullinane

SERPENTINE MARATHON SEMINAR AGENDA

- 1. Do You REALLY Want to do This??!**
- 2. Target Setting (and Adjusting)**
- 3. The Key Sessions**
- 4. Building Up the Miles Safely**
- 5. Managing Illness and Injury**
- 6. Race Practice**
- 7. Tapering for Success**
- 8. The Race and What to Expect**
- 9. Post-Race Recovery**

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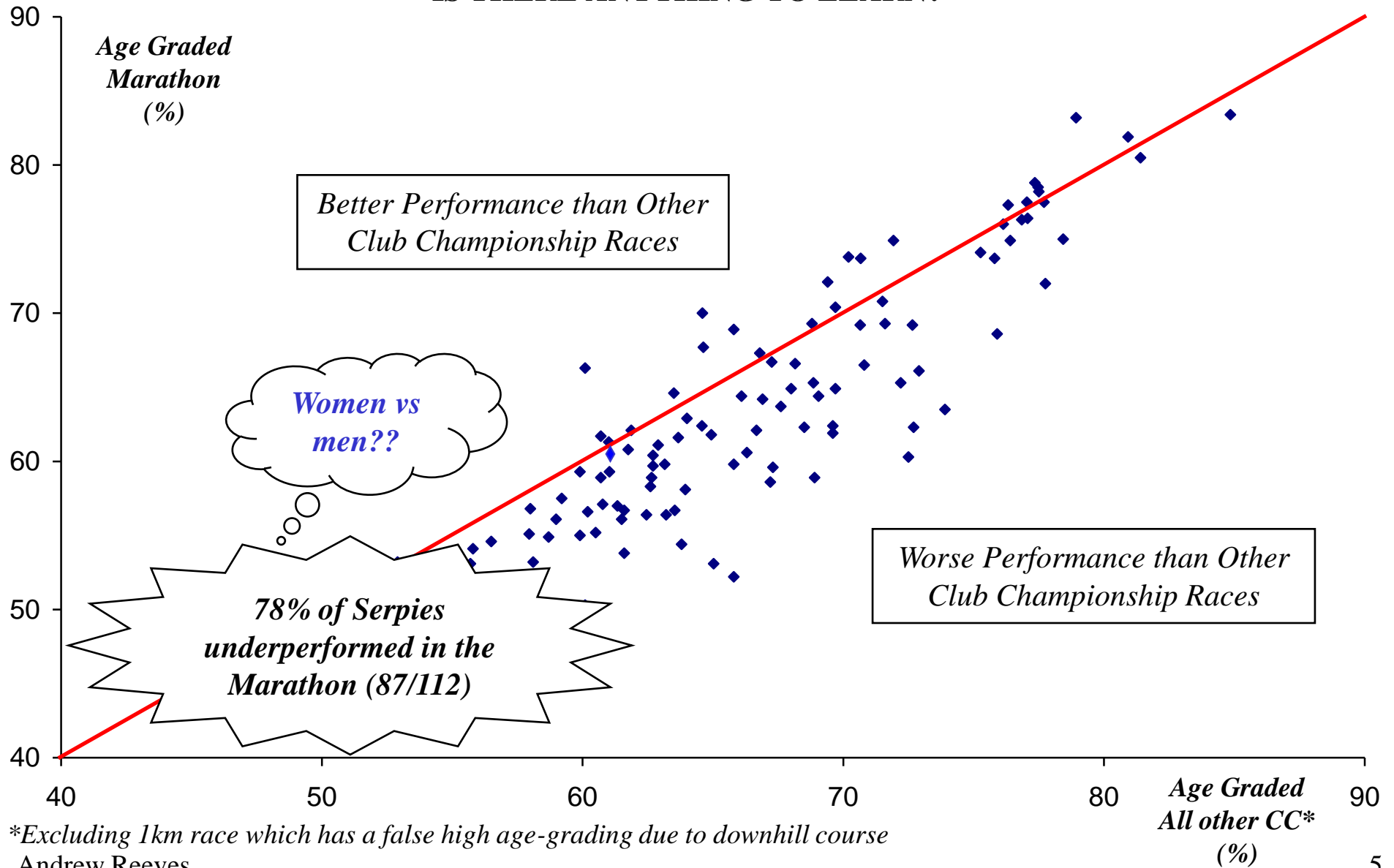
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DO YOU *REALLY* WANT TO DO THIS??!

