

PHYSIOLOGICAL PROFILE OF YOUNG PLAYERS

HANS HOLDHAUS

**Institute for Sportsmedicine &
Science - Austria**

IMSB - Austria



**IMSB
OLYMPIC
CENTER
Südstadt**



IMSB - Austria



**SCIENTIFIC
SUPPORT**

IMSB - Austria



SPORTS PHYSICIANS

BIOMECHANICS

NUTRITION SCIENTIST

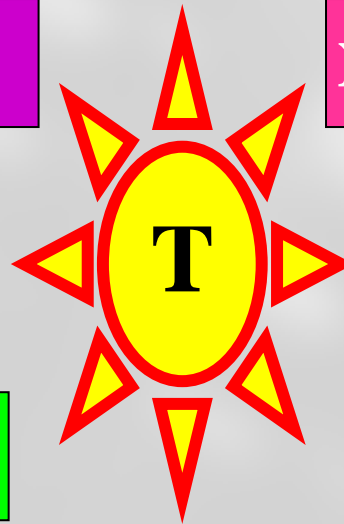
PSYCHOLOGIST

THERAPISTS

MASSEUR

COACHES

SPORTS SCIENTISTS



IMSB - Austria



TOP LEVEL SPORT



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Austria



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**NATIONAL
TEAM**

**JUNIOR
TEAM**

**YOUTH
TEAM**

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**FENCING, JUDO,
CYCLING, TRACK & FIELD,
SWIMMING, SOCCER**

HANDBALL

YOUTH SPORTS



YOUNG PLAYERS

?????

YOUTH SPORTS



? GOAL ?



?
CONSEQUENCES
?

YOUTH SPORTS



**WORLD CHAMPION
YOUTH
HANDBALL**

**WORLD CHAMPION
IN ELITE
HANDBALL**

YOUTH SPORTS



TRAINING
YOUNG PLAYERS

MILESTONE
ON THE WAY
TO THE TOP

YOUTH SPORTS

A background image showing a handball game in progress. Several players in blue and white uniforms are visible, with one player in the foreground wearing a white jersey with a red star and crescent. The text 'PERFORMANCE DETERMINING FACTORS' is overlaid in a large, white, serif font, centered within a black rectangular frame that has a grid pattern.

PERFORMANCE DETERMINING FACTORS

YOUTH SPORTS



**GAME
CHANGES**

FASTER

DYNAMIC

RISKY

VIOLENT

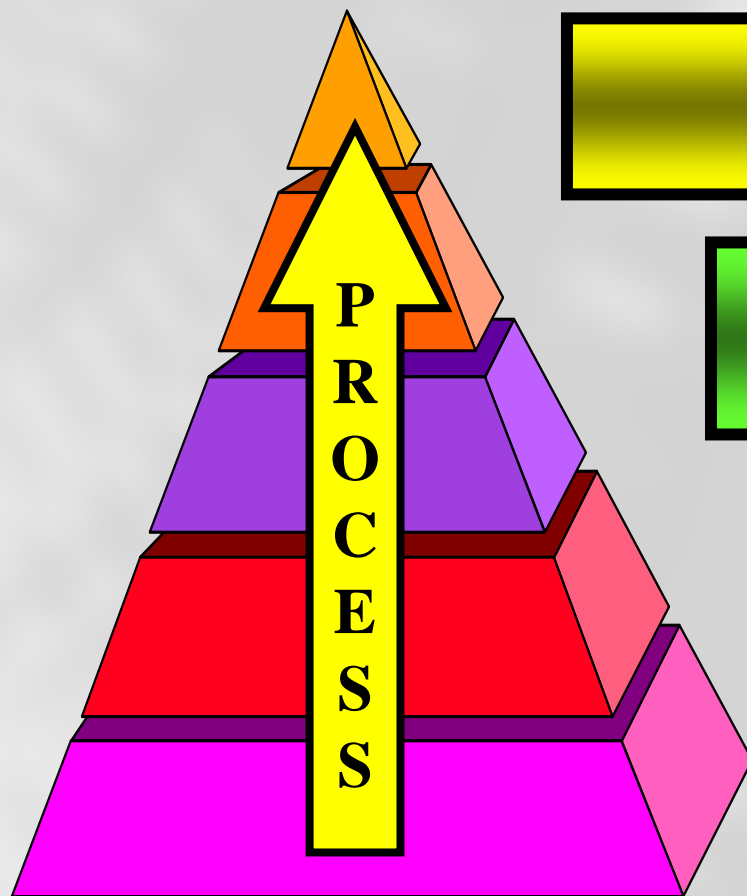
YOUTH SPORTS



NECESSITY & DEMAND

**YOUTH TRAINING
MUST BE ADAPTED
ACCORDINGLY**

YOUTH SPORTS



CONTROLLING

TRAINING

DIAGNOSIS

ANALYSIS

YOUTH SPORTS

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ANALYSIS



YOUTH SPORTS

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TECHNIQUE

ANALYSIS

TACTICS



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? PHYSICAL ?

ANALYSIS

??????



YOUTH SPORTS

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SPEED
REACTIVITY
FLEXIBILITY
COORDINATION
SPEED ENDURANCE
AEROBIC ENDURANCE
EXPLOSIVE STRENGTH
etc.



YOUTH SPORTS

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THROW

A ANALYSIS

? FACTORS ?



