

International RaceRunning camp

Frederiksberg 11. july 2017



Leif Nielsen, coach for the Danish RaceRunning team, running.



Team Danmark, training for children and young people.

Age	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Play training.....																
General allround development.....																
Body ABC.....																
Sport ABC.....																
Physical ABC..																
another sport																
Start individual training of physiccil / tecnicque training																
Development of sports - pychological competence																

Body ABC: Agality, balance, coordination

Sport ABC: run, jump, throw, catch, kick

Physical ABC: farstness (1 – 15 sec sprint), strenght, movement , staying power

Physical training: Generel training, focus on schoulder, elbow, back, knee, ankle.

Fast power: development of alactacid power (- 20 sec.)



Steps of development RaceRunning.

<p>Step 1</p>	<p>Coordination General movement Tecnich Balance</p>	<p>S T R E C H I N G</p>	
<p>Step 2</p>	<p>Start strength With bodyweight Start condition</p>		<p>Maintance Condition General movement tecnich</p>
<p>Step 3</p>	<p>Strength Power Condition</p>		

Biological age and training age

Biological age → Age of training ↓	Age 0 – 14	Age 14 – 17	Age 17 – 19	Age 19+
Age 0 – 2	1	1	1	1
Age 2 – 4	1	1	2	2
Age 4 – 6	1	2	2	3
Age 6 – 8	1	2	3	3
Age 8 – 10	1	2	3	3
Age 10 +	1	2	3	3

Physical Training

The most important elements for a RaceRunning beginner athlete are:

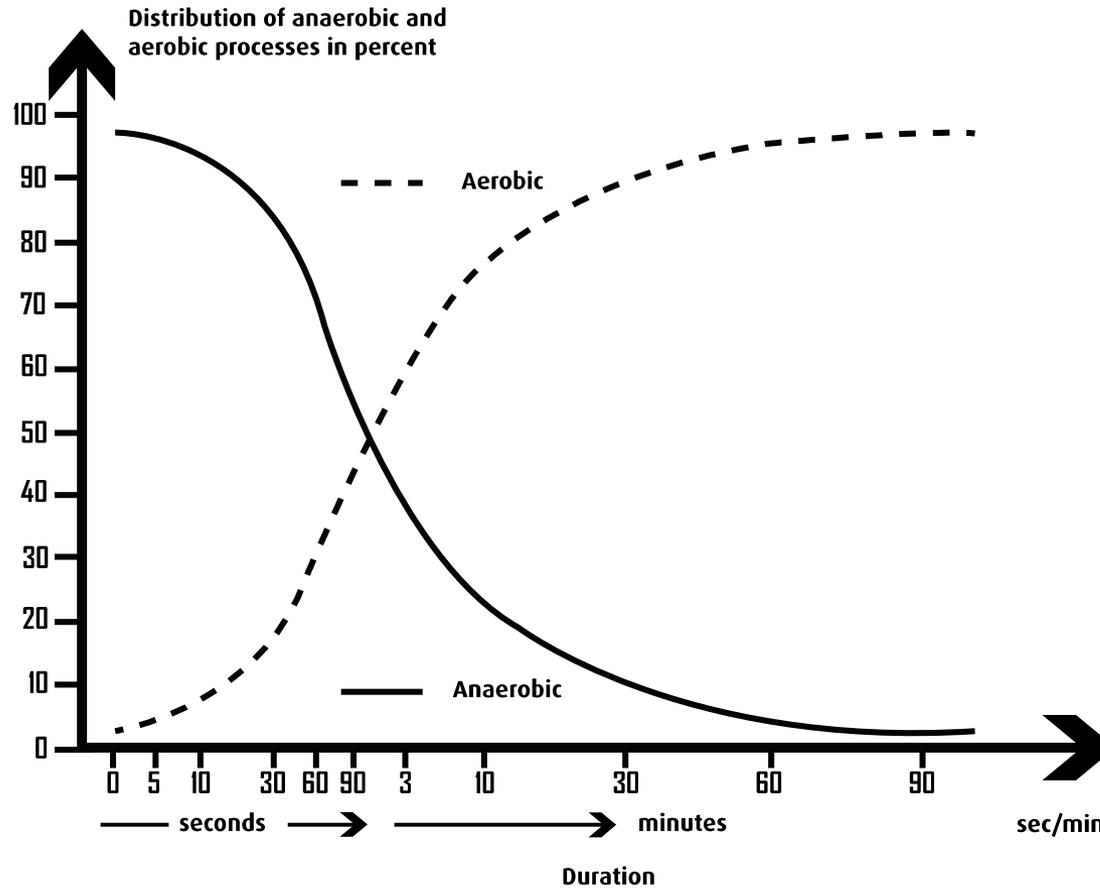
- Condition Training (physical fitness)
- Strength Training
- Coordination Training
- Stretching Out

Warming-up

- The passive method
- The active method



Aerobic / Anaerobic



Physical Training

Training in time
.....not distance!



