POLAND

National HES manual

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PART A
PART B
AND APPENDICIES
This manual has been prepared by national experts from Poland. Grazyna Brodawith his team from the Cardinal Stefan Wyszynski Institute of Cardiology (http://www.ikard.pl) wrote this manual based on their experience from the EHES Pilot Survey conducted in 2010-2011.

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More information about the EHES Pilot Project: http://www.ehes.info
PART A
PARTA

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1. AIMS AND PURPOSE OF THE SURVEY

Introduction

Cardiovascular diseases (CVD), most often caused by atherosclerosis (coronary disease or cerebral stroke) are the main cause of morbidity, handicap and premature deaths in the developed countries. The CVD pandemic is also increasingly spreading over the developing countries. Data released by the WHO in 2002 reveal that 16.7m deaths due to CVD were reported worldwide, that the number included 4m deaths in Europe which was 55% of all female and 43% of all male deaths. Among the cardiovascular diseases, atherosclerosis (50%) and cerebral stroke (ca. 30%) were the most common death causes in both gender groups. Estimates show that despite all the progress in diagnostics and treatment, cardiovascular diseases will pertain the major death cause in most countries worldwide at least till year 2020.

In 2010, 80,544 Polish males and 91,429 females died from CVD which amounted to 41% of all male deaths and 52% of all female deaths. One in three deaths among men and one in ten deaths among women occurred in the young and middle-aged populations. In crude numbers, 30,000 persons under 64 years of age die in Poland every year. In spite of the declining CVD-related mortality, observed in Poland from the beginning of the 1990s (ca.30%-fall in years 1997-2001), Poland’s standardized mortality rates were still almost twice as big as those recorded in the EU countries. (men: 519/100 thous. vs 298/100 thous.; women: 331/100 thous. vs 192/100 thous.) Particularly worrying is the fact that the excessive mortality in Poland, as compared to the other European countries, is mainly found in young and middle-aged people. In these age groups, the mortality rates are about 2.5 times higher than in the EU countries. It is also important that significant regional differences are observed in the CVD-related mortality – in 2002 the highest rates were observed in the south-western part of the country (Opolskie, Śląskie, Zachodniopomorskie) and in Łódzkie, but the lowest in north-east part (Podlaskie, Mazowieckie and Pomorskie). The differences between the regions amount to 25-30% among persons aged 20-74 years and are even as high as 50% for the whole age range. The causes of these differences are still unknown, they may be related to many factors: organization of health service, availability of diagnostic-therapeutic services, or regional differences in the intensity of the risk factors, related to the style of living and socio-economic factors.

Beside mortality, the CVD are the main cause of morbidity and hospitalization. In 2008, 987 258 patients were hospitalized due to CVD, what was 44% of all hospitalizations. More than 50% of the CVD-related admissions to hospital were caused by the ischaemic heart disease (499 626 patients), with its various clinic forms: angina pectoris, myocardial infarction, long-lasting ischaemic heart disease. 128,823 persons were admitted to hospital due to myocardial infarction. However, taking into consideration the fact, that about 20% of all myocardial infarctions in population end in sudden death before hospitalization, it should be estimated that the number of myocardial infarctions is higher and it amounts to 160,000 cardiac infarcts each year.

Although etiopathogenesis of arteriosclerosis has not been fully explored yet, the environmental factor (low physical activity, unhealthy diet, smoking) plays the major role in its development and progression. It leads to hypertension, lipids and carbohydrate metabolism disorders, and obesity. Epidemiologic studies, clinical trials and intervention studies have proved that
the above-mentioned, classical factors significantly contribute to the high risk of both, incidence and death due to CVD. Over the recent 20 years, however, some new risk factors have been playing an increasingly important role. These are: haemostatic factors, homocysteine, non-specific inflammation markers, as well as economic status and the psycho-social factors (depression, type of personality, social support). The multicentre case-control study INTER-HEART, carried out in 52 countries of all the continents, including nearly 30,000 persons, showed that six risk factors (hyperlipidemia, smoking, hypertension, diabetes, abdominal obesity and the psycho-social factors) together with the three cardio-protective factors (vegetable and fruit consumption, consumption of small amounts of alcohol and daily exercise) determined 90% of the incidence of myocardial infarctions among men and 94% among women. This correlation was found worldwide, in younger and older populations.

Estimates from many countries indicate that decrease of the level of the risk factors in a population is more effective than improvement of diagnosis and therapy. Hence, lowering of the average blood pressure and level of cholesterol and frequency of smoking in a population, had a 57%-share in the decrease in mortality from the CVD in the US in years 1980-1990, a 60%-share in the decrease in mortality in Scotland and a 58% share in the decrease in mortality in England and Wales in years 1981-2000. Also Polish studies, Pol-MONICA Warsaw and Pol-MONICA Cracow, which monitored the levels of risk factors in right-bank Warsaw and the former Tarnobrzeg Voivodship proved that lower blood pressure and lower frequency of smoking in a population is correlated with a significant reduction in the total risk of cardiovascular death.

Nationwide Polish data are far from sufficient, in the terms of monitoring selected risk factors for long periods and the level of the total coronary risk at both, nation-wide and regional levels, for a wide range of ages. Until now, epidemiologic studies have been carried out locally, with unstandardized methodology, hence – the results from these studies are hardly comparable, or representative for the whole country. Only two local studies assessing the level of risk factors and its time trends have met the international standards and were both carried out under the Pol-MONICA project, an independent part of the international WHO MONICA Project (MONitoring of trends and determinants of CArdiovascular Disease). The surveys covered middle-aged (34-64 years of age) populations of the right-bank part of Warsaw (Pol-MONICA Warszawa) and the former Tarnobrzeg Voivodship (Pol-MONICA Kraków) and they were carried out in years 1983/84, 1987/88, 1992/93 and under the name of Pol-Monica Bis study in 2001. Another programme monitoring health status is the Polish edition of the international CINDI Project, carried out by the Medical University in Łódź since the early 1990s on the population of Łódź. Other studies which should be mentioned here include NATPOL Plus, realized in 2002 by a team of researchers of the Medical University in Gdańsk, on a nationwide Polish sample of persons aged over 17. The survey provided some precious information on exposition of the Poland’s adult population to cardiovascular diseases. However, the sample was relatively small (3050 persons) and the sampling method did not enable assessment of exposition of Poland’s population in different regions of the country. The above-mentioned studies revealed big intensity of classical risk factors in Polish population. However, over the recent decade, advantageous trends have been observed in the frequency of cigarette smoking and hypertension prevalence and control, especially in urban areas. However, the changes are hardly sufficient and not as radical as those observed in the countries of Western Europe. Increasing trends were observed in obesity and diabetes (Pol-MONICA study).
Attempts to solve the problem of the CVD in the international and Polish forums

At the 53rd World Health Assembly of WHO held in the year 2000, member countries, and Poland among them, adopted the resolution on the action plan – to reduce morbidity, handicap and premature deaths from chronic non-infectious diseases, with special focus on cardio-vascular diseases. This resolution sets out three major targets:

1. Working out a map of epidemics of chronic non-infectious diseases and analyzing their social, economic, behavioral, and political determinants,

2. Reducing exposition to classical risk factors

3. Extending the care of persons with chronic non-infectious diseases.

The resolution also stated that the present monitoring system of population health status must be an integral part of health service, as it facilitates quick collection of information on changes in health status and hence – taking all necessary organizational, budgetary decisions. Due to the fact, that some risk factors cannot be modified (e.g. sex, age), stress should be put on monitoring and controlling the modifiable risk factors, such as cigarette smoking, improper diet, lack of physical activity, obesity, hypertension, lipid and carbohydrate metabolic disorders. This rational plan of action is recommended by the WHO, because:

1) the above-mentioned risk factors have the biggest effect on morbidity and mortality;

2) they can be modified through effective prevention;

3) it is not difficult to define the level of these risk factors;

4) the factors can be surveyed with adherence to ethical standards. Moreover, the WHO resolution states that including in primary and secondary prevention programs the results of risk factors’ monitoring will bring more beneficial health and economic effects than treatment of the already-manifested diseases.

In 2002, the Council of the EU worked out and adopted the Heart Plan for Europe, aimed at reduction of the cardiovascular epidemic in the EU countries. The Plan is based on the resolution adopted at the WHO’s 59th Meeting in 2000 and other international initiatives. It is assumed that the common strategy of the EU member countries should lead to a 40%-reduction of CVD-related mortality in persons under 65 by the year 2020. This target should be achieved mainly through better management of the major CVD risk factors in population and improvements in diagnosing and treatment of the CVD. Management of risk factors is stipulated to include: reductions of average cholesterol level in population to below 5.0 mmol/l, blood pressure – below 140/90 mmHg and reduction of cigarette smoking by at least 1% each year.

Monitoring the epidemiological situation is an essential element of assessment of the above decisions. This should be done through periodical cross-sectional surveys (optimally – carried out every five years), based on standardized methods. In Poland, intensive actions aimed at reduction of the CVD epidemic are undertaken. In years 1993-2001, the National Program of Heart Protection and the National Program of Stroke Treatment was carried out under the patronage of the Ministry of
Health. The programs were continued by a group of experts appointed by the Ministry of Health who worked out the National Program of Cardiovascular Diseases’ Prevention and Treatment. This program (POLKARD) was carried out in years 2003-2005 and the aims it adopted coincided with the Heart Plan for Europe.

Prevention and epidemiology of cardiovascular diseases, with a special focus on monitoring of common availability and effectiveness of treatment of the CVD risk factors, accompanied by the analysis of the influence of individual risk factors on the overall cardiovascular risk were among the prominent targets of the POLKARD Programme.

Multi-center, National Health Survey in Polish population (WOBASZ – Wielośródkowe Badanie Stanu Zdrowia Ludności) was carried out under the POLKARD program in years 2003-2005. It was designed, coordinated and organized by the Department of Cardiovascular Epidemiology and Prevention at the Cardinal Stefan Wyszyński Institute of Cardiology in Warsaw. The program was carried out in cooperation with the academic centres (medical universities) in Gdańsk, Poznań, Katowice Łódź and Kraków. In 2010 Poland (Instytute of Cardiology) joined the international multicenter EHES project. The aim of the project was to collect nationally representative, high quality health data which are comparable between countries and over time. In the frame of EHES project the pilot survey was conducted in order to ensure quality and comparability of data it is emphasized to standardize measurements, good staff training and cooperation with the reference centres (Helsinki, Rome and Oslo). In Polish pilot out of 490 persons invited, 206 (42%) respondents were examined. The aim of the pilot study was to test the methods of screening, staff skills and validity of the measurement and investigation methods. The additional aim of EHES Project was to elaborate manual for nationals surveys in collaborating countries using recomendations tested in the pilot.

Aims of national survey in Poland

1. Assessment of Poland’s population exposition to CVD, both in the whole country and in every voivodship through measurement of the prevalence of many CVD risk factors, both classical and the so-called new cardiovascular risk factors, as well as the assessment of morbidity (CVD, diabetes).

2. Assessment of the degree of management of the modifiable cardiovascular risk factors.

3. Assessment of the lifestyle and knowledge on CVD prevention in Polish population

4. Assessment of implementation of the prevention principles by general practitioners.

2. ORGANIZATION AND MANAGEMENT OF THE NATIONAL HES

Genesis and organization of the National HES: WOBASZ project

This project will by coordinated by the Department of Epidemiology and Prevention of Cardiovascular Diseases at The Institute of Cardiology in Warsaw. The design of the project was based, among the others, on the experience gained by the research team of the Department in international and studies like MONICA Project, previous WOBASZ 1st edition and the recommendation from FEHES and EHES Pilot Survey. The project will be conducted in cooperation
with the following research centres: Medical University in Gdańsk, Medical University in Łódź, Medical University in Poznań, Silesian Medical University in Katowice, Jagiellonian University in Kraków latter called as a regional center. The study will be (should be) approved by the Regional Bioethical Committee at the Institute of Cardiology. The structure of the organisation is shown in table 1 and figure I.

**Coordination center – scope of activities**

The main task to be fulfilled by the Coordination Centre was coordination and factual as well as organizational supervision of the whole study. It was in the Coordination Center, where the sets of questionnaires and instructions are prepared for each of the study’s components. The methods employed in the survey are based on the instruction for the WOBASZ. Beside the above-mentioned documents, the Coordination Centre prepared a catalogue used for encoding the questionnaire of drug using. This questionnaire was encoded for the whole all-Polish sample and entered into the computer database in the Coordination Centre. The elaborated catalogue of drugs was based on the WHO (ATC) anatomical-therapeutic-chemical classification of drugs and was being updated over the whole period of study, to keep the pace with the state-of-the-art drugs introduced in the meantime. This method of encoding allows to identify any drug regardless of its trademark, defining the form in which the drug is intaken and the daily dose.

<table>
<thead>
<tr>
<th>Research center</th>
<th>Regional coordinator</th>
<th>Voivodships investigated by the regional centers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical University in Łódź Department of Social and Preventive Medicine</td>
<td>Head of the Department</td>
<td>Łódzkie Lubelskie</td>
</tr>
<tr>
<td>Medical University in Gdańsk Clinic of Hypertension and Diabetology</td>
<td>Head of the Clinic</td>
<td>Zachodniopomorskie Pomorskie Warmińsko-mazurskie Podlaskie</td>
</tr>
<tr>
<td>Medical Academy in Poznań Institute of Cardiology Clinic of Hypertension, Vascular</td>
<td>Head of the Clinic</td>
<td>Wielkopolskie Lubuskie Kujawsko-pomorskie</td>
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</table>
Questionnaires related to the dietary habits were also encoded and entered into the computer database for the whole all-Polish sample in the Coordination Centre. To enable this procedure, dietary habits were assessed with a worked-out algorithm based on 24-h dietary recall, which allowed to assess energy and nutritional values of the daily food ration for each respondent as
well as the amount of each of the 80 nutrients in the consumed products and dishes. The algorithm, in accordance with the guidelines of the Institute of Food and Nutrition, allows for vitamin and nutrient loss due to technological processes.