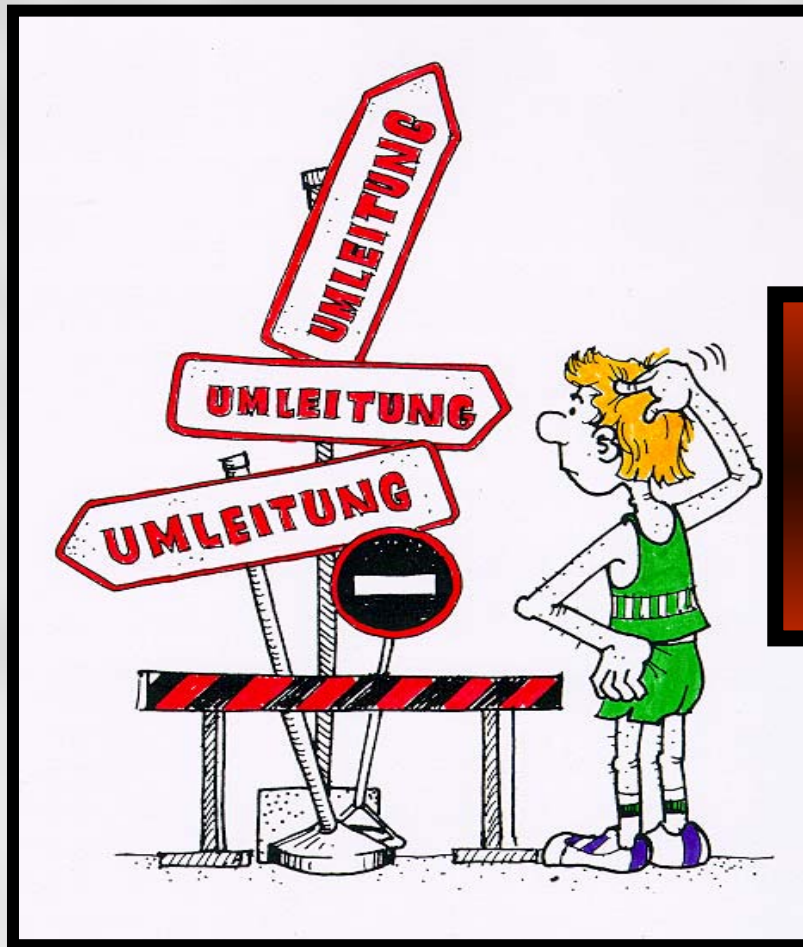
YOUTH SPORTS

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**MORE SCIENTIFIC
RESEARCH ON
PHYSICAL ABILITIES
IN HANDBALL**

YOUTH SPORTS



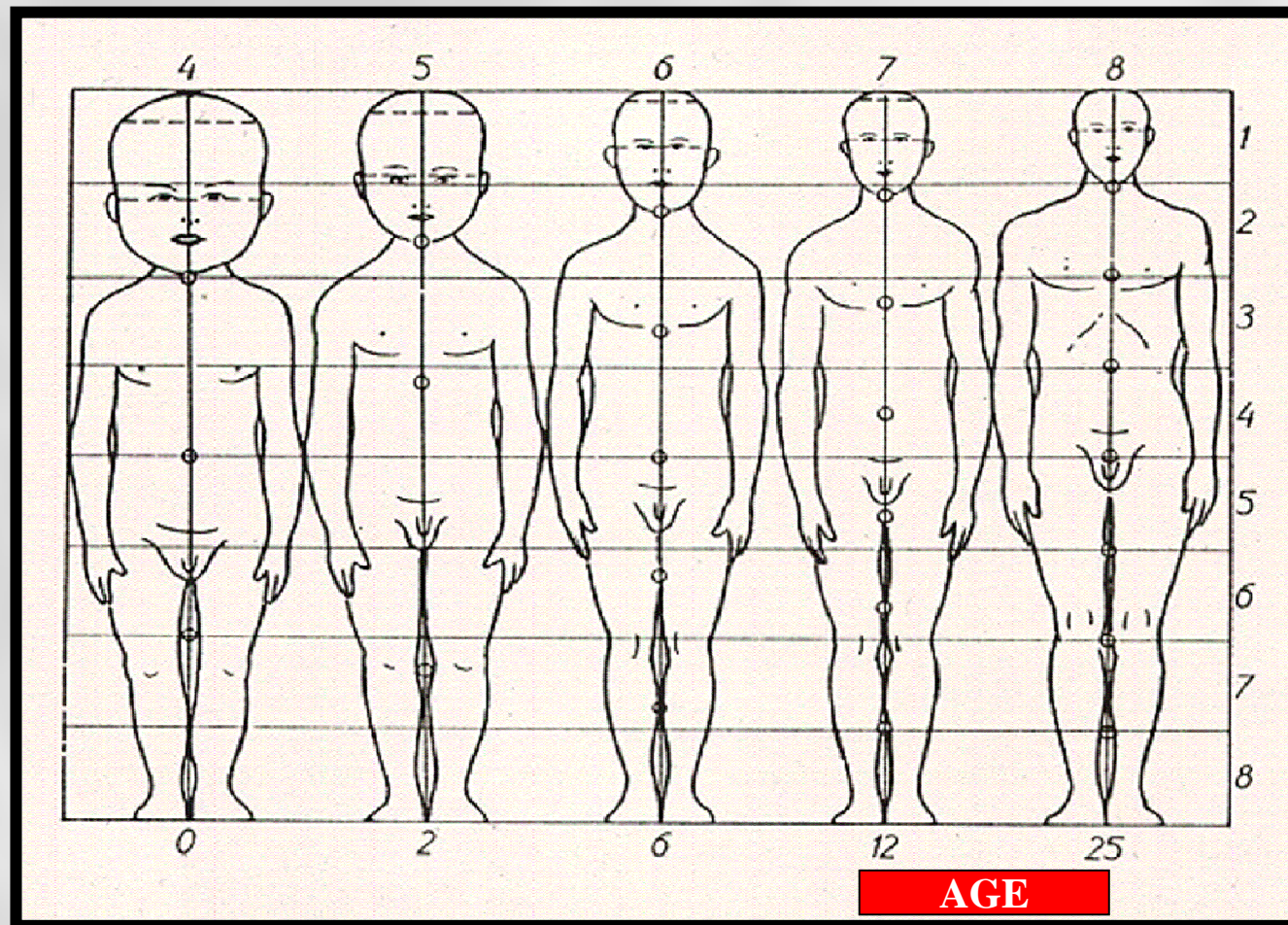
? WHAT ?



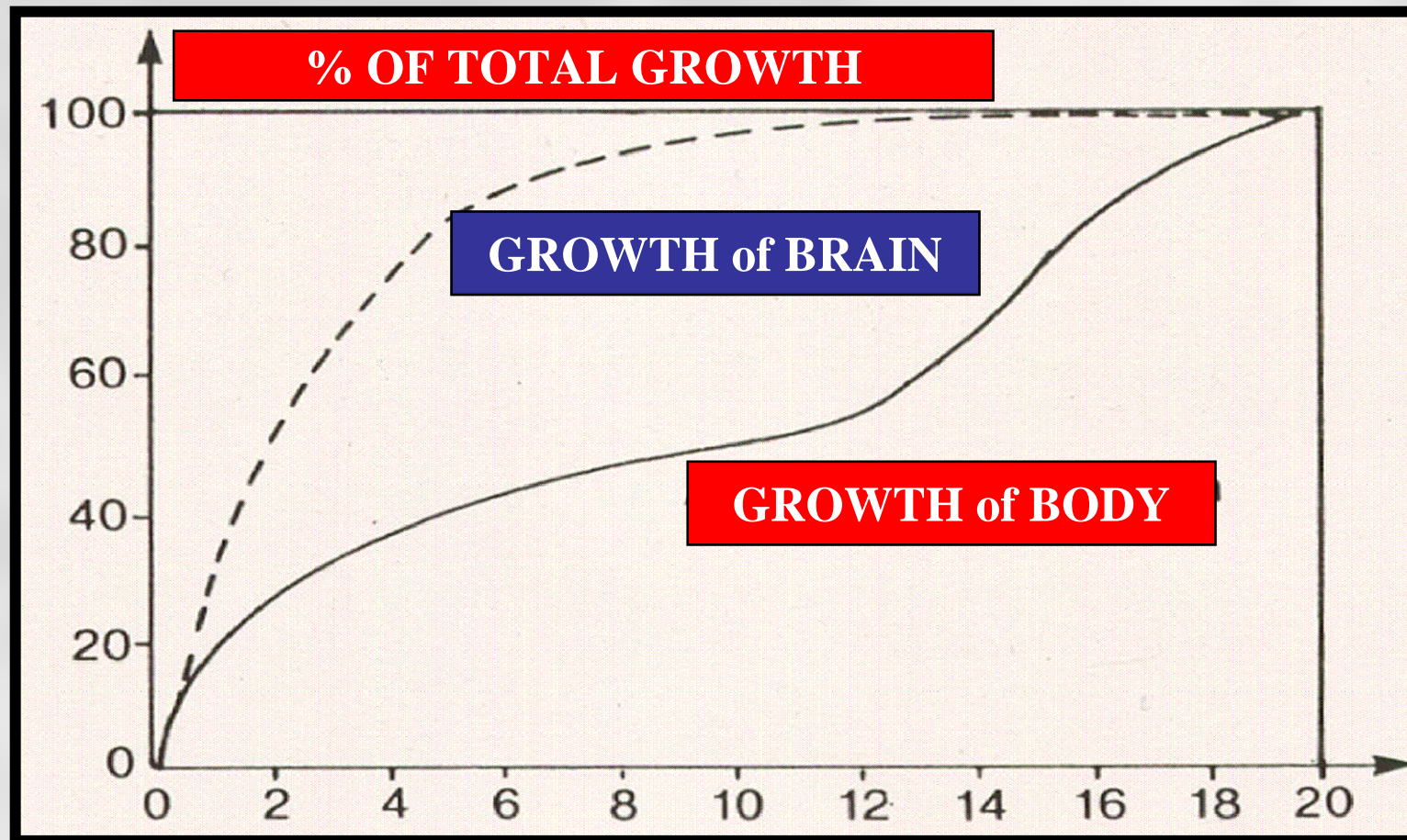
? WHEN ?