RaceRunning
- a sport in movement...

RESULT COMPARING, FRESH SPORT AND RACERUNNING

MALE:

<u>DISTANCE</u>	<u>WL</u>	<u>CLUB</u>	<u>RR1</u>	<u>RR2</u>	<u>RR3</u>
100 m	9,77	11,00	26,58	20,53	19,34
200 m	19,68	23,01	54,30	43,58	39,7
400 m	43,74	52,11	3.40,15	1.21,20	1.28,01
800 m	1.42,45	1.58,55		2.58,57	3.32,63
1500 m	3.27,64	4.15,88		5.52,23	7.25,82

FEMALE:

<u>DISTANCE</u>	<u>WL</u>	<u>FRESCH</u>	<u>RR1</u>	<u>RR2</u>	<u>RR3</u>
100 m	10,80	13,35	32,77	24,03	21,96
200 m	22,02	28,95	1.10,54	55,00	43,40
400 m	49,48	65,00	2.22,70	1.58,37	
800 m	1.57,67	2.28,70	4.44,74	4.10,96	
1500 m	3.57,00	5.25,00			



access to sport

Calculating the Intensity

- The Talking Method
- Sprints
- Pulse

The Objectives of Aerobic Training

- Improving Condition (physical fitness)
- Improving the body's use of Oxygen
- Improving the body's ability for restitution

Intensity

- Low Intensity Training
- Moderate Intensity Training
- High Intensity Training

The Objectives of Anaerobic Training

- Improving (or maintaining) the ability of the body to react fast and to quickly produce energy for the most strenuous exercise level.
- Improving (or maintaining) the ability of the muscles to quickly and continuously obtain the energy for the most strenuous exercise level.
- Improving (or maintaining) the ability of the body's ability for restitution after strenuous exercise.

Anaerob training

- Speed training
- eks.:
 - Reaction training
 - Sprintstart

START PROCEDURE – AND CARD

**On your marks....go to the startlineand be quiet
Set..... Get ready.....and be quiet
"Gun" RUN**

CARD:

Technical problem.....Green card

False start / warning.....Yellow / black card

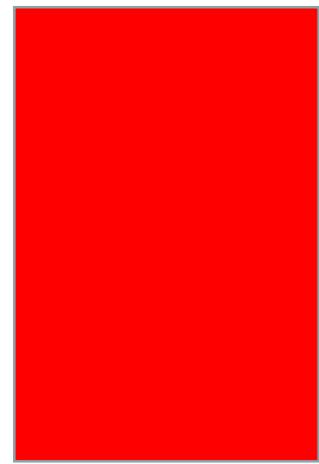
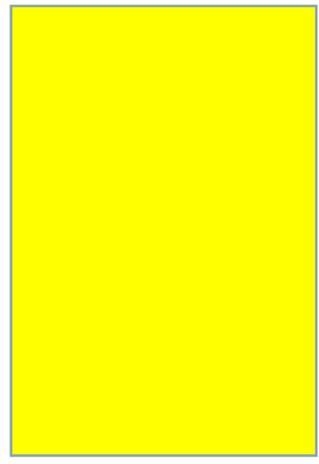
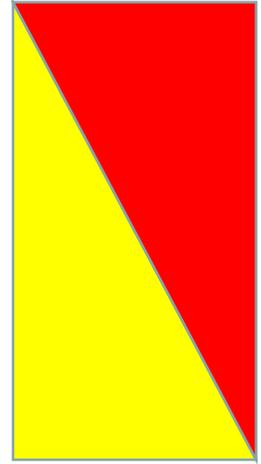
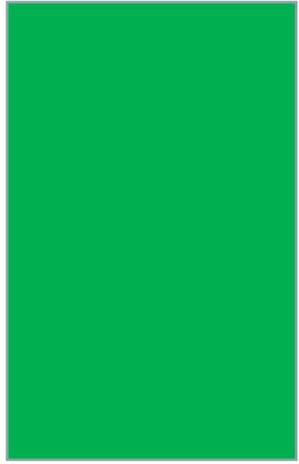
False start.....Red / black card

Discipline problem / warning.....Yellow card

Discipline problem, second time.....Red card



RaceRunning
- a sport in movement...



