

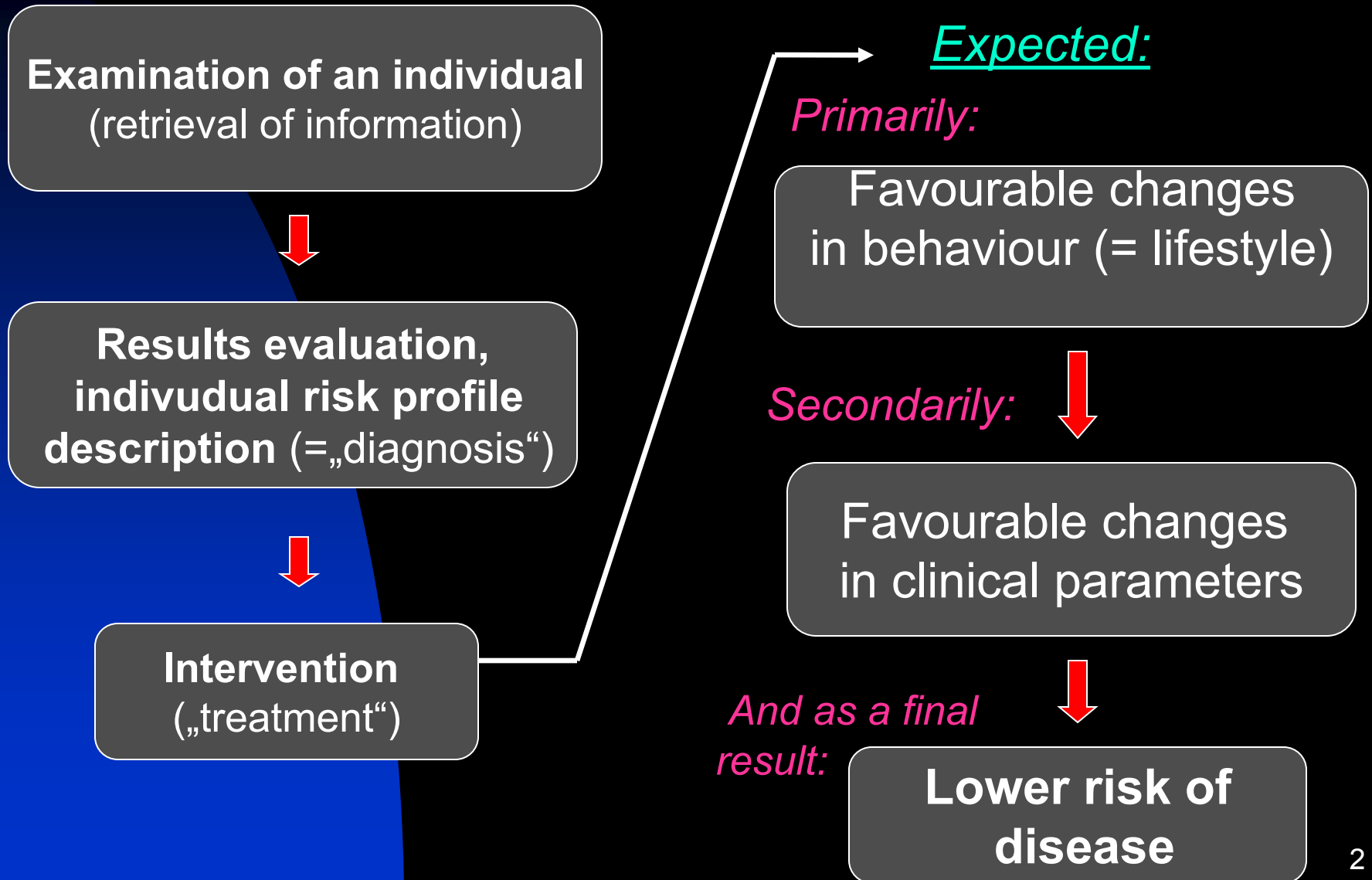
Preventive examination as a tool for primary prevention



doc. MUDr. Jindřich Fiala, CSc.

Department of Public Health

Preventive examination in primary prevention (intervention to reducing the risks)



Content of examination

A. Anamnestical part

Retrospective (questionnaire) assessment of lifestyle factors + some others

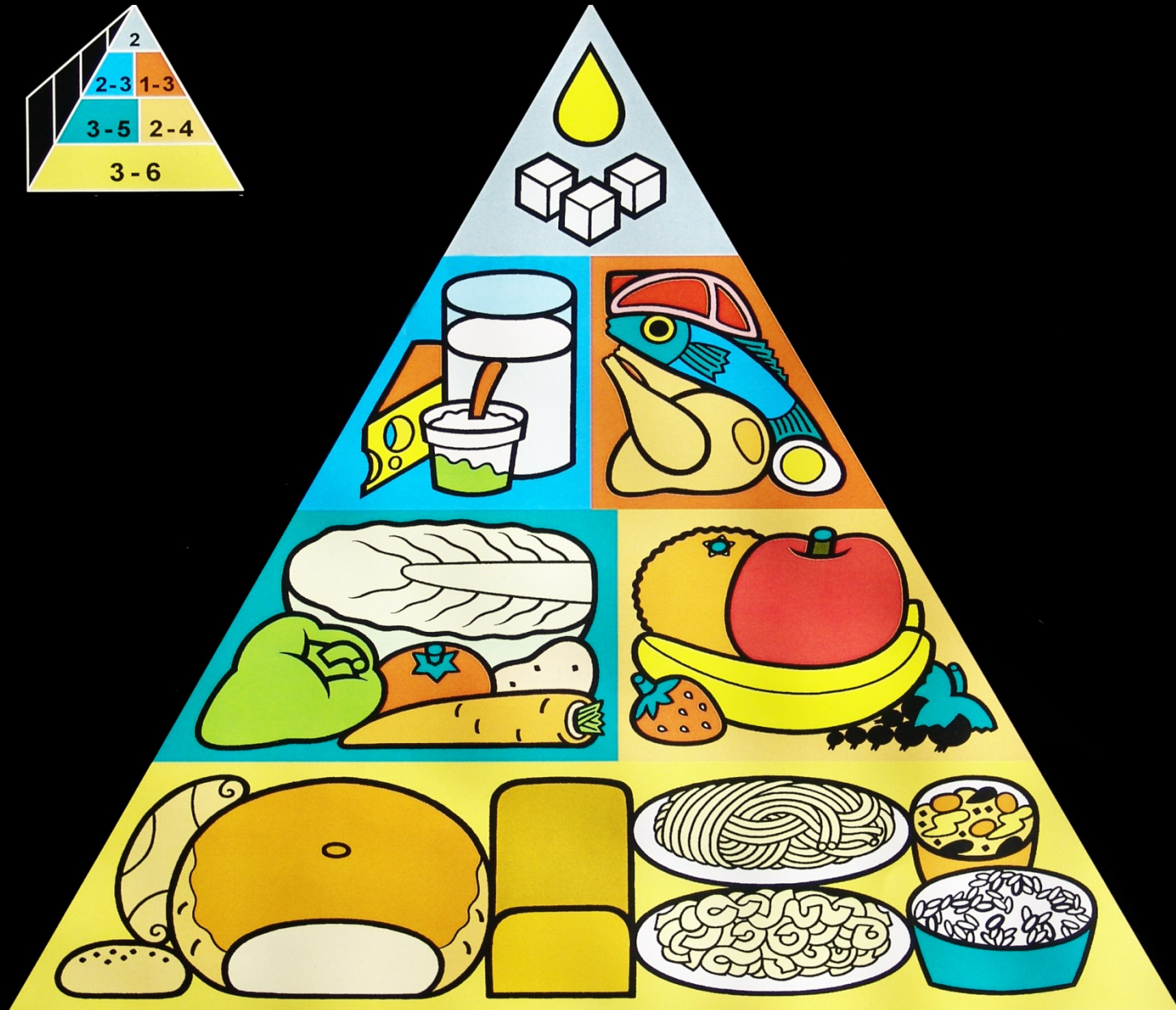
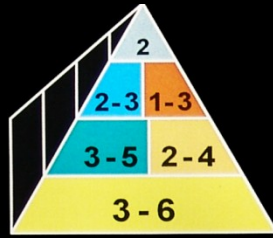
- **Basic personal data**
- **Dietary habits**
- **Physical activity**
- **Alcohol**
- **Smoking**
- **Psychosocial stress**
- **Family history**
- **Personal history**

B. Clinical part

Direct measurement of physical, physiological and biochemical parameters

- **Nutritional anthropometry**
(Weight, Height, BMI, Body fat, Body composition, Obesity)
- **Blood Pressure**
- **Biochemical plasmatic values** (blood lipids, glycemia...)
- **Fitness testing (ergometry)**
- **Respiratory functions**

Dietary Assessment - Basic Principles - Food Pyramide



Specification of usual serving sizes – in food groups

Food group	Specification of 1 standard serving	<i>Your usual serving size in comparison with standard size</i>					
		<i>Half</i>	<i>Equal</i>	<i>1.5 times larger</i>	<i>2 times larger</i>	<i>3 times larger</i>	<i>4 times larger</i>
Cereals (breads, rolls, pasta, rice)	1 slice of bread (60g); 1 roll; 1/2 cup of cooked rice or pasta (125g)	<input type="checkbox"/> 0,5	<input type="checkbox"/> 1	<input type="checkbox"/> 1,5	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Potatoes	1/2 plate of potatoes (100g)	<input type="checkbox"/> 0,5	<input type="checkbox"/> 1	<input type="checkbox"/> 1,5	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Vegetables (except potatoes)	1 pepper, carrot or 2 potatoes; a small bowl (1 cup) of raw leafy vegetables or mixed vegetable salad	<input type="checkbox"/> 0,5	<input type="checkbox"/> 1	<input type="checkbox"/> 1,5	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Fruits	1 apple, orange, banana (100g); 1 cup of strawberries, currants, blueberries or raspberries; 1 glass of 100% fruit juice	<input type="checkbox"/> 0,5	<input type="checkbox"/> 1	<input type="checkbox"/> 1,5	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Milk and dairy products	1 glass of milk (250ml); 1 yogurt (200ml); a piece of chesse (50g)	<input type="checkbox"/> 0,5	<input type="checkbox"/> 1	<input type="checkbox"/> 1,5	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Meat, poultry, fish, eggs, legumes	85 g of cooked lean meat, poultry or fish; 1 egg; 1/2 cup of dry beans	<input type="checkbox"/> 0,5	<input type="checkbox"/> 1	<input type="checkbox"/> 1,5	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Processed meat	2 sausages; 100 g of salami, paté, mince/meatloaf	<input type="checkbox"/> 0,5	<input type="checkbox"/> 1	<input type="checkbox"/> 1,5	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Fats	10 g of butter or margarine, lard, bacon 2 table spoons of vegetable oil;	<input type="checkbox"/> 0,5	<input type="checkbox"/> 1	<input type="checkbox"/> 1,5	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Sweets	3 lumps of sugar; 3 sweet drops; 25g of chocolate 1 dessert ; 2 table spoons of jam	<input type="checkbox"/> 0,5	<input type="checkbox"/> 1	<input type="checkbox"/> 1,5	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

Daily consumption of food groups – frequency

How often do you eat. . . .

Food Frequency:

Now, as a next step, try to recall what you had usually for the daily meals (breakfast, lunch, dinner and snacks) in terms of different food groups. In other words, try to estimate how often your meals included different food groups. Consider the period of past 1-2 months, approximately.