YOUTH SPORTS

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YOUTH SPORTS



YOUTH SPORTS



COORDINATION

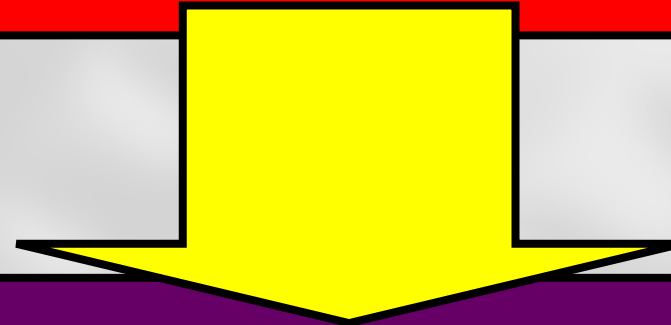
COORDINATION

COORDINATION

YOUTH SPORTS



COORDINATION

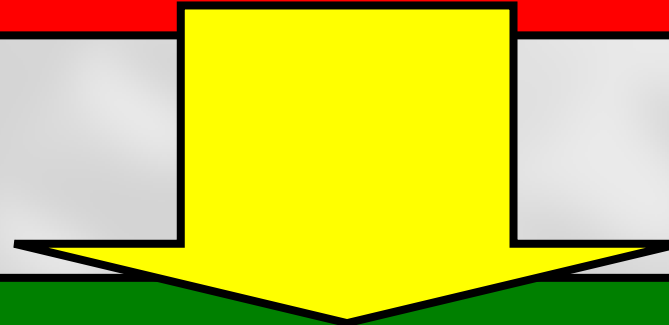


**BASIS FOR
TECHNIQUE**

YOUTH SPORTS



COORDINATION



**PREVENTION OF
INJURIES**

YOUTH SPORTS



**THE COORDINATION BASIS
FOR HIGH PERFORMANCE
IN THE FUTURE
MUST BE DEVELOPED
DURING CHILDHOOD**

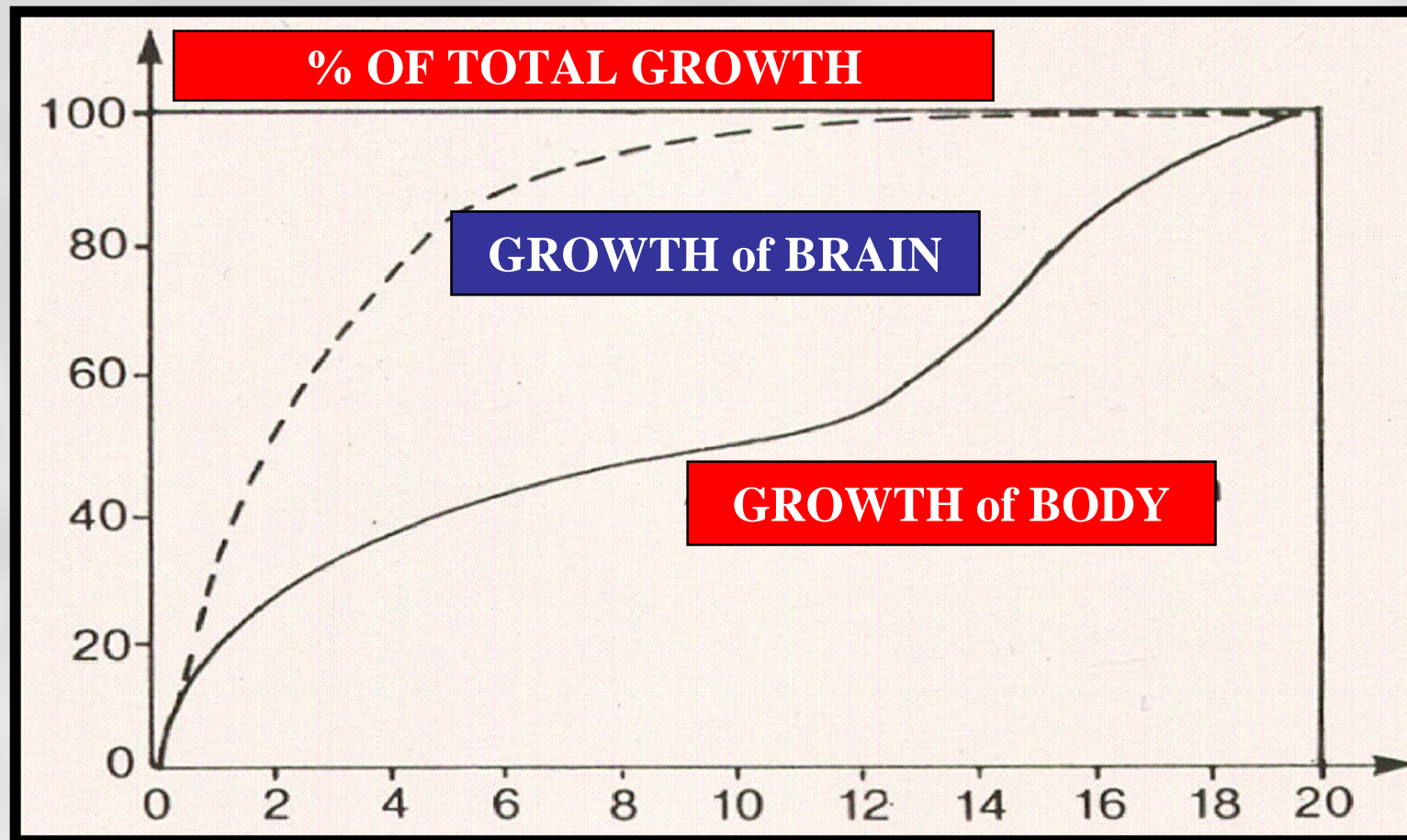


YOUTH SPORTS



?
CONDITIONING
?