“More people run in the London Marathon than in the 1,500m for the whole of Europe in one year– yet it is the worst trained for distance of all”

(Frank Horwell, 12 Things You Should Know About Marathon Training)

HOW DO US SERPIES PERFORM? IS THERE ANYTHING TO LEARN?



*Excluding 1km race which has a false high age-grading due to downhill course

Andrew Reeves

WHY IS THE MARATHON DIFFERENT?

- **Energy requirement cannot be met by normal liver and muscle glycogen stores:**
 - The wall! (sudden blow out or gradual decline)
 - ➔ *Need to adapt to fat burning while running (Long Slow Runs)*
 - ➔ *Need to practice taking gels / sweets / water in training*
- **Shear time taken has implications:**
 - Foot / leg damage (blisters, knees...)
 - ➔ *Correct shoes (pronation?) & socks!*
 - Toilet needs!
 - ➔ *Imodium? Need to practice!*
 - Boredom / Incentive
 - ➔ *Train with others*



*For all other races training should go beyond distance (eg train 10 miles for 5 mile race)
– but only for the Marathon will this actually damage you.*

➔ *Need a different strategy*

➔ *Do you REALLY want to do this NOW?*

DO YOU *REALLY* WANT TO DO THIS??!

Quick Show of Hands...

- What is your Running Age? – how many years training and racing seriously (ie racing for time)
 - Have you started doing Long Runs?
 - How motivated are you (1-10)?

Question Your Own Motivation – Are You Sure Now is Right for You??

Are you doing it for the right reasons? (NOT just because your friends are doing it and that is all Serpies seem to talk about...)



- *There is plenty of time ahead of you to do the marathon justice...*
- *You DONT want to do it now, badly and never want to do it again...*

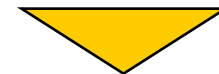
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TARGET SETTING

	<i>Example Calcs</i>			
	<u><i>Multiplier</i></u>	<u><i>Correction</i></u>	<u><i>Actual Time for Distance</i></u>	<u><i>Target Time for Marathon</i></u>
Half	2	+6 to 10mins	1:31:45	3:10:00
10 km	5	-10 mins	40	3:10:00
[5km	10	-	19	3:10:00]

*Better
corellation
for women*



*Defines your Pace
for Pace Runs*

Target setting

- ❑ Factors to consider when setting a target:
 - Number of years running
 - Duration and intensity of training
 - Previous marathons run
 - Your own ability
 - Recent injuries
 - The marathon course
 - Weather
 - Take the first few miles into account

Target setting

- ❑ Strategies for achieving your goal
 - Be realistic – goals must be achievable
 - Be positive towards the goal – don't fear it
 - Consider having more than one goal – and be prepared to revise your goal before and during the race
 - Finishing can be a goal for first time marathoners
 - Also – have a goal for after the race – think about what your next race will be.

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THE KEY SESSIONS LONG RUNS

What?

- Long: Build up to 20+ miles (or ~3 hours or target time – whichever comes first)
- **Slow:** 60s to 90s slower than marathon race pace 7:45-8:15 / 9-9:30 / 9:30-10
 - Caution: Not too slow as will change gait

- Build up for 3 weeks then cut back for a week to aid recovery
- Get used to the time (“time on feet”) and distance mentally and physically – allows body to adapt. (note: Full adaptation takes 5-10 years of training)
 - Increase capillaries and mitochondria in leg muscles
 - Increase bone density and strengthen muscles, ligaments and tendons
- Train body to store more muscle glycogen and to burn fat stores to prevent hitting the wall. (We have plenty of fat but it is harder for our bodies to use, whereas we only have enough muscle glycogen for ~20 miles)

Why?