In each line, check the square that best describes the composition of your diet

Fill in all lines. If you do not eat some food or meal at all, check "Less than once a MONTH".

<u>I. Breakfast</u>	<i>Less than once a MONTH</i>	<i>1-2 times per MONTH</i>	<i>3-4 times per MONTH</i>	<i>1-2 times per WEEK</i>	<i>3-4 times per WEEK</i>	<i>5-6 times per WEEK</i>	<i>Once a DAY</i>
Breads, rolls, cereals, pasta, rice, cakes	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
Potatoes	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
Vegetables (except potatoes)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
Fruits	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
Milk and dairy products	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
Meat, poultry, fish, eggs, legumes	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
Processes meat (sausages, salami, patés...)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
Fats and high-fat foods	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
Sweets	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

Dietary habits

- Low-fat dairy products preference**

Do you prefer skimmed dairy products if you can decide between low-fat and high-fat products?

No, I do not differentiate among them	Most frequently I don't, only sometimes	In about 50 % of cases I do	I mostly do	I definitely do, I always try to get them	I don't drink milk or eat dairy products
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 0

- "High-fat spreads" consumption**

When you eating bread and rolls, do you spread them usually with some spreadable fat ?

<i>Less than once a MONTH</i>	<i>1-2 times per MONTH</i>	<i>3-4 times per MONTH</i>	<i>1-2 times per WEEK</i>	<i>3-4 times per WEEK</i>	<i>5-6 times per WEEK</i>	<i>Once a DAY</i>	<i>2 times per DAY</i>	<i>3+ times per DAY</i>
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8	<input type="checkbox"/> 9

- High-fat (mayonnaise) salads**

How often do you eat salads rich in mayonnaise and fat?

<i>Less than once a MONTH</i>	<i>1-2 times per MONTH</i>	<i>3-4 times per MONTH</i>	<i>1-2 times per WEEK</i>	<i>3-4 times per WEEK</i>	<i>5-6 times per WEEK</i>	<i>Once a DAY</i>	<i>2 times per DAY</i>	<i>3+ times per DAY</i>
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8	<input type="checkbox"/> 9

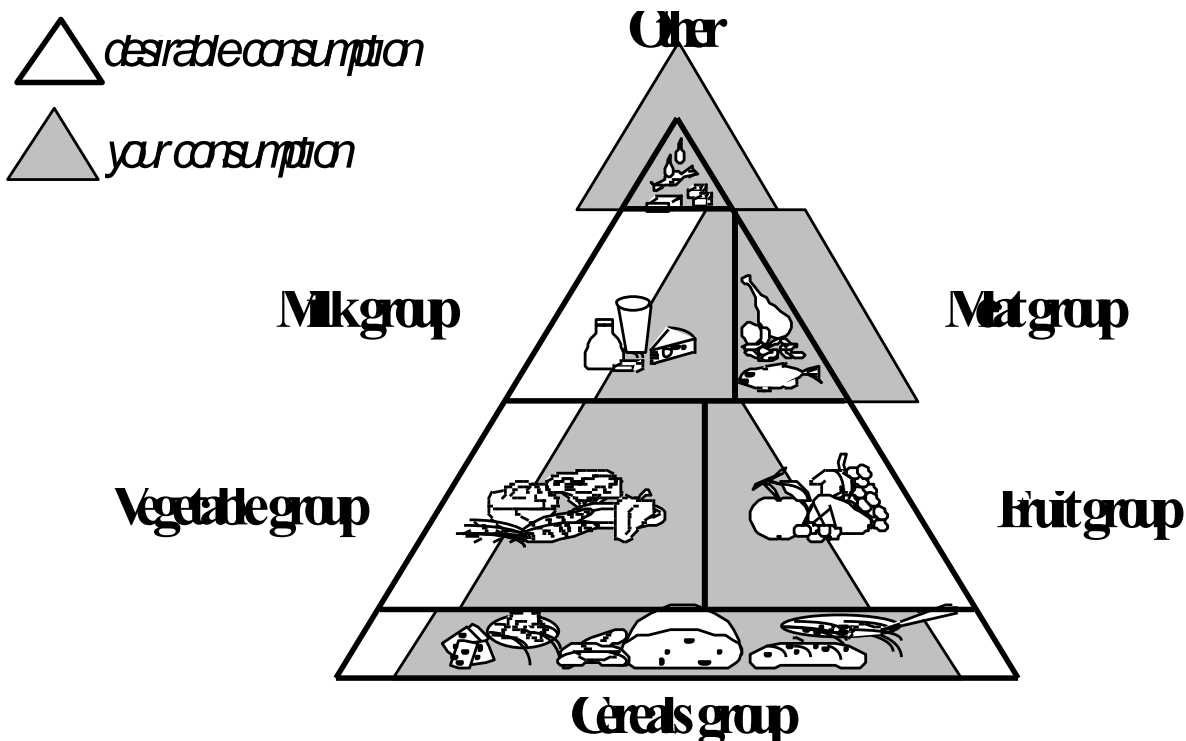
- Whole-grain products consumption**

How often do you consume high-fibre food, i.e. whole-grain bread, muesli, porridge, cereals etc. ?

<i>Less than once a MONTH</i>	<i>1-2 times per MONTH</i>	<i>3-4 times per MONTH</i>	<i>1-2 times per WEEK</i>	<i>3-4 times per WEEK</i>	<i>5-6 times per WEEK</i>	<i>Once a DAY</i>	<i>2 times per DAY</i>	<i>3+ times per DAY</i>
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8	<input type="checkbox"/> 9

Nutrition assesment - results

Detary assesment - food pyramid



<i>Food group</i>	<i>Servings consumed</i>	<i>Recom mended</i>	<i>Percentage reached</i>	<i>Recommendation</i>
Cereals, breads, pasta, rice	3,3	4,0	82%	Raise intake
Vegetables	3,5	5,0	70%	Raise intake
Fruits	2,0	4,0	50%	Raise intake
Milk and milk products	1,5	3,0	50%	Raise intake
Meat, poultry, fish, eggs	2,3	1,0	22%	Lower intake
Other (fats and sweets)	2,6	1,0	260%	Lower intake

Alcohol consumption evaluation

Alcohol

- **Frequency:** How often do you drink any alcohol (beer, wine, spirits)?

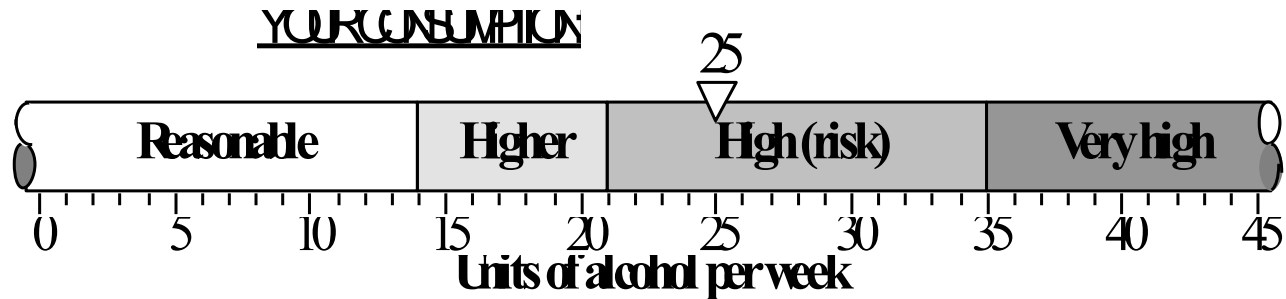
<i>Never</i>	<i>Several times a YEAR</i>	<i>1-2x per MONTH</i>	<i>3-4x per MONTH</i>	<i>1-2x per WEEK</i>	<i>3-4x per WEEK</i>	<i>5-6x per WEEK</i>	<i>1x per DAY</i>	<i>2x per DAY</i>	<i>3x per DAY</i>	<i>>3x per DAY</i>
<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8	<input type="checkbox"/> 9	<input type="checkbox"/> 10

- **Quantification of weekly consumption:** Number of units per week (only for regular consumption at least *1x a week*):

	<i>1 unit - approximately</i>	<i>1 unit - more exactly (10g of 100% alcohol)</i>	<i>Units weekly:</i>
Beer (3.5 - 5.5 % alcohol)	1 glass	<u>Beer labelled 12°:</u> 1 unit = 250 ml (0.5 l = 2 units) <u>Beer labelled 10°:</u> 1 unit = 330 ml (0.5 l = 1.5 units)	
Wine (10 - 13 % alcohol)	1 wine glass	100 ml	
Spirits (40 % alcohol)	1 small glass (for spirits)	25 ml (small tot) bigger measure 50 ml = 2 units	

Alcohol consumption evaluation

ALCOHOL



CONCLUSION Safe limit exceeded Risk for health!

Alcohol intake (units / week)		Assessment:
Women	Men	
< 7	< 11	Moderate
7-14	11-21	Rather high
14-21	21-35	High (the safe limit exceeded)
21- 35	35 - 49	Very high
> 35	> 49	Exceptionally high

Smoking

Smoking

- Do you smoke ?

No <i>(=at least for 3 months)</i>	Occasionally <i>(fewer than 1 cigarette per day)</i>	Yes, regularly	Cigarettes a day: (number)
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="text"/>

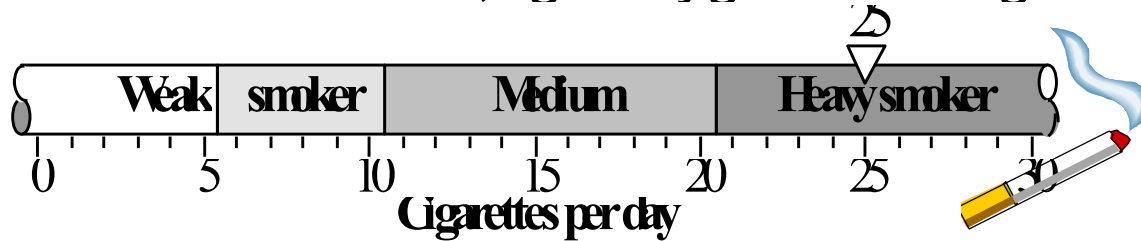
- Passive smoking: do you often in a room where somebody else is smoking?

No <i>(practically never)</i>	Seldom <i>(< 1x weekly)</i>	Quite often <i>(1-3x weekly)</i>	Very often <i>(> 3x weekly)</i>
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

Smoking - evaluation

SMOKING

Regular smoking of cigarettes in any amount represents a very significant health risk, which surpasses most of the other risks and moreover, significantly aggravates their negative effects!



WARNING According to recorded data you are subject to significant passive inhaling of cigarette smoke. This represents the same (and thus very significant) health risk as active smoking!

Physical activity - I

A. Frequency assessment

How frequently did you practice following recreational and sporting activities? (in the past 1-2 months)

	<i>Never</i>	<i>Irregularly</i>	<i>1-2x a month</i>	<i>3-4x a month</i>	<i>1-2x a week</i>	<i>3-4x a week</i>	<i>5-6x a week</i>	<i>Daily</i>
Brisk walk at long distances, hiking	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
Running, jogging	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
Cycling, including stationary exercise cycle	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
Aerobic	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
Strength exercise	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
Tennis, squash, badminton..(= „racket sports,„)	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
Volleyball, football, handball... (ball games)	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
Swimming	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
Others: (specify, please)	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
<i>Seasonal winter sports: (Data concerning only the last 1-2 months!)</i>	<i>Never</i>	<i>Irregularly</i>	<i>1-2x a month</i>	<i>3-4x a month</i>	<i>1-2x a week</i>	<i>3-4x a week</i>	<i>5-6x a week</i>	<i>Daily</i>
Cross-country skiing	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
Downhill skiing	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
Skating	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

Physical activity - II

B. Quantitative assessment using SPORTINDEX score:

Sportindex calculation is made only for activities carried out on a regular basis, i.e. at least once a week. For Intensity estimation, use the auxiliary table below.

