IMSB - Austria

TOP LEVEL SPORT

32 FEDERATIONS
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

PERFORMANCE DETERMINING FACTORS

GAME CHANGES
- FASTER
- DYNAMIC
- RISKY
- VIOLENT
YOUTH SPORTS

NECESSITY & DEMAND

YOUTH TRAINING MUST BE ADAPTED ACCORDINGLY

YOUTH SPORTS

CONTROLLING
TRAINING
DIAGNOSIS
ANALYSIS
YOUTH SPORTS

ANALYSIS

TECHNIQUE

TACTICS
YOUTH SPORTS

? PHYSICAL ?

ANALYSIS

??????

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YOUTH SPORTS

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

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20
THROW

ANALYSIS

? FACTORS?

MORE SCIENTIFIC RESEARCH ON PHYSICAL ABILITIES IN HANDBALL
**GROWTH of BODY**

**GROWTH of BRAIN**

**% OF TOTAL GROWTH**
YOUTH SPORTS

COORDINATION

BASIS FOR TECHNIQUE

PREVENTION OF INJURIES
THE COORDINATION BASIS FOR HIGH PERFORMANCE IN THE FUTURE MUST BE DEVELOPED DURING CHILDHOOD.
YOUTH SPORTS

% OF TOTAL GROWTH

GROWTH of BODY

GROWTH of BRAIN

0 2 4 6 8 10 12 14 16 18 20

0 20 40 60 80 100

YOUTH SPORTS

CONDITIONING IN CHILDHOOD

YES  NO

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YOUTH SPORTS

MOST DIFFICULT STAGE OF DEVELOPMENT

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1. PUB - PHASE

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YOUTH SPORTS

MOST EFFICIENT CONDITIONING PHASE

TESTOSTERONE

ng/ml

8j 10j 12j 14j
INDIVIDUAL CAPACITY OF THE HUMAN SYSTEM LIMITS THE TRAINING LOAD

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

HEALTHY?

RESILIENT?

LIMITS?

RISKS?
YOUTH SPORTS

BIOLOGICAL AGE

NORMAL
ACCELERATED
RETARDATED

YOUTH SPORTS

12,9 J.
YOUTH SPORTS

SPEED

POWER

EXPLOSIVE POWER

FLEXIBILITY

DEXTERITY

SPEED ENDURANCE

POWER ENDURANCE

ENDURANCE

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YOUTH SPORTS

SHUTTLE-RUN

4-5 Steps (7.5 km/h, 9.0 km/h, 10.5 km/h, 12.0 km/h, 13.5 km/h)
Duration 3 min/Step, Rest 2 min

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50
YOUTH SPORTS

AGILITY

POWER

COORDINATION

SPEGIFIC SPEED PERFORMANCE

AJAX SPRINT

VERTICAL TAKE-OFF STIMULANT

JUMP HEIGHT

EXPLOSIVE POWER JUMP - TECHNIQUE (JUMP-COORDINATION)

COUNTER MOVE JUMP

YOUTH SPORTS SPEZIFIC SPEED PERFORMANCE

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54
YOUTH SPORTS

WEAK

STRONG

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58
YOUTH SPORTS

CONTROLLING

THANK YOU