- Practice race conditions: gels / toilet stops / clothing / shoes / up early
- Do not need to do EVERY week – have some rest weeks in your programme
- Choose a day when you can recover adequately and are not tired from day before.

When?

- Replenish food reserves: Sugars / starch / protein. Within 20 mins - Great. 2hrs - OK
- Sleep or nap on day and power nap throughout week *Zzzzzzzz*
- Do not run the day after - swim / massage / rest / eat! Remember the damage!!

Recovery?

THE KEY SESSIONS

CONSTANT PACE RUNS (TEMPO)

Lactate Threshold

Race Pace

What?

- Running at the pace you can sustain for ~1hour. Ie 10k to 10mile pace
 - “Comfortably hard” pace – can say 4-5 words (count)
- E.g. 40 mins run or intervals 3 x 2mile

- Marathon target race pace
 - Pace should be controlled – can chat in bursts.
- Build up to 13+ miles



Why?

- Key fitness session:
 - Pushes the boundary of when you go anaerobic
 - Increases aerobic capacity

- Key pacing session:
 - Gets the body used to running at target pace over long distances
 - Body learns the pace so you wont go off too fast on the day

When?

- Great weekly session or alternate with the Tempo runs
 - Karen’s Tuesday Dome
 - Beate / Andy’s Thursday Battersea

- Great weekly session or alternate with the Lactate Threshold runs
 - Wednesday club runs – Tower / Millenium / Battersea Bridges

Recovery?

- Medium to hard session
- Food / hydration within 2hrs (20mins!)

- Hard session – rest or recovery next day
- Food / hydration within 2hrs (20mins!)

THE KEY SESSIONS STRENGTH AND SPEED

Hills

Fartlek

Speed

What?

- Kenyan: constant EFFORT up AND down continuous. 3 x 10 mins OR
- Hard up and sloooooow down. 3 x 6 hills

- “Speed Play” – slow interspersed with fast bursts
- 20 to 40 mins on grass / trail
- Burts as and when you feel

- Repeated fast exertions
- Constant speed(s) (10k/5k/3k)
- Defined distances on Track

Why?

- Leg strength
- VO2 max
- Running form

- Aerobic capacity
- Leg strength
- “Different” – maintains interest

- Aerobic capacity
- Anaerobic capacity
- Leg strength and form
- Vo2 max

When?

- ←————— • Mix up with other intense sessions once per week —————→
- Lars Hampstead Hills
 - Karens Greenwich Hills
 - Malcolm + Jeannette’s Tuesday Track Willesden
 - Urban Tuesday Battersea