<p>Sport No.1 (namely) :</p> <p>How many times a week: <input style="width: 50px; height: 25px;" type="text"/></p> <p>Duration (of 1 exercise): <input style="width: 50px; height: 25px;" type="text"/> minutes</p> <p>Intensity: <input style="width: 50px; height: 25px;" type="text"/></p>	<p>Sport No.2 :</p> <p>How many times a week: <input style="width: 50px; height: 25px;" type="text"/></p> <p>Duration (of 1 exercise): <input style="width: 50px; height: 25px;" type="text"/> minutes</p> <p>Intensity: <input style="width: 50px; height: 25px;" type="text"/></p>	<p>Sport No.3 :</p> <p>How many times a week: <input style="width: 50px; height: 25px;" type="text"/></p> <p>Duration (of 1 exercise): <input style="width: 50px; height: 25px;" type="text"/> minutes</p> <p>Intensity: <input style="width: 50px; height: 25px;" type="text"/></p>
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Auxiliary table for estimation of intensity of physical activity

Verbal description	Rest	Very, very light	Very light	Light	Mode- rate	Some- what hard	Heavy	Very heavy	Very, very heavy	Maxi- mum
Numeric rating (score)	1	2	3	4	5	6	7	8	9	10

Physical activity - evaluation

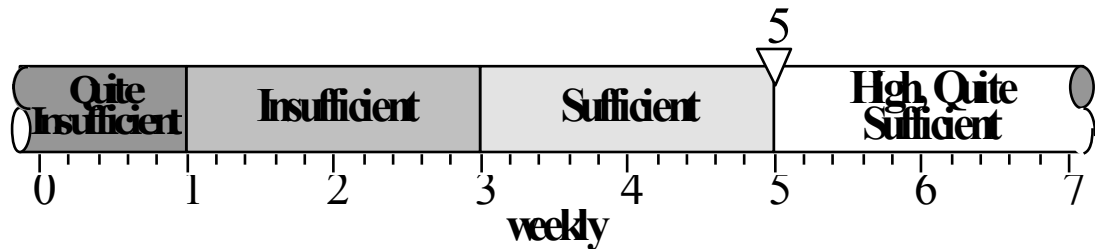
PHYSICAL ACTIVITY



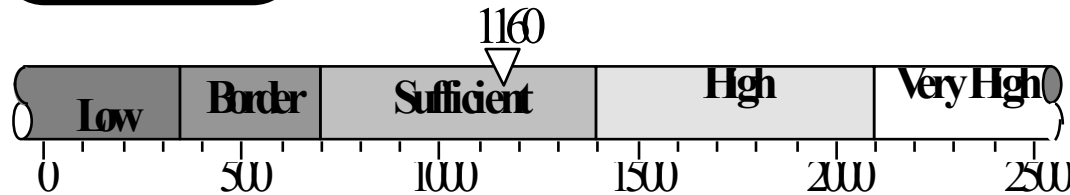
FREQUENCY (How many times...)

The score represents a cumulative sum for all activities including those that are undertaken rarely (<1 times a week).

To ensure that exercise has the desired effect it must be performed regularly, at least three times a week, preferably more often.



SPORT INDEX



These sporting activities/exercise was evaluated
 Bisk walking at long distances, Cycling exercise-cycle, Fitness centre (strength-training)

Sport-Index represents a comprehensive assessment of the level of sporting activities/exercise. It included an assessment of frequency, duration and intensity. All sports which are undertaken regularly (at least once a week) are assessed and the score is then added up. Values >700 may be regarded as sufficient.

Stress I

Psychosocial stress

- Do you think that you are often exposed to stress situations?

NO, I don't	Seldom	Quite frequently	YES, very frequently
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

- How do you manage to cope with the stress?

Very we	Quite well	Not very well	Poorly
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

- Try to score your overall stress on a 1 to 10 scale:
(1 = no or little stress, 10 = exceptionally heavy stress load)

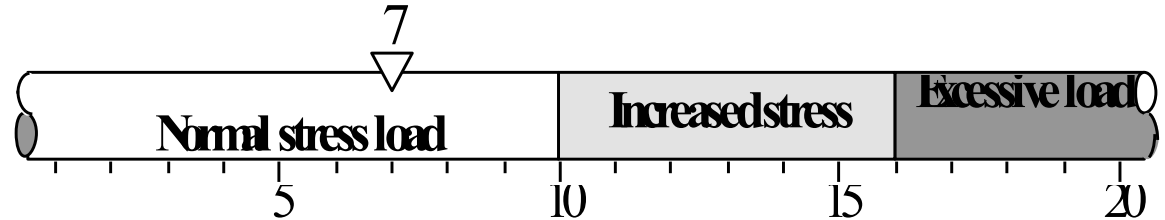
Psychosocial stress evaluation

PSYCHOSOCIAL STRESS LEVEL



STRESS SCORE

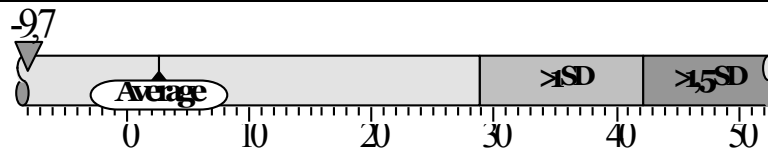
Stress score represents a rough assessment of the psycho-social strain level.



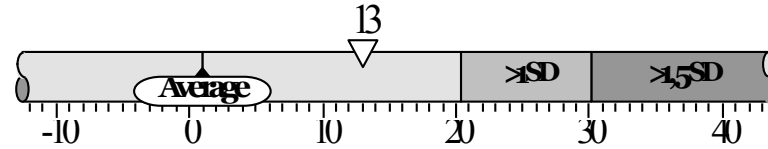
Bortner scale

1.	You are never late	<hr/> <p>01234567890¹⁰1234567890²⁰1234567890³⁰12345</p>	You don't care about being late
2.	You avoid competing with others	<hr/> <p>01234567890¹⁰1234567890²⁰1234567890³⁰12345</p>	You have a competitive nature
3.	You speed up a conversation (e.g. finish sentences for others) and answer once you have guessed the meaning	<hr/> <p>01234567890¹⁰1234567890²⁰1234567890³⁰12345</p>	You are a patient listener, you always let others finish what they have to say
4.	You live in a rush	<hr/> <p>01234567890¹⁰1234567890²⁰1234567890³⁰12345</p>	You do not let yourself being chased, in principle you always avoid rush
5.	You have the patience to wait	<hr/> <p>01234567890¹⁰1234567890²⁰1234567890³⁰12345</p>	You are very impatient while waiting
6.	You put a lot of effort in anything you do	<hr/> <p>01234567890¹⁰1234567890²⁰1234567890³⁰12345</p>	You take everything easy
8.	You do everything fast (e.g. eating or walking)	<hr/> <p>01234567890¹⁰1234567890²⁰1234567890³⁰12345</p>	You are rather slow (e.g. while eating or walking)
11.	You like to take the lead and assert your views	<hr/> <p>01234567890¹⁰1234567890²⁰1234567890³⁰12345</p>	You are happy to be led by others
12.	You feel self-conscious amongst others, particularly amongst those you do not know	<hr/> <p>01234567890¹⁰1234567890²⁰1234567890³⁰12345</p>	You feel at ease in almost any company
13.		<hr/> <p>01234567890¹⁰1234567890²⁰1234567890³⁰12345</p>	

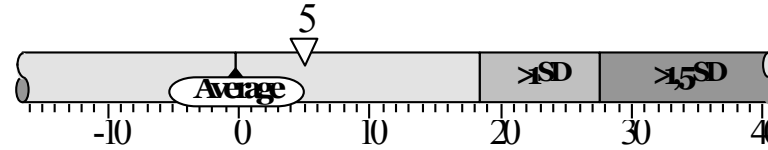
Type A behaviour - the behaviour of this type is characterised by a high level of ambition, competitiveness, assertive power, aggressiveness, feelings of constant lack of time, continuous time planning and organising, impatience. Internal need to achieve more and more results in shorter and shorter time intervals. High level of activation of the nervous system. Type A behaviour increases the risk of cardiovascular diseases.



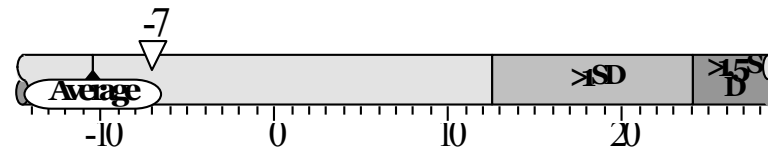
Irritability - increased irritability of the nervous system, high sensitivity towards irritation. The behaviour demonstrates inadequate response to various stimuli. Negative emotions persist a long time.



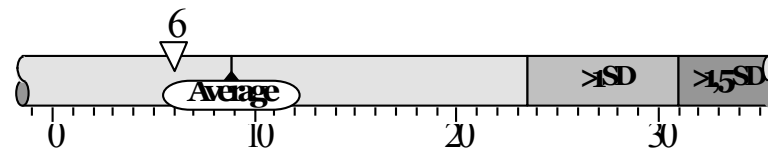
Tension - feelings of inner tension, pressure, anxiety, lack of ability to relax both muscles and soul. The tension may manifest itself through deterioration in mental functions, e.g. memory, attention, etc.



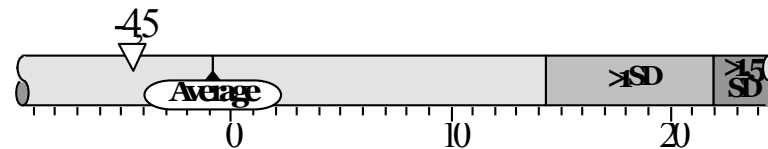
Hostility - hostile, spiteful approach to others, sometimes to oneself. The behaviour of hostile individuals includes signs of animosity, aggressiveness and destructiveness.



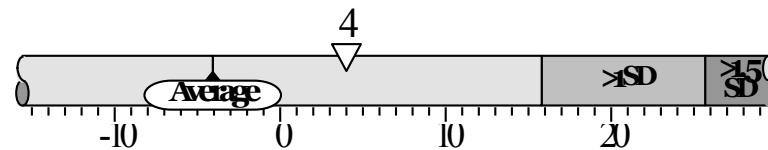
Interpersonal sensitivity - increased perceptiveness, sensitivity to social situations, pathologically increased oversensitivity in interpersonal relationships - both in family and other groups. Signs include, among others, unwillingness to get involved in social activities. These may often cause stress.



Life events - subjective perception of events with an immediate negative influence on the individual. Their impact on mental health may be highly stressful and may contribute to a number of minor or major diseases.