YOUTH SPORTS



YOUTH SPORTS



CONDITIONING IN CHILDHOOD

YES

NO

YOUTH SPORTS



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YOUTH SPORTS



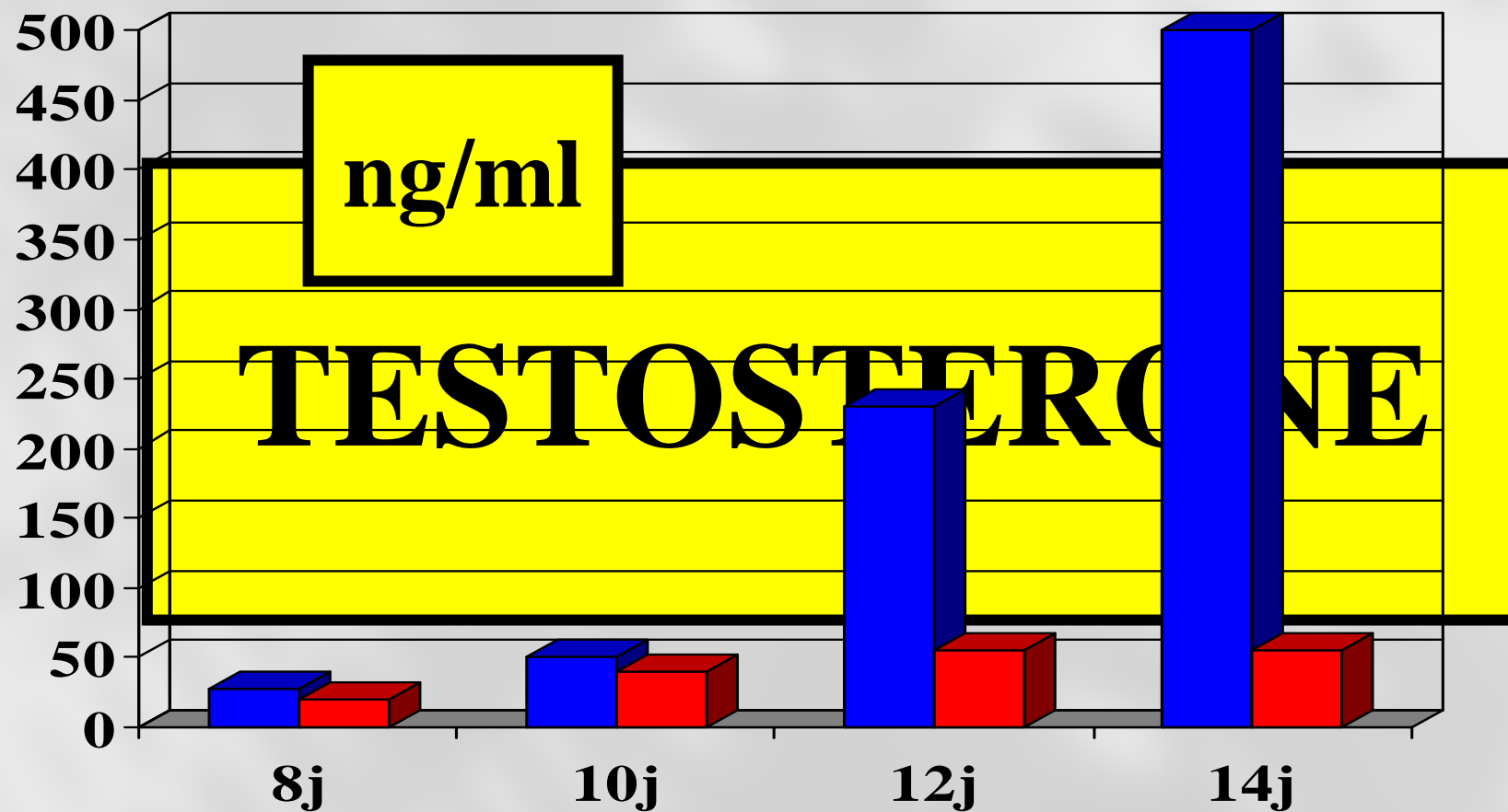
**MOST DIFFICULT
STAGE OF
DEVELOPMENT**

YOUTH SPORTS



MOST EFFICIENT CONDITIONING PHASE

YOUTH SPORTS



YOUTH SPORTS



**INDIVIDUAL
CAPACITY
OF THE
HUMAN SYSTEM
LIMITS THE
TRAINING LOAD**

YOUTH SPORTS



INDIVIDUAL TRAINING

REGENERATION

YOUTH SPORTS



