

# 6 hours training a week are enough for preparing Ironman amateur athletes 

Suren Arutiunian<br>S-TEAM

## Is triathlon a mass sport?



## How do athletes train for an Ironman?

|  | Beginner | Age Group <br> Contender | Age Group <br> Elite | Professional |
| :---: | :---: | :---: | :---: | :---: |
| Sprint | $200 / 6$ | $300 / 8$ | $400 / 11$ | - |
| Olympic | $300 / 8$ | $350 / 10$ | $500 / 12$ | $900+/ 25+$ |
| IRONMAN <br> 70.3 | $400 / 11$ | $500 / 12$ | $700 / 18$ | $1,100+/ 29+$ |
| IRONMAN | $600 / 15$ | $750 / 20$ | $1,000 / 28$ | $1,300+/ 32+$ |

## What's wrong with this table?

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## Olympic and Ironman pro-athletes do the same training volume.

|  |  |  |  | Professional |
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## 3 universal laws of physical training





## \#1 The Dose-Effect Law



## \#2 The Supercompensation Law



## \#3 Each training load has a limit of its training effect



## What does the optimal dose depends on?

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- Energy resources (glycogen store)
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- Tissue degradation resistance during training
- Technique
- Recovery conditions (sleep, nutrition, daily stress (again!))


## The optimal dose doesn't depend on the competition an athlete is preparing for

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## My version

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| Olympic |  | $350 / 10$ <br> $300 / 8$ |  |  |
| IRONMAN <br> 70.3 |  | $500 / 12-$ <br> $300 / 8$ |  |  |
| IRONMAN |  | $750 / 20$ <br> $300 / 8$ |  |  |

## Who were these athletes?



They were not professional athletes


## Participants



Artur Shagimardanov 26 years old


Maxim Nizhnik
32 years old


Roman Sobolev
35 years old


Dmitry Guzeev
42 years old
~ 1.5 years training experience less than 6 hours a week, full time job ( $40 \mathrm{~h} / \mathrm{w}$ ), married

## Methods

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- 2 "long" training sessions a week (12-20 km running, 60-120km cycling)


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- 1 strength workout a week
- Swimming lives its own life
- 6-7 hours training a week (average)


## Training volume results

8 months before the IM:
$6 \mathrm{~h} 40 \mathrm{~min}( \pm 50 \mathrm{~min})$
2 months before the IM:
$6 \mathrm{~h} 50 \mathrm{~min}( \pm 34 \mathrm{~min})$


## Physiological tests results

## Test protocol:

Warm up: $10 \mathrm{~min}(100 \mathrm{w}, 8 \mathrm{~km} / \mathrm{h})$
Steps: $+20 \mathrm{w} / 2 \mathrm{~min},+1 \mathrm{~km} / \mathrm{h} / 2 \mathrm{~min}$
Aerobic Threshold: Ve, Ve/VCO2

## Results:

Cycling Aerobic Threshold
July 2015-170w ( $\pm 30$ ), $132 \mathrm{~b} / \mathrm{min}( \pm 22)$
July 2016-200w ( $\pm 20$ ), $137 \mathrm{~b} / \mathrm{min}( \pm 8)$
Running Aerobic Threshold
July 2015-5:00 min/km, $146 \mathrm{~b} / \mathrm{min}( \pm 10)$
July 2016-4:36 min/km, $151 \mathrm{~b} / \mathrm{min}( \pm 7)$


## Ironman Copenhagen 2016 results



Artur Shagimardanov
26 years old
Finish time- 10:17:59
54 between 211 TOP 25\%


Maxim Nizhnik
32 years old
Finish time- 14:26:05
241 between 252
TOP 95\%


Roman Sobolev
35 years old
Finish time- 9:55:26
41 between 326
TOP 12\%


Dmitry Guzeev
42 years old
Finish time- 11:17:09
187 between 475 TOP 43\%

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- Are 8 hours training a week enough for preparing Ironman champion?


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What we can do to achieve this goal?
Highly-focused training blocks

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What we can do to achieve this goal?
Highly-focused training blocks
Low glycogen training

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What we can do to achieve this goal?
Highly-focused training blocks
Low glycogen training
Blood flow restriction training?

## Conclusions:

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## Looking into the future:

- Are 8 hours training a week enough for preparing Ironman champion?

What we can do to achieve this goal?
Highly-focused training blocks
Low glycogen training
Blood flow restriction training?
Etc., etc., etc.
Don't be focused mostly on the training volume.

THANK YOU FOR ATTENTION!

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