Frustration - any failure to meet a specific need. State of organism caused by postponing of or failure to meet a particular need. The behavioural pattern displays signs of emotional tension and frequent anxious reactions. Growing feeling of



Physical examination

Anthropometry



1st part:

Weight kg

Height cm

Circumferences:

Waist: cm

Hip: cm

Skinfolds:

2nd part:

Biceps: mm

Triceps: mm

Subscapular: mm

Supraspinal: mm

3rd part:

"Somatotype"

Skinfolds:

Calf: (back side) mm

Circumferences:

Arm: cm

Calf: cm

Condyles:

Humerus (elbow width) mm

Femur (knee width) mm

BODYSTAT – body composition by bioimpedance measurement:

Impedance value:

Body composition (results acquired by processing with special software "Bodystat")

Component:	% of weight:
Fat	
Active body mass (muscles + water + bones)	
Water	

Blood pressure and pulse

Systolic / Diastolic BP: mmHg

Pulse: beats / minute

Physical examination

Anthropometry

1st part:



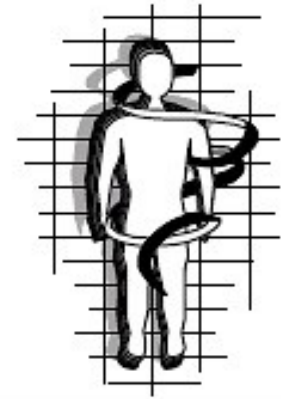
Circumferences:

Waist:

cm

Hip:

cm



Skinfolds:

2nd part:

Biceps:

mm

Triceps:

mm

Subscapular:

mm

Supraspinal:

mm

3rd part:

“Somatotype”

Skinfolds:

Calf:
(back side)

mm

Circumferences:

Arm:

cm

Calf:

cm

Condyles:

Humerus
(elbow width)

mm

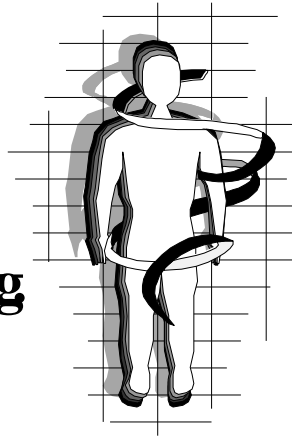
Femur
(knee width)

mm

Anthropometry



Anthropometry

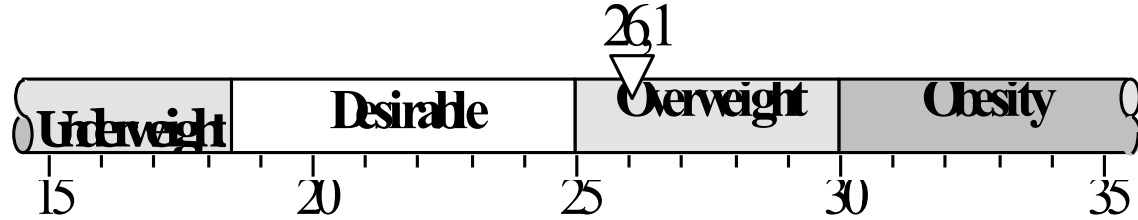


Your height is 176cm and your weight is 81kg

BM

BM (Body mass Index) is currently the most widely used index to assess adequate weight. It has a certain shortcoming namely that it does not reflect the differences in body composition. For a detailed assessment therefore, it is advisable to consider also the results of skin fold measurement, impedance measurement, sonatic type determination, etc.

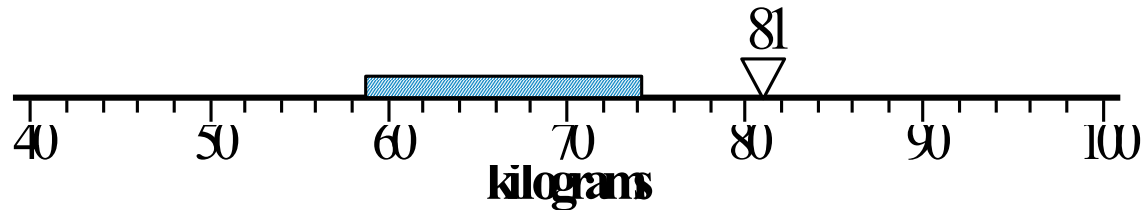
BM ($\text{body weight [kg]} / \text{body height}^2 \text{ [m]}^2$):



Recommended weight range

The diagram shows the relation between your actual weight and recommended weight, expressed in kilograms. The recommended range (shown as hatched rectangle) has been established on the basis of your height, sex and recommended range of BM. The recommendations have similar limitations as the BM.

Lower boundary: 59kg; Upper boundary: 74kg.



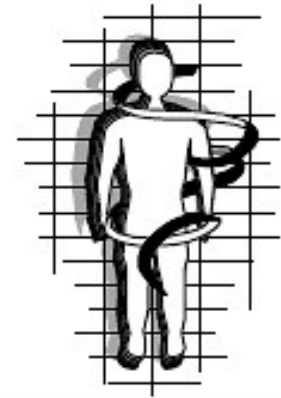
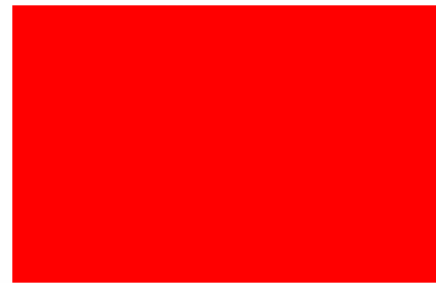
Physical examination

Anthropometry

1st part:

Weight kg

Height cm



Skinfolds:

2nd part:

Biceps: mm

Triceps: mm

Subscapular: mm

Supraspinal: mm

3rd part:

“Somatotype”

Skinfolds:

Calf:
(back side) mm

Circumferences:

Arm: cm

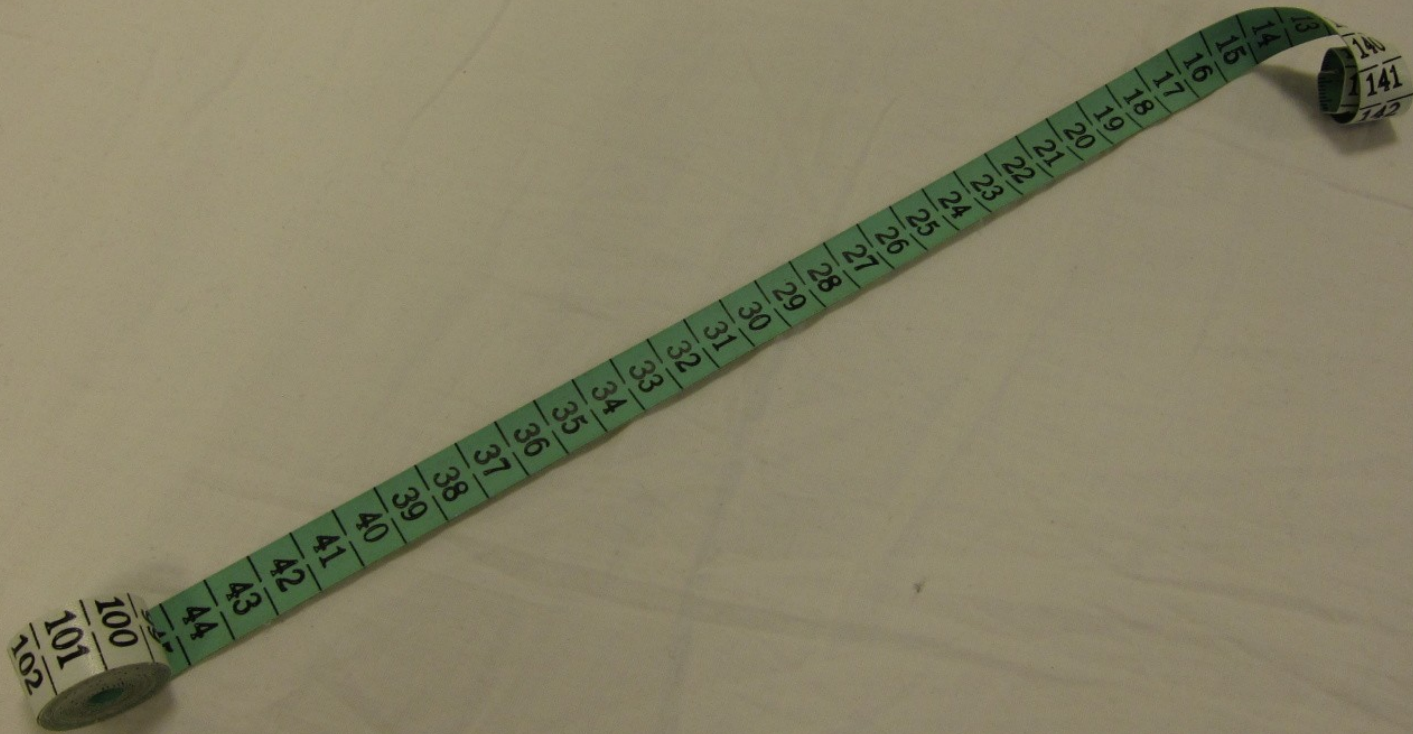
Calf: cm

Condyles:

Humerus
(elbow width) mm

Femur
(knee width) mm

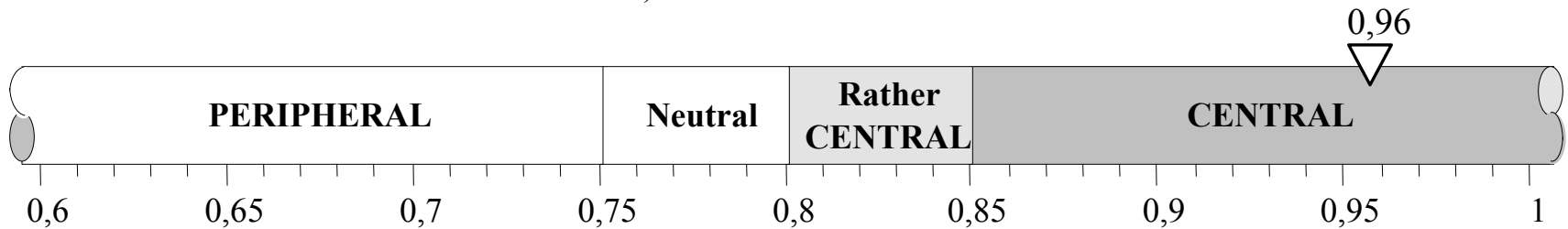
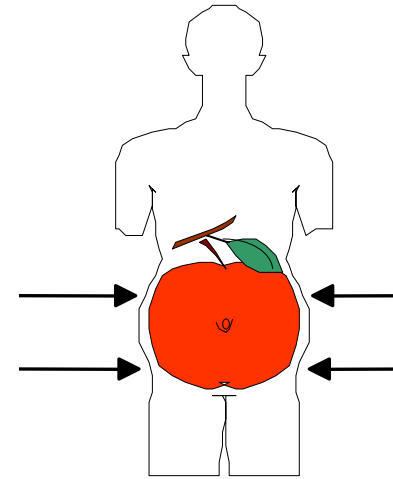
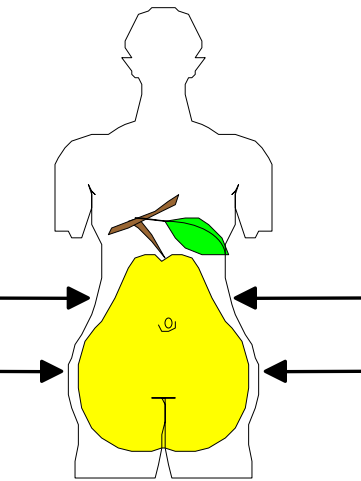
Anthropometry



Waist / Hip Ratio evaluation

Index WHR

Not only appearance but also the health risk to an individual is, apart from the total amount of body fat, influenced by its distribution, i.e. the type of depositing. There are two major types: **the male type** (android, apple, central) with fat depositing in abdominal area which is less favourable in terms of health than **the female type** (gynoid, pear) with fat depositing rather in the gluteofemoral area, i.e. at buttocks and thighs. WHR (Waist/Hip Ratio) is the most widely used indicator of fat distribution. The diagram shows the position of your WHR value - the depicted categories and their borders correspond with your sex (different criteria for men and women).



