

Monitoring physiological fluctuations during trainings



If you can't measure it you can't
improve it!

Peter Drucker

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- 2001-2009 National coach Romania, Athletics
- 2010-2011 Head coach/Assist. Coach ULL,USA
- 2012-2014 Head coach China,Athletics
- 2015-2018 Sport Science Romania
- 2018 Director of Human Performance Lab
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Types of tests

- ◆ Test VO₂Max
- ◆ Test submaximal, %out of VO₂Max
%HRMax
- ◆ Test RMR
- ◆ SmO₂
- ◆ Salivary testing
- ◆ Blood work



Bloodwork

◆ 1. Potentiators of performance :

Testosteron, Tsh, CoQ10, vitD3

◆ 2. Inhibitors of performance :

Glucosa, insulina, cortizol, estradiol

◆ 3. Overtraining:

CPK, Proteina C-reactiva

◆ 4. Enduranta:

Feritina, Hb, B12, B9

◆ 5. Dehydration:

Electroliti, hemoleucograma





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REQUESTS	RESULTS		UNITS	REFERENCE RANGES
CK, TOTAL	1898	H	UNITS/L	26-140
FERRITIN, SERUM	9	L	NG/ML	10-154
IRON & TIBC, SERUM				
IRON, SERUM	29	L	MCG/DL	35-175
IRON BINDING CAPACITY	412	H	MCG/DL	250-400
% SATURATION	13	L	%	15-50
CORTISOL, TOTAL	39.8	H	MCG/DL	8-24 AM
CBC (INC. DIFF & PLT)				
WBC	4500		/CMM	4000-11000
RBC	3.51	L	MILLION/CMM	4.00-5.20
HEMOGLOBIN	11.6	L	GM/DL	12.0-16.0
HEMATOCRIT	33.0	L	VOL %	36.0-47.0
MCV	76.9	L	FL	79.0-101.0
MCH	33.1	H	PG	26.0-33.0
MCHC	35.2		%	32.0-36.5
RDW	14.4		%	11.5-14.5
PLATELET COUNT	238000		/CMM	150000-450000
MPV	8.8		FL	7.4-10.4
NEUTROPHILS %	36.1	L	%	45.0-70.9
LYMPHOCYTES %	48.7	H	%	15.0-45.0
MONOCYTES %	8.2		%	0.0-13.0
EOSINOPHILS %	6.0	H	%	0.0-4.9
BASOPHILS %	1.0		%	0.0-2.9

