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The Complexity of Transitioning From A Good Club Athlete To A GB Elite Performance Athlete.

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Intro – Constantly Learning And Developing A Philosophy Of Coaching Practise :

National coach Bath university British Triathlon .

Belgium Triathlon federation consultant.

Slovakia ITU coaching development project.

Technical director triathlon Ireland .

Head of Endurance athletics Ireland .

Welsh Athletics national coach.

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Fundamental messages

- Understanding your athletes history and journey
- Asses your athletes coachability – Are they open to coaching advice?
- Be honest in your approach what is possible
- Establish the right understanding around training intensity – The right Aerobic Balance
- Developing the right programme for the right athlete (**Review, Refine, Optimise , Refine , Perform**)

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Coaching What Is In Front Of You Is Key!

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Athlete History & Journey

- Consistency.
- Injuries
- Physical preparation history?
- Technical model – how does your athlete move?
- Prolific trainer
- Race performances – consistency/over raced?
- Competition programme.
- Emotional control in training
- Are the event specific requirements aligned to the training programme?

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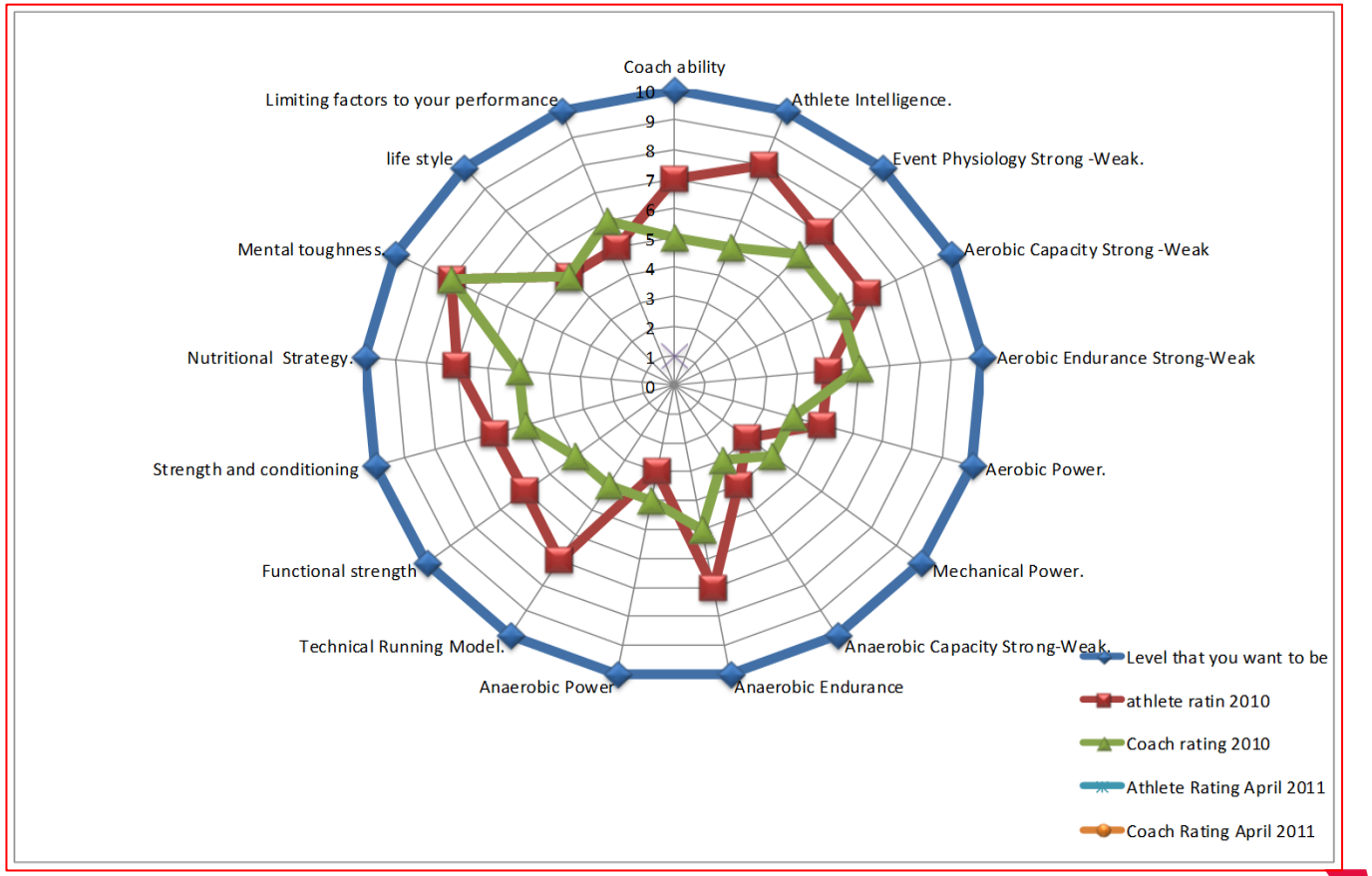
Athlete Profiling.