Risky WHR	
Women	> 0.85
Men	> 1.0

Waist circumference	Normal	Moderate risk	High risk
Women	< 80	80 - 87	> 87
Men	< 94	94 - 101	> 101

Physical examination

Anthropometry

1st part:

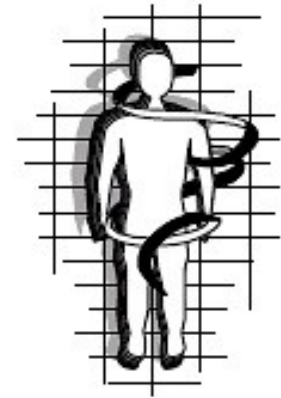
Weight kg

Height cm

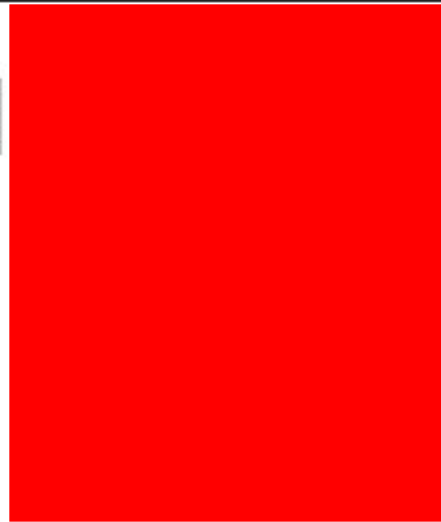
Circumferences:

Waist: cm

Hip: cm



2nd part:



3rd part:

"Somatotype"

Skinfolds:

Calf:
(back side) mm

Circumferences:

Arm: cm

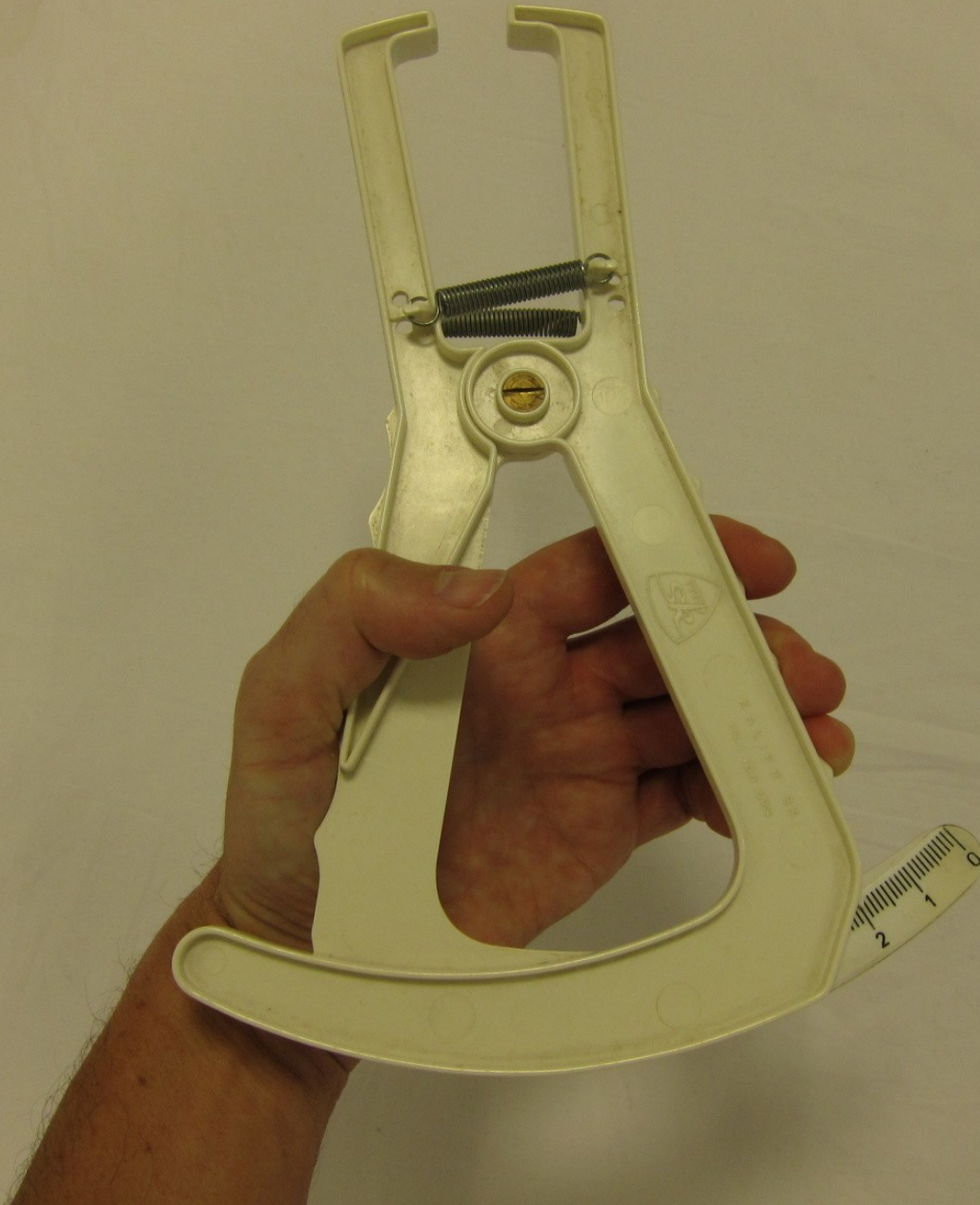
Calf: cm

Condyles:

Humerus
(elbow width) mm

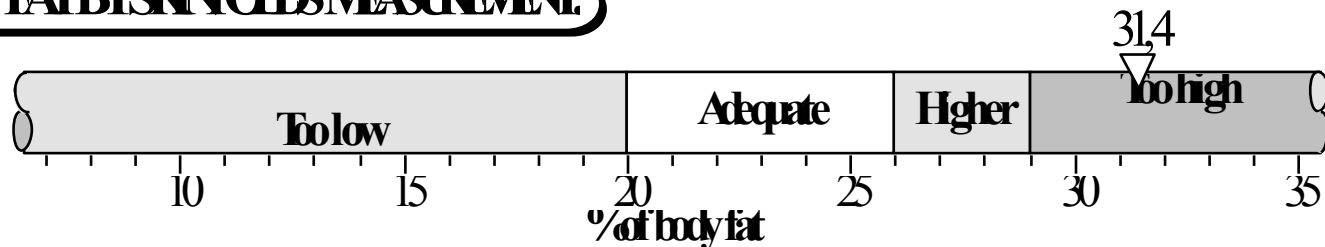
Femur
(knee width) mm

Anthropometry



Evaluation of 4 skinfolds measurement

BODY FAT BY SKINFOLDS MEASUREMENT



Measurement of skinfolds is one of the most commonly used methods of establishing the amount of body fat. It has certain disadvantages, especially that only subcutaneous fat is measured. The result usually well correlates with the overall fat amount but may not give an completely accurate assessment in terms of visceral fat amount. For that reason it is best to combine it with impedance measurement.

<i>Body fat %</i>	<i>Low</i>	<i>Normal</i>	<i>Overweight</i>	<i>Obesity</i>
<i>Women</i>	<i>< 20</i>	<i>20 - 26</i>	<i>26 - 30</i>	<i>>30</i>
<i>Men</i>	<i>< 12</i>	<i>12 - 18</i>	<i>18 - 25</i>	<i>> 25</i>

BODYSTAT measurement

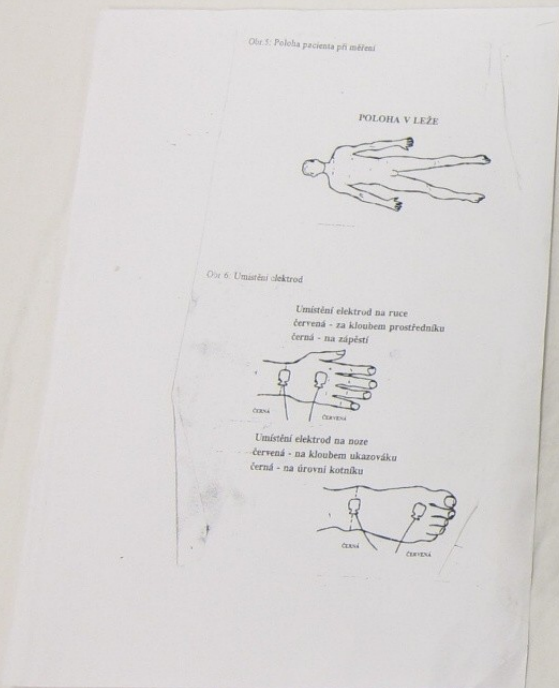
BODYSTAT – body composition by bioimpedance measurement:



Body composition (results acquired by processing with special software “Bodystat”)