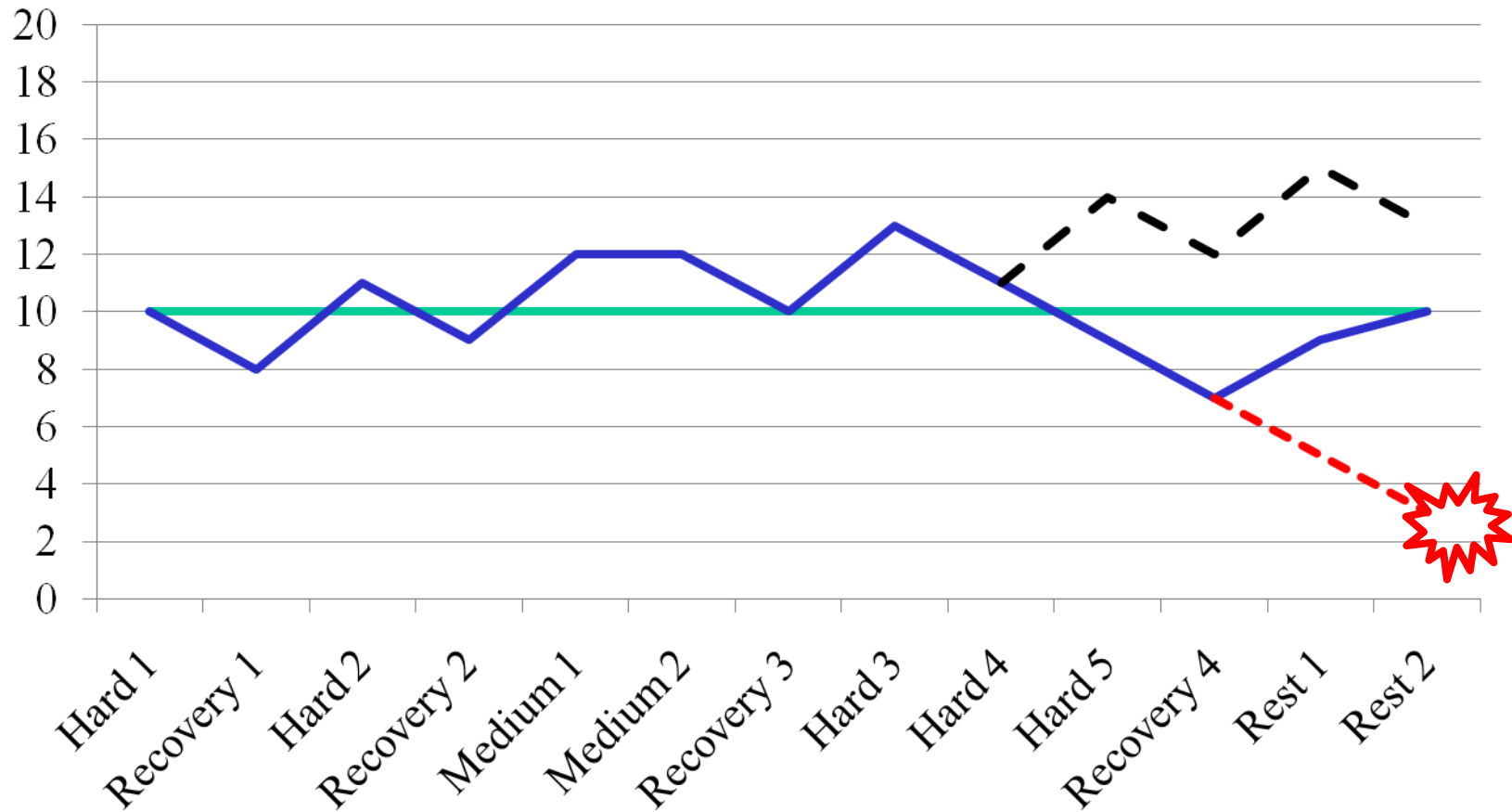
Recovery?

- ←—————
- All are hard sessions – recovery crucial. Sleep / nap rest afterwards
 - Immediate food plus replenish continuously afterwards for rest of day
-

THE KEY SESSIONS REST AND RECOVERY

*Most adaptation does NOT occur DURING training,
but AFTER when you are RESTING*

Fitness Index



REST AND RECOVERY TYPES

1. Sleep:

- Get adequate amounts every night (specific to you)
- Power nap at work (20mins tops)

2. Rest Days:

- Do absolutely NO exercise, veg out, have a massage
- After the hardest sessions

3. Recovery Days:

- Gentle runs of ~30mins
- X-training for 30mins-1hr (swim / cycle)
- After tough sessions
- To add mileage in mornings when session afternoon (caution!)

4. Strength and Stretching Days

- Pilates / gym / core conditioning
- Gentle stretches held for 20-30s (much longer than straight after a run 5-10s)
- At least 1 per week

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Building up the miles safely

❑ The 10% principle

- From a decent base (approx 20 miles) build up the mileage by 10% a week – so, if your base week was 20 miles, the next week 22 miles, then 25 etc. BUT
- Remember the fundamental principle of adaptation so
- Every four or five weeks, have an easy week – reduce mileage by 20-25%, then start to build the miles again the next week
- Focus on building the miles should be long runs initially
- Be careful about increasing intensity and distance in the same week
- Things go wrong – be prepared to back off and don't be a slave to a schedule

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SUCCESSFULL INJURY AND ILLNESS MANAGEMENT

CAVEAT – Seek Appropriate Medical Attention!
(Physio / (Sports) Doctor / Chemist)

The following are generalities only!