REQUIREMENTS FOR INDIVIDUAL TRAINING

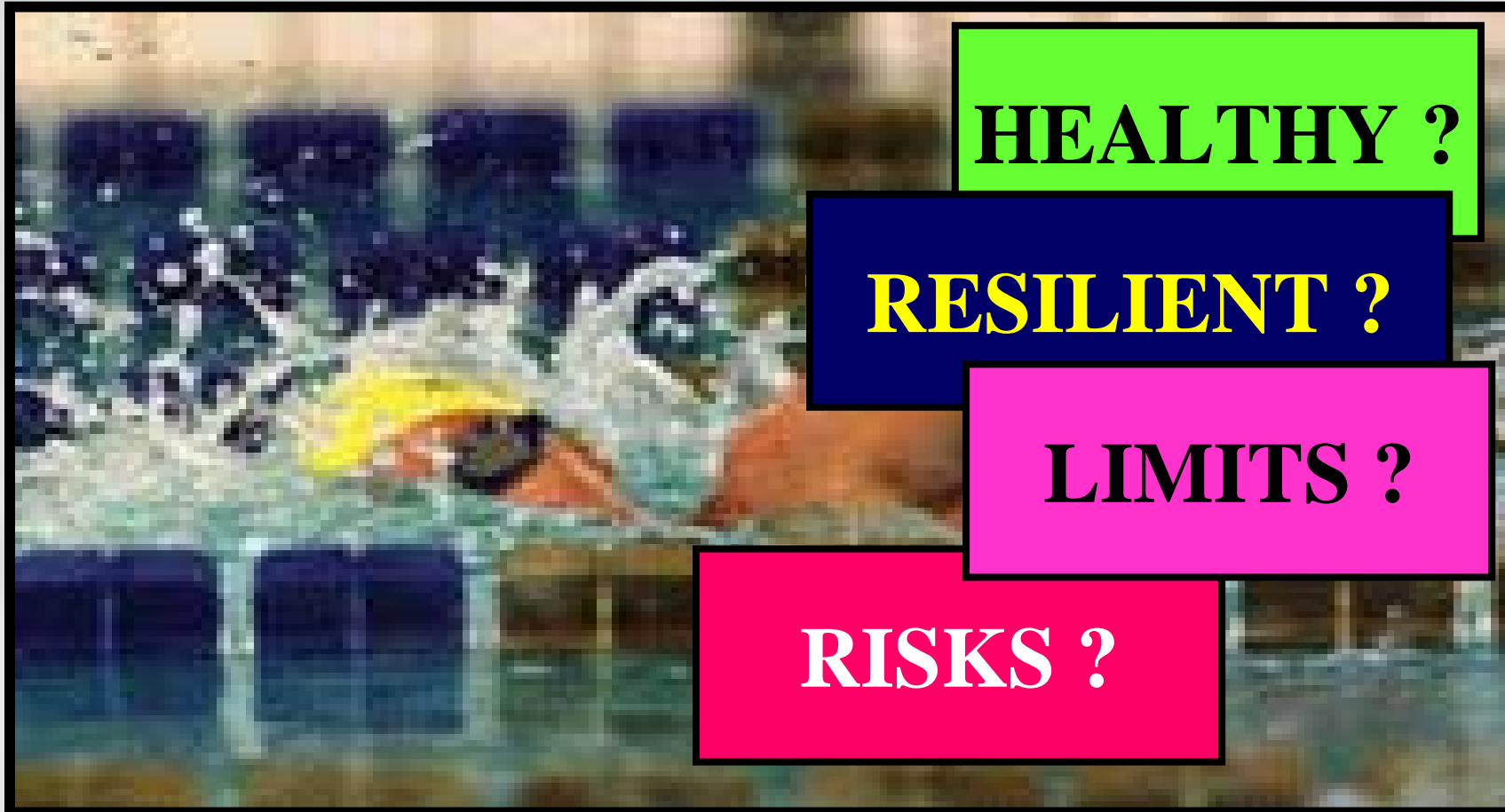
YOUTH SPORTS



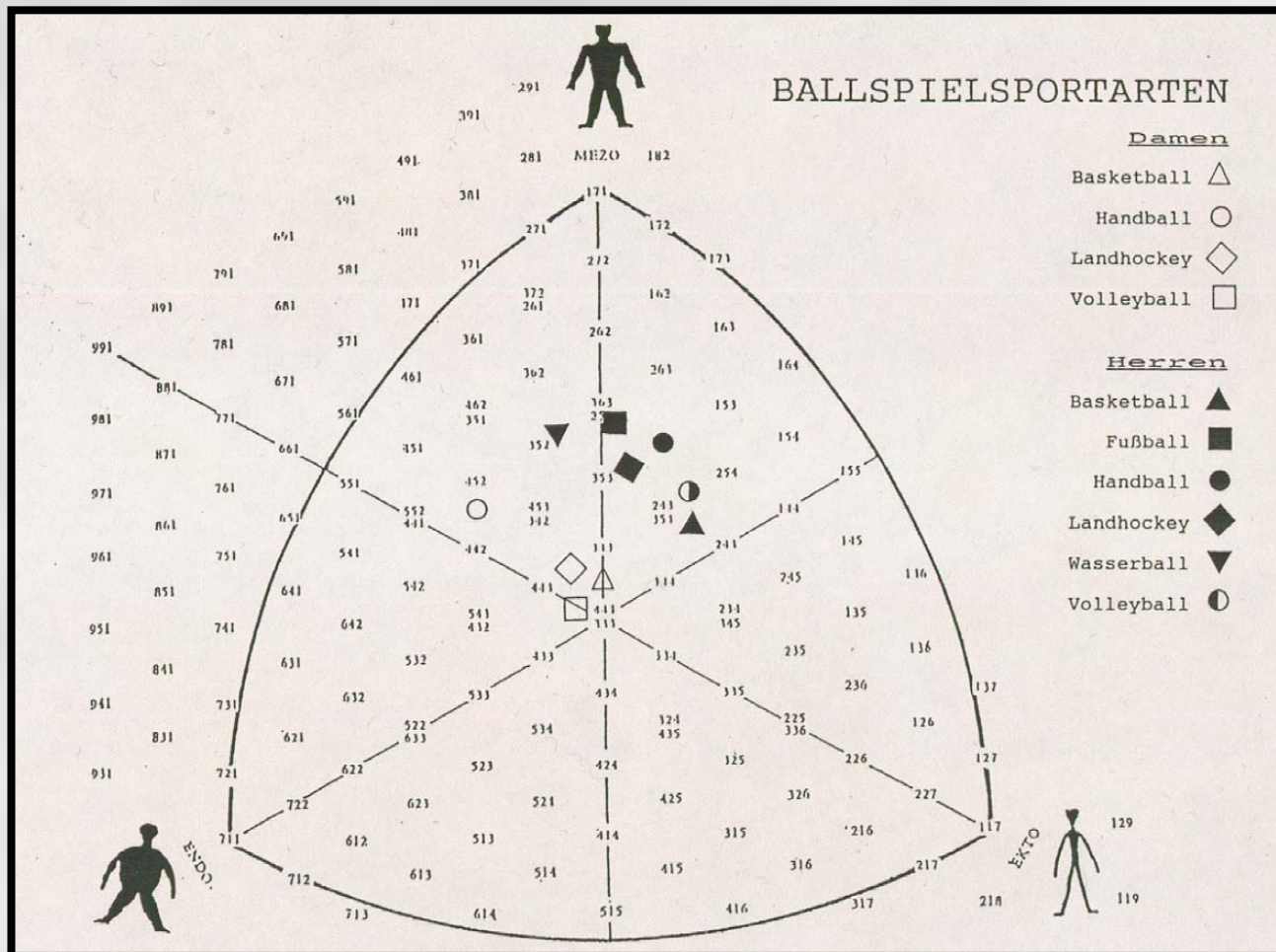
COMPLEX SPORTS MEDICAL EXAMINATION

**INTERNAL STATUS
ORTHOPAEDIC STATUS
ERGOMETRY (ECC)
LAB (Blood, Urin)**

YOUTH SPORTS



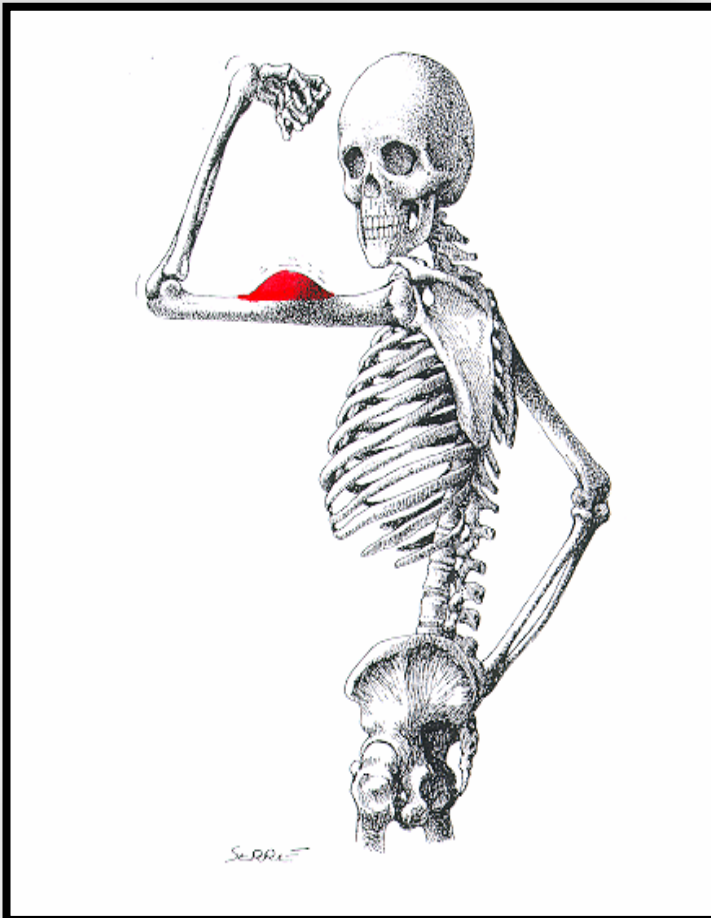
YOUTH SPORTS



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YOUTH SPORTS

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BODY - COMPOSITION