- Metabolic /Lab Based.
- Peak Vo2 Values.
- Vvo2 (velocity) .
- Economy.(cost)
- RER (value.)
- Lactate threshold.
- Lactate turn point.



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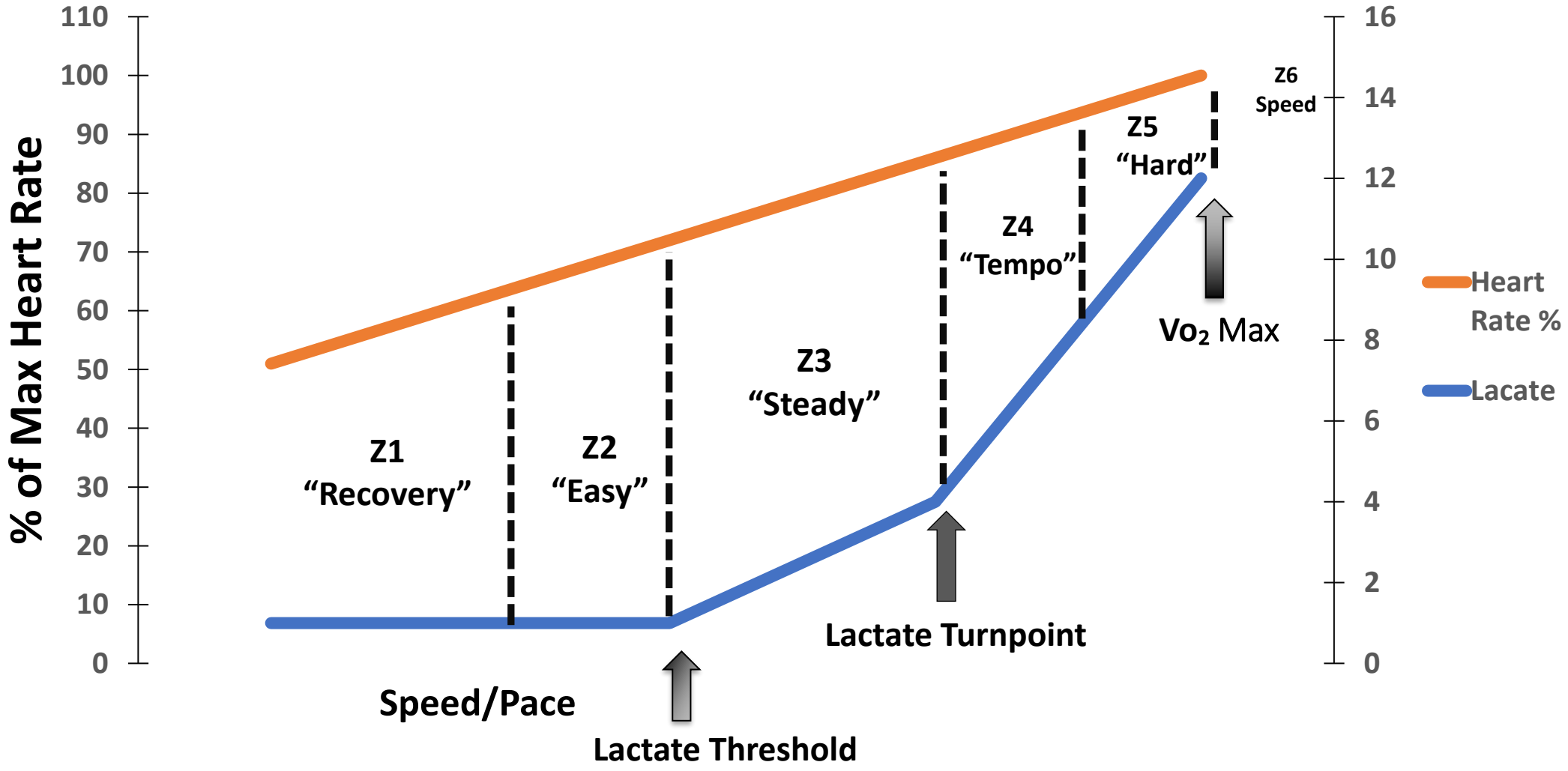
6 Zone Training Model