Note: A Sports Therapist / Sports Masseur is NOT medically qualified to give a diagnosis – just a working hypothesis

**SUCCESSFUL ILLNESS AND INJURY MANAGEMENT
COMMON INJURIES**

Action	Symptoms	Cause (Most Overuse / repetitive / shoes)	Prevention (ALL: Stretch / Strengthen)	Treatment (After RICE)
ITB	Pain hip or knee (hammering)	Overuse / Pavement	Mix it up – grass / X-country	Massage (painful)
Femoral Tendonitis	Knee gives way / soreness up stairs	Patella Tracking? High Intensity	Good Scheduling	Patella Taping / Vastus Lateralis
Runners Trots	!!!	Nerves / Trigger foods / Fibre	Remove triggers / Increase Soluble	
Anterior Tibial Tendonitis	Crepitus / Intense pain	Long Runs / Tight Calves		Massage / Physio
Achilles Tendonitis	Crepitus / annoying pain	Tight calves / ageing	Massage / Heat / S&S	Massage / Physio
Compartment Syndrome	Dull pain worse when run	Build up of pressure	Seek Medical Advice	Seek Medical Advice
Plantar Fasciitis	Pain (mornings!)	Overuse	S&S	Ball rolling
Stress Fracture	Localised Pain worse when run	Overtraining	S&S	Rest 3-6 weeks

**SUCCESSFUL ILLNESS AND INJURY MANAGEMENT
SUMMARY STRATEGIES**

Action	Prevention	Treatment (Acute)	Rehab (w Physio)	Management (Chronic)
Sleep / Recovery	✓	✓	✓	✓
Dont Overtrain	✓	n/a	Controlled	✓
Stretching	Dynamic / Static	×	Controlled	✓
Strengthen	Pilates / Gym / X-Train	×	Pilates / Gym / X-Train	Pilates / Gym / X-Train
Massage	✓	×	✓	✓
RICE (After)	✓	✓✓✓	✓	✓
Heat (before)	✓	×	✓	✓
Dont Train	Ill Below Neck			

www.AndrewReevesTherapies.co.uk

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RACE PRACTICE

- ❑ What you need to practice
 - Running at your goal pace
 - Running in the kit you'll be wearing on the day
 - Hydration/refuelling strategies
 - Race day preparations

RACE PRACTICE

- ❑ Running at goal pace

Either

- During a practice race

Or

- During training runs

Or

- Both!

Why?

Running at goal pace helps you become accustomed to what you will be trying to achieve in the marathon.

Don't run quicker than goal pace; and it will feel more strenuous in training than in the race – remember – you will taper!

RACE PRACTICE

KIT

In particular, check for chafing and blistering

Also make sure you can cope in cool/hot/wet weather

HYDRATION/REFUELLING

Experiment with gels – taste and texture are very different. Remember – you should drink with most gels – 1g of carbs needs 3g of water to be used for energy. (good sources of info:

<http://www.cycloport.org/article.aspx?id=94> or <http://www.torqfitness.co.uk/nutrition/torq-gel>

If running London, practice with Lucozade Sport (check other marathons – do they use energy or isotonic drinks?)

RACE PRACTICE

- Race day preparation
- Best way is to enter another race!
- Prepare kit the day before – know where your number is!
- Pre-race food – get to know what you want to eat and how early
- Travel plans- have a back up (for London, check the TFL website; go to Greenwich/Blackheath before race day; other marathons, read race info and visit start area).