FAT
SCELETON
MUSCLES

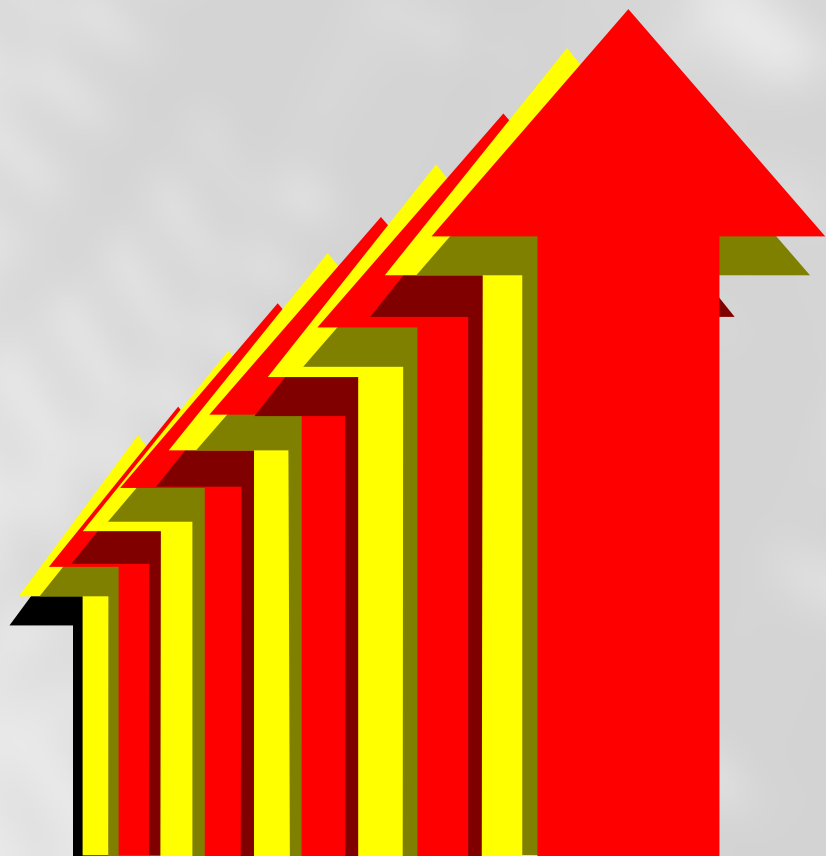
YOUTH SPORTS



**BIOLOGICAL
AGE**

**CALENDARY-
AGE**

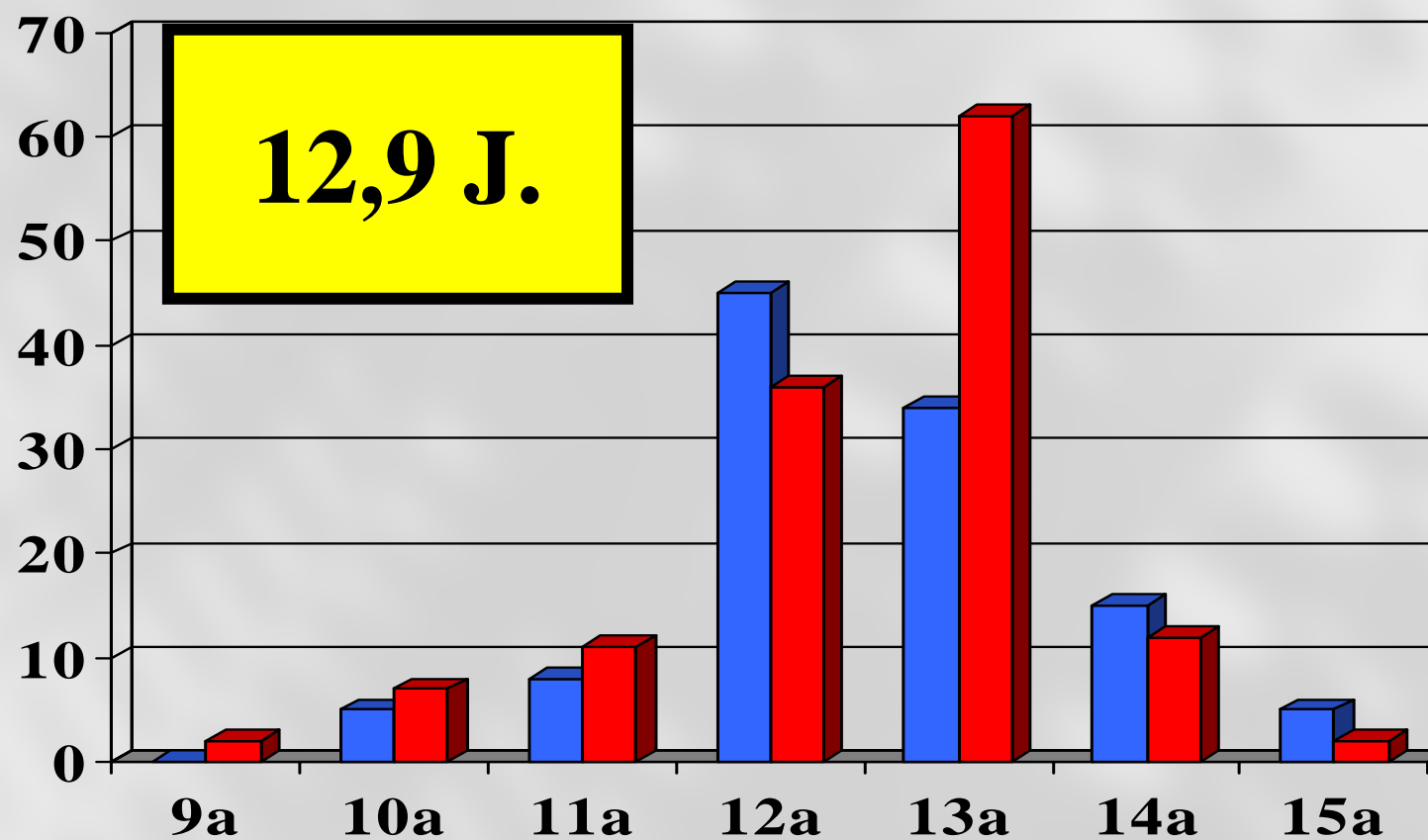
YOUTH SPORTS



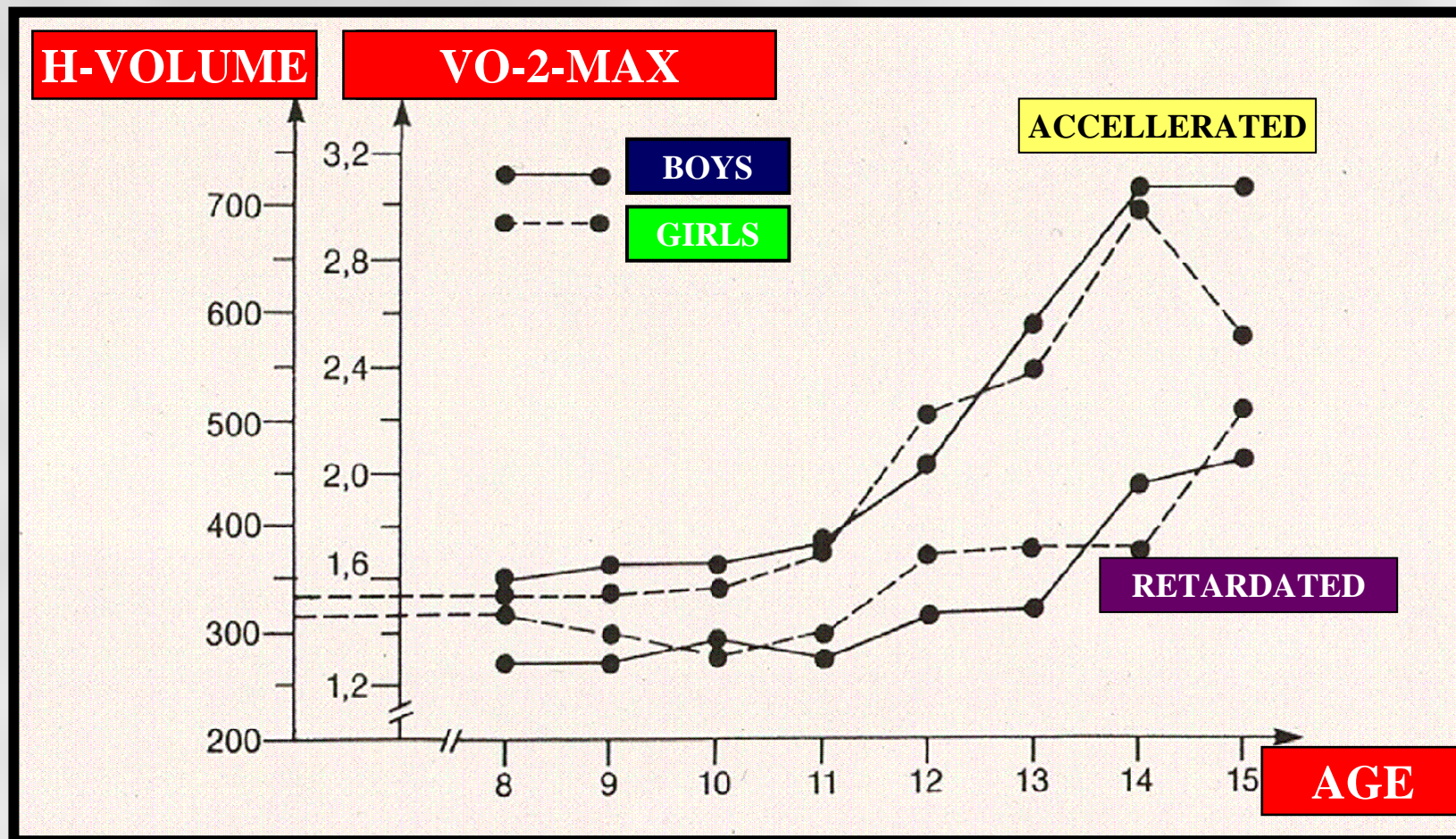
**BIOLOGICAL
AGE**

**NORMAL
ACCELERATED
RETARDATED**

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YOUTH SPORTS



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**DIAGNOSIS
OF
MOTORIC
ABILITIES**