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Physiology Support Structure

1. **Aerobic Profiling**
   Standardised step-test in the lab or field to establish the lactate threshold, lactate turnpoint and training zones. Could include VO_{2max} testing

2. **Training Session Monitoring**
   Lactate monitoring of training sessions to ensure that the training goal is being met. Examples include control around Z2, Z4 and Z5 sessions

3. **Aerobic-Anaerobic Balance**
   A short step test in the field in order to establish the lactate turnpoint, followed by a maximum effort TT over 600m or 1km to look at anaerobic capacity

4. **Performance Indicators**
   Monitoring of standardised event-specific sessions in order to predict current racing form and establish the metabolic cost of running at qualifying time speeds

5. **Maximal Sprint Speed**
   Measurement of maximal sprinting velocity using timing gates. This could be used as a single test, or in combination of 1 to 4.

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Example Support Timeline

1 **Aerobic Profiling**
Standardised step-test in the lab or field to establish the lactate threshold, lactate turnpoint and training zones. Could include VO_{2max} testing

2 **Training Session Monitoring**
Lactate monitoring of training sessions to ensure that the training goal is being met. Examples include control around Z2, Z4 and Z5 sessions

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Event Specific Strength & Conditioning Programme

- **Aim. -** Improve the following**.**
- **Technical –** improve tendon health and ligament health
- **Structural** – muscle mass, better movement and control.
- **Physiological** - Improved efficiency and improved fatigue resistance
- **Force** – Improved contact , stiffness , reactivity increasing your power per stride
- **Strength** underpins the above four pillars and ultimately drives performance

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Specific Strength Development

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Developing A Training Programme

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Clara Evans

From Ponty Roadents to representing GB at the World Half Marathon Championships!

2017	2018	2019	2020
5k 17-15	16-49	16-21	16-02.
10k 34-55	34-02	33-07	32-47
Half-M. 75-38	74-13	72-49	72-21
Marathon ???			

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Programme Design Philosophy.

- Aerobic capacity +technique.
- Aerobic capacity + power.
- Aerobic capacity + power + technique.
- Aerobic power.
- Event specific endurance.
- Event specific endurance & resistance + power.

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Critical Areas of Programme Design

Preparatory Phase of Training

- Principle of loading
- 5 weeks training cycle
- Check set week 3&5

- **High /High /Low/Very High /Low.**
- Managing a 5 week cycle in the general phase of conditioning 4-5 x 5 week cycles October until March
- Less risk - more control .
- Weeks 3-5 allow controlled check sets /comps.

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Example of Training Load Preparatory Phase

Aims

improve aerobic capacity

Vo2 session

Hills strength

Initial phase no threshold work or middle ground work - ONLY for 5-10 weeks

Mon aerobic zone 1

Tues Vv02 2x (4min-3min-2min) then 9x1mins work pm build run (safer at this stage 25-35mins)

Wed aerobic recovery run.

Thurs aerobic run + power strides

Friday long hills 3x (2min-2x1mins) Pm build run 25-35mins

Saturday recovery

Sunday Long run Pm + power strides

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Example of Fundamental Conditioning Phase One

Aims

- Increase aerobic capacity + power .
- Strength 10k conditioning sessions .
- Controlled threshold development

Example Of Fundamental Conditioning Phase One

Mon - 50mins recovery pm power and strides 8x10s hills .