The Coordination Centre will be organize regular meetings with the regional coordinators, in order to discuss the course of the survey nation-wide as well as in individual centres and solve the emerging problems.

Central Laboratory

All the biochemical measurement for the National survey will be conducted in the Central Laboratory “Diagnostyka” at the Institute of Cardiology in Warsaw. The Central Laboratory is a holder of the CDC Certificates (Centre for Disease Control – Lipid Standardization Program in Atlanta) for determination of cholesterol, concentration and RIQAS (Randox International Quality Assessment Scheme) - the European certificate of high quality in the area of lipid and glucose measurement. Serum samples, frozen to the temperature of -20°C, prepared in the regional research centres, will be transported to the central laboratory in dry ice by the courier company. In the computing centre, individual results of the laboratory tests were enclosed to the computer databases of all the persons under survey. In addition, the results were transmitted to the regional centres, which passed them on directly to the examined persons.

Central Computing Centre

Duties of the central computing centre consisted of:

1) assessing the sample size, the sampling method and the methodology used in the statistical research, so that the obtained results were reliable for the total and regional populations;

2) preparing the list of the selected persons, their addresses and their identification numbers for the survey, followed by sending these list to regional coordinators. All individual documents of a respondent, as well as the test-tubes will be labeled for easy identification.

3) Statistical Analysis System (SAS version 9.2.) will be used to set up the central computer database, with individual data of all the respondents. Databases comprising information from the basic questionnaire were delivered by the regional centres. However, the data from the questionnaire on the daily diet, medications using and the results from the laboratory tests will be entered in the coordinator centre. Completed database will underwent verification with respect to data completeness, logical and coverage errors;

4) working out preliminary descriptive analyses for each voivodship, which served as a base for reports on the particular voivodship’s population health, compiled by the Coordination Centre. The reports will be sent to the govermental heads of respective voivodships.

Regional Coordinators – Advisory Team
Duties of local coordinators, who were engaged in the Project in individual voivodships (Table I) includes:

1) organization and training of the commune-based research teams in the research targets and methods;
2) monitoring the regularities of the course of the survey in their areas;
3) encoding the primary questionnaires, construction of the computer database for their regions and sending it on to the central computing centre;
4) sending the unencoded questionnaires on medications using, dietary habits and psychological problems to the Coordination Centre;
5) Cooperation with the Coordination Centre.

Commune-Based Research Centers

In each of the selected communes, research centers were set up whose duty was to carry out the survey. Each team included nurses and medical technicians who had been trained in the methods and targets of the study and subsequently verified. Members of the research teams will be recruited by the regional research centers, in cooperation with the managerial staff of the local medical centers (Warsaw, Łódź, Kraków), or in cooperation with the Institute for Social Research in Sopot (Centres in Gdańsk, Poznań, Katowice). The Institute in Sopot established a special department for health studies.

Tasks entrusted to the commune-based research teams comprise:

1) sending invitations to persons selected for the survey and appointing the date of meeting;
2) obtaining the respondent’s written consent to take part in the survey;
3) conducting the interview to fill in the delivered questionnaires;
4) taking the blood pressure and anthropometric measurement;
5) taking blood samples for biochemical tests and preparing the serum and plasmo samples to be sent by courier service to the Central Laboratory;
6) Sending the local coordinator the study reports taking into account the persons who did not turn up at the appointment.

In the case a person did not come to the appointment, they will be invited two more times. If no response was given, the cause of doing so will be investigated (changing the residence, death of the selected person, no consent to be surveyed). The information should be entered into log-book.

The survey will be conducted, depending on the local conditions and the respondent’s place of residence in a commune’s survey centre (one for the whole commune), or in the respondent’s home (prearranged).
3. TIMING OF THE SURVEY

The survey is expected to start in 2014 and it will last probably about 3 years. Its completion will depend on obtaining the sufficient financial support. That should be noted that the national survey was planned for 2011-2013 but because of economic crisis the project was moved for later time.

Timing of the project:

• Preparation of manuals, contracts, budgeting, establishment of the work team in Regional Centers

• Material and technical provision of the study: will be done by main coordinator center. This includes the preparation of questionnaires, medical supplies and everything necessary to carry out the study.

• Meeting of regional coordinators to establish and agreed the final version of study protocol.

• Recruitment and training of regional research teams.

• Working meeting of regional coordinators from individual regions of Poland for purpose of training in standard working procedures and methodologies.

The time course of the nationwide WOBASZ study

The study will be conducted at particular region at examination sites (clinic visits) or at home of respondents (it will depend of regional coordinators); examinations of the respondents will take place in the morning from 7:00 to 14:00. After the fieldwork, frozen sera and plasma will be collected by car from regional centers to central lab.

4. TARGET POPULATION AND SAMPLE SIZE

Sampling methods

The survey will cover the whole territory of Poland. Each of the 16 voivodships will be serve as a benchmark unit. A sample of 19,200 men and women aged 20-74 will be drawn in the Department of State Registers at the Ministry of the Interior and Administration. Two-stage sampling scheme will be used and stratified by the voivodship and the commune category. Lists of communes in Poland were set up of the 6-digit identifiers and names of territorial units, as provided by the CSO: 1847 small communes (up to 8,000 inhabitants), 558 medium communes (from 8,000 to 40,000 inhabitants) and 102 big communes (over 40,000 inhabitants). Two small, two medium and two big communes will be drawn in each voivodship (primary sampling units – altogether 96 PSU will be selected). In each of PSU, 100 females and 100 males will be selected. The size of the sample was 100 persons x 2 sexes x 6 PSU x 16 voivodships = 19,200 persons.

Random sampling for the study population survey in Poland will be performed through a universal electronic system for population register called PESEL, which is managed by the Ministry of Interior of
Poland. This is an information system of civil registration, including the entire population residing in Poland. The unique PESEL number is given for each Polish citizen at birth or for foreign person at the moment when he or she obtains Polish citizenship. The official request included criteria proposed by a professional statistician during selection of the population sample. We have used the PESEL system in our previous survey.

**Statistical methods of estimation**

To estimate statistics (proportions, means) of analyzed risk factors (events) in different types of communes (small, medium, big communes) in each voivodship, covariance analysis adjusted for age (confounding variable) will be used. Estimated parameters (age-adjusted) in every type of commune in each voivodship will be then applied to calculate statistics for the whole voivodship, using weighted averages with the structure of population from small, medium and big communes in each voivodship as weights. Risk factor rates analyzed for the total of Poland were determined as weighted averages, the weights being the ratios of a given voivodship population to total Poland’s population aged 20-74.

Additional variables relating to diet will be were introduced to the model of covariance analysis which represents the season of the year, in which the cross-sectional analysis will be conducted. This was done due to the fact that dietary habits are season-specific.

### 5. LEGAL, ETHICAL AND DATA CONFIDENTIALITY ISSUES

**Ethical approval**

The key steps in the approval process by the Regional Ethical Committee is the protocol invitation letter, informed consent, which include a detailed description of examinations performed, including blood sampling, while emphasizing confidentiality during processing and maintaining the information. Also very important is to introduce the separate inform consents for core examination and for taking blood sample for DNA isolation.

Institute of Cardiology has its own Regional Ethical Committee evaluating individual projects and providing its approval for them to be performed. The evaluation is based on the International Ethical Guidelines for Biomedical Research Involving Human Subjects Pre pared by the Council for International Organizations of Medical Sciences (CIOMS) in collaboration with the World Health Organization (WHO). The Ethical Committee follows directives of the Ethical Code in compliance with:

- Act of Basic Rights and Freedoms, which is the part of the Constitution of the PL of April 1997;
- Personal data Protetion Act of Sept 29, 1997;
- Directive of personal data processcion;
- Act of Human Rights and Biomedicine of Oct 1, 2001;
- Clinical Trials Directive 2001/20-EC (Good Clinical Practice)
- and with other relevant laws of Poland and the EU (civil code, business code, work/employment code, criminal code, law on archiving, etc.).

**Informed consent**
Evaluation by the Ethics Committee concerns not only the examination alone (i.e. that the patient is not harmed or threatened), but also the content of the Informed Consent. After approval of the project by the Ethics Committee, the key issue will be the Informed letter, which includes a detailed description of conducted examinations, including blood collection (app. 2). Respondents will be provided with truthful and understandable explanation of purpose of the survey, examination procedures and processing and manipulation of sensitive information, including use of data and biological material obtained. Anonymous approach during data processing and maintenance will be stressed. Participants will also be given the option to withdraw from the survey at any time.

During register desk each respondent will sign the informed consent. This inform consent should be approved by the Regional Bioethics Committee. Respondent will sign the consent after arrival at the examination site and identification. Informed consent: see app. 4 and 5. The respondent should have enough time to read it or get questions answered so that respondent receives clear and complete information.

6. RECRUITMENT OF RESPONDENTS SCHEDULING APPOINTMENT, MOTIVATION, PARTICIPANTS

Quality assurance

The key issue to assure the quality is the sufficient time (at least one year) to plan, prepare and conduct the survey. To achieve high quality of data, it will be necessary to assure that the plan for the preparation part of the survey includes all important aspects at all levels of preparation (management and field coordination). Compliance with planning and preparation schedules and the accuracy of conducting examinations according to the manual will be monitored. Quality will be monitored continuously and trainings will be made as needed with the goal to detect and eliminate all possible issues as soon as possible after the survey starts. Handling with data will also be monitored, including their back-up, transfer to the central database and their management (regular back-up). Results of all activities will be documented.

Pilot survey

The area for pilot will be selected at the meeting of regional collaborator.

Quality control

Internal quality control measures will include regular reports by regional coordinators in individual regions and visits to field sites and to laboratories so that the conduct is assured according to the EHES standards.

To achieve as high response as possible, the quality control will also involve the process of inviting the participants.

Instruments will be continuously inspected during examinations depending on the examination frequency, and these inspections will be documented.

Selection and training of staff responsible for inviting respondents
Selection of competent and motivated staff is a key role in achieving the highest participation in screening. During training the focus should be made so that the whole process of inviting respondents is conducted in a professional and friendly manner. Especially important is training of conversation with the respondent. It is necessary to focus on the standard answers to possible questions of the respondent. Staff must offer respondent alternative time and place of examination (visit at home, weekend, another term, etc.) in the case when original term and place is not suitable for him. It is necessary that staff selected for telephone contact, received concise instructions on what to say during telephone interview and standard answers to potential questions of the respondent (see above Possible questions and answers during the telephone interview).

Steps to increase participation in screening

Several steps can be made to increase the participation in the screening.

Announcement and mass media campaign (press conference, promoting the project in the print, radio and television media) on the preparation of survey.

- Organisation of the web-site with information on the survey.
- Introducing of measurement that could be attractive for participants (i.e. ECG)

invitation information letter, in which the relevance of information is important, the importance of the study and contribution for the respondents. The emphasis on protection of personal data raises participation; therefore it is important to mention it when inviting the respondents. The information letter of invitation should be signed by important and reliable person.

Phone conversation, respectively home visit in some reason is important especially for those who can not or do not want to participate in the screening. In this form of contact the help of respondent for the screening should be highlighted.

Repeated contacts (2nd and 3rd letter of invitation)

Staff training

Training of the research team and certification of its members provided the background for the survey. Each of the Research Team members was provided a training on the total research methodology employed, and on the top of that, received a detailed instruction on the particular aspect of the study in which they participated. The training program included information of the aims and the ethic of the study as well as the confidential nature of the obtained data, interviews being based on questionnaires and the enclosed instructions, the method of blood taking, centrifugation, storage, separation, marking the samples and sending them on to the Central Laboratory, the methods of conducting the interviews on the dietary habits and psychological testing.

Training programs are essential to ensure standardization and quality of all the examinations. Training programs are conducted at two levels. One level is training at the country level. This is the kind of training of trainers. The second level is training of the professionals in the regions involved in the national survey EHES - WOBASZ. The first level will be performed by the team involved in EHES Pilot.
In Poland staff training will take place at two levels. At first meeting of the Working Group EHES is scheduled (coordinators at county level). At the second level training of implementers of examinations from individual regions of Poland will be conducted. Training will be divided into theoretical and practical training of the individual measurements.

**The content of training session:**

- invitations of the respondents, the motivation
- working with documentation (questionnaire, records measurements, table about participation and non participation)
- standard procedures of individual examinations
- data processing, insertion into the PC

Training materials (app. 11 A, B, C,) will be based on EHES –JA training materials translated into Polish.

**Data management**

Coordination of work will be managed by the main team of personnel from Institute of Cardiology, and there will be personnel in the field who will supervise over individual teams in the regions. Tasks of the main team and in the field will be clearly defined.

**Tasks of the Institute of Cardiology will be:**

- Preparing and coordination of work in the field, e.g. selection of inquirers, providing IT equipment, providing trainings and coordination of transfer of laboratory samples to the central laboratory.
- Data management, receiving and processing data from the survey in the field.

**Tasks of personnel in the field will be:**

- Data collection, conducting medical examinations
- Inspections of questionnaires (for accuracy of filled out information) with respondents during examinations
- Data entry from handcopy questionnaires to electronic format in the computer (if the survey is conducted separately)
- Secure saving of questionnaires and electronic data, regular back-up at the end of each working day and transmission of data to the Institute of Cardiology

Each respondent will be assigned a unique identification number. It will include the country code, survey number, voivodships No (1-16), comune (PSU) No 1-6 and personal No with identification of gender and control digit. There will be 12 numbers (at ID’s) at maximum. The identification number will not allow to identify the respondent’s personal information.
All obtained data (questionnaire data, medical examination data and laboratory results) will be saved at the central database administered by the IK. Data from the regional center will be transmitted each month in an electronic format to the central database (database server, file server).