Intensity, Duration, Pauses

Training	Intensity	Exercise time	Pause/Work-distribution	Repetitions
Speed	100%	2 – 10 SEC.	20 - 30 : 1	6 – 15 SETS
Anaerobic effect	70 - 90%	10 – 40 SEC.	10 - 15 : 1	6 – 10 SETS
Anaerobic Capacity	50 - 70%	40 – 120 SEC.	1 - 5 : 1	4 – 8 SETS

Restitution

Intensity	Normal Duration of Restitution	Normal Duration of Supercompensation
Low	¼ - 1 ½ 24hrs	From a few hours to a couple of days.
Moderate	½ - 2 24hrs	1 - 3 (-4) 24hrs
High	1 - 3 24hrs	1 - 4 (-6) 24hrs
Very high and Maximum	2 - 4 (-5) 24hrs	3 - 6 (-10) 24hrs

Training of Coordination

Coordination:

The ability to combine the movements of the body in relation to each other and to the surroundings.

RaceRunning Technique

- Butterfly Technique
- Gallop
- Classical Running Technique
- Classical Spastic technique

Technique Training

The most important aspects to be practiced are:

- The athletes' position on the RaceRunning bike.
- The position of the athletes' head; is the athlete looking up/down/left/right?
- The athletes' push-off and footwork at the starting line as well as during the race.
- The position of the athletes' toes during the race; are they pointing forward, going inwards or going outwards?
- Adjustment of the athletes' starting block.

RaceRunning Technique - Video

<https://www.youtube.com/watch?v=mwyxcS4PwAs>

The Role of the Coach in the Technical Training

Finding the right running technique/movement pattern is a task for the coach – though normally the decision is made together with the athlete.

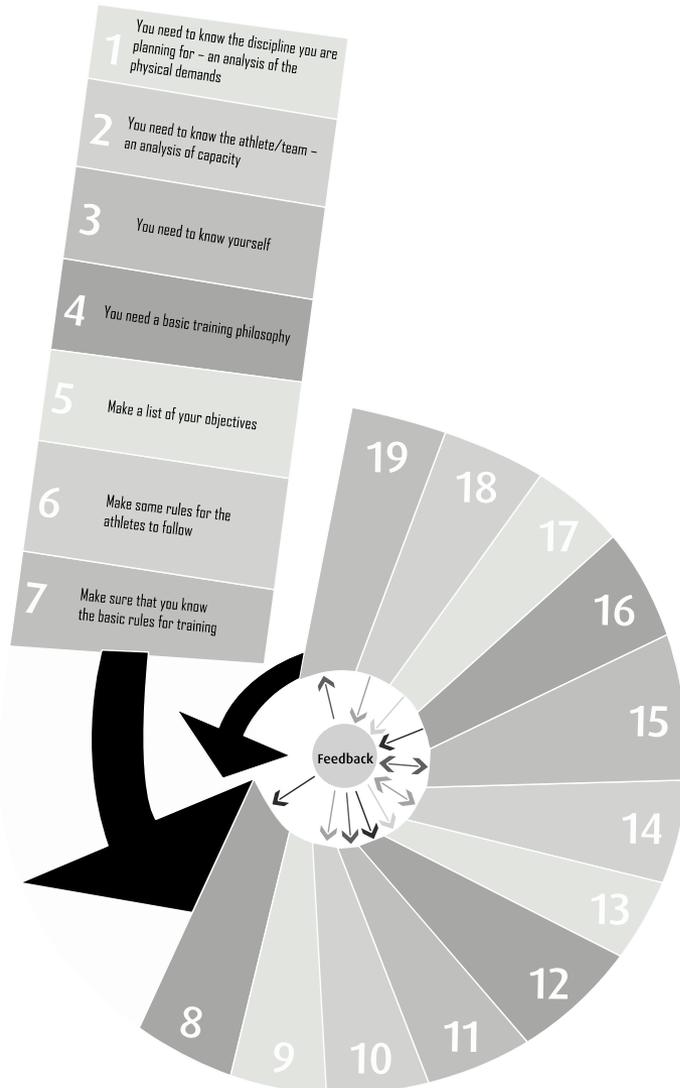
- The right running technique minimizes the risk of injuries.
- The athlete uses less energy to get from A to B and the joy of running grows.
- The right running technique/movement pattern uses less energy and gives better results at competitions.