Tue - Fartlek 5min fast/5min easy/4/4/3/3/2/2/1/1/3/3/2/2/1/1 (Gym) pm 5mile build run.

Wed - 70mins pm 50mins .

Thurs - 50mins 8x100m strides. (Gym) pm rest .

Fri - 3mile Build / 1mile easy /3x1mile tempo (AT) rest 90s . pm 5 mile build run .

Sat - Rest .

Sun - Long Run 1hr-40mins

Mon- 50mins recovery pm power strides or short hills.

Tue - Fartlek 5 x (2mins -3x1mins rest 60s) break 3mins easy. (gym) pm 5mile build run.

Wed - 70mins pm 50mins .

Thurs- 50mins 8x100m (Gym) pm rest

Fri - 2x(2mile – 1mile – 4x1min fast 1min easy) (AT) (10k) (3k) rest 2min/90s/1min/ 3mins pm Easy run.

Sat Rest.

Sunday Long Run 1hr-40mins .

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Example Of Event Specific Preparation Phase

Aims

- Continued aerobic development .
- Increased recovery around key session.
- Extension principle / further not faster when developing specific event speed endurance

Example Of Event Specific Preparation Phase

- Mon- am recovery run
- **Tuesday - am 4-5 x (1200m+300m) rest 60s /break 3mins , extension carefully managed pm recovery jog**
- Wed - am aerobic run pm aerobic run.
- Thurs - am aerobic recovery +6x100m strides .
- **Friday - am 7miles 5-50/40/30/(6min) 5-25/20/15. pm easy run.**
- Sat am- recovery or rest.
- Sunday Aerobic .+ 6x100m strides.
- Mon - Aerobic.
- **Tue - 2k tempo / 400m easy / 2x300m/3x200m pm easy run.**
- Wed - aerobic run
- Thurs - jog and strides. Pm rest.
- Fri - rest pm run with event prep.
- **Sat Race**

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Example of Specific Marathon Preparation

Intro:

- Athlete in very good 10k shape
- High Lactate turn point
- Strong aerobic endurance prior to starting marathon preparation phase
- Marathon preparation /subject to the athletes individual ability to be able to absorb a high training load and volume.
- Fuelling profile critical to any success at the marathon .

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Example of Specific Marathon Preparation

Mon- am 50min recovery - pm 8x10s hills /25min easy .

- **Tue – am fartlek 10x2mins /10x1mins (10k pace) pm build run 5-7miles.**
- Wed- am 70mins pm 50mins
- Thurs – am 50mins recovery - +6x6sec strides.
- **Fri - am 5-6 x 4k (MP) 1K recovery pm recovery run..**
- Sat - am recovery run.
- Sun -2hrs-15mins
- Mon- am 50mins recovery pm 8x10s hills /25min easy
- **Tue - am 10 x 3mins tempo rest 60s (10k pace) pm build 5-7miles**
- Wed - 70min pm 50mins
- Thurs- rest pm 50mins
- Friday am 40min recovery +6x6s strides. Pm rest.
- **Sat - 8mile build /1mile easy/ 6mile MP/1mile build / 4mile above MP /1mile easy .**
- Sun Recovery run.

Managing The Balance Of Aerobic Capacity Work V The Growth Of Anaerobic Interference.

- Event Aerobic Endurance Development
- 85% to 93% .

- 10x800mrest 2mins
- 8x1k rest 2mins.
- 6x1200m rest 2mins.
- 5-6 x 1mile rest 2mins.
- 3x(4x800m) rest 90-75-60-3mins.
- 3x(2k-1k) rest 90s /3mins
- 5x(1200m+300m) rest 45s/ 3mins.
- 4x(1600m+ 400m) rest 60s / 4mins.

- Event Specific Vv02 + Development.
- 97% to 110%

- 5x(3x400m) odd sets 40s rest/evens 60s / 3mins.
- 5x(2x600m) rest 75s /rest 3mins.
- 4-5x(800m-2x400m) rest 30s /3mins .
- 3x(1k 3mins/3x400m rest 60s) rest 3mins.
- 3x(6x400m) rest 45s/ rest 3mins.
- 3x(600-500-400-300-200) rest 2mins/5mins .
- 2x1k rest 3mins /2x9x200m rest 60/5mins /2x1k rest 3mins .