**Selected measurements**

In 100% of the respondents will include:

1) core questionnaire (app. 6):

- socio-demographic data (age, social status, education);
- economic situation (principal source of maintenance, income per capita in family);
- physical activity at work and during leisure time;
- addictions (smoking status, alcohol consumption);
- interview about diabetes – diagnosing and treatment;
- interview about the current and past cardiovascular diseases, with special focus put on hypertension, coronary disease, cerebral infarction (hospitalization, place of treatment, possibly pharmacological and non-pharmacological treatment, past surgeries on coronary arteries);
- family interview about cardiovascular diseases (myocardial infarction, cerebral infarction);
- respondent’s knowledge on CVD prevention and uncured hypertension;
- application of prevention principles by the general practitioners on the base of an interview with the respondent.
2) the questionnaire related to the current drug use (over the 2-week period before the survey: drug’s name, cause of treatment and daily dose); 

3) blood sample taking form for biochemical tests (glucose, cholesterol, triglycerides, HDL-C, LDL-C); 

4) blood sample taking form for DNA isolation; 

5) Measurement 
   • blood pressure; 
   • measuring heart action; 
   • anthropometry (height, body mass, waist and hip circumferences) 
     • ECG. 
     with: 

Additionally, in 50% of the respondents the survey will include 

1) additional biochemical tests (homocysteine, hs CRP); 

2) questionnaire on the diet (app. 7): 
   • qualitative interview: habitual frequency of individual products’ consumption over a 2-3 months’ period prior to the survey; 
   • quantitative survey: detailed assessment of the quantity and type on food consumed over 24 hours prior to the survey. 

3) psychological questionnaire (questionnaire of social support by Berkman and Syme, as well as the questionnaire on depression by Beck and Quality of life - short form of WHO questionnaire) – app. 8 

Non-participant

If the contact with a respondent is established and he(she) refuses to fill out the questionnaire, an attempt will be made to obtain some basic information by phone, e-mail or by home visit. The aim of the non-respondent questionnaire is to obtain information on gender, age, education, employment and self rating health. Answers will be recorded to a questionnaire labelled by the identification number of the respondent. Such information then characterizes a set of respondents, which helps to make the obtained data more objective. Next to the non-respondent questionnaire, the information on gender and age is obtained from the central registry of population of the CR within the sample of selected individuals. 

Selected examination site

Medical examinations will performed in existing or newly organised healthcare facilities where blood samples will be collected (laboratory with facilities), so that the accessibility and blood collection following procedures are ensured. Such examination site will be provided with the appropriate equipment to
conduct the examination (measurement of blood pressure, height, weight, waist), and the examination will be conducted by professional personnel. Utilization of space will be ensured by an agreement on rent. In some regions the survey activities will be performed during home visits using portable equipment.

Questionnaire

A questionnaire will be based on the WOBASZ, EHES and FEHES recommendations and will be focused on lifestyle markers (like eating, exercise, smoking) and on more detailed information related to the risk of cardiovascular diseases and other chronic diseases and on questions focused on environmental markers.

The final version of the National survey questionnaire will be validated in pilot before the national survey in Poland starts.

Quality control

Standard procedures will be provided by:

- Buying a unique recommended measurement technique
- Its regular inspection
- Staff training in each standard measurement procedures as well as standard in the standard communication with respondents
- Control Coordination Centre staff should visit regularly cooperating workplaces.

BUDGET

The following budget calculations are based on the assumption that out of 19,000 selected persons we will reach about 60-65% response rate (about 12,000 will be investigated). Presented values reflect estimates from our previous national HESs and information obtained from a few manufacturers of the devices. The budget is prepared in PLN only total cost is given in Euro and in PLN.

<table>
<thead>
<tr>
<th>FIELD WORK INCLUDING REPORTING</th>
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<tbody>
<tr>
<td>Personnel cost</td>
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<table>
<thead>
<tr>
<th>Type of personnel</th>
<th>Person months</th>
<th>Cost (PLN)/person month</th>
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<td>Statistician</td>
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<tr>
<td>PR person</td>
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<td>3000.00</td>
<td>15000.00</td>
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**Equipment and other resources**

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Note:

1) The real budget will depend on the inflation rate
2) The above budget is based on assumption that examinations will be conducted at fixed clinics. In case the survey will be conducted partly at the home of participant the budget should be adjusted in relation to amount of the personnel and amount of equipment required.

**TOTAL: 1566940.00**
PART B
PART B

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PART I. GENERAL REMARKS

A. CONTACT WITH A PERSON WHO IS A RESPONDENT OF THE STUDY

The Investigator is to start a conversation with the person who is a Respondent of the Study with greeting him/her, introducing himself/herself and presenting the information about the activities to be performed.

While the questionnaire is being filled in, the Investigator reads the questions aloud.

If the Respondent of the Study expresses such a need, the questions should be re-read and any necessary explanations provided.

The Investigator must not comment on the Study Respondent’s responses or Study findings and results.

Once all the activities at this particular fieldwork point have been completed, the Investigator thanks the Study Respondent for his/her cooperation, accompanies him/her to a next fieldwork point, passes the relevant documents, and bids farewell to the Study Respondent.

B. THE USE OF IDENTIFICATION LABELS

There are two types of labels used:

- With survey identifier
- With bar code used in a laboratory

C. FILLING IN DOCUMENTATION

The documents are to be filled in in blue. The person who makes changes in documents (auditor) does it in red.

- Most questions have a closed list of answers – one answer should be chosen and marked with an ‘x’.
- When two or more answers can be chosen, appropriate information is given in the Questionnaire or relevant instruction.
- The Study Respondent should not be read a list of answers. Exceptions to this rule are given in a relevant instruction.
- If there is a note at some answers “you should pass to a further question”, the questions in between should be left unanswered.

Information in numbers (age, year, number of cigarettes, and so on) should be put in boxes, supplemented with zeros if necessary (e.g. 001, 022, 333).
Dates should be in the format DD.MM.YYYY (day and month – two digits each, year – four digits).

Text information should be written in block letters.

When in doubt how to encode an answer given by a Respondent of the Study:

- Leave the place for the answer blank;
- Put the digit “1” in a circle in the right margin of the page;
- In the bottom margin of the page, after the digit “1” in a circle, give a short and precise description of how a Study Respondent answered the question;
- If there were more such cases on one page, the digits used should be “2”, “3”, and so on.

If any changes have to be made in a text or selected choice:

- Cross out the element changed with one horizontal line (so that the text changed could be read);
- A correct version should be written right of or above the text crossed out;
- OR put “x” in the correctly selected box

NOTE: All changes and corrections must be accompanied by date and signed with own code.

D. INSTRUCTION HOW TO FILL IN RESPONDENT’S CHECK LIST

IDENTIFICATION LABELS

There are two labels used:

1) On the left side with survey identifier (affixed at registration)
   - Strip with unused labels of this type is stapled at the upper left-hand corner (so that the labels should not be damaged);
2) On the right side with bar code used in a laboratory (affixed at blood collection).
   - When a patient has refused to give blood, the label is not affixed. The relevant box should be crossed out.

FILLING IN CHECK-LIST (APP. 3)

Boxes: name and surname, date of examination, PESEL number are filled in at registration.

Further points are filled in at consecutive fieldwork points.

Each Investigator writes in his/her (two-digit) identification number and puts his/her signature next to it.

Yes/No answers to the questions about activities performed at a particular fieldwork point are marked below.
The “Sending the findings” point is filled in after laboratory test findings have been received (lipid levels, fasting glucose, ECG interpretation).

Any additional remarks which have no special place devoted for them in the documents to be filled in at a particular fieldwork point (e.g. withdrawal from the Study) should be written at the bottom of the page or overleaf. Each remark must be accompanied by date, individual code and signature.

E. SURVEY DOCUMENTATION AND PROTOCOL
SURVEY DOCUMENTATION

1. Lists of people randomly selected from the population of a region, and instruction on how to use log-book and labels;
2. Study Respondent’s informed consent forms;
3. Baseline Questionnaire;
4. Baseline Examination Questionnaire – Psychological questionnaires;
5. Baseline Examination Questionnaire – Chart of medications applied;
6. Physical Examination Forms – blood pressure measurement, anthropometric measurement;
7. Instruction on how to collect blood samples and store them until they are sent to the Central Laboratory; instruction on how to fill in biochemical test chart;
8. Instruction on how to process blood samples in a laboratory;
9. Questionnaire about dietary habits.

Ad 1. Lists of people randomly selected from the population of a voivodships, and instruction on how to use the log-book and labels

A documentation set for one sex and for one voivodship/PSU contains:

- Register – list of people selected randomly with their addresses and PESEL numbers;
- Address labels – 3 for each selected person (large self-adhesive labels – 14 pages);
- Identification labels – 8 for each selected person (small self-adhesive labels – 14 pages).

A uniform system of person identification is used in all documents. The full number consists of three numerical elements:

Number for województwo mazowieckie (Mazovian voivodship): 14;

Number for voivodship: 01-16;

Individual number: 001 – 200 for men, 201 – 400 for women;

Control number digit

People who appear as requested (after the first or consecutive invitations) should be marked in the log-book as “Examined”. The unused address labels should be crossed out.

People who refuse to participate in the Study should be marked in the log-book as “Refusal” with the relevant date. The unused address labels should be crossed out.

If the invitation has been returned by the Post with a note “Unknown addressee”, “Wrong address” or similar, such a note should be written in the log-book next to the name of the relevant person. The envelope with the note from the Post should be attached to the log-book.
In the case of people who died or moved out of the district, the note written in the log-book should be “Deceased” or “Moved out” with a most accurate date of the fact. The unused address labels should be crossed out.

These should be used to identify particular parts of questionnaires and tubes.

After the completion of the Study, the log-book and unused labels should be stored in Statistical Centre.

**Ad 2. Informed consent to undergo examinations**

Once a Respondent’s written informed consent to participate in the Study and separate informed consent for DNA isolation and genetic testing is signed, the chart, signed by the Interviewer, should be detached from the questionnaire and locked in a secure place (in this way it is impossible to match the Study findings with the name of a particular person examined).

**F. CONTACT WITH RESPONDENT**

**The first contact with respondent**

First contact with respondent consists of sending a letter of invitation. Invitation letter: see App. 2

Invitation letter contains:

- addressing
- notice about the random selection of participant in the study
- the proposed date, time and place of examination
- the basic information about the project
- the way the participant was selected
- the assurance of privacy of personal data
- the benefit to the respondent
- the information how to be prepared for the examination in the case of interest
- possible change of date, respectively home visit (in some regions home visit will be done)
- information about feedback
- telephone number and name of responsible team-person in the case if the concated person would like to change the date of visit

Invitation letter should be concise and especially understandable by the respondents of each age category and education.

The second letter of invitation will be sent to the respondents who were absent for the examination and which could not be contacted by phone or during the home visits. The second letter of invitation is formulated differently than the first one. If the respondent does not respond to the second invitation letter, the third letter of invitation is sent to the respondent. If the respondent fails to appear for examination, the respondent is recorded between the non-participating persons in the screening.
Possible questions and answers during the visit or if selected person will contact by phone after getting invitation letter.

• **Question 1:** Why was I selected in the screening?
  
  **Answer:** We selected a representative sample from region XY randomly from the Central Population Register. You were the one from selected. It is a coincidence, like winning the lottery.

• **Question 2:** But I am not a representative?!
  
  **Answer:** Nobody is itself representative. Everyone is different. Total sample, which was selected, is representative for the society or population.

• **Question 3:** Why did you choose people at random? How can you choose a representative sample this way?
  
  **Answer:** Random selection is the only way we can obtain a representative sample. It's also a way that allows us to control errors.

• **Question 4:** How did you choose me?
  
  **Answer:** We used the Central Population Register. First, we chose a place where screening will take place and then people were randomly selected for participation. It’s a scientifically proven methodology.

• **Question 5:** How will you know what the overall health of the population is when you examine only sample of a whole population?
  
  **Answer:** It’s like the elections; we will not collect accurate data, but a comprehensive picture of population health.

• **Question 6:** I am very busy to be able to participate in screening. May I rather send instead of myself my husband or neighbour, or someone else?
  
  **Answer:** No, if you replace a person who does not want to participate, it is no longer a representative sample. It is therefore very important for us your attendance in screening.

• **Question 7:** Usually in surveys it is possible to be replaced man by man.
  
  **Answer:** Yes, but this is the scientific research and we must use scientific methods. It is not so important for commercial opinion surveys.

It is necessary to record contact data of each selected respondent.

**Data to be recorded in the log-book**

- **Status of capacity:** it is recorded whether a person is eligible or not to participate in screening. The reason for disqualification may be emigration, death, etc.
- **Contact:** to notice that the contact was successful (invitation letter, telephone, personal visit). If a letter of invitation does not return to address of the sender, the contact is considered as successful. If contact is successful, it is necessary to record whether the respondent attended the screening or not and if not, it is necessary to record reason of absence.
• **Not contacted persons**: we consider those people whose invitation letter was returned to the sender’s address and other contacts were not possible or successful. Number and type of contacts must be recorded.

• **Participating persons**: The respondent, which is considered participative, must have at least one measurement (height, weight, some results of the questionnaire)

• **Nonparticipating persons**: denial or contacts were not successful. The reason for refusal must be recorded.

