Train Smarter?
at @Triathlon_Show 2015
Where to look for advice

- This presentation is from JBST.com / CoachJoeBeer.com
- Visit 220Magazine.com and check “Training”
- Check out www.bit.ly/road2gold
The Brutal Basics...

- **TRAINING ZONES & GOALS**
  Goals determine plans which should set the sessions you do.
e.g. Elites/Top AG train 20-35/9-18h; 800-1200h/400-800h p.a.
  Racing teaches you the craft of racing.

- **NUTRITION**
  Correct diet + the right sports nutrition products = better gains
  e.g. low glycogen; protein timing; L-Carnitine augmentation
  Personalised nutrition programmes are the new marginal gains

- **EQUIPMENT**
  This can improve performance through “Kit Doping” (Aston 2013)
e.g. optimised wetsuits; drag reduction bikes/clothing, compression
  It is developing faster than your genes (220 Science of Speed)*
Ist Rule of Tri
Base level must be 75-90% of time

That’s is 55-80% HRmax or in “low lactate” ZONE ONE predominates in all phases of the year:

Coach of Ironman Cozumel ’13 winner “85% base training” (2013)

UK OD National Squad ~70% below race pace.

Top 10 Olympian 2012 - S74% B88% R85% in Z1
NEW EVIDENCE

Tonnessean (2014) XC Ski/Biathletes “Road to Gold”…Z1 predominates
THE BIG MISTAKES

- Going too hard to soon
  All interval studies, Elite training plans and their diaries include time to get the muscles warmed-up. Too-hard, too soon activates “stress” response.

- Calling low Z2 “base” training or steady
  80(83?)%HRmax and above is stressful “no-mans land” training - if you are meant to be there good, otherwise it truly is junk!

- Not doing sessions to a plan
  Its your training so be in control of session plans, outcomes and future tweaks (route, time of day, training partners, equipment)
2nd Rule of Tri
Quality must be quantified

- Using planned intervals works best
  Such as the proven 6 x 4’ @ 88-90%HR (+RI 2 - 4’)
  This is very potent therefore must be surrounded by pure Z1 days

- It’s only worth doing HIT when LIT is correct
  So Z2 “lapses of concentration” come out of your HIT allowance
  You may be doing HIT too many days per week (2-3 optimum)

- Only add HIT if required
  For a beginner, those in “get round” mode or coming back to training
  the top of Z1 into Z2 to get “race-ready” (2-3 x 10’) is hard enough
  to achieve race completion and enjoy training.
NEW EVIDENCE

Tonnessen (2015) Orienteering: 55-82% = Z1 (>70%)
THE BIG MISTAKES

- Randomly doing an interval session or “block”
  Intervals cannot just be added to volume rises, competitions starting or when recovery is chronically affected.

- Doing an interval that is traditional yet unproven
  Several are erroneous: minute-on/minute off; build of speed towards end of long-ride/group run; TC time trials to replace endurance

- Failing to let adaptation take priority once work is done
  If Elites/Top AG only do 2-4 intervals per week how can you do more and add additional “racing” sessions and then properly adapt?
Make time to keep strength/conditioning:
Resistance training (machine, free weights, body weight) and Pilates/Plyometrics(?) NOT circuit training

Make things harder through late base into PRECOMP:
e.g. swim: two costumes/drag shorts, paddles, less drafting.
  e.g. bike: +weight, low cadence hills (4-6’@60rpm), +CRR
  e.g. run: 8-15” hills, heavy shoes, DWR, Buggy, WeightBelt(?)

For prehab, rehab and to beat ageing/BMD drops:
It makes an athlete more “complete” and is no longer considered damaging to s/c/r
4th Rule of Tri

Plan 3:1 Blocks of Training

- Use technology (paper & pen) or computer to plan:
  e.g. 3:1 weeks, lighter days (low Z1 technique), transition training, non-training days, alternative sports in offseason

- Use realistic training volume (8hrs; 220 Reader Survey)
  Don’t get hooked on a number it will vary: 10, 8, 12, 6
  The training bank builds your fitness over time.
  It’s all about ability, consistency and “ABSORBING”

- Don’t go OTT after season
  Less is gained Oct to Dec, more from Feb to April.
  Aim 60%-75% of volume you intend to peak at Mar-July
NEW EVIDENCE

Stellingwerff (2012) Elite marathoners training (74% Z1; 2-3 CHO availability sessions)
5th Rule of Tri
Nutrients can tweak genes

- Use carbs in training - it's the predominant fuel choice. Some fasted sessions help lean-burn ability but do compromise quality and the session must be controlled.

- Protein timing has been shown to help "adaptation" e.g. around weight training or endurance sessions. Plus shakes add an extra "easy" quality protein dose to the diet.

- Assessment of nutrient status is vital e.g. blood profiling for Vitamin D, B12, Folate, Testosterone and others to ensure RBC, immune and health optimisation.
Stellingwerff (2014) Nutrition can plug various areas of fatigue
THE BIG MISTAKES

- **Missing the basics of diet & sports nutrition**
  Nothing is THE super food or pill. Carbs fuel, water hydrates, treats are treats, protein should be spread out, good fats are “essential”

- **Random use of a supplement or super-nutrient**
  Most affective results are using an effective dose+response e.g. colostrum x 10g x 2 weeks or more = rebuilding/immunity

- **Assuming you “are” fit and you “have a great diet”**
  If you don’t know your “nutrient status” how can you tell what you need: latest article, health food e-mail etc = just a waste of money
1990 Student: Hbn 13.3 … 2015 Post Training Camp: 15.7
6th Rule of Tri
Feed your body

- **Good Sleep is central to development**
  It’s all about ability, consistency and “ABSORBING”
  Elites 10-12h/d and Amateurs 50-hour minimum rule

- **Make daily wholefood nutrition a natural habit:**
  e.g. slow release carbs, real-food proteins, quality fats
  Don’t try to be perfect just remember YAWYEAD
  (You Are What You Eat And Drink)

- **Body Work/flexibility must focus on your imbalances**
  e.g. poor shoulder mobility, leg tightness or cramping
  The right expert that is the challenge
7th Rule of Tri

Kit can make you faster

- Buoyancy, flexibility, drag reduction wetsuits
  It has to fit, be practised and be removed fast

- The bike has evolved beyond belief (Sat 10:15)
  Aero tubing, integrated hydration, electronic shifting, power measurement

- Running requires good rebound, hence foam
  Light mass means fast but rebound must aid running - use of DeepWater Running, body work and regular new shoes
THE BIG MISTAKES

- Not doing the sessions on your plan and training randomly
- Using equipment based on a whim not on science/sense
- Ignoring the importance of strength & conditioning
- Too high vitamin C and random supplementation
- Seeing bike power measurement/aerodynamics as “elitism”
- Not broad enough Zone One [55% - 80%]
- Ignoring recovery tools (foam rollers, compression, sleep)
TCR 2015 Advice

- Training <80% must be a central habit bit.ly/road2gold
- Hard work sessions must be well planned/spaced
- Nutrition timing and type impacts significantly
- Bike power measurement is a serious but effective tool
- Bodywork, DIY foam rollering etc remains a priority
- Fasted sessions & low-carb training has a place
- Blood profiling is the new “train smart” see InDurance.co.uk
Out now

Coming this Summer