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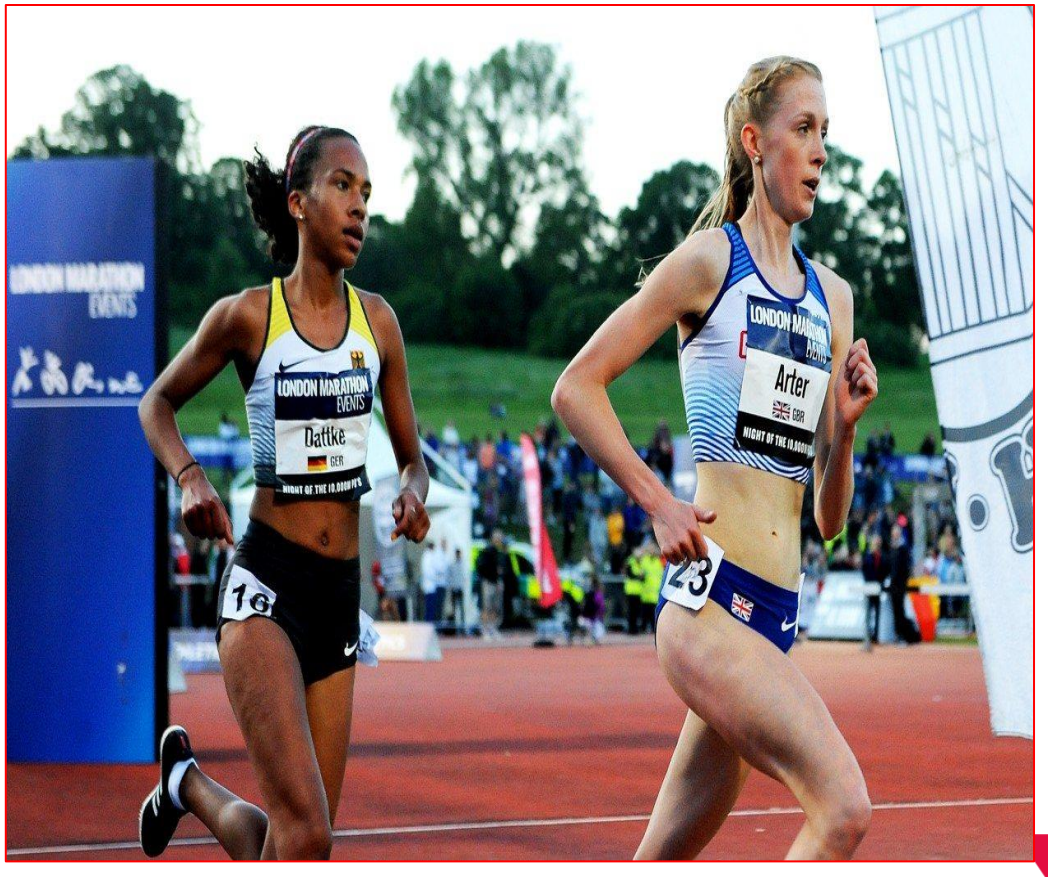
Developing The Right Aerobic Balance
Are You Adding Or Taking Away !!!!!

Performance Indicators

- Vv02 3k pace 100%.
- 5k pace 97%. (4x1200m) / (6x800m)
- 10k pace 93% (3-4 x 2k) / (8-10 x1km)
- ½ Marathon 88% (3x3k) / (3x5k)
- Marathon 85% (4-5 x 5k) / (25km)
- *Weeks 3-5 check sets .*