Tactical Training

Tactical training is the planning of an upcoming competition.

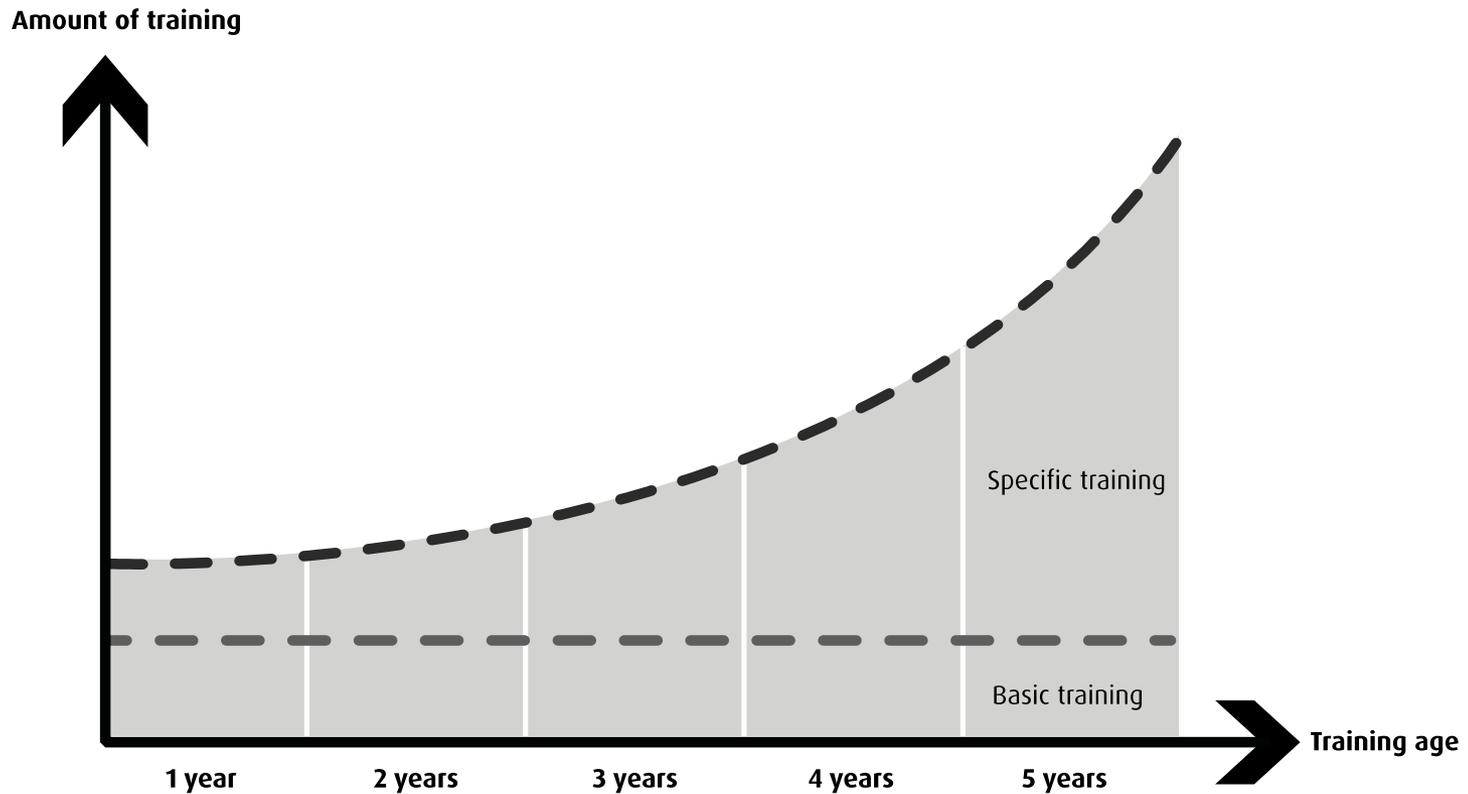
- Know your strengths and weaknesses
- Know your competitors
- Plan your competitions

The “Figure 6”-plan



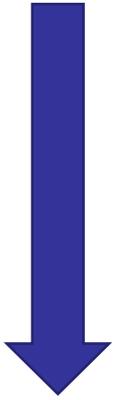
8. Make a long-term plan
9. Make a plan for the whole year
10. Make a periodic plan
11. Make a week plan
12. Make a schedule for the training sessions
13. Make a plan for reaching the peak fitness conditions
14. Carrying out the plans
15. Adjustments during the process
16. Conduct an assessment
17. When something does not work properly
18. Do a summary of the training
19. Adjustments & new planning

Basic Training and Specific Training



Planning the training year

Method of Arthur Lydiard.