YOUTH SPORTS



SPEED

POWER

EXPLOSIVE POWER

FLEXIBILITY

D

DEXTERITY

SPEED ENDURANCE

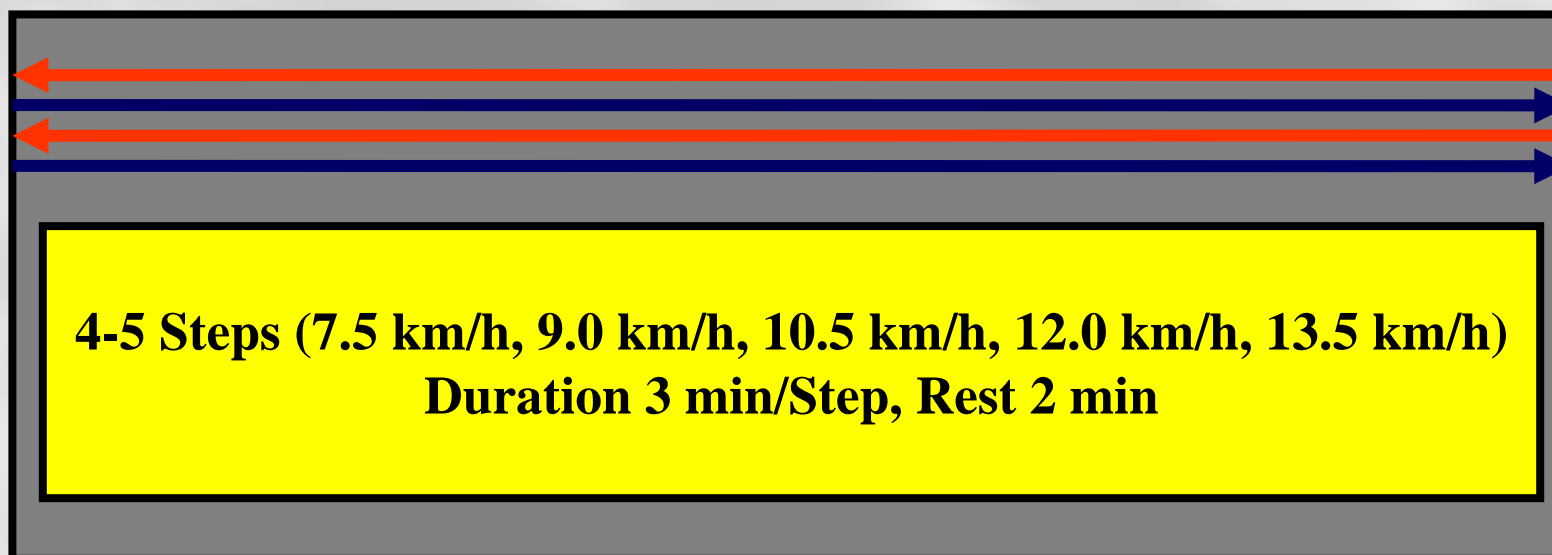
POWER ENDURANCE

ENDURANCE

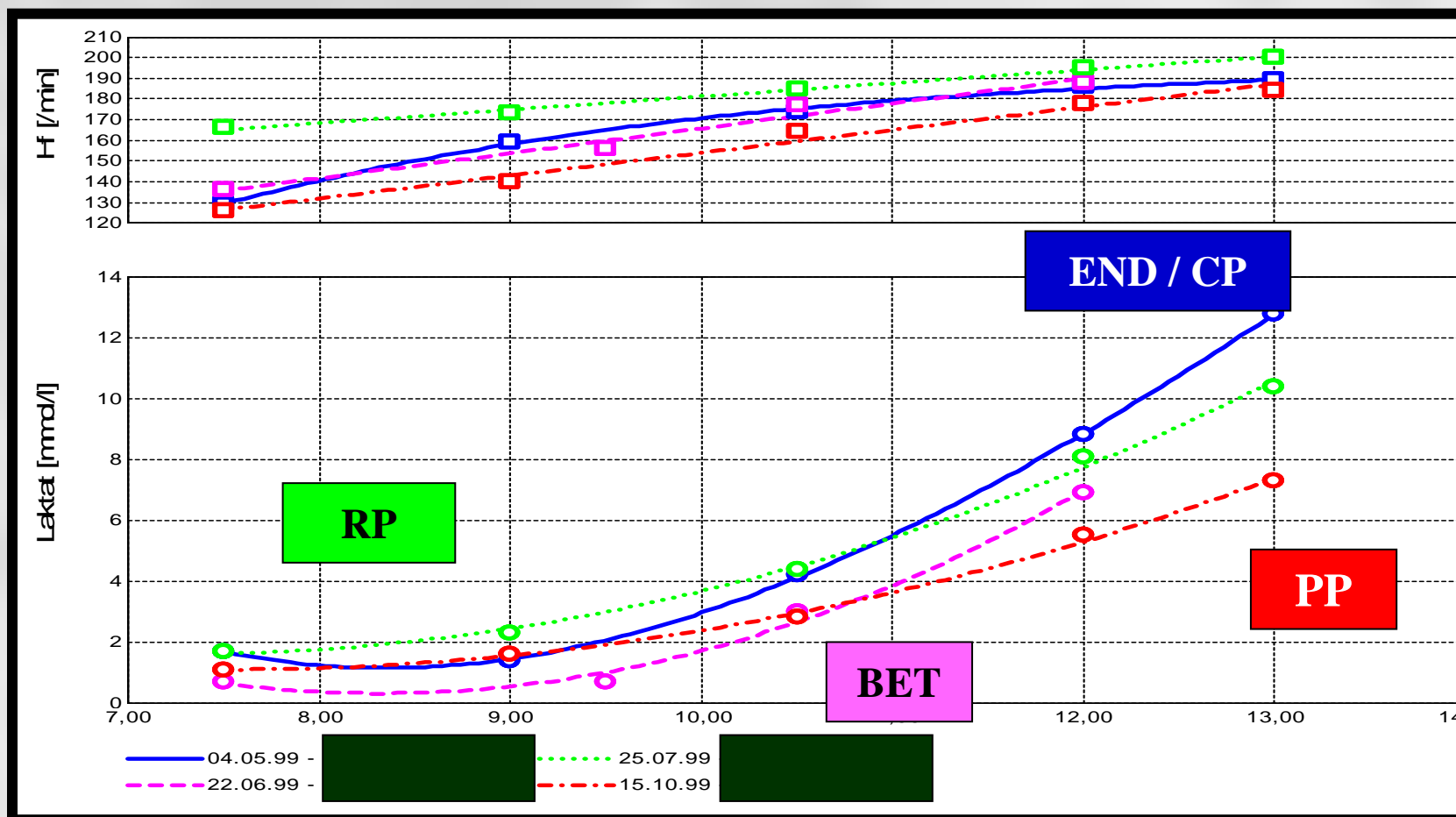
YOUTH SPORTS



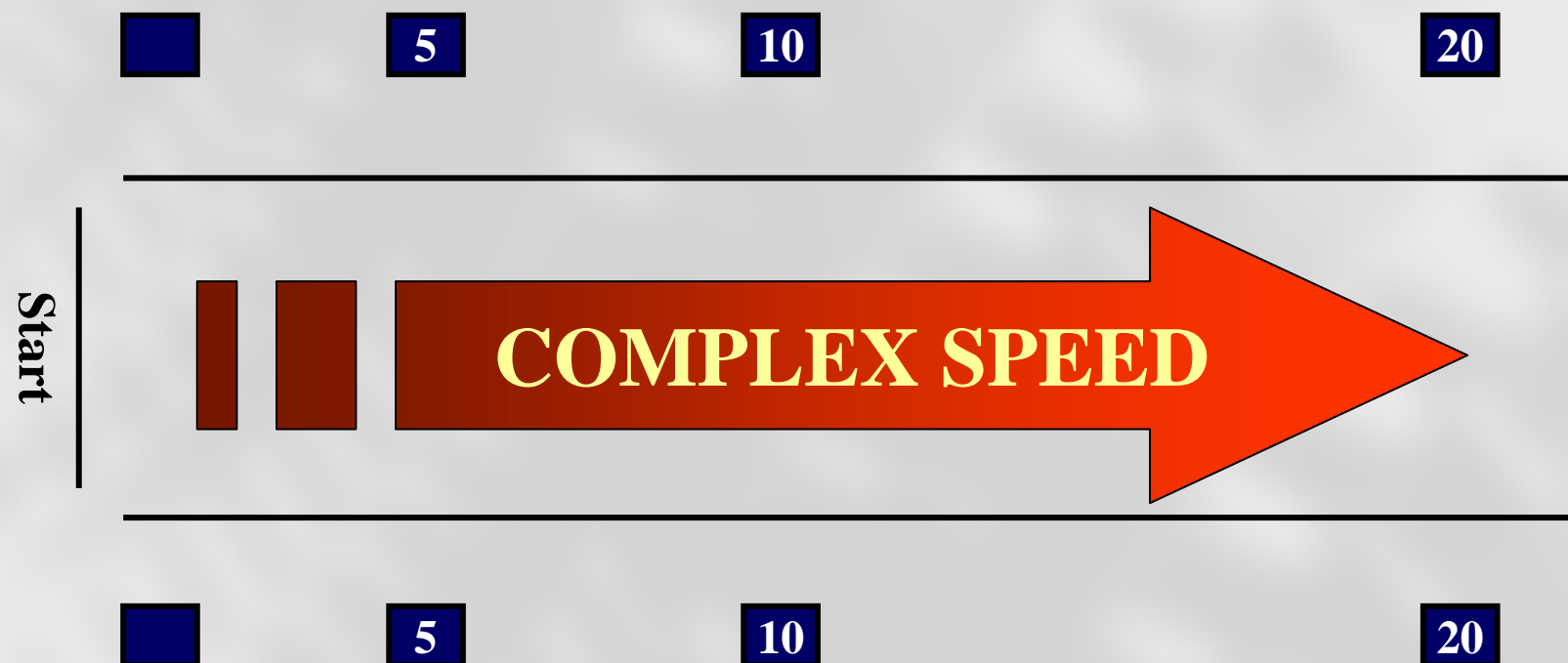
SHUTTLE-RUN



YOUTH SPORTS



YOUTH SPORTS



YOUTH SPORTS

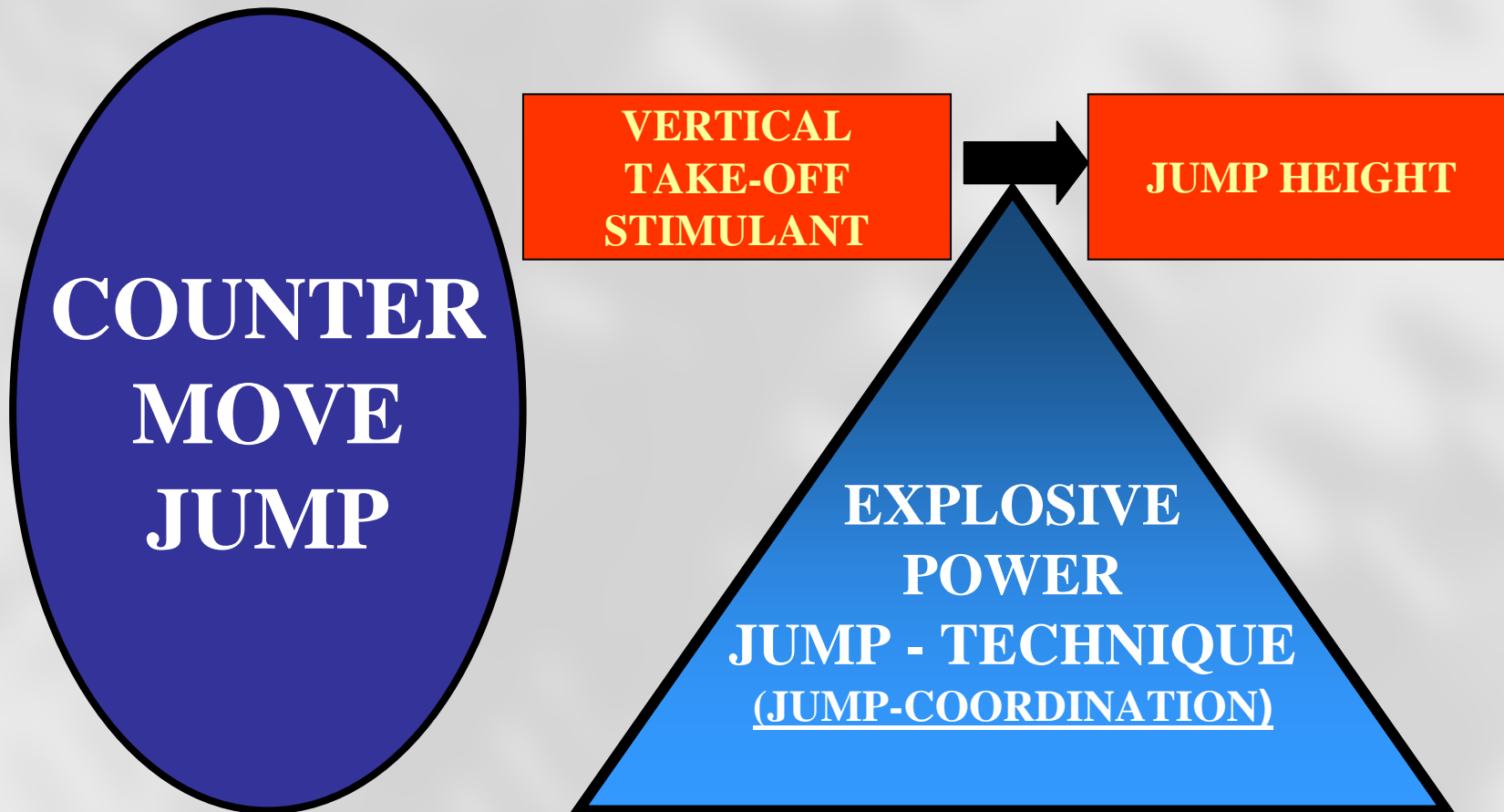


AJAX SPRINT

SPEZIFIC SPEED PERFORMANCE



YOUTH SPORTS



YOUTH SPORTS



**BALANCE
TESTS**

**AGILITY
TESTS**

**REACTION
TESTS**

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ANAEROBIC TESTS





YOUTH SPORTS






INSTITUT FÜR
SPORTWISSENSCHAFTEN
DER UNIVERSITÄT SALZBURG









BREITENBERGER, Pascal
 Spielposition: sturm
 Geburtsdatum: 21.06.88
 Standort: LAZ Vbg Unterland
 Mannschaft: Laz Vbg Unterland