The reason for refusal must be recorded in the form and in the log-book. The reasons will be recorded in the list of the contacted respondents every day during the telephone interview or home visit at the client's home after registration an order of the examination should be kept strictly.

### G. Order of the fieldwork examination

**The stable order of examination**

**WAITING ROOM**
The respondent is welcome by the staff and waiting for the examination (as short as possible)

**REGISTRATION**
- Identification of respondent
- Sign of informed consents
- Folder with enclosed documents:
  - check list + label set
  - core questionnaire
  - biochemical check list
  - dietary habits questionnaire
  - psychological questionnaire
- Blood pressure measurements

**Blood sample drawing**

**The flexible order of examination**

- Anthropometry
- Core questionnaire
- Dietary habits questionnaire
- Psychosocial questionnaire
- Resting ECG
- **Physician**
  - Physical examination
  - Checking of documentation completeness
  - Data on medication taken and reasons for treatment

### H. FEEDBACK TO THE RESPONDENT (app. 10)

At the day of examination after all measurements had been completed, the physician/investigator should check all measurement results, and asked questions on the use of medications, including the reasons for the treatment. The participants were given an opportunity to ask questions. A short feedback on all results (including ECG) was given by physician, and there was discussion on CVD risks.
After 2-3 week of examination (when results of biochemical tests are available) a letter with results of examination was mailed to every participants. The letter (app. 15) will include also short, basic interpretation of the results and individual recommendation.
PART II: CORE QUESTIONNAIRE (app. 6)

CHAPTER I. IDENTIFICATION DATA

Identification data are written in at patient’s registration.

Q. 1. Date of examination – write the full date of the examination using Arabic numerals:

Day of examination (two digits) e.g. 03; 17
Month of examination (two digits) e.g. 01; 12
Year of examination (four digits) e.g. 2010, 2012

Q. 2. Time the examination started – write two digits in the hour boxes, e.g. 08 and two digits in the minute boxes, e.g. 05

CHAPTER II. DEMOGRAPHIC DATA

Q. 3. Sex – self-coding

Q. 4. What is your date of birth? – write just like I.1 – “Date of examination”


Q. 6. Do you live with your spouse or partner? – self-coding

Q. 7. How many people live in your household (including yourself)? – self-coding

Q. 8. What is your education? – self-coding. You should choose:

Answer 1. If the number of years in the primary school is lower than 7 (in people older more than 60yrs, in younger person less than 8yrs old);

Answer 2. If the person finished 7, or 8 classes of the primary school (depending on age) but does not qualify for answer 3;

Answer 3. If the person finished lover secondary education;

Answer 4. If the person finished upper secondary education and passed school graduation exams;

Answer 5. If the person finished any post-secondary but not tertiary education;

Answer 6. First step of teritiary;

Answer 7. University education;

Answer 8. If the person has primary education and finished basic vocational education
Answer 9. If the person finished lover secondary school and basic vocational school.

Q. 9. How many years did your education take (do not include the years which you had to repeat)? – self-coding.

Q. 10. What is the average monthly net income (the sum which is obtained after paying all taxes) per person in your family (household)? – self-coding, after what is meant by net income has been elucidated to the Study Respondent.

CHAPTER III. DATA ON WORK AND PHYSICAL ACTIVITY

Q. 1. How would you define your current labour status? – self-coding. Pay attention to passages. If the answer is 1, leave Question 2 empty.

Q. 2. Have you ever worked for pay or profit? – self-coding. If the answer is “No”, pass to Question 9.

Q. 3. What is/was the character of your employment? – self-coding. If it was self-employment or working at home without payment, you should go to Question 5.

Q. 4. What is/was your employment contract? – self-coding;

Q. 5. Are/Were you employed in your principal place of work? – self-coding;
    a. full time
    b. part time

Q. 6. How do/did you usually get to work (place of education) and back? – self-coding. Pay attentions to passages. If you pass to Question 8, leave Question 7 unanswered.

Q. 7. How many minutes daily does/did it take you to cycle to work (place of education) and back? – self-coding;

Q. 8. Does/Did your professional work have a character? – self-coding. Note if 50% of work time is hard physical work or rather sedentary).

Q. 9. Do you happen to do some physical exercises (e.g. jogging, cycling, swimming, gardening, and so on) for at least 30 minutes non-stop? – self-coding. If the answer is “No”, pass to Question 11, and Question 10 must be left unanswered.


CHAPTER IV. TOBACCO SMOKING

NOTE!! ALL QUESTIONS IN THIS CHAPTER REFER TO SMOKING CIGARETTES AND OTHER TOBACCO PRODUCTS.

IV A. CURRENT SMOKING

Q. 1. Are you a current tobacco smoker? – self-coding. If the answer is “1 – Yes, regularly” go on to Question 2. If the answer is “2 – Occasionally” or “3 – No”, go to Chapter IV B, and Questions 2 a – h should be left unanswered.

Q. 2a. What type of tobacco products do you smoke every day? – self-coding; a few answers can be chosen.

Q. 2b. On average, how many cigarettes, cigars or pipes do you smoke daily? – write in a two-digit number of cigarettes smoked per day, e.g. 05, 25, and so on. If the number exceeds 98, write in 98.

Q. 2c. How long (how many years) have you smoked cigarettes (or other tobacco products)? – write in the number of years (sum up all separate periods of smoking; if the Respondent does not remember exactly, put in an approximate number).

Q. 2d. How old were you when you started smoking cigarettes (or other tobacco products)? – self-coding; write in age in years;

Q. 2e. Do you inhale when you are smoking cigarettes (or other tobacco products)? – self-coding;

Q. 2f. Why do you smoke cigarettes (or other tobacco products)? – self-coding; Give one, most important, answer. If the Respondent is unable to answer the question himself/herself, it is allowed to read out possible answers from the questionnaire.

Q. 2g. Have you ever attempted to stop smoking? – self-coding;

Q. 2h. Would you like to stop smoking? – self-coding. If the answer to Question 2 or 3 is “Yes”, go to Chapter V.

Q. 2i. If so, why would you like to stop smoking cigarettes (or other tobacco products)? – self-coding. Write in one, most important, reason. If the Respondent is unable to answer the question himself/herself, it is allowed to read out possible answers from the Questionnaire. Once this part of the Questionnaire is filled in, go on to Chapter V.

IV B. EX-SMOKERS OR THOSE WHO NEVER SMOKED

Q. a. Did you ever smoke cigarettes or other tobacco products for at least a year? – self-coding. If the Respondent has never smoked, go to point h.
Q. b. How old were you when you stopped smoking cigarettes or other tobacco products? – Write in a two-digit number of years of age the Respondent was when he/she stopped smoking cigarettes, e.g. 15.

Q. c. Did you attempt to stop smoking before? – self-coding. If the answer is “Yes”, ask how many times.

Q. d. If he/she has stopped smoking within the last year, it was – self-coding;

Q. e. What was the most important reason for stopping smoking? – self-coding. Write in one, most important, reason. If the Respondent is unable to answer the question himself/herself, it is allowed to read out possible answers from the Questionnaire.

Q. f. What was the largest number of cigarettes that you smoked per day in one year? (THE QUESTION IS ABOUT CIGARETTES ONLY). Write in a two-digit number, which in the Respondent’s opinion was the largest number of cigarettes he/she smoked per day in one year, e.g. 05, 20.

Q. g. How old were you when you started smoking cigarettes? Write in a two-digit number of years of age the Respondent was when he/she started smoking cigarettes, e.g. 09, 20.

Q. h. How many hours a day do spend on average in the same room with other people smoking? – self-coding;

Q. i. How often are you in the same public place and means of transport with other people smoking cigarettes? – self-coding;

Q. j. How often are you with other people smoking at work? – self-coding.

CHAPTER V. ALCOHOL CONSUMPTION

Q. 1. In the last 12 months, have you drunk vodka, wine or beer at least once? – self-coding. If the answer is “No”, go to Chapter VI, and leave Questions 2 – 7 unanswered.

Q. 2. How often do you drink vodka or another high-proof spirit (brandy, whisky)? – self-coding. If he/she does not drink vodka, go on to Question 4, and leave Question 3 unanswered.

Q. 3. If you drink vodka or another high-proof spirit, how many milliliters do you usually drink then? – self-coding;

Q. 4. How often do you drink wine? – self-coding. If he/she does not drink wine, go on to Question 6, and leave Question 5 unanswered.

Q. 5. If you drink wine, how much of a bottle do you usually drink then? – self-coding;

Q. 6. How often do you drink beer? – self-coding. If he/she does not drink beer, go on to Chapter VI, and leave Question 7 unanswered.
Q. 7. If you drink beer, how many liters of beer do you usually drink then? If he/she drinks e.g. one 300 ml can, write in 0.3; if 500 – 0.5 (because the first digit refers to liters).

CHAPTER VI. MEDICAL INTERVIEW FOCUSED ON CARDIOVASCULAR DISEASES

VI A. EFFORT ANGINA

This part of the Questionnaire must be adopted from the London School of Hygiene. The way it is filled in must be compliant with the standard instructions. The aim of this part of the Questionnaire is a standardized diagnosis of effort angina.

The questions have to be asked exactly in the way they are printed as even a small change in a question asked may result in unexpected discrepancies in answers. Unambiguous answers to the questions need to be written down as they are, regardless of the fact whether they seem correct or not. Additional or explanatory questions should appear extremely rarely and must be put down in the Questionnaire. They must be as consistent with the vocabulary used in the question as possible. They must never suggest any answer.

If there is any substantial doubt about accurate interpretation by the Respondent, the answer should be registered in the way which excludes a correct answer. For example: If the question “Have you ever felt chest pain or anxiety” is answered: “I think I have but I can’t remember exactly.” – such an answer should be treated and registered as “No”.

An exception to this rule is the situation when the first or second question about angina is answered “No – only a feeling of pressure or burden in my chest”. Therefore, although the answer to the question is literally negative, it suggests a different interpretation and, thus, should be treated and registered as “Yes”.

If the pain appeared during other forms of effort, e.g. cycling, walking upstairs or gardening, the answer registered should be “No”. The phrase “walk uphill” does not cover walking upstairs. It is possible to itemize other circumstances when the pain appeared on the margin of the Questionnaire. Unambiguous answers do need to be supplemented with additional questions, but if there are such words in an answer as “occasionally” or “sometimes”, an additional question of the type “does it happen in most cases” is mandatory. A positive answer to this question should then be registered as “Yes”.

Q. 1. Have you ever felt chest pain or anxiety? – self-coding. If the answer is “Yes”, go to Question 3, and leave Question 2 empty.

Q. 2. Have you ever had the feeling of pressure or burden in your chest? – self-coding. If the answer is “No”, go to Part B, and leave Questions 3 – 10 empty.

Q. 3. Do these symptoms appear currently when you walk uphill or when you are in a hurry? – self-coding. If the answer is “No”, or “I am never in a hurry” go to Part B, and leave Questions 4 – 10 empty.
Q. 4. Do these symptoms also appear when you walk on a flat surface at a normal pace? – self-coding;

Q. 5. What do you do when these symptoms appear during walking? – self-coding. If the answer is “I keep walking without changing the pace” go on to Part B, and leave Questions 6 – 10 empty. If he/she takes AEROSONIT, NITROGLYCERINUM, NITROLINGUAL, NITROMINT, SORBONIT, SUSTONIT, TRIMONIT – and walks on, encode 1.

Q. 6. What happens with this feeling of pain, burden, pressure or anxiety in your chest when you stop walking? – self-coding. If the answer is “It does not relieve fully”, go on to Part B.

Q. 7. How long does it take these symptoms to relieve fully after you stop walking? – self-coding. If the answer is “more than 10 minutes”, go on to Part B, and leave Questions 8 – 10 empty.

Q. 8. In which place or places do you feel pain, pressure, burden or anxiety? – self-coding. Each of the Questions below has to be answered.

   Q. 8a. Sternum (upper or middle part);
   Q. 8b. Sternum (lower part);
   Q. 8c. Left side of the chest front;
   Q. 8d. Left arm;
   Q. 8e. Another localization;

Q. 9. Have you ever seen a doctor because of these complaints? – self-coding. If the answer is “No”, go on to Part B, and leave Question 10 empty.

Q. 10. If you have, what did the doctor diagnose? – self-coding.

VI B. PRESENT AND PAST DISEASES

Q. 1. Do you suffer now from any chronic disease or do you have any health problems (a chronic disease is a disease which lasts or is expected to last at least 6 months)? – self-coding. If the answer is “No”, “I don’t know” or “I refuse to answer”, go on to Question 3.

Q. 2. How much (To what extent) have your health problems limited your everyday activities in the last 6 months? – self-coding;

Q. 3. Have you ever been hospitalized because of the following diseases?
   a) Myocardial infarction – self-coding;
   b) Aggravated coronary artery disease – self-coding;
   c) Brain stroke – self-coding;
   d) Heart failure – self-coding;
Q. 4. Have you ever been diagnosed with any of the diseases itemized below? – self-coding;

For each of the following diseases, one of the codes below should be used.

1 – Yes
2 – No
3 – I don’t know
4 – Answer refused

If the answer is “Yes” (code 1), you should ask if it has been during the last 12 months and encode the answer according to the same scheme (codes 1 – 4).