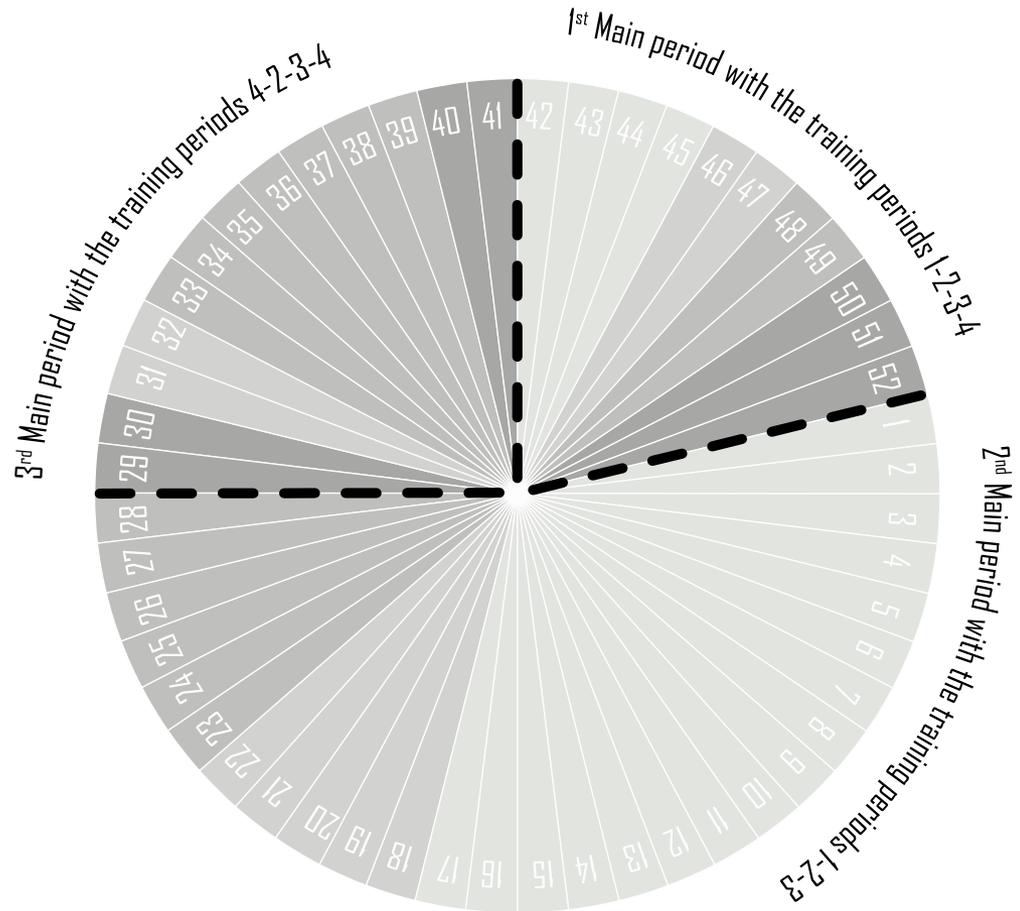


From WM to the end of season, competitions.....	1. October.
Most important competition, CPISRA – WM.....	12 – 14. july.
1 week to make the body fit for the competition.....	10. july.
2 weeks with optimize speed.....	19. june.
4 weeks with tempo training.....	22. may.
4 weeks with interval training.....	24. april.
6 weeks with hill training.....	13. marts.
As long as possible, 19 weeks.....	30. October.