RMR





Training factors

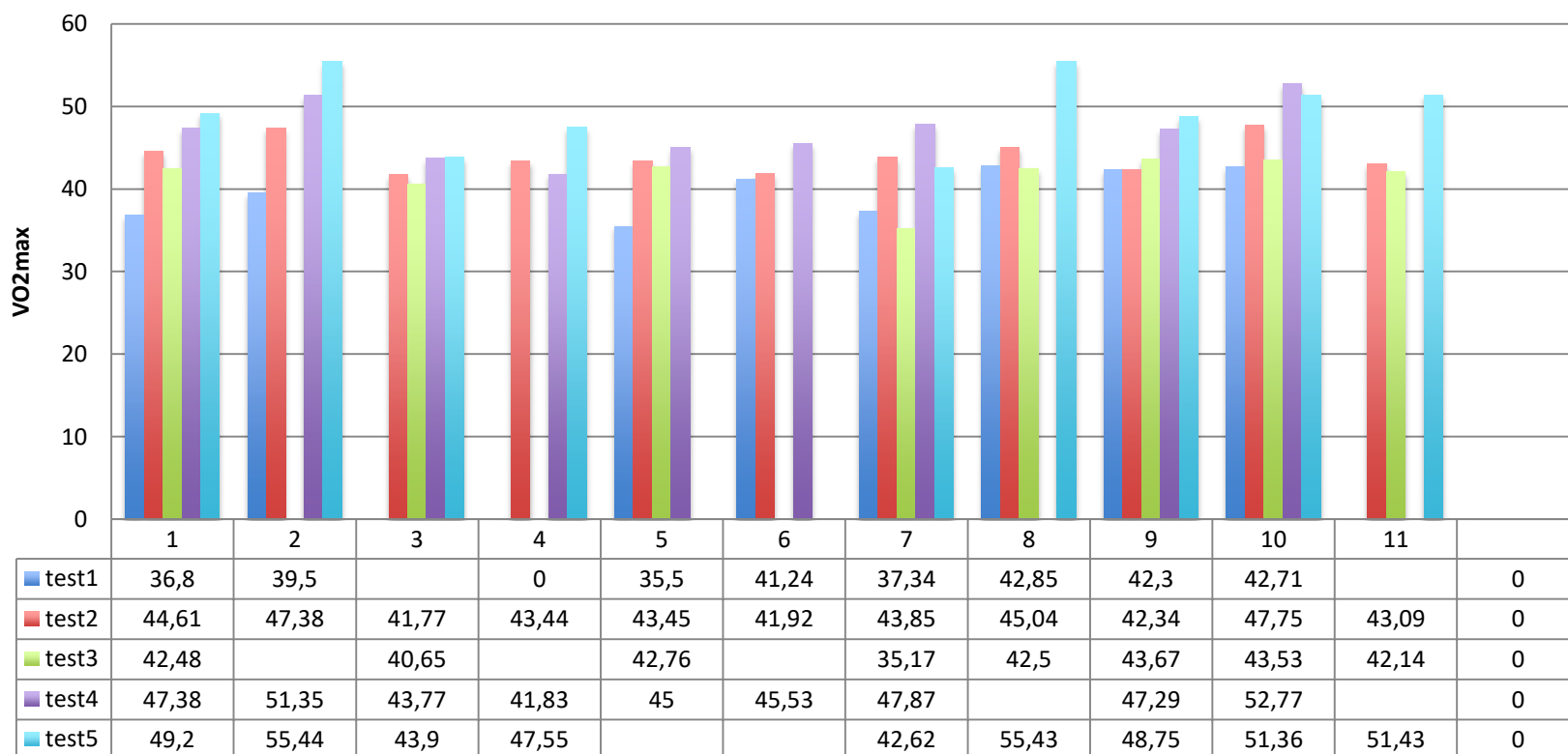


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Monitorizare VO2max 2017

CNOPJ canotaj Iasi