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TAPERING FOR SUCCESS

THE MARATHON TRAINING PARADOX

Uniquely the marathon poses a paradox:

- *We do short fast runs and we do long slow runs*
- *But we never do the full distance (either fast or slow as it would be too damaging – ie no overdistance)*

➔ *So how can we do the full distance fast?*

TAPERING FOR SUCCESS

The answer is the Taper (...plus a bit of race day adrenalin and lots of support!):

- Reduce mileage by 50% every week for 2 to 3 weeks: 50 / 25 / 12
- But maintain INTENSITY and FREQUENCY
- Stay off feet in last few days – no shopping trips or sightseeing or DIY / gardening. VEG OUT!
- Switch some calories from proteins and fats to carbohydrates eg 60% to 70% from carbs. Keep hydrating (3g of water to store 1g glycogen).
- Visualise running the race – get to know the course and the finish (first / last 10miles week before?)
- Last big meal Saturday lunch. Lighter meal evening. Mix of carbs 3hrs before race (eg porridge / banana / honey)
- ➔ *We fully replenish our muscle glycogen stores (probably for first time since we started training)*
 - *We even fit in that little bit more by carbo-loading starting 3 days before the race*
- ➔ *We are fully rested and fresh*
- ➔ *The adaptation of our last runs has time to kick-in*
 - *No run will improve your fitness in the last 2 weeks – you are just increasing your chances of injury*

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MANAGING THE WALL

1. What is it?

- **Muscle glycogen stores become depleted and your body must increase fat burning**
- **Requires more oxygen so you slow down**
- **Liver glycogen stores become depleted and so your blood sugar falls (hypoglaecemia)**
- **Brain has no glycogen stores so depends on blood sugar**
- **As go hypoglaecemic brain effected:**
 - **Confused**
 - **Uncoordinated**
 - **Depressed**
 - **DONT CARE**

2. If Hit dont panic (too Much):

- **Try to run through it – your brain will be effected first – your muscles will actually be OK**
- **When impossible just walk for 1 mile – allow blood sugar return to normal**

MANAGING THE WALL

Dont Hit it in the First Place!

- **Do enough (5+) long runs of ~20 miles (or 3 hrs)**
 - Muscle glycogen / Fat burning / Mitochondria
- **Do enough race pace runs:**
 - Can hit and maintain pace
- **Taper properly**
 - Carbo-loading with water and plenty of rest
- **On the day preparation:**
 - Breakfast / sports drinks
- **During Race:**
 - Go off **slightly slower** than target race pace – plenty of time to catch up
 - Hydration / carbs

Year	2005	2006	2007	2008
Miles	490	390	500	420
Av. mpw	29	22	29	27
Max mpw	52	43	49	40
# Long	5	4	6	4
# Pace	6	4	5	1
½ Time	1:19:07	1:16:58	1:18:21	1:18:58
Time	2:41:38	2:44:35	2:41:21	2:44:25
Wall?	V Soft	V Hard!	Soft	V Hard!
Place M	211	322	150	291
Impact	Last 6 miles 3mins slow	Walked mile 24 – 10 mins	Last 6 miles 5mins slow	Walked mile 24 + Sick – 6mins
Weather	Fine	Wet	HOT	Dry
Ill/Injury	Lanzarote Flu	Cold	AntTib Injury	No Motiv ation

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POST RACE RECOVERY

You may feel a high (a few days) after the run but don't kid yourself – it will take a month+ before you are fully fit again mentally and physically

Immediately After Race:

- Water and food: Sports energy drinks / sports recovery (protein drinks)
- Try to keep walking every few minutes to prevent seizing up. Massage after a day or 2
- Proper meal ASAP and keep eating regularly and often for next few days



If you REALLY have to run reverse the taper:

- Rest fully for a week (Dr Costill) – swim
- Bring back slow easy miles 12 / 25 / 50
- Dont do another marathon for 6months - year

Why not go on Holiday and not run for 2+ weeks!

- Reward
- Give body and mind chance to recover
- Come back remotivated and reinvigorated
- Try other sports

SERPENTINE MARATHON SEMINAR BIBLIOGRAPHY

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 - Horwill**
 - Hancock**
 - List of Masseurs etc**
 - List of coaches**