Asthma (including allergic asthma) – self-coding;

Chronic bronchitis, COPD (Chronic Obstructive Pulmonary Disease), Emphysema – self-coding;

Atrial fibrillation – self-coding;

Another arrhythmia (not AF) – self-coding;

Diseases of lower extremities (atherosclerosis, intermittent claudication, Buerger’s disease) – self-coding;

Myocardial infarction – self-coding;

Coronary artery disease (angina pectoris) – self-coding;

High blood pressure (arterial hypertension) – self-coding;

Increased cholesterol levels – self-coding;

Brain stroke (cerebral hemorrhage, cerebral thrombus) – self-coding;

Rheumatoid arthritis – self-coding;

Degenerative joint disease – self-coding;

Lumbosacral spine diseases – self-coding;
Cervical spine diseases – self-coding;

Diabetes – self-coding;

Allergy (rhinitis, conjunctivitis, dermatitis, food allergy, and other allergies including asthma) – self-coding;

Gastric or duodenal ulcer – self-coding;

Liver cirrhosis, liver dysfunction – self-coding;

Malignant neoplasm, including leukemia and lymphoma – self-coding;

Migraine – self-coding;

Urinary incontinence – self-coding;

Chronic anxiety – self-coding;

Chronic depression – self-coding;

Other psychic disturbances – self-coding;

Persistent trauma or defect resulting from an accident – self-coding;

Q. 5. Have you been hospitalized or are you currently under the constant care of a physician because of the disease(s) you suffer from – self-coding;

Q. 6. In the last two weeks, have you regularly taken any aspirin preparations – self-coding. If the answer is “No” (Point 3 or 4), ask about other commercial names of aspirin preparations (i.e. ACARD, ACESAL, ACIDUM ACETYLSALICYLICUM, ASCALCIN, ASPIRIN, ASPIRIN PROTECT, BESTPIRYN, CALCYPIRyna, CARDIOPIRIN, ENCOPIRIN, GALOCARD, KWS ACETYLOSALICYLOWY, POLOCARD, POLOPIRyna S, POLOPIRyna, POLOPIRyna C).

VI C. ARTERIAL HYPERTENSION

Q. 1a. Do you know the upper limit of normal blood pressure – self-coding. If the answer is “No” / “I don’t”, go on to Question 2, and leave Question 1b unanswered.

Q. 1b. What are these values? – Write in a three-digit number, e.g. 115/095.

Q. 2. Do you know what your blood pressure is? – self-coding. If the answer is “No”, go on to Question 4, and leave Question 3 unanswered.

Q. 3 Is your blood pressure ... – self-coding including the note under the question.

Q. 4. When did you last measure your blood pressure? / When did you last have your blood pressure measured? – self-coding;
Q. 5. Has a doctor ever found that your arterial blood pressure was increased? – self-coding. If the answer is 2, 3, 4, go on to Part D, and leave Questions 6, 7, 8, 9, 10 empty.

Q. 6. How old were you (approximately) when you were diagnosed with increased blood pressure? – self-coding. Write two digits into the box, e.g. 08, 25. Try to receive a most accurate answer (if necessary ask additional questions). When it is impossible to get a precise answer, write in 99.

Q. 7. Have you ever taken any medication because of increased blood pressure? – self-coding. If the answer is 2, 3, go on to Part D, and leave Questions 8, 9, 10 and 11 empty.

Q. 8. Have you taken these drugs in the last two weeks? – self-coding. If the answer is 2, go on to Part D, and leave Questions 9, and 10 empty.

Q. 9. Have you taken antihypertensive drugs in the last three days? – self-coding;

Q. 10. Have you been hospitalized because of your hypertension? – self-coding;

Q. 11. Has any member of your family been diagnosed with arterial hypertension? – self-coding.

VI D. CHOLESTEROL

Q.1. Have you ever been diagnosed with an increased cholesterol level? – self-coding. If the answer is “No”, go on to Question 6, and leave Questions 2 – 4 unanswered. If the answer is “I don’t remember”, go on to Question 6, and leave Questions 2 – 5 unanswered.

Q. 2. How old were you when you were diagnosed with an increased cholesterol level? Write a two-digit number into the box to show the number of years the Respondent turned when an increased level of cholesterol was diagnosed e.g. 08, 25. Try to receive a most accurate answer (if necessary ask additional questions). When it is impossible to get a precise answer, write in 99.

Q. 3. In the last two weeks, have you taken regularly any medications prescribed by a physician to lower your cholesterol level? – self-coding. The word “regularly” should be understood as every day or almost every day. If 2 or 3, leave Questions 4 and 5 unanswered.

Q. 4. Have you taken any medications to lower your cholesterol level in the last three days? – self-coding;

Q. 5. Do you observe any special diet prescribed by a physician or another health professional in order to lower your cholesterol level? – self-coding;

Q. 6. In the last 12 months, have you had your blood cholesterol level measured? – self-coding.

CHAPTER VII. OTHER MEDICAL INTERVIEWS

VII A. DIABETES MELLITUS
Q. 1. Has any member of your family been diagnosed with diabetes? – self-coding. Each subquestion has to be answered. If “Yes”, who was it?
   a) father or paternal relatives,
   b) mother or maternal relatives,
   c) siblings or children

Q. 2. Have you ever been diagnosed with diabetes? – self-coding. If the answer is “No” or “My glucose level was increased sometimes, but a physician did not consider it diabetes” or “I don’t remember”, go on to Part B, and leave Questions 3 – 8 unanswered.

Q. 3. How old were you when you were diagnosed with diabetes? Write in a two-digit number to show the number of years the Respondent turned when diabetes was diagnosed e.g. 05, 15.


Q. 5. Have you taken any antidiabetic medications regularly in the last 14 days? – self-coding. The word “regularly” should be understood as every day or almost every day.

Q. 6. Have you taken any antidiabetic medications in the last 3 days? – self-coding.

Q. 7. Have you been hospitalized because of diabetes? – self-coding;

Q. 8. Do you self-control your glucose level (glucometer with strips)? – self-coding.

VII B. OBESITY

Q. 1. Has a physician or a nurse ever told you that you are overweight or obese? – self-coding. If the answer is “No” or “I don’t remember”, go on to Question 3,

Q. 2. How old were you (approximately) when you were diagnosed overweight or obese? Write in a two-digit number to show the number of years the Respondent turned when overweight was diagnosed e.g. 05, 15. Try to receive a most accurate answer (if necessary ask additional questions). When it is impossible to get a precise answer, write in 99.

Q. 3. Do you think you are overweight or obese? – self-coding;

Q. 4. Do you know how much you weigh? – self-coding. If the answer is “No”, go on to Question 6, and leave Question 5 unanswered.

Q. 5. Can you tell me how much you weigh – write in three digits, e.g. 099,115.

Q. 6. In the last 12 months, have you noticed that you have put on more weight than 5 kg? – self-coding.

VII C. MENSTRUATION AND PREGNANCY
Note! While asking questions you should be particularly tactful because of their very specific character.

Q. 1. Do you currently menstruate? – self-coding. If the answer is “Yes” or “Yes, irregularly” (code 1 or 2), go on to Question 4, and leave Questions 2 and 3 unanswered. If the answer is “No, because I am pregnant” (code 3) go on to Question 6, and leave Questions 2 – 5 unanswered. Write in “No” (code 4) if the Respondent has not menstruated for longer than 6 months. If she has not menstruated for a shorter time than 6 months, use code 2 (yes, irregularly). If the answer is “No” (code 4), do not ask about contraceptives and in Question 5 write in “No”.

Q. 2. How old were you when you stopped menstruating? Write in a two-digit number to show the number of years the Respondent turned when she stopped menstruating e.g. 42, 50.

Q. 3. Why do you not menstruate? – self-coding. You should first ask why she does not menstruate, and then if the Respondent does not answer satisfactorily, you can read questions with possible answers.

Q. 4. Do you take hormonal drugs because your menstruation has stopped or is abnormal? – self-coding. If the answer is “Yes”, go on to Question 6, and leave Question 5 unanswered.

Q. 5. Do you take hormonal contraceptives? – self-coding;

Q. 6. How many children have you had? – write in the number of children, e.g. 01, 10.

VII D. HEALTH STATE


VII E. FAMILY MEDICAL HISTORY

Q. 1. Is your father alive? – self-coding. If the answer is “He is dead”, you should ask “What was the cause of his death?” and when the answer is ambiguous, you can read the answers provided by the Questionnaire. If the answer is 1 or 8, go on to Question 3, and leave Question 2 unanswered.

Q. 2. How old was your father when he died? Write in the age of the father (years) at death, e.g. 60, 75. If the Respondent does not know the exact number, write approximation, e.g. 65, 70; and if he/she does not know, write in “I don’t know”.

Q. 3. Did your father have myocardial infarction or brain stroke? – self-coding. If the answer is “No” or “I don’t know”, go on to Question 5, and leave Question 4 unanswered.

Q. 4. How old was your father when he had first myocardial infarction or brain stroke? – write in the father’s age when he fell ill. If the Respondent does not know the exact number of years, write approximation; and if he/she does not know, write in “99”.
Q. 5. Is your mother alive? – self-coding. If the answer is “She is dead”, you should ask “What was the cause of her death?” and when the answer is ambiguous, you can read the answers provided by the Questionnaire. If the answer is 1 or 8, go on to Question 7, and leave Question 6 unanswered.

Q. 6. How old was your mother when she died? Write in the age of the mother (years) at death, e.g. 60, 75. If the Respondent does not know the exact number, write approximation, e.g. 65, 70; and if he/she does not know, write in “I don’t know”.

Q. 7. Did your mother have myocardial infarction or brain stroke? – self-coding. If the answer is “No” or “I don’t know”, go on to Chapter VIII, and leave Question 8 unanswered.

Q. 8. How old was your mother when she had first myocardial infarction or brain stroke? – write in the mother’s age when she fell ill. If the Respondent does not know the exact number of years, write approximation; and if he/she does not know, write in “99”.

CHAPTER VIII. HEALTH CARE

Q. 1. Have you been hospitalized in the last 12 months? – If the answer is “Yes”, ask how many times.

Q. 2. Have you sought medical consultation in the last 12 months? – If the answer is “Yes”, ask how many times, and go on to Question 4 leaving Question 3 unanswered.


Q. 4. Where do you usually go to see a doctor? – self-coding;

Q. 5. When you see a doctor,
   Q 5 a. do you usually have your blood pressure measured? – self-coding;
   Q 5 b. are you advised to stop smoking? – self-coding;
   Q 5 c. are you given dietary advice? – self-coding;
   Q 5 d. are you advised to increase physical activity? – self-coding;

Q. 6. Did you buy all the drugs prescribed by a doctor during the latest visit? – self-coding. If the answer is 1 – 3, go on to Chapter IX.


CHAPTER IX. HEALTH AWARENESS

Q. 1. Do you know what diseases and complications can result from untreated arterial hypertension? – You should wait until the Respondent finishes answering (do not read answers provided) and mark options which the Respondent mentioned. You can mark more than one option. The Respondent’s answers which are not given in Points 1 – 6 should be put in Point 7.
Q. 2. What methods of preventing heart diseases, other than taking drugs, do you know? – You should wait until the Respondent finishes answering (do not read answers provided) and mark options which the Respondent mentioned. You can mark more than one option. The Respondent’s answers which are not given in Points 1 – 9 should be put in Point 10, e.g. stress.

INSTRUCTION HOW PSYCHOLOGICAL TESTING QUESTIONNAIRES SHOULD BE FILLED IN

A. Note: All questionnaires of the psychological testing must be filled in by the Respondent himself/herself. A trained interviewer may help to fill in a questionnaire when the Respondent is unable to read the questionnaire without help (e.g. has forgotten to take his/her glasses or does not understand a question). During a questionnaire interview, on no accounts is the interviewer allowed to suggest an answer (e.g. by prompting or nodding).

B. Rules of conduct when depression is diagnosed based on the sum of answers in the Depression Questionnaire:

1. If the Respondent in Q. 1109 answers that “I want to take my own life” or “Will commit suicide whenever possible” – it is mandatory that a primary care physician should be informed that severe depression is suspected in the Respondent.

2. If the Depression Questionnaire score is 30 ≥ points in the Beck Depression Inventory, the interviewer asking questions from the Main Questionnaire must immediately notify a primary care physician about this fact with the information that severe depression is suspected in the Respondent.

3. If the Depression Questionnaire score is 17 ≥ points in the Beck Depression Inventory, the interviewer asking questions from the Main Questionnaire must immediately notify a primary care physician about this fact with the information that depression signs have been diagnosed in the Respondent.

4. If the Depression Questionnaire score is 10 ≥ points in the Beck Depression Inventory, this information should be given to the Respondent together with the results and findings of the main questionnaire.

CHAPTER X. DEPRESSION QUESTIONNAIRE (app. 8)

(For Respondents aged below 74 years)

Instruction how to fill in Depression Questionnaire

All answers to the questions in the Questionnaire are closed and self-coding, The Respondent selects one of the four possible answers under each of the 21 depression signs and symptoms (from A to U). the answer selected should be marked with a cross next to the number of the answer.

Q. A. – self-coding;

Q. B. – self-coding;

Q. C. – self-coding;

Q. D. – self-coding;
CHAPTER XI. SOCIAL SUPPORT QUESTIONNAIRE (app. 8)

Instruction how to fill in the Questionnaire (Questions 1 – 10)

Apart from personal particulars, in the Questionnaire there are several questions about contacts with friends and relatives, who may be expected to offer support when times are hard. If a question asks about numerical information, the number is put in the relevant place ( ). If the are closed, answering the question is based on putting cross in a box ( ) next the number of an answer.

A. FAMILY LIFE


Q. 2. Do you have a pet? – self-coding. If the answer is “Yes”, write in the number of pets in the next cell.
Q. 3. Are you or have you ever been married? – self-coding. If the answer is “No”, go on to Question 6.

Q. 4. How many times have you been married? – write in the number of marriages, e.g. 1, 2.

Q. 5. Data on the first, second and third marriages:

Q. 5.1. In Column 1 – write the age you were in when you got married; in Column 2 – write how many years you were married; in Column 3 – choose only one answer; e.g. if you are still married to this partner, put X in cell 1.