Anthropometry - Bodystat



Anthropometry - Bodystat

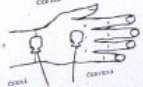
5. Poloha pacienta při měření

POLOHA V LEŽE

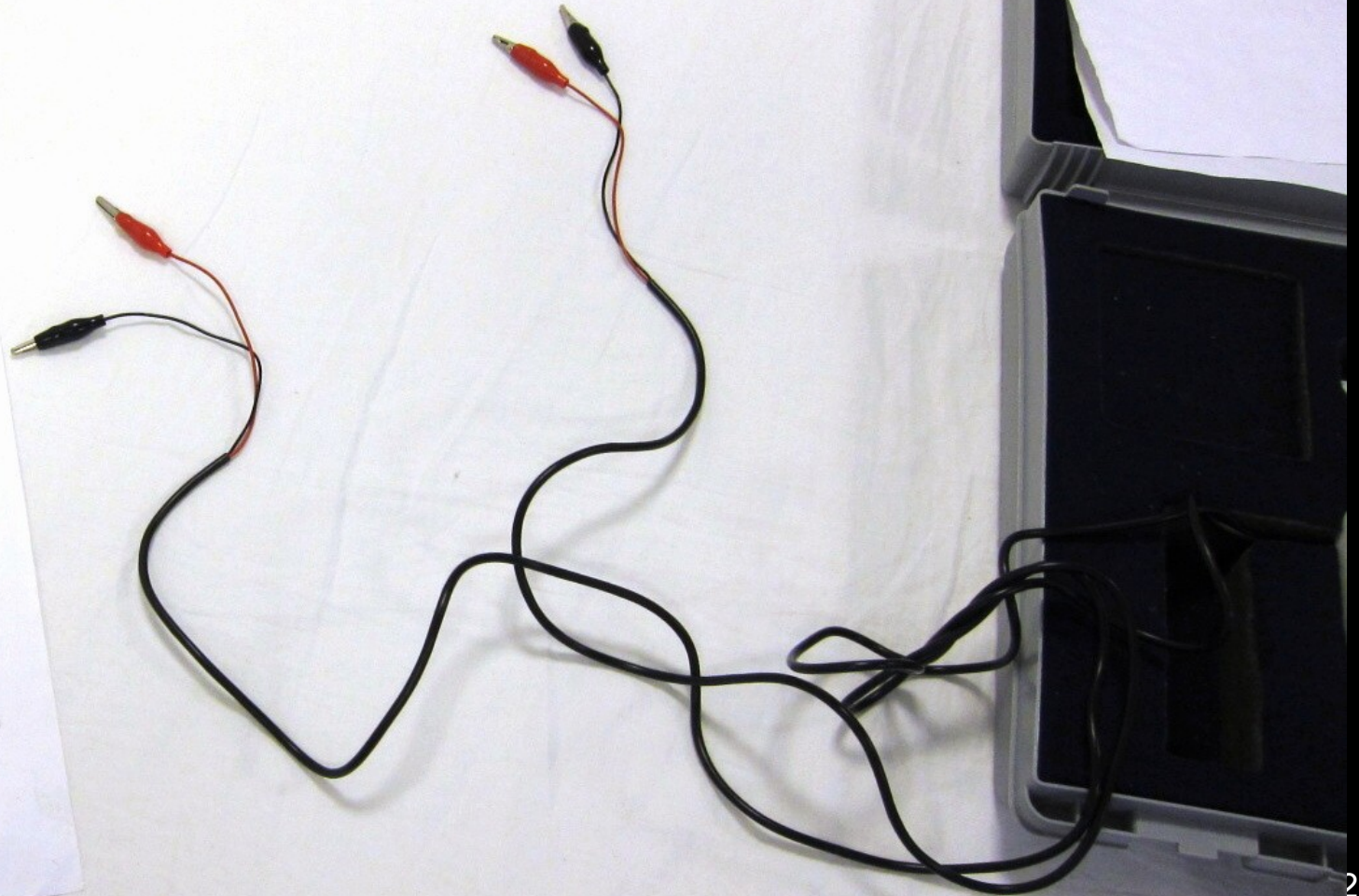
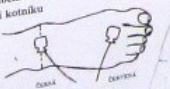


6. Umístění elektrod

Umístění elektrod na ruce
červená - za kloubem prostředníku
černá - na zápěstí

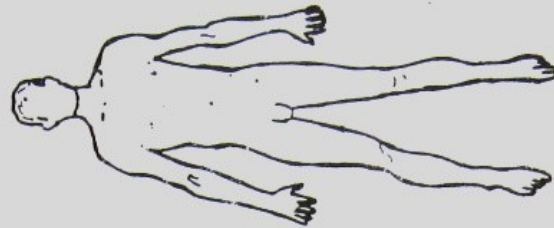


Umístění elektrod na noze
červená - na kloubem ukazováku
černá - na úrovni kotníku



Anthropometry - Bodystat

POLOHA V LEŽE

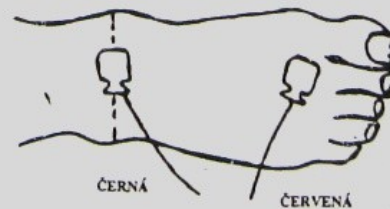


Obi 6: Umístění elektrod

Umístění elektrod na ruce
červená - za kloubem prostředníku
černá - na zápěstí



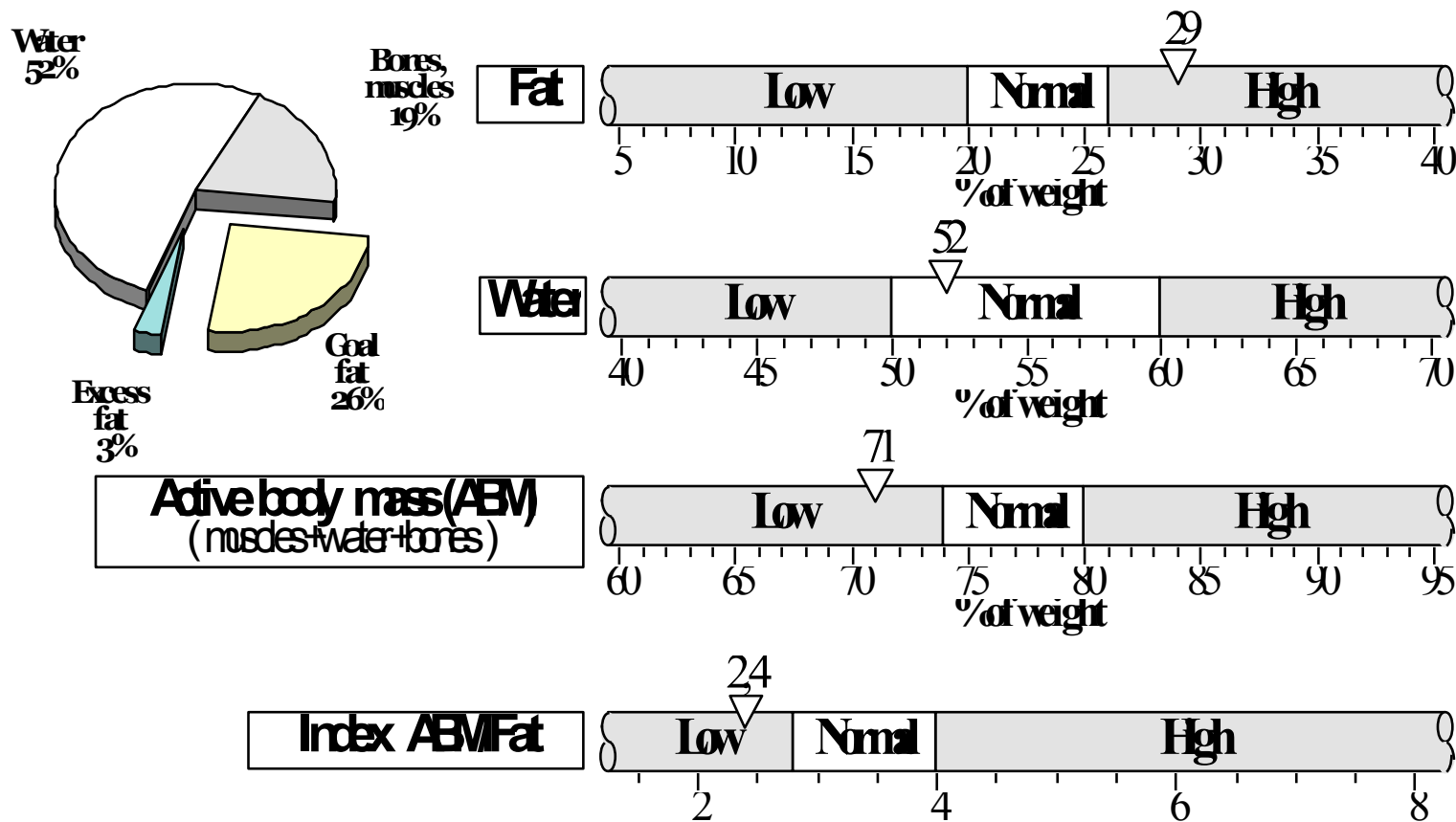
Umístění elektrod na noze
červená - na kloubem ukazováku
černá - na úrovni kotníku





Body composition by impedance measurement:

Composition of the body is a very important indicator of the actual state of human organism and its physical condition. The important factors are the amounts of fat and active body mass (ABM), which together represent the body weight. The total weight alone is less significant - e.g. a muscular individual may appear, according to his/her weight, height and associated index (BMI) as obese, while in reality he/she may have a perfect body composition. And on the other hand, an individual with standard weight, according to tables and indices, may be truly obese (i.e. have too much fat and too little muscle tissues). A negative sign may be not only an excessive but also too low % of body fat (exaggerated fear of obesity, mental anorexia). The impedance measurement is extremely important for monitoring changes over a period of time - e.g. a weight loss as a result of a diet may only reflect a loss of water amount, on the other hand, under certain circumstances it is possible to gain weight as a result of exercise and subsequently lose it again - if the capacious fat tissue is being replaced by the less capacious, but heavier active body mass.



Physical examination

Anthropometry

1st part:

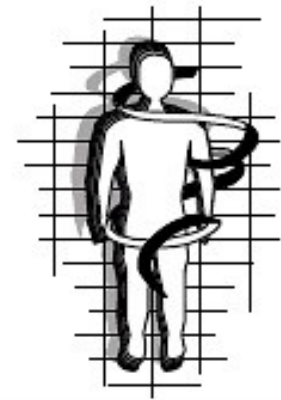
Weight kg

Height cm

Circumferences:

Waist: cm

Hip: cm



Skinfolds:

2nd part:

Biceps: mm

Triceps: mm

Subscapular: mm

Supraspinal: mm

3rd part:

“Somatotype”



Somatotype evaluation

Somatotype

The somatotype expresses the morphological structure of an individual on the basis of an interrelation of three elements. *Your somatotype:*

Endomorphy: Mesomorphy: Ectomorphy

54: 48: 1,3

I. **Endomorphy** - characterises the level of fatness according to subcutaneous fat

II. **Mesomorphy** - expresses the level of muscle and skeleton development

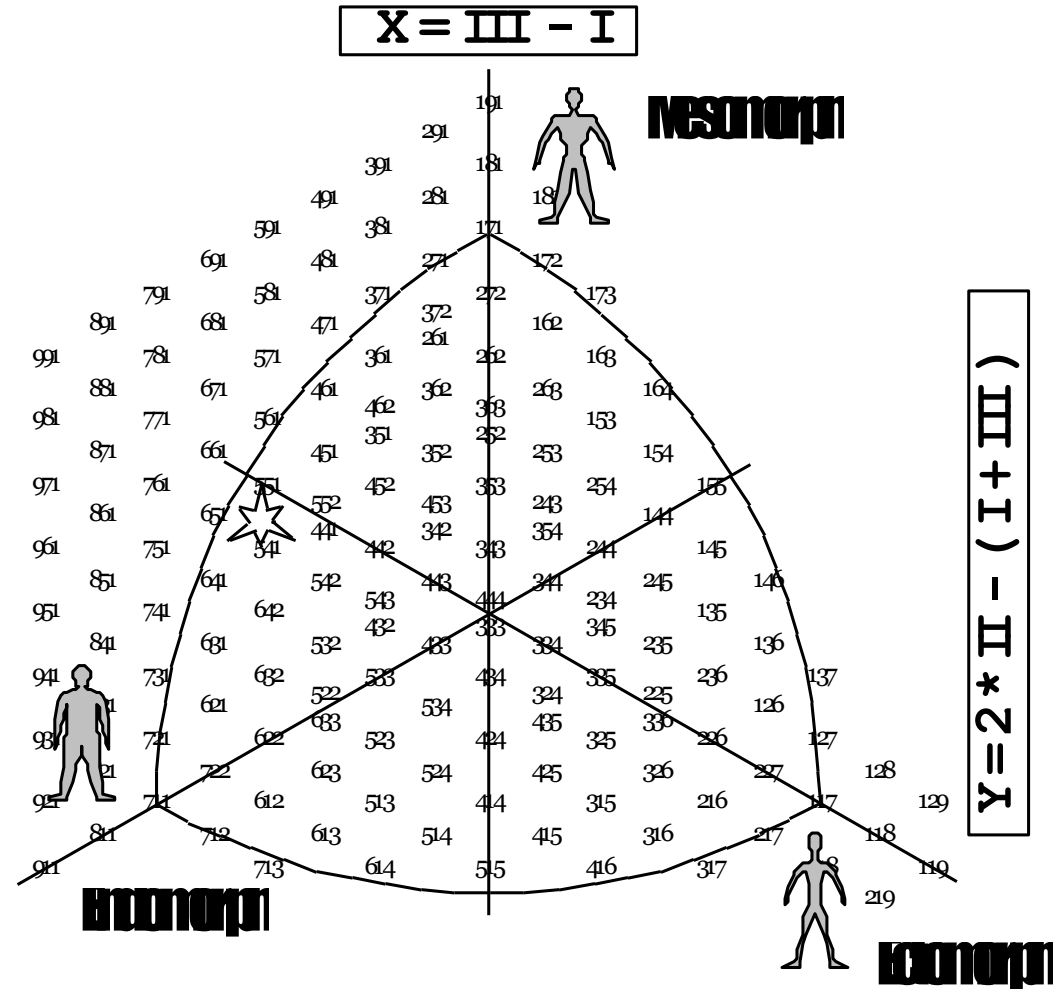
III. **Ectomorphy** - determines the level of slinness, frailness and relative length of limbs

The first two components may be influenced, the third is genetic.