test 1-2-3-4-5
CNOPJ IASI



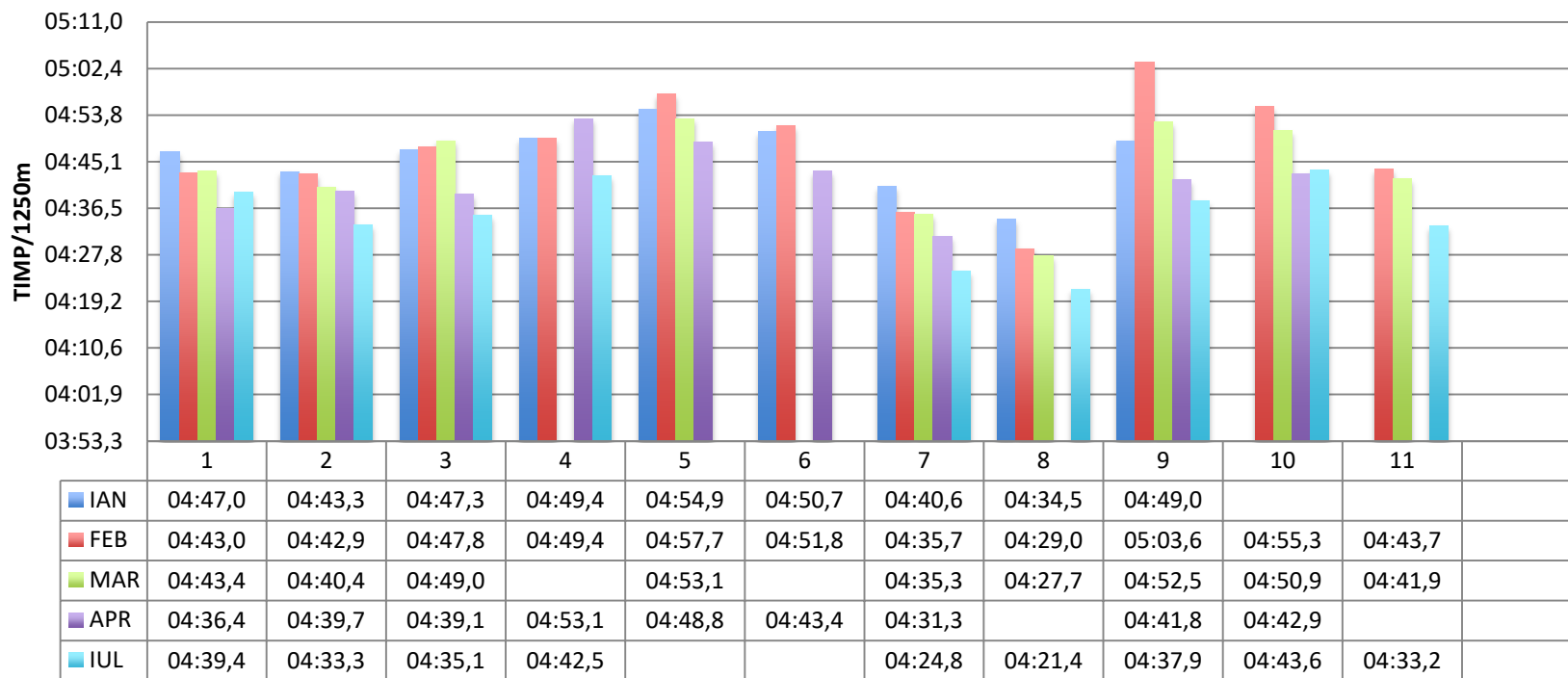


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Monitorizare progres 2017 CNOPI canotaj, Iasi