Q. 5.2. and Q. 5.3. – fill in in the way described at 5.1

B. CHILDREN

Q. 1. Do you have any children? – self-coding. If the answer is “No”, go on to Question 8.

Q. 2. How many children? – write the number of children you have, If you have more than 9, write in 9.

Q. 3. Children’s age – write the age of each child. If you do not remember, write approximation.

B1. CONTACT WITH CHILDREN

Q. 4. How many children do you see in a month? – write the number of your children you see at least once a month.

Q. 5. How many children do you see in a week? – write the number of your children you see at least once a week.

Q. 6. How many children do you phone in a month? – write the number of your children you phone or write to at least once a month.

Q. 7. How many children do you phone in a week? – write the number of your children you phone or write to at least once a week.

Q. 8. With how many children do you have very close emotional contacts? – write the number of children with whom those contacts are very close, e.g. if there are two of them, write 2 in Point 8.1. If the contact is loose with one child – write 1 in Point 8.3.

Q. 9. Overall, are you satisfied with the contact with your children? – choose only one of the three options.

C. RELATIVES

Q. 1. With how many relatives are you in close contact? – mark the number of relatives you are in close contact with. Do not include your children but only your parents, grandparents, siblings, cousins, and the like.
Q. 2. How many relatives do you see in a month? – write the number of your relatives you see or write to at least once a month.

Q. 3. How many relatives do you see in a week? – write the number of your relatives you see or write to at least once a week.

Q. 4. With how many relatives do you talk over the phone in a month? – write the number of your relatives you phone or write to at least once a month.

Q. 5. With how many relatives do you talk over the phone in a week? – write the number of your relatives you phone or write to at least once a week.

Q. 6. Are you satisfied with the contact with your relatives? – choose only one of the three options.

D. FRIENDS

Q. 1. How many friends do you have? – mark the number of your friends you are in close contact with.

Q. 2. How many friends do you see in a month? – write the number of your relatives you see or write to at least once a month.

Q. 3. How many friends do you see in a week? – write the number of your relatives you see or write to at least once a week.

Q. 4. With how many friends do you talk over the phone in a month? – write the number of your relatives you phone or write to at least once a month.

Q. 5. With how many friends do you talk over the phone in a week? – write the number of your relatives you phone or write to at least once a week.

Q. 6. Are you satisfied with the contact with your friends? – choose only one of the three options.

E. GROUPS

Q. 1 A. Social groups or sport-recreational groups – self-coding. If the answer is “No”, go on to Point 10 B. If it is “Yes”, fill in one of the three options characterizing your activity in such a group.

Q. 1 B. Trade unions, professional associations – self-coding. If the answer is “No”, go on to Point 10 C. If it is “Yes”, fill in one of the three options characterizing your activity in such a group.

Q. 1 C. Political parties, political organizations self-coding. If the answer is “No”, go on to Point 10 D. If it is “Yes”, fill in one of the three options characterizing your activity in such a group.

Q. 1 D. Higher public utility associations – self-coding. If the answer is “No”, go on to Point 10 E. If it is “Yes”, fill in one of the three options characterizing your activity in such a group.

Q. 1 E. Others – self-coding. If the answer is “No”, go on to Part VI. If it is “Yes”, fill in one of the three options characterizing your activity in such a group.
CHAPTER XII. QUALITY OF LIFE ASSESSMENT QUESTIONNAIRE (WHOQOL - BREF) (app. 8)

Instruction how to fill in the Quality of Life Assessment Questionnaire

All the answers to the questions are closed and self-coding. The Respondent answers each question by choosing only one answer out of five possible answers next to each of the 26 questions about his/her quality of life (from 1 to 26). Mark the answer chosen by putting an “x” sign next to it.

Q. 1. What is the quality of your life? – self-coding;
Q. 3. How much did physical pain stop you from doing what you should have done? – self-coding;
Q. 4. How much do you need medical treatment so that you can do your everyday activities? – self-coding;
Q. 9. How much is your environment conducive to your health? – self-coding;
Q. 10. Do you have enough energy in your everyday life? – self-coding;
Q. 11. Are you able to accept your appearance (the way you look)? – self-coding;
Q. 12. Do you have enough money to cover your needs? – self-coding;
Q. 13. Is the information that you may need in your everyday life available enough? – self-coding;
Q. 14. To what degree are you able to enjoy your interests? – self-coding;
Q. 15. How do you find this situation? – self-coding;
Q. 17. To what degree are you satisfied with your performance in everyday life? – self-coding;
Q. 18. To what degree are you satisfied with your ability (readiness) to do some work? – self-coding;
Q. 20. Are you satisfied with your relationships with people? – self-coding;
Q. 22. Are you satisfied with the support your friends give you? – self-coding;

Q. 23. How much are you satisfied with your housing conditions? – self-coding;

Q. 24. How much are you satisfied with health service facilities? – self-coding;


Q. 26. How often have you felt such negative feelings as dejection, anxiety, despair, depression? – self-coding;

CHAPTER XIII. BLOOD SAMPLE TAKING

A. INSTRUCTION HOW TO COLLECT BLOOD AND STORE IT UNTIL IT IS SENT OUT TO A LABORATORY

1. THE SCOPE OF BIOCHEMISTRY TESTS:
   - Biochemistry tests include lipid concentrations (total cholesterol, HDL-C, LDL-C, triglycerides), fasting plasma glucose levels, and genetic determination.

2. PRINCIPLES OF BLOOD SAMPLE COLLECTION
   - The patient has to be identified based on the check list.
   - The patient must express his/her informed consent to undergo tests – verify in the check list.
   - Blood samples can be collected from people who have been fasting for at least 8 hours but not more than 12 hours. Should a patient not meet this criterion, this fact must be recorded in the documents, and another appointment made (only to collect a blood sample).
   - The person collecting blood samples must be licensed to do it.
   - Criteria excluding from having a blood sample collected:
     - Refusal to give informed consent for blood sample collection;
     - Antithrombotic therapy;
     - Diseases causing bleeding

3. EQUIPMENT FOR VACUUM BLOOD COLLECTION
   - Set of labels with a bar code identifying the person from whom blood samples are collected (one per patient);
   - Set of labels with an EHES identifier (one per patient) stapled to the personal card.
   - Biochemistry collective form (one or more for a day of tests);
   - Biochemistry individual form (one per patient);
- Laboratory reference form (one per patient);
- Tray
- Collection tube with red cap containing coagulation activator (10 ml) (one per patient);
- Collection tube with gray cap containing sodium fluoride and citrate (2 ml) (one per patient);
- Collection tube with purple cap containing EDTA (10 ml) (one per patient);
- Container or stand for sterile tubes;
- Support cushion;
- Tourniquet;
- Needle holder and needles (0.6, 0.7, 0.8);
- Needle container;
- Sterile disinfectant pads;
- Disinfectant solution;
- Adhesive tape;
- Gloves providing barrier protection;
- Disposal container for bio-hazardous waste utilization;
- Container (red sack) for bio-hazardous waste (pads, gloves);
- Container (blue sack) for other waste.

**DOCUMENTATION**

- The person responsible for blood collection fills in the individual biochemistry form, laboratory reference form, and writes a patient into the collective biochemistry form.
- The collective biochemistry form should contain the date when a particular blood sample was collected and consecutive (within a day) number (starting from 1). The person collecting a blood sample should sign it and include his/her code.
- Bar code identification labels and EHES identification labels are stuck onto the laboratory reference form.
- The laboratory reference form must have the number of the test costs placed on it (No 7222).
- Minilabels should be stapled to the collective biochemistry form, in such a way that they will not be damaged.
- A bar code identifying label is put onto the individual card.

**PREPARATION OF TUBES**

- Bar code labels and EHES labels are adhered to red cap tubes and gray cap tubes.
- The label with the EHES study participant’s identifier is adhered to the purple cap tube.
BLOOD COLLECTION:

General principles:

- A blood sample should be collected when the person is seated. The collection site is a vein in the cubital fossa of the left upper extremity. Blood can be collected with a person in the lying position when the person has to be lying because of the disease, or when a person is very sensitive and may faint while a blood sample is collected. Such facts need to be included in the individual biochemistry form.

- When it is impossible to find a vein in the left arm or when the left arm is amputated, it is acceptable to collect blood from the right arm – such a fact must be included in the individual biochemistry form.

Using a tourniquet

- A prolonged pressure on the vein with a tourniquet may result in changes in biochemical parameters. The time when a tourniquet is used should be as short as possible. If a tourniquet is used to make the vein more visible, it should be released immediately before blood starts flowing. In other cases, the tourniquet should be released within 1 minute.

Blood collection procedure

1. Before a blood sample is collected, the person in question should take off any garment that feels tight on the arm from which a blood sample is to be collected.

2. The person who is to collect blood must wash his/her hands, disinfect them and put on gloves.

3. Put on a tourniquet at least 10 cm from the venopuncture site.

4. Disinfect the venopuncture site.

5. Take the cover off the opposite (blunt) end of the needle.

6. Place the needle into a holder.

7. Take the sheath off the needle and insert the needle at an angle of 15º.

8. Release the tourniquet.

9. Insert the vacutainer into the holder firmly. Be careful not to injure the vein wall while doing this.

10. You should wait until blood fills the tube, then after removing the tube from the holder but without withdrawing the needle, fix consecutive tubes according to the protocol.

11. Collect blood into tubes.

   - Into red cap tube – 10 ml;
   - Into gray cap tube – 2 ml;
   - Into purple cap tube – 10 ml.
12. Withdraw the needle from the vein and put a sterile swab onto the venopuncture site. The patient should be instructed that the venopuncture site has to be pressed for about 5 minutes.

13. Tubes:
   - The content in the one with the red cap should be mixed by rotating the tube 5 times.
   - The content in the one with the gray cap should be mixed by rotating the tube 15 times.
   - The content in the one with the purple cap should be mixed by rotating the tube 5 times.

14. The venopuncture site should be protected with an adhesive tape + dressing.

15. Take off your gloves, wash and dry hands.

16. The used needles and holders must be discarded. They should be put into a disposal container for bio-hazardous waste utilization. The remaining waste materials such as pads must be put into relevant containers. Waste must be utilized according to the local regulations.

**Patient goes on to undergo further procedures:**

- A patient together with the individual card (with a set of labels for a participant of the EHES Study stapled to it) and the individual biochemistry form should be taken to the room where the Main Questionnaire is filled in.

**Transferring material and documents to further procedures:**

**Red cap tube and gray cap tube containing blood:**

- Collective biochemistry form,
- Laboratory reference form,
- must be taken to the laboratory within 1 – 2 hours so that they can be processed further.

**Purple cap tube containing blood:**

- is frozen to -20°C at the Department of Epidemiology, Cardiovascular Diseases Prevention and Health Promotion.

**B. Instruction how to process blood samples at the laboratory**

1. **Collecting tubes from the blood collection room**

   A package delivered every day contains:
   - red cap tubes (one for each patient; with bar code and EHES labels);
   - gray cap tubes (one for each patient; with bar code and EHES labels);
   - collective biochemistry forms (one or more labels with bar and EHES codes and with minilabels attached to them to label minitubes);
   - laboratory reference forms (one for each patient; with bar code and EHES labels).

   Having received the package, the laboratory personnel must compare its content with what is in the collective biochemistry form. Should there be any incongruities, they have to be noted in the form and the blood collection room personnel must be notified about them immediately.
2. DETERMINING LIPID AND GLUCOSE LEVELS:

The determination is performed according to the standard laboratory procedures based on the laboratory reference form. You should write in the form the EHES Identifier label instead of a person’s name.

Not later than on the following weekday the results should be submitted to the Department of Epidemiology, Cardiovascular Diseases Prevention and Health Promotion.

Once the tests are completed, the results in the electronic form (xls file) should be submitted to the Department of Epidemiology, Cardiovascular Diseases Prevention and Health Promotion. The file should contain the EHES identifier and bar code for each person examined.

3. CENTRIFUGING IN LABORATORY

 In order to separate serum and plasma, blood samples should be left in room temperature (15 – 24 °C) for 3 hours after collection and then centrifuged. In unique situations, the time elapsed till centrifuging may be prolonged to 2 hours. Centrifuging should be performed in room temperature. In order to separate serum and plasma, blood samples should be centrifuged for 15 minutes at 3500*g. The centrifuge Instruction Manual should be available at the laboratory.

 Centrifuged serum samples should be transferred with a pipette to new and clean secondary tubes, on which minilabels with the EHES code of the person examined should be adhered (in the centre of the photograph, they are stapled to the collective biochemistry form, they should be separated with scissors).

 Ideally, one or two tubes which can be used in temperature -70 °C (on the photograph) (1 ml of serum in each), and the remaining part of serum, if any, should be placed in a third tube which can be used in temperature -20 °C (on the number of the secondary tubes used should be noted in the collective biochemistry form).

 The person performing laboratory procedures signs collective biochemistry form(s) and includes his/her individual code.

 On the following weekday at the latest, secondary tubes together with a copy of the collective biochemistry form have to be submitted to the Department of Epidemiology, Cardiovascular Diseases Prevention and Health Promotion so that they can be thawed.

CHAPTER XIV. CARD OF MEDICATIONS USED (in core questionnaire)

Q. 1. Have you taken any medications (drugs), vitamins or nutritive substances in the last two weeks? – self-coding;

Q. 2. What was the cause of your taking drugs? – write clearly all the diseases which have caused the Respondent to take drugs in the last 2 weeks. Central coding ICD-10.