Each individual has a different ratio of these three components. Their values are expressed by means of a numeric ratio of three quantities

The type of body build and the individual's appearance are result of combination of all three. The triangle diagram will show you which components prevail for you (your somatic type is marked by an asterisk).

People with prevailing **endomorphic** element easily gain fat, people with prevailing **mesomorphy** easily gain muscles and people with prevailing **ectomorphic** element easily keep slim



Condyles (elbow and knee width)



Physical examination

Anthropometry



1st part:

Weight kg

Circumferences:

Waist: cm

Height cm

Hip: cm

Skinfolds:

2nd part:

Biceps: mm

Triceps: mm

Subscapular: mm

Supraspinal: mm

3rd part:

Skinfolds:

“Somatotype”

Calf: mm
(back side)

Circumferences:

Arm: cm

Calf: cm

Condyles:

Humerus mm
(elbow width)

Femur mm
(knee width)

BODYSTAT – body composition by bioimpedance measurement:

Impedance value:

Body composition (results acquired by processing with special software "Bodystat")

Component:	% of weight:
Fat	
Active body mass (muscles + water + bones)	
Water	

BP



Blood Pressure + Pulse

BLOOD PRESSURE [X]

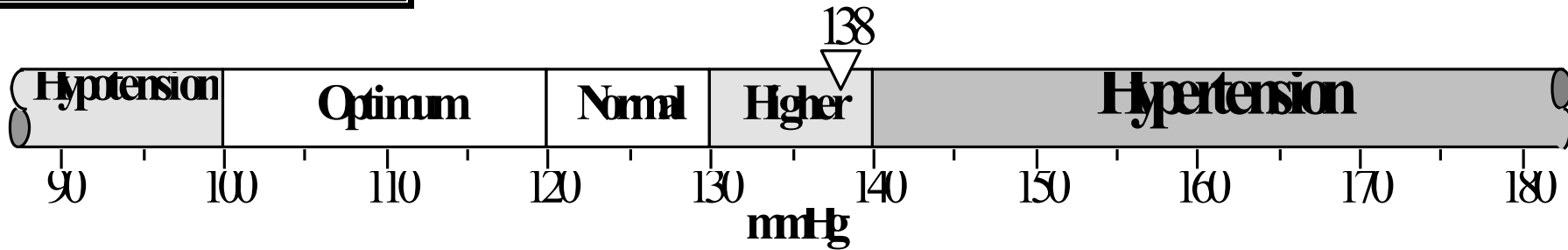
Systolic BP: mmHg

Diastolic BP: mmHg

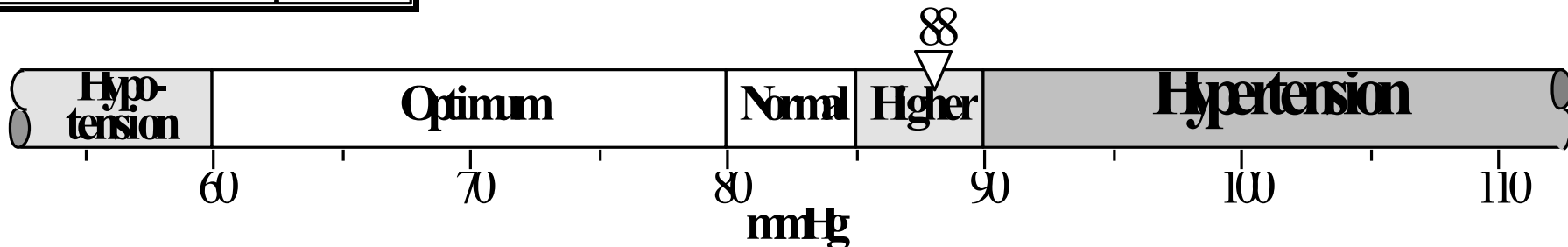
Pulse: beats / minute

< BACK END ENTER

Systolic blood pressure



Diastolic blood pressure



Fitness assessment - ergometry

Protocol used:

- | | |
|--|---|
| <input type="checkbox"/> - Bruce | <input type="checkbox"/> - Naughton |
| <input type="checkbox"/> - Astrand | <input type="checkbox"/> - Accelerated Naughton |
| <input type="checkbox"/> - Heart trainer | |

Perceived exertion (Borg scale):

Minute:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Rating:																					

Time – exercise duration: min : sec

Maximal heart rate: Beats / minute

VO2 max: ml/kg/min

Maximal workload: Watts

Basic spirometry

	1 st measurement	2 nd measurement	3 rd measurement	
FEV ₁ :				litres
FVC:				litres

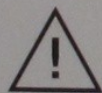
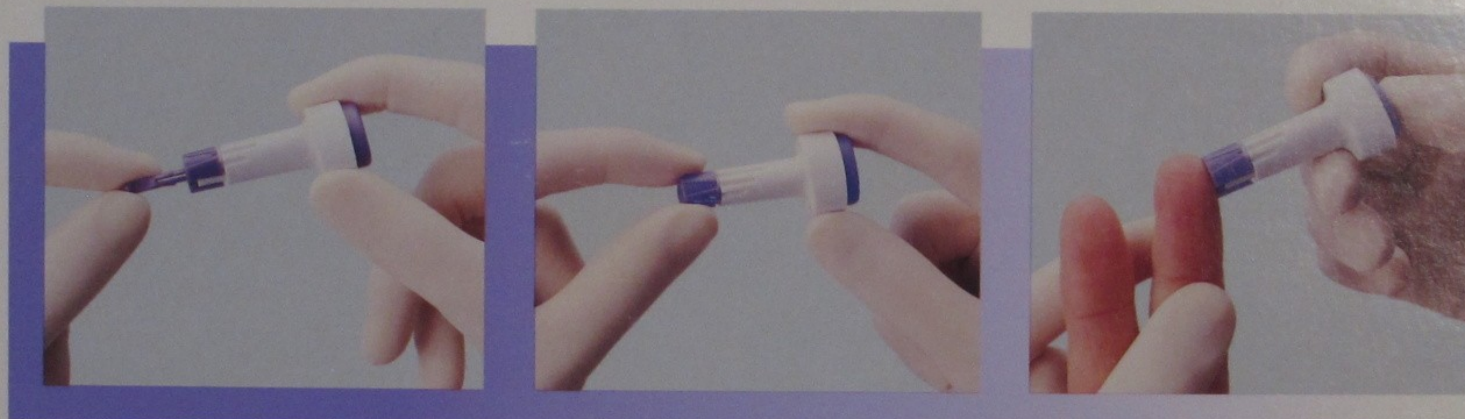
REFLOTRON



ACCU-CHEK[®]

Safe-T-Pro Plus

200 STERILE, SINGLE-USE LANCING DEVICES
WITH 3 DEPTH SETTINGS



Consult the instructions for use / Consulter les instructions d'utilisation / Lea las instrucciones de uso / Consultar as instruções de uso /
Se brugsanvisningen / Se bruksanvisningen / Se brukermanualen / Lue käyttöohjeet / Raadpleeg de gebruiksaanwijzing / Leggere le
istruzioni per l'uso / Gebrauchsanweisung beachten / Patrz instrukcja obsługi / Lásd a használati útmutatót / Βλέπε οδηγίες χρήσης

Gauge / Diamètre de l'aiguille / Diámetro de la aguja / Diâmetro da agulha / Nålens diameter / Lâpimitta / Diameter van de naald /
Diametro dell'ago / Durchmesser der Nadel / Średnica ostrza / Átmérő / Διάμετρος αιχμής: 23 G, 0.65 mm

Depth / Profondeur de piqûre / Profundidad / Graus de profundidade / Indstiksdybde / Stickdjup / Dybde / Pistosvyydet / Prikdiepte /
Profondità di penetrazione / Stechtiefe / Głębokość nakłucia / Szúrásmélység / Βάθος τρυπήματος:
1.3 mm; 1.8 mm; 2.3 mm

Chirona
LUSA
2ml
LUSA
Chirona
LUSA
2ml
LUSA



CHOL
■■■■

ESC

Cholesterol
90 Tests / Μετρήσεις
REF. NO. 745005

Autoclix

2mL EDT
2mL EDT

OKL

000 000

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Reflotron®

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Reflotron® Keyboard

ESC	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11/12	PRINT SCREEN	NUM	SCROLL LOCK	
ESC	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	NUM	SCROLL LOCK	
Escape		Risk calculator	LDL		Test info				Transfer profile	Print profile			SYST	PAUSE	BREAK
!	@	#	\$	%	^	&	*	()	-	=	~			PG UP