	18.09.01				18.09.01		
	Kennwert	Pkt.	Kennwert	Pkt.	Kennwert	Kennwert	
Sprint 5m	1,13	3			OS vo re	5	
Sprint 10m	1,97	2			OS vo li	5	
Sprint 20m	3,32	3			OS hi re	4	
					OS hi li	4	
Linienlauf	13,56	1			Hüftbeuger re	5	
Bumerang	12,85	2			Hüftbeuger li	5	
Tapping	10,9	3			Waden re	5	
CMJ	29,4	2			Waden li	5	
DRJ Höhe	24				Brust re	5	
DRJ Kontaktzeit	220				Brust li	5	
Erg. Sprung	4,37	3			Bauchmusk.	4	
Agility	649	3			Körperkomp.	5	
Medizinballwurf	5,8	2					
Shuttle Run	0						
Sit and Reach	5	3					


OS vorne




OS hinten




Hüftbeuger




Waden



Brust

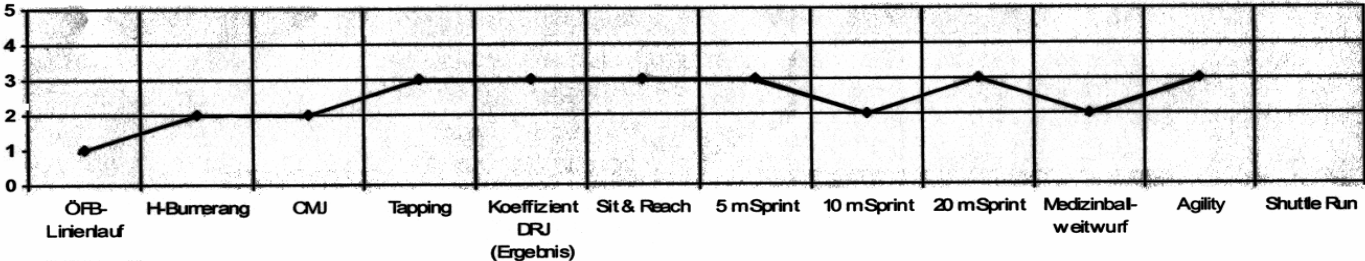


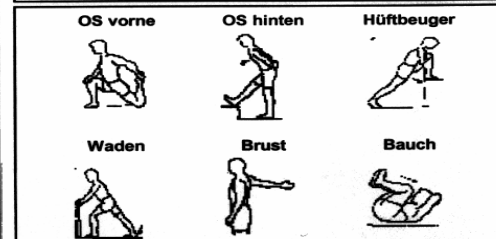
Bauch



Beurteilung 18.09.01: 27 Punkte
 Defizite in der Antrittsschnelligkeit (Schnellkraft, Schnelligkeit)!
 Starke Defizite in den allg. koordin. Fähigkeiten!!

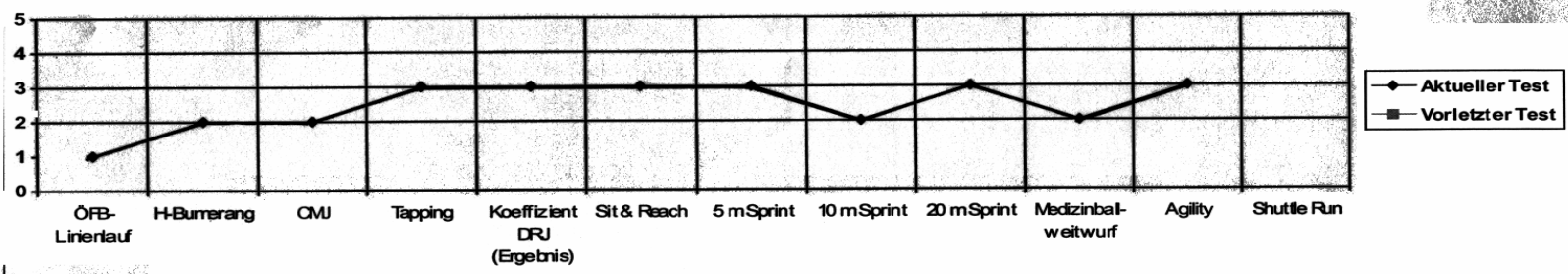
Beurteilung : 0 Punkte





Beurteilung 18.09.01: 27 Punkte
 Defizite in der Antrittsschnelligkeit (Schnellkraft, Schnelligkeit)!
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Beurteilung : 0 Punkte



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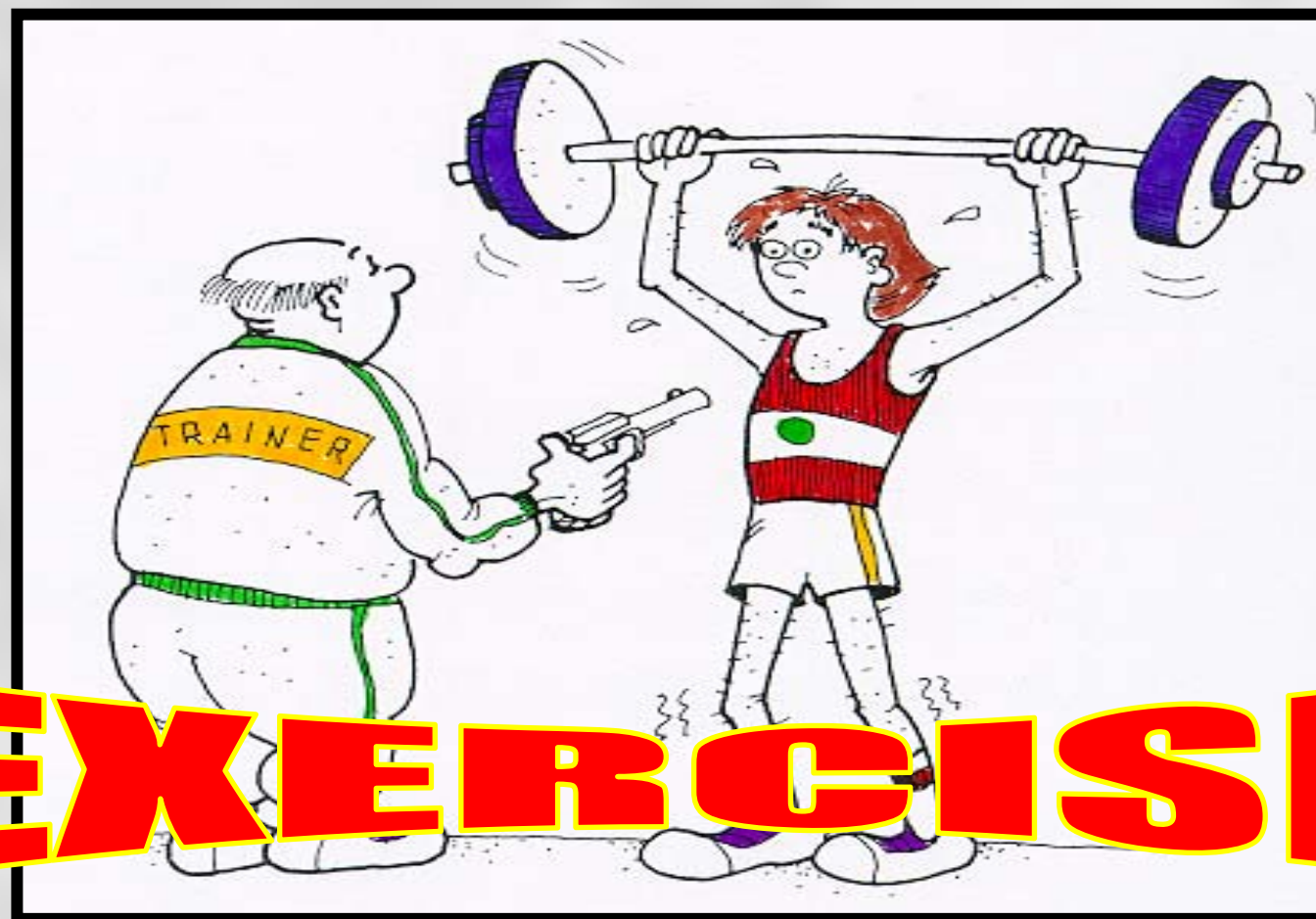


? GOAL ?

PLANNING

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CONTROLLING

YOUTH SPORTS



**THANK
YOU**