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Understanding Good Process

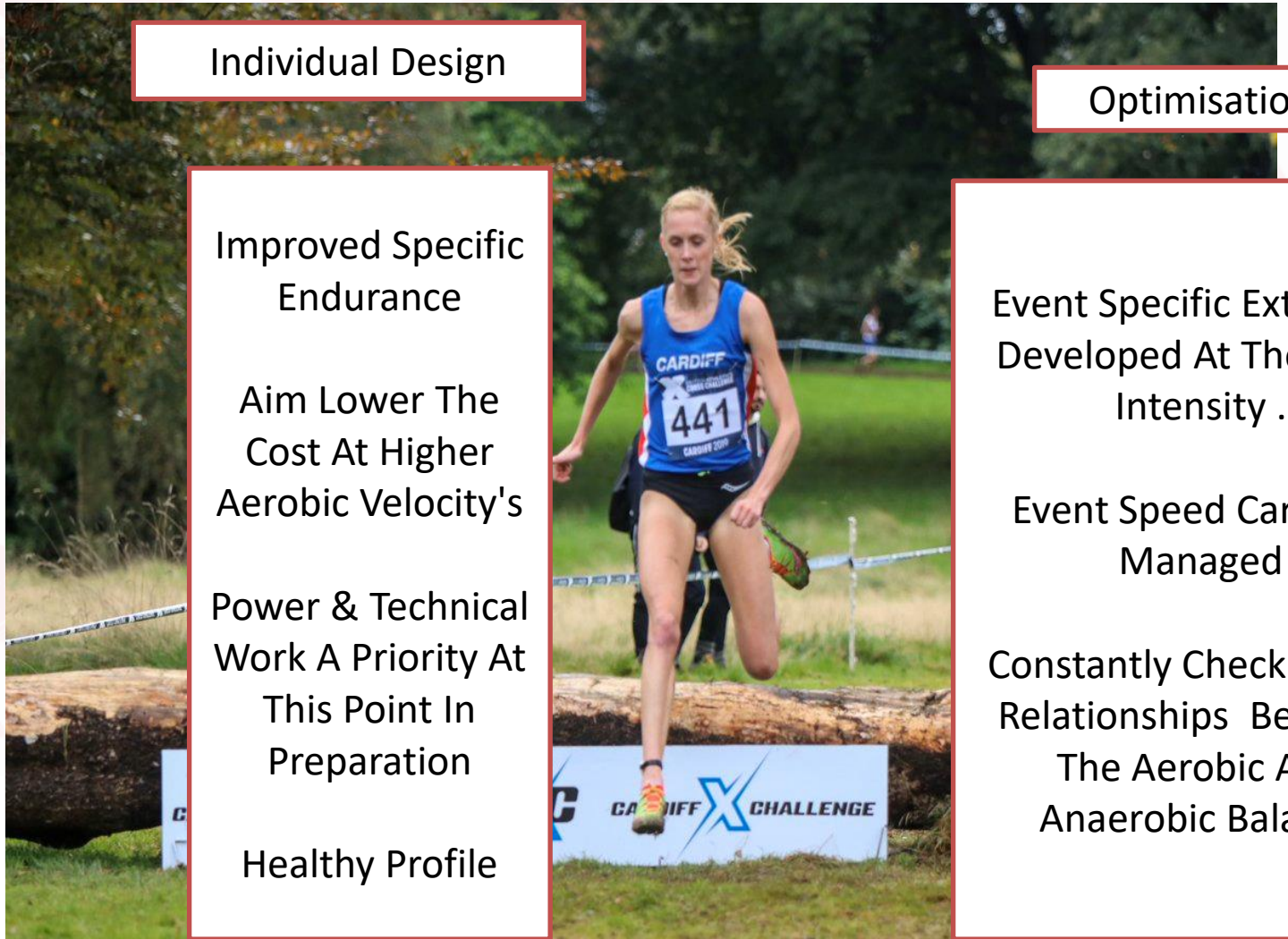
Monitoring

Improved Capacity

High Fractional Utilization .

Healthy Profile .

Individual Design



Improved Specific Endurance

Aim Lower The Cost At Higher Aerobic Velocity's

Power & Technical Work A Priority At This Point In Preparation

Healthy Profile

Optimisation

Event Specific Extension Developed At The Right Intensity .

Event Speed Carefully Managed

Constantly Checking The Relationships Between The Aerobic And Anaerobic Balance

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Summary

- Review your athlete and understand the limiting factors to performance
- Plan your aims.
- Design
- Execute
- Refine
- Evaluate evidence based.
- Refine (Again)
- Optimise.
- **Perform**

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Questions?

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