1 2 3 4 5 6 7 8 9 0 - = ~



Reflotron[®] Plus

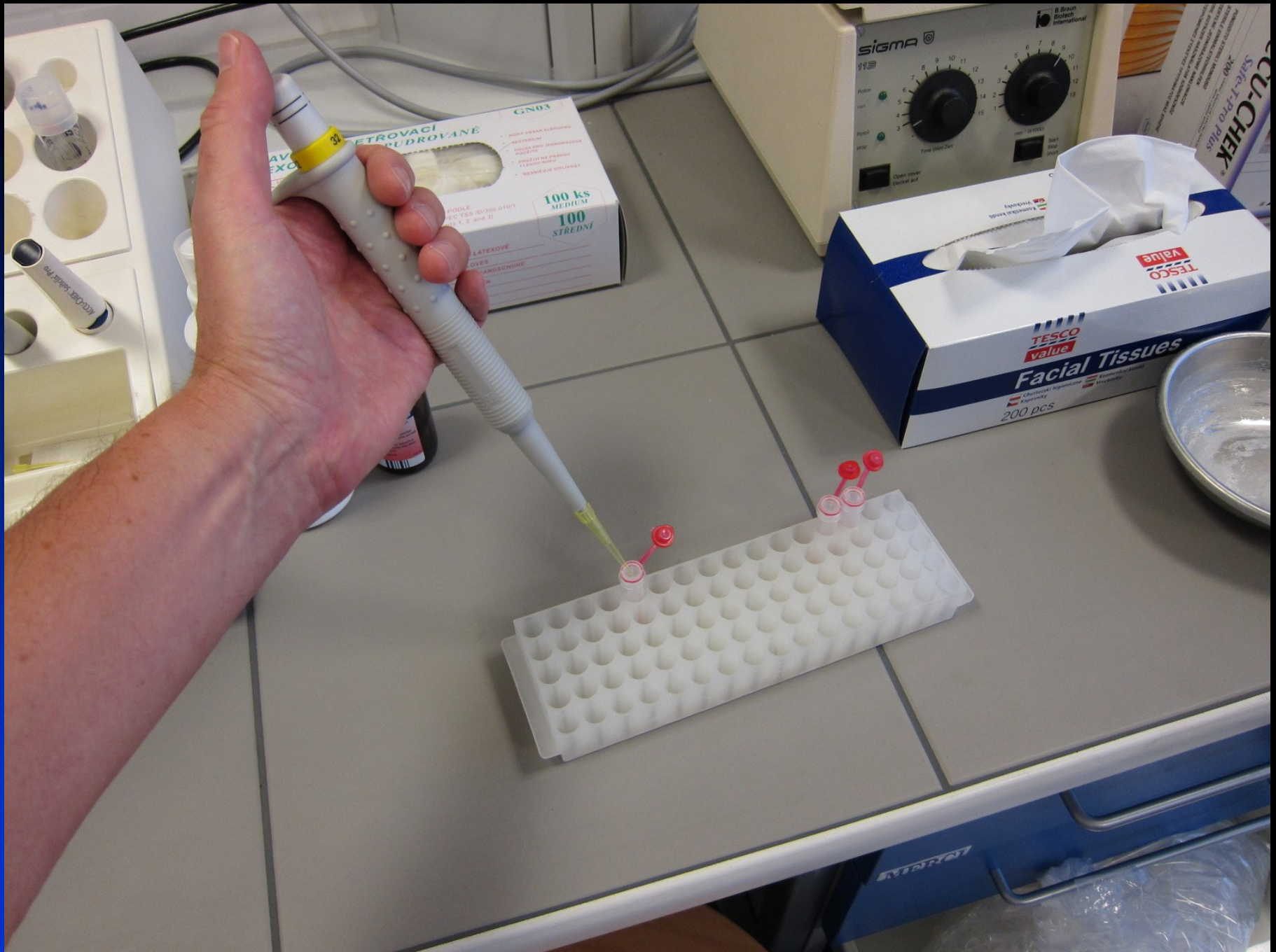
301 N. Pillsbury, DTC, C24754600

HAND[®]
SAFE

HAND[®]
SAFE

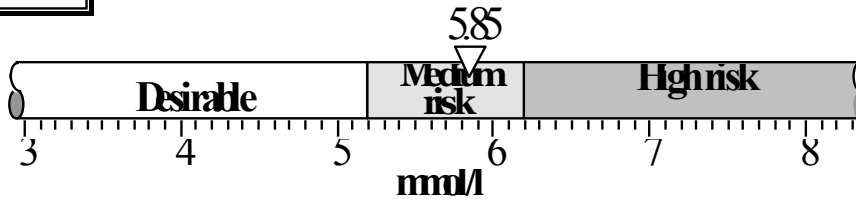
Concept F

CHL
1000

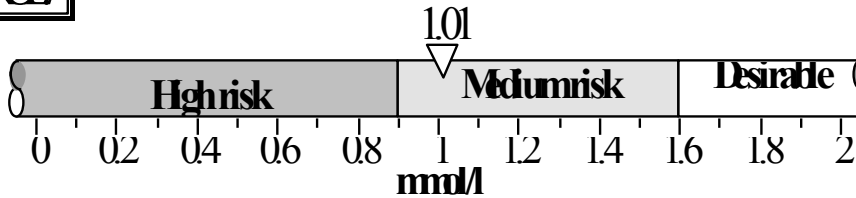


Biochemical blood examination

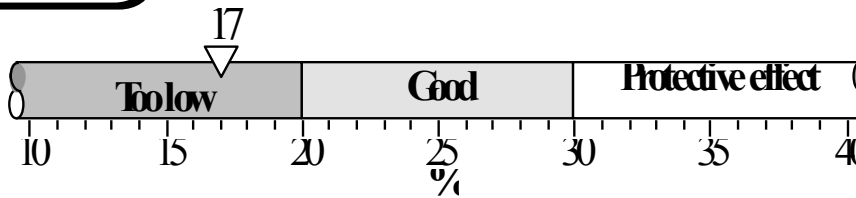
TOTAL CHOLESTEROL



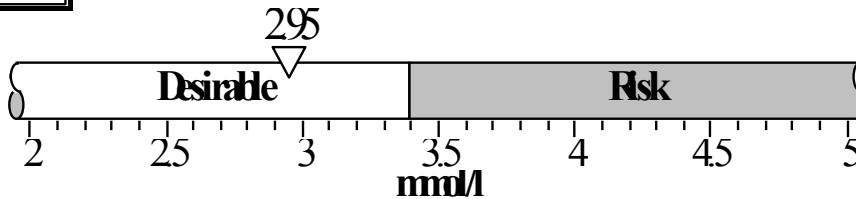
LDL-CHOLESTEROL



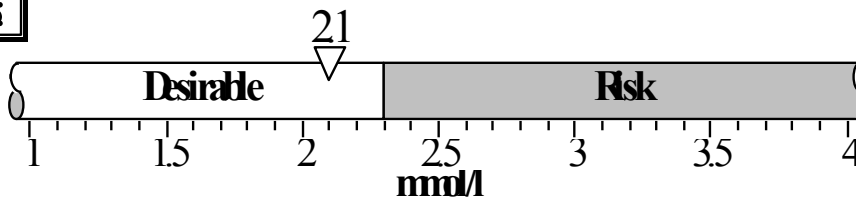
HDL/total cholesterol ratio



LDL-CHOLESTEROL



TRIGLYCERIDES



Ergometry

Fitness assessment - ergometry

Protocol used:

- | | |
|--|---|
| <input type="checkbox"/> - Bruce | <input type="checkbox"/> - Naughton |
| <input type="checkbox"/> - Astrand | <input type="checkbox"/> - Accelerated Naughton |
| <input type="checkbox"/> - Heart trainer | |

Perceived exertion (Borg scale):

Minute:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Rating:																					

Time – exercise duration: min : sec

Maximal heart rate: Beats / minute

VO2 max: ml/kg/min

Maximal workload: Watts

Ergometry

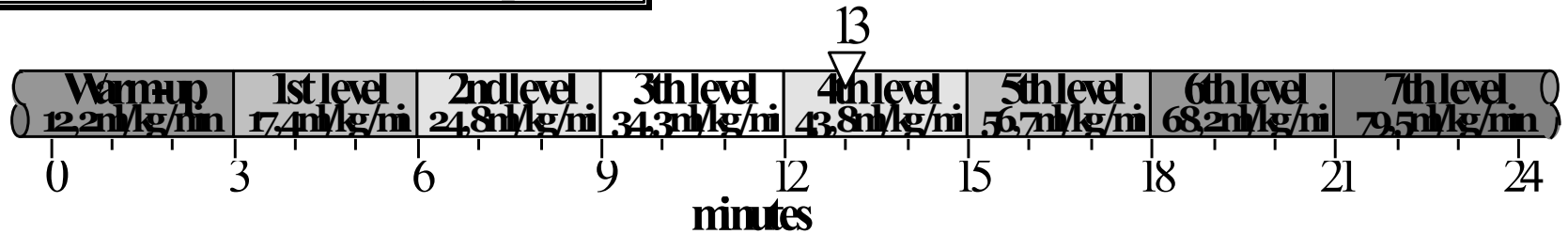




PHYSICAL FITNESS TESTING- Bicycle Ergometry

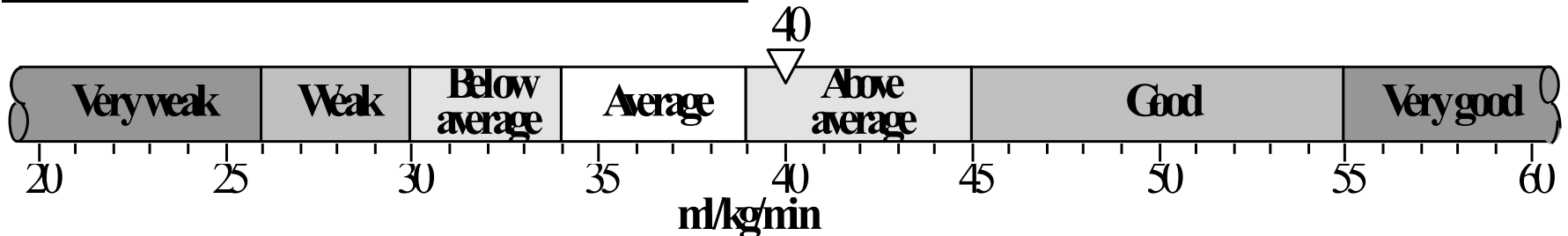
Total time duration: 13min0s

LEVEL OF LOAD ACHIEVED (Bruce protocol):



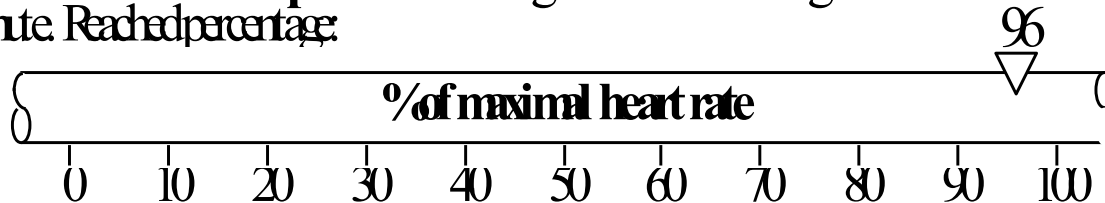
The highest workload during the examination was **200 Watt**, which is **247 Watt / kg**

FITNESS EVALUATION ACCORDING TO VO2max



ACHIEVED PERCENTAGE OF MAXIMAL HEART RATE

Your heart rate reached the value **189 beats per minute** during examination on ergometer. Theoretical maximum value for your age is **197 beats per minute**. Reached percentage:



Spirometry

Basic spirometry

	<i>1st</i> <i>measurement</i>	<i>2nd</i> <i>measurement</i>	<i>3rd</i> <i>measurement</i>	
FEV ₁ :				litres
FVC:				litres

SPIROMETRY [X]

FEV1: litres

FVC: litres

< BACK END ENTER

Spirometry



Spirometry

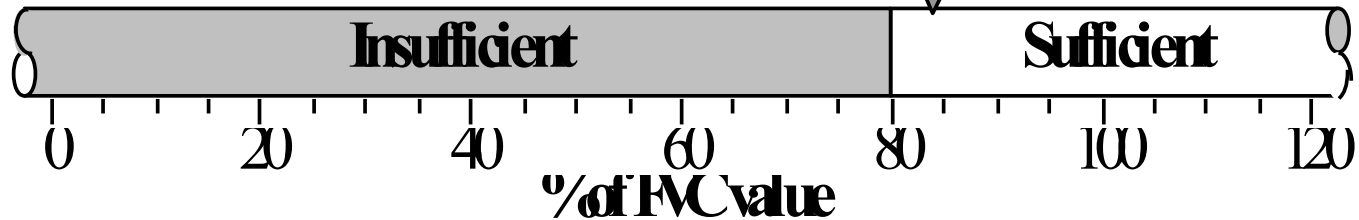
RESPIRATORY FUNCTIONS

FEV₁:

Measured value: 28 litres

Appropriate: min 80% of FVC

90%



FVC:

Measured value: 36 litres

Appropriate value: 36 litres

100%