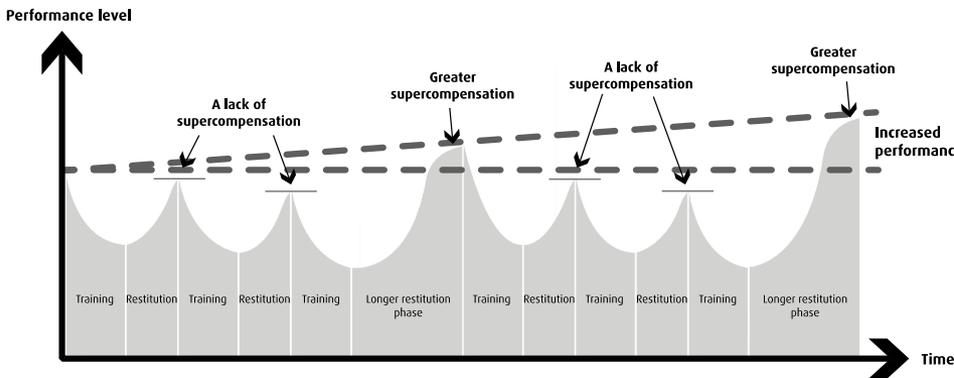
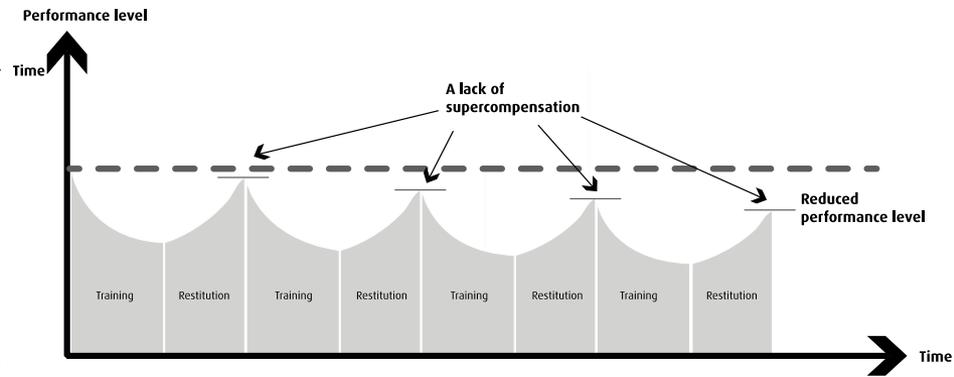
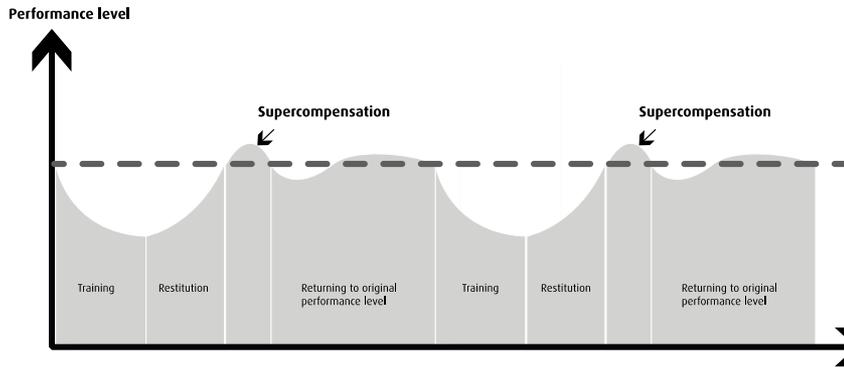
Planning the Training Year

A training period of one year

- 1 The Build-up phase
- 2 The Preparatory phase
- 3 The Competition phase
- 4 The Restitution phase



Supercompensation



Strength Training

The standard definition of strength training:
An organized and planned activity with the primary objective of improving one or more strength abilities:

- Maximum strength
- RFD (Rate of Force Development)
- Endurance

Strength Training

The linear method &
The non-linear method

1 RM = The weight load that the athlete can do maximum once

- Endurance
- Maximum Strength
- FD - Training for Speed and Speed-strength

Stretching Exercises

The purpose of stretching out is:

- To increase the athletes' flexibility and range of movement
- To prevent injuries
- To prevent harmful movements
- To increase level of wellbeing
- To prevent soreness

Strength Training Exercises

- These exercises are designed in order for the athletes to be able to do them at home.
- The exercises should in general be repeated 3x10 times.
- Experienced athletes may repeat the various exercises 3x20 or 3x30.
- The exercises may be combined as you wish.
- All the exercises are training the muscular endurance.

Exercises with Resistance Band

Depending on the specific resistance band used the level of resistance will vary and the exercise become easier or harder.

There are 5 different types of resistance bands available.

Be aware that the individual athlete might have relatively more strength in some muscle groups than in others.