1st column: Drug trade name (name on the packet); form of drug (e.g. tablets, capsules, ampoules, drops); unit dose (i.e. dose in one tablet, capsule, and the like). Example: Amlozek, tabl, 5mg;
2nd column: Daily dose of drug. Example: 1 x 1 tbl, 2 x ½ tbl;

3rd column: Number of days the drug was taken in the last 2 weeks (if the drug is not taken every day, write in the number of days when the drug was taken; e.g. if every second day, write 7; if twice a week, write 4, and the like. If the drug was taken every day, write 14). Example: 14 days.

The Card of Medications Used has to be filled in clearly.

PHYSICAL EXAMINATION FORM (in core questionnaire)

CHAPTER XV. PHYSICAL EXAMINATION QUESTIONNAIRE

Q. 1. Date of examination – write the full date of the examination using Arabic numerals:
   - Day of examination (two digits); e.g. 03, 17
   - Month of examination (two digits); e.g. 01, 12
   - Year of examination (four digits); e.g. 2002, 2005

A. ANTHROPOMETRY MEASUREMENTS – instructions and results form

Exclusion criteria. The person does not undergo body measurements when

- The person is immobile or on a wheel-chair;
- The person is unable or finds it difficult to stand;

When the height is measured

- When the hairdo (e.g. afro) makes it impossible to carry out measurement

When the hip or waist circumference is measured

- When the person is pregnant (> 20th week)
- When the person has abdominal hernia

A1. Height measurement

Equipment

- Stadiometer
- Bubble-level
- Reference ruler 200 cm long
- Platform

Place of measurement

The stadiometer should be attached to the wall starting from the level of the floor. When the floor surface is soft (e.g. fitted carpet), a wooden platform should be used. The stadiometer and the platform should be leveled.

Measurement:

1. Height is measured with the accuracy to 0.5 cm;
2. Height should be measured to the head, and not to the hair. The person must be without shoes, heavy clothing, headwear and hair decorations;
3. The person measured must stand upright with his/her back to the stadiometer. Head, back, heels should touch the stadiometer, and the distance between the feet should be 10 cm. The person’s head should be positioned in such a way that the line between the ear canal and cheekbone will be horizontal;
4. If the person measured is taller than the person who carries out the measurement, this person should stand on the platform while performing the task.
5. If the person measured is taller than the length of the stadiometer, it is acceptable that the person will say what his/her height is, and this fact should be mentioned in the Questionnaire.
6. If height has not been measured, the cause of this fact should be noted in the Questionnaire.

**Stadiometer calibration and checking**

- Stadiometer horizontal and vertical alignment should be checked with a bubble-level.
- At the beginning and the end of each day of measurements, the stadiometer should be checked with the reference ruler and adjusted if the error exceeds 2 mm. the check-up should be noted in the logbook.

**A2. Weight measurement**

**Equipment**

- Certified electronic medical weighing device. It should be calibrated.
- Cuboid weight of M1 class with certified calibration:
  - 3 at 20 kg each
  - 1 at 10 kg
- Bubble-level

**Place of measurement**

The weighing device should stand on a hard surface (not on a fitted carpet or another soft material). If such a hard surface is not available, the weighing device should be placed on a hard wooden platform. A bubble-level should be used to check if the weighing device is appropriately leveled.

**Body mass measurement**

- Without outer clothes (jacket, coat)
- Without shoes/boots
- With empty pockets

**Method of measuring body weight**

In the case of an electronic weighing device, follow the instruction.

**Recorded information**

- Body mass is measured and recorded with the accuracy to 100 g.
- If the person’s body mass exceeds the scale maximum, it is acceptable that the person will say what his/her weight is, and this fact should be mentioned in the Questionnaire including the maximum of the weighing device scale.
If the person is pregnant, the record includes the present weight, the week of pregnancy, and the body mass before pregnancy.

If the body mass has not been measured, the cause of this fact should be written in the Questionnaire.

**Calibration of the weighing device**

- The weighing device should be calibrated at the beginning and the end of each day of examinations.
- The weighing device is checked with standard weights and is re-calibrated if the measurement error exceeds 0.2 kg. The results of the test and re-calibrating are noted in the logbook.

**A3. Waist and hip circumference measurement**

**Equipment**

- Strong, inextensible measuring tape
- Mirror, big enough to show the whole body
- Bubble-level
- Reference ruler 200 cm long

**Place of measurement**

- The measurement must be performed in a place where privacy is secured. It should be a separate room or a screened-off place.
- The mirror is attached to the opposite wall.

**Measuring waist circumference**

1. The person measured is asked to expose the waist by loosening the belt and lowering the trousers/skirt.
2. The person stands astride (around 10 cm between his/her feet) putting the body weight evenly on both legs.
3. Arms freely down the body
4. The person performing the measurement is sitting on a chair in front of the person measured.
5. The person performing the measurement of the waist circumference, finds a place on the body of the person measured which is between the lower margin of the rib and the upper margin of the iliac crest.
6. The person performing the measurement makes sure the measuring tape is placed horizontally
7. The measuring tape placed horizontally must be neither too tight nor too loose.
8. The person measured is asked to breathe normally, the result of the measurement should reflect the moment at the end of exhalation.

**Information recorded**

- Waist circumference is measured and recorded with the accuracy to 0.5 cm.
- If the measurement has not been performed (e.g. pregnancy, hernia, on wheelchair), the cause should be noted in the Questionnaire.
- The waist circumference reported by the Respondent is not acceptable.

**Hip circumference measurement**
1. The person measured should be without outer clothing. The measurement should be performed directly on the skin or on light underwear.
2. The person measured stands upright, relaxed with the body weight evenly on both legs.
3. Hip circumference is measured at the level where the buttock muscles are prominent most. The measuring tape is held horizontally, which is checked in the mirror. The measurement is carried out with the accuracy to 0.5 cm. If the hip circumference is larger than the length of the measuring tape, it should be noted in the Questionnaire, including the maximal length of the tape.

*Measuring tape calibrating and testing*
- The length of the measuring tape is tested at least once a month with the 200 cm long reference ruler.

*Quality control of anthropometry*

**On the spot**
- Regular control of the measurement method

**By the Coordination Centre**
- Auditor’s unannounced visits to the place where measurement is carried out in order to observe the method of measurement.
- Regular monitoring of measurement findings (digit preference, mean and standard deviation)

**A4. MEASUREMENT RESULT FORM** (in core questionnaire)

**Q. 1. Height (shoes/boots off) (accuracy to 0.5 cm)**

- *Stadiometer ID – write in*
- *Height has not been measured because – give cause*
- *Other observations affecting the measurement result*

**Q. 2. Body mass (shoes/boots off) (accuracy to 100 g)**

- *Pregnancy > 20th week*
- *Body mass before pregnancy – when the woman is pregnant < 20th week.*

**Q.3. Body mass has not been measured – give cause**

**Q. 4. Body mass has been measured – self-coding**

- *Other observations affecting the measurement result*

**Q. 5. Waist circumference (accuracy to 0.5 cm)**

**Q. 6. Waist circumference has not been measured – give cause**

**Q. 7. Waist circumference has been measured – self-coding**
Other observations affecting the measurement result

Q. 8. Hip circumference (accuracy to 0.5 cm)
Q. 9. Hip circumference has not been measured – give cause
Q. 10. Hip circumference has been measured – self-coding

Other observations affecting the measurement result

B. ARTERIAL BLOOD PRESSURE MEASUREMENT
B1. Equipment for measuring arterial blood pressure

- Device for automatic arterial blood pressure measurement (OMRON 705IT), which had been validated by BHS;
- Inflatable cuffs of various sizes;
- Inelastic measuring tape;
- Thermometer;
- Watch;

Criteria excluding measuring blood pressure:

All Respondents must have their blood pressure measured. Those excluded from undergoing this mandatory measurement include persons:

- With both arms amputated,
- With arms so deformed that it makes correct putting on a cuff impossible;
- After bilateral axillary lymphadenectomy.

Conditions of measurement

In order to make sure that the conditions to perform measurement are correct the room should be quiet, the temperature should be mild (fairly warm, but not too hot) and measured for each person whose blood pressure is measured. Should any unwelcome events happen while the blood pressure is being measured, such a fact must be logged. For half an hour before the measurement, the Respondent should not smoke tobacco, eat, drink anything except water, his/her urinary bladder should be empty. The person should take off outer clothing and tight garments.

Mode of measuring arterial blood pressure

1. Arterial blood pressure is measured by a trained technician (nurse). Each person who measures blood pressure should have an identification number, which should be put down in the Measurement Card.
2. Measurement should be carried out only with approved and verified sphygmomanometers (each sphygmomanometer should have its individual number, which should be put down in the Questionnaire).
3. Sphygmomanometer should be placed on a table in front of the person performing the measurement so that the person whose blood pressure is being measured cannot see the result of the measurement.

4. Each person whose blood pressure is measured must be seated with his/her back supported and feet resting on the floor. The Respondent must not swing his/her legs. If the legs cannot reach the floor, something must be put in such a way that he/she can rest his/her feet on it. If the Respondent is unable to sit, blood pressure can be measured with the person standing, and this fact must be noted in the Questionnaire.

5. The person who is sitting while blood pressure is being measured must not change this position within 5 minutes preceding the measurement. During the measurement, the person whose blood pressure is measured should not talk.

6. If possible, the measurement should be performed on the right arm. If it is not possible, e.g. because the arm is amputated, there is rash, open wound, bruises or arteriovenous fistula on it, the measurement may be performed on the left arm, provided both the fact and its cause are logged. The arm where blood pressure is measured should be placed on a table so that the cubital fossa (the triangular area on the anterior view of the elbow, colloquially know as the “elbow pit”) will be at the level of the heart, and the hand is resting on the table with the palm upwards. To achieve this, you should adjust the height of the chair or elevate the arm by putting e.g. a cushion under it.

7. Before a blood pressure measurement is performed, the largest circumference of the arm should be measured (with an inelastic measuring tape) and recorded (with the accuracy to 1 cm). The results of this measurement should help choose an appropriate inflatable cuff. The size of the cuff should be noted in the Questionnaire.
   - Cuff size: small – arm circumference < 21 cm.
   - Cuff size: medium – arm circumference 22 cm – 31 cm,
   - Cuff size: large – arm circumference > 32 cm.

8. The cuff of a sphygmomanometer is put onto the right arm, the lower edge around 3 cm above the elbow pit. It should be put on rather tightly so that once it is inflated it will not become loose. The rubber tubes should be on the anterior side of the arm and the cuff cushion on its front and inside surface. The upper edge of the cuff should not be limited by clothes.

9. Arterial blood pressure is measured three times in one-minute intervals.

10. When the device displays “measurement error code”, this fact should be noted.

Quality control

The quality control of arterial blood pressure measurement includes the following elements:

- Personnel training (theoretical and practical)
- Equipment maintenance and its regular calibration
- External audit

Equipment maintenance and its regular calibration

The equipment should be regularly maintained and checked. The remarks after such checking should be logged in the logbook. If any inappropriate functioning has been noticed, the device should be replaced, which should also be logged in the logbook.
Everyday control of the equipment:

Every day, before starting performing measurements, or when the site where the measurements are performed has been transferred to another room, you should make sure that:

- The batteries are charged adequately;
- The rubber tube is intact and appropriately connected to the device.

Weekly control of the equipment:

Once a week, or when the site where the measurements are performed has been transferred to another room, you should:

1. inspect the cuff
   - making sure the fabric is clean and intact
   - making sure the rubber parts are intact
2. inspect the device for automatic arterial blood pressure measurement (calibration protocol)

Quality control of the device for automatic arterial blood pressure measurement (Coordination Center):

- For each device, there should be calculated mean (and standard deviation) systolic and diastolic arterial blood pressures, so that it can be found out whether the device tends to show measurement results which are higher or lower than the mean value.
- For each person performing measurements, the frequency of identical measurements (separately for systolic and diastolic) results should be verified, in order to make sure the person really performs three measurements in each patient.
- For each person performing measurements, there should be calculated mean (and standard deviation) systolic and diastolic arterial blood pressures, so that it can be found out whether the person tends to read measurement results which are systematically higher or lower than the mean value observed for the whole team.

B2. ARTERIAL BLOOD PRESSURE

Q. 1. ID number of the person performing the measurement;
Q. 2. The cause why the measurement has not been performed – mark the cause;
Q. 3. Date of the measurement;
Q. 4. Time of the measurement;
Q. 5. Temperature in the room;
Q. 6. Sphygmomanometer type;
Q. 7. Sphygmomanometer number;
Q. 8. Arm circumference (in cm);
Q. 9. Size of the cuff used (depends on the arm circumference in cm) – choose one the three mentioned above;
Q. 10. The arm on which the measurement has been performed;
Q. 11. The cause why the measurement has been performed on the left arm – mark the cause;
Q. 12. The position in which the measurement has been performed;
Q. 13. The cause why the measurement has been performed in the standing position – mark the cause;
Q. 14. Heart rate (60 sec.);
Q. 15. Was the heart rate regular?
Q. 16. Blood pressure measurement:
   1st measurement
   systolic blood pressure
diastolic blood pressure
   heart rate
   2nd measurement
   systolic blood pressure
diastolic blood pressure
   heart rate
   3rd measurement
   systolic blood pressure
diastolic blood pressure
   heart rate
Q. 17. Remarks from the person performing the measurement (anything that might have affected the measurement results);
Q. 18. Write in the data about the measurement error.