test 1-2-3-4-5

CNOPI IASI

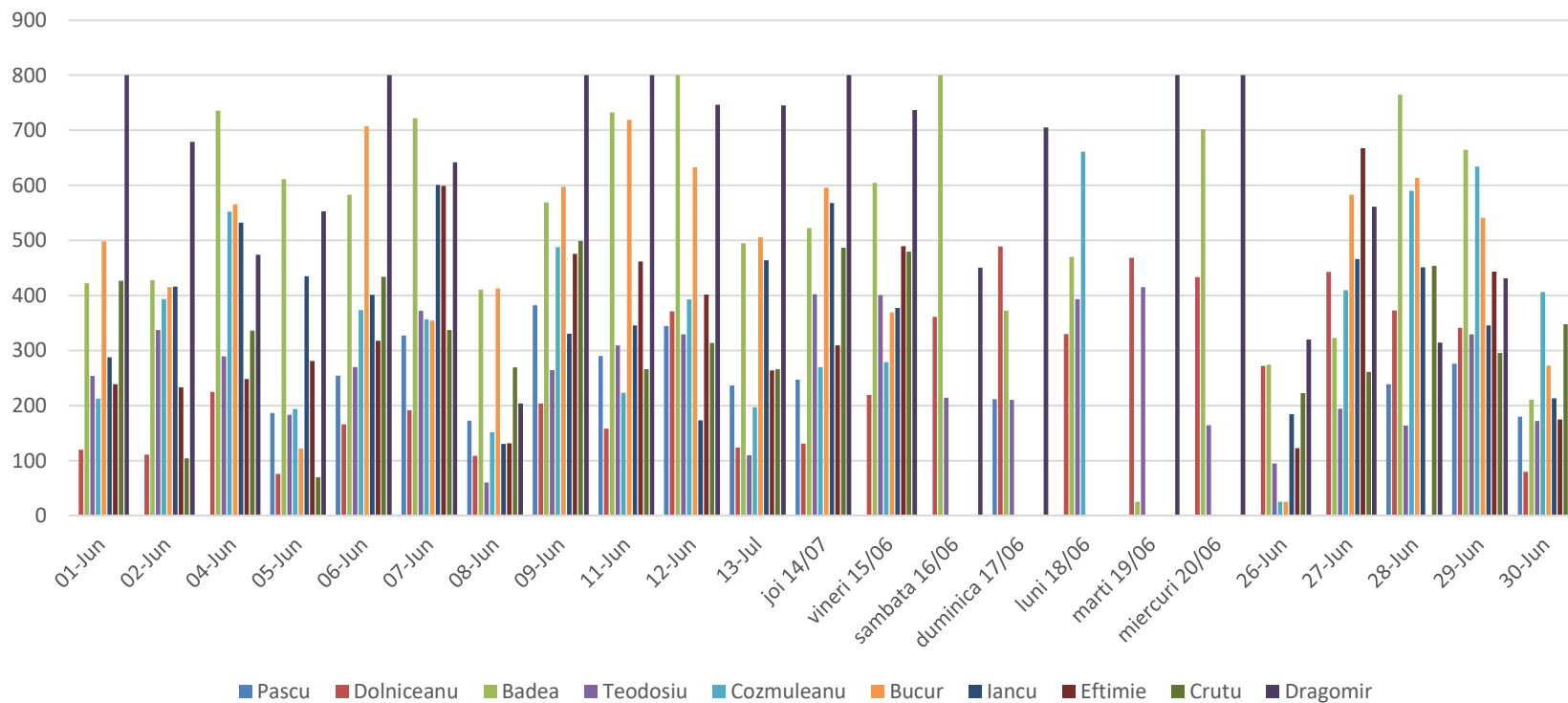




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IgA

Valori slgA luna Iunie,
lot national sabie masculin

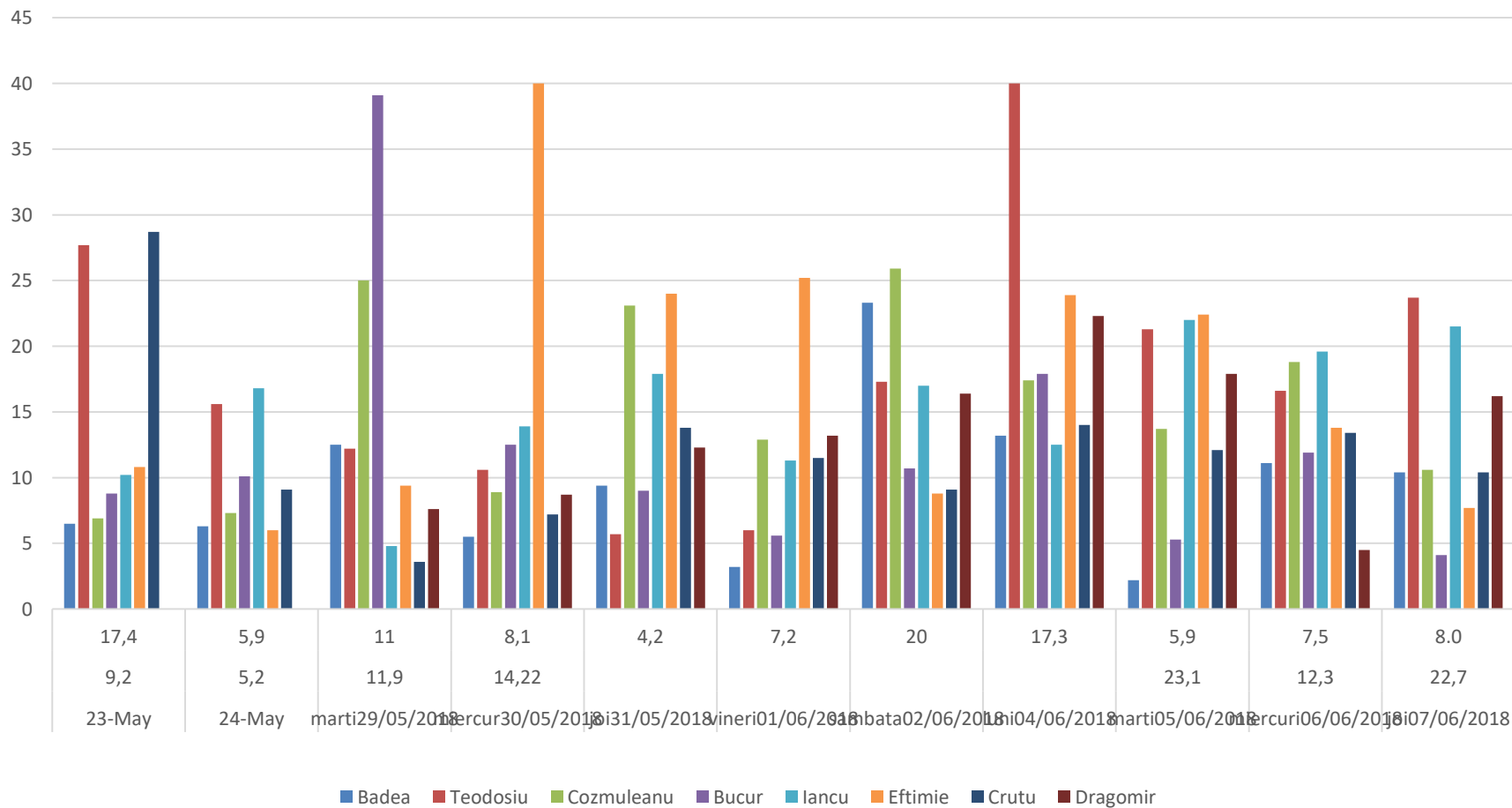




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Cortizol

Cortizol 23.05-07.06



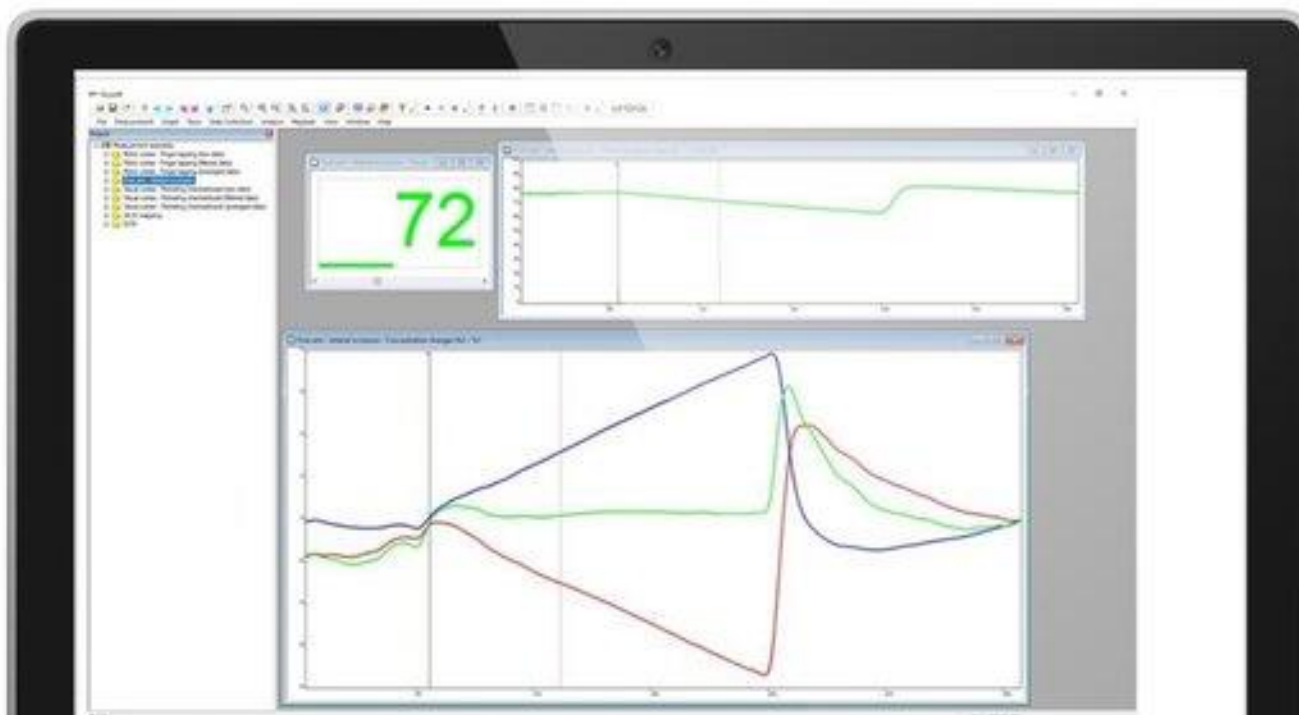
Monitorizare somn

Monitorizare somn



Teste salivare rapide

SmO2





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Whoop system



Altitudine simulare







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Thank you!