CHAPTER XVI. INSTRUCTION HOW TO ACQUIRE INFORMATION ON DIETARY HABITS

PART I. IDENTIFICATION DATA
Attach an ID label

PART II. DIETARY PREFERENCES
Q. 1. Does he/she add extra salt? – self-coding
If the answer is “Yes”, mark:
   o When he/she adds salt without tasting the food first,
   o When he/she often adds salt believing most foods are not salty enough.
Q. 2. Does he/she remove fat? – self-coding
Q. 3. Has he/she changed the dietary habits? – self-coding
Q. 4. How does he/she assess his/her dietary habits? – self-coding

PART III. THE USUAL FREQUENCY OF EATING SOMETHING DURING THE LATEST 2 – 3 MONTHS (APP. 7)

Q. 1. How often do you eat the following products? – the question refers to an average frequency within the latest 2 – 3 months, both on weekdays and red-letter days. The list includes commonly eaten foods, either atherogenic (conducive to atherosclerosis) or antiatherogenic, i.e. reducing the risk for atherosclerosis development. Four categories of consumption per week and two categories when consuming was less frequent have been adopted here.

The Respondent’s answer about the consumption frequency should be marked by writing an “X” in an appropriate box.

NOTE: Should a mistake have been made, the wrong answer must be crossed out and the right answered must be marked with an “X” and circled.

Milk, kefir, yoghurt, milk drinks, also milk in the form of soups, cocktails, milk with coffee. Small amounts of milk, e.g. a teaspoonful of milk with coffee or soup should not be included.

Cottage cheese, curd cheese, also when being an ingredient in dishes, e.g. cheese pastes, pancakes, dumplings with cheese, cheese cakes.

Hard cheese, processed cheese, hard cheese added to pizza and the like should be included too.

Beef, pork, veal, lamb, offal (variety meat), dishes an ingredient of which is one (or more) of these meats, tinned meat; also meat in semi-meat foods and meat cooked in soups.

Poultry and poultry products, dishes an ingredient of which is poultry, tinned meat; also meat in semi-meat foods and meat cooked in soups.

Beef, pork, veal products, also tinned.

Fish and tinned fish, dishes whose ingredient is sea or fresh-water fish, fresh or frozen, also smoked fish and tinned fish.

Eggs, boiled, fried, such dishes as omelets.

Butter, with bread and added to foods, for frying and baking.

Soft margarines (in boxes), with bread and added to foods.

Mixed fats, based on mixtures of butter and margarine or butter and oil with bread and added to foods.

Pork fat, lard, used for frying, baking or with bread.

Oil, olive oil and other vegetable oils, added to salads, but also in mayonnaise and used for frying, baking and in stews.

Boiled vegetables, also in vegetable soups, vegetable salads (with other ingredients). Vegetables and meat-vegetable stocks (e.g. broth, bullion) should not be included.

Raw vegetables, eaten with larger dishes, with sandwiches, as snacks.
Dry leguminous plants, dishes from them: bean, soybean, lentil, pea – soups, goulash, pastes, and the like.

Fruit, fresh and frozen. Raw, fried, baked and boiled, added to foods, e.g. rice or pasta.

Fruit and vegetable juices, sweetened and condensed juices added to water should not be included.


PART IV. WHAT HAS BEEN DRUNK AND EATEN IN THE LATEST 24 HOURS?

Q. 1. General profile of the correctness of the meal schedule

Filled in by the person who encodes the Questionnaire.

1 – Correct schedule. At least three meals a day and at least two intervals in between lasting 3.5 to 5.5 hours;

2 – Schedule partially correct. Classification 1 or 3 does not apply;

3 – Incorrect schedule. 1 or 2 meals a day.

Q. 2. Food intake during the day of the inquiry – We choose typical if the day of the inquiry did not differ significantly from other days in terms of the number of meals and the amount of food. We choose atypical if the food eaten on the day of the inquiry differed significantly from that eaten on other days because of e.g. illness, participation at a meeting or party, or other causes.

Q. 3. Food eaten and drunk in the latest 24 hours

The purpose of the interview is to find out the quantitative intake of all products eaten and drunk within the latest 24 hours preceding the interview, including the times of main meals. The quantity of the food consumed is defined in home or commercial measures, the size of a single amount of food can be assessed also with the help of photographs found in “The Album of Photographs of Products and Dishes”. The final results of the quantitative consumption are given in grams. In the case of dishes, especially regional dishes, the information should include their ingredients, way of preparation and the kind of fat used (if any).

PART V. GENERAL PRINCIPLES OF CARRYING OUT DIETARY INTERVIEW

An interview should be carried out in a place where a quiet and uninterrupted conversation is possible.

Before the interview is begun, the Respondent should be informed about the purpose of the interview:

- We ask the Respondent to recall what he/she ate and drank yesterday, where it was and what the circumstances were.

- We inform the Respondent that the information is anonymous and how important it is to tell the truth.

It is important that the Respondent should realize that the time the questions are to cover is a full 24 hours. Most often, it is the time from the morning (getting up) until the morning of the following day; i.e. also food consumption during the night has to be included. In the case of shiftwork or due to other reasons for starting the interview at another time of day or night, it must be remembered that the time
an interview is to cover is a full 24 hours. The time of food consumption must be recorded exact to 30 minutes, e.g. 6:00, 11:30, 18:30.

Before an interview is begun, the Respondent should be asked if he/she has understood its purpose. After an interview is finished, again the Respondent should be asked if everything was clear and if he/she would like to add anything. Whenever possible, additional questions should be asked, e.g. about sweets, sauces, dressings, alcoholic and nonalcoholic drinks, fats used in dishes, additives, vitamin and mineral supplements.

Questions which are particular meal specific should be avoided, e.g. What did you have for breakfast? Instead, you should ask about the first meal. Next to consecutive meals there are their usual names to help the interviewer to qualify a meal and write it into an appropriate place.

The time of a meal is most informative. Breakfast is a meal eaten before 9 am, lunch – before 1 pm, dinner – before 6 pm, supper – after 6 pm.

A portion of food qualified as a meal to be written into positions I – IV is one which has not only an adequate energy value but contains sufficient nutritional elements, e.g. cheese sandwich, yoghurt with fruit, and the like. Eating food with no or little nutritional value can be qualified as having a snack, e.g. sweets, chips, coke, and so on, eaten between the main meals but also instead of a main meal.

The whole interview can be divided into the following stages:

I. Recalling all products and dishes consumed

The following additional questions can be asked:

1. Can you remember what you ate and drank yesterday after you got up?
2. What time was it?
3. Did you have the meal at home or out of home?
4. Did you have anything else?
5. What did you eat or drink after that?
6. What time was it?
7. Did you have anything else?

You should repeat these questions asking about all the products, dishes and drinks consumed during the whole day, possibly also during the night, i.e. during 24 hours. Sometimes, it is necessary to ask additional questions, e.g.:

8. What kind of bread did you eat?
9. Was there anything on the bread? What?
10. Did you eat any products with the bread?
11. Did you eat or drink anything else?

It may be easier for a Respondent to recall what foods he/she had during the 24 hours before if other additional questions are asked, e.g. about work schedules, activities at home or during leisure time, or any connotations with a meal (e.g. what the plate looked like).
II. Description of products, dishes and drinks consumed

Each food and drink which is written into the Questionnaire should include the information about its kind and contents, e.g. the kind of bread, oil or margarine, fat content in yoghurt. Also the technology and additives used to preparing a product should be reported, e.g. kind of fat, fat content in cream added to soup, herbal spice instead of salt. Food with a lower calorific value or lower content of salt, fat, sugar must also be reported. A help in describing products is provided in Appendix 1 “Principles of Describing Products and Dishes”, which includes the issues about which one has to remember while describing products.

It may be impossible to acquire this information when a meal was eaten out of home. Conceivable is also a situation that the Respondent does not know the content of and method of preparing a meal, e.g. when cooking is done by one member of the household and the others are not interested in it. In such cases, some other additional questions may be helpful, e.g. about the kind of fat in the fridge (oil, olive oil, lard).

III. Assessing the amount consumed

It must be remembered that what is written into the Questionnaire must be only the amount consumed, so anything that was not eaten, even though it was part of a dish, must not be included. Home-used measures are acceptable (1 teaspoonful, 1 spoonful, 1 glassful, 1 plateful). Width and length can be described in cm (slice of bread or cheese, raw carrot, orange diameter, vodka or soybean sauce in ml). Grams can be useful too. Some help can come from the Album of Photographs of Food Products and Dishes prepared at the National Food and Nutrition Institute, in which the most commonly consumed products are described in term of measures used both at home and commercially.

IV. Data verification and supplementation

In the final stage, it is necessary to return to the beginning of the interview and look through all the record of the 24-hour food consumption. Check if all the information has been written down correctly and add anything that is missing, including the information of what was eaten or drunk during the night. Eating snacks (chips, sweets, nuts) in between main meals and drinking alcohol must not be forgotten. The information about alcohol must include the kind and amount of alcohol drinks consumed, which enables this amount to be recalculated into 100% alcohol.

After the information about the 24-hour food consumption is collected, it can be compared with the information about the frequency of product consumption. If the Respondent said that e.g. he/she drinks milk (kefir, yoghurt, buttermilk) every day, but in the 24-hour recall, which was representative for typical nutrition, did not mention milk, it is necessary to verify and amend either the data on food consumption frequency or supplement those from the 24-hour consumption.

Q. 4. Did the Respondent take any mineral or vitamin preparations yesterday?

If the answer is “Yes”, you should write down the name of the preparation. When the number of ingredients in a preparation is small, you should write them down, e.g. Vitamin C is sold in tablets of 100 mg, 200 mg and sparkling tables of 500 mg. The number of tablets, pills, and so on should also be recorded.
Q. 5. Were these preparations taken because of on-going ailments, e.g. because of having a cold.

At the end of the interview the Respondent should be thanked for his/her cooperation and time devoted to the conversation. The principles of applying the assessment method of 24-hour nutrition recall, its advantages and disadvantages are presented in Appendix 2.

PART VI: BASIC PRINCIPLES OF PRODUCT DESCRIPTION

In the 24-hour food consumption recall, it is essential to obtain exact information about the kinds of products, dishes and drinks consumed. Of help can be the list below.

BREAD
Kind (white wholemeal, wheat, mixed, with soybean, sunflower seeds, nuts)
Amount (number and size of slices, rolls)
Weight of the amount consumed

CAKES AND PASTRY
Home-made or commercial
Kind of fat used (if known)
Amount (number and size of slices, cakes)
Weight of the amount consumed

CEREALS
Kind and commercial name (flour, pasta, groats – buckwheat, barley, etc)
Amount (spoonfuls, glassfuls)
Weight of the amount consumed
Used extras (fat, sauce)

MILK AND DAIRY PRODUCTS
Kind and commercial name (milk, kefir, yoghurt, buttermilk; cheese – cottage, hard, green)
Fat content (%)
Amount (how much drink, number and size of cheese slices, spoonfuls of cottage cheese)
Weight of the amount consumed

MEAT, POULTRY, THEIR PRODUCTS
Kind and character (pork, beef, poultry; lean, fat visible, with bone, without bone, poultry with/without skin)

Commercial name and characteristics of meat products (cold cuts) (lean, with visible fat)

Amount (meat, number of cold cuts slices, sausages)

Weight of the amount consumed

Method of preparation (cooked, fried, stewed, grilled)

Kind of fat used (if known)

FISH, THEIR PRODUCTS

Commercial name and characteristics (fish, tinned fish, smoked fish)

Method of preparation (cooked in vegetables, fried, stewed, grilled)

Kind of fat used (if known)

Used extras (oil, tomato puree)

Amount consumed

Weight of the amount consumed

VEGETABLES

Name and kind (fresh, tinned, frozen)

Method of preparation (raw, cooked, stewed)

Used extras (kind of fat, sauce)

Amount consumed

Weight of the amount consumed

FRUIT

Name and kind (fresh, tinned, frozen) Method of preparation (raw, cooked, baked) Used extras (sugar, fruit juice, chocolate, cream) Amount consumed (number of pieces)

Weight of the amount consumed

DRY LEGUMINOUS SEEDS

Name and kind (seeds of bean, soybean, lentil, pea)

Method of preparation (as soup, cutlet, goulash, pate, salad ingredient)
Amount consumed
Weight of the amount consumed

SOUP
Name and type (homemade, prepared out of home, from concentrate)
Essence (water, vegetable stock, meat stock, milk)
Used extras (rice, noodles, potatoes, croutons)
Method of spicing and seasoning (cream, egg yolks, flour)
Thickness (thick, clear)
Amount consumed (standard plateful, plateful until edge, ladleful)
Weight of the amount consumed

MIXED DISHES – e.g. meat and vegetable dishes, lecho, bigos)
Name and type (homemade, prepared out of home, from concentrate)
Method of spicing and seasoning (cream, egg yolks, fat)
Amount consumed (soup spoonful, ladleful)
Weight of the amount consumed

JUICES AND NONALCOHOLIC DRINKS
Name and type (low-sugar, sweetened)
Used extras (sugar, cream, lemon)
Amount consumed (glassful, bottleful, canful)
Weight of the amount consumed

ALCOHOLIC BEVERAGES
Name and kind (vodka, dry wine, sweet white/red wine, beer)
Volume or weight of amount consumed (100 ml of vodka, a glass of wine, a bottle or can of beer or .033l or 0.5 l)

SWEETS AND SNACKS – e.g. candies, chocolate sweets, chocolate bars, chocolate, halva, chips)
Commercial name and kind
Amount (number of candies, of chocolate squares, spoons of chips, nuts; a packet of known weight)
Weight of amount consumed
PART VII. THE METHOD APPLIED WHILE INTERVIEWING A RESPONDENT ON THE 24-HOUR FOOD CONSUMPTION RECALL

Applying the method

1. To assess mean food and drink consumption in a group representative for a given population and of adequate number;
2. To compare dietary habits between different groups and changes in dietary habits over time;
3. To monitor food consumption in order to assess dietary habits and health of the population

Advantages of the method

1. The possibility to standardize the method;
2. A short time of the interview (around 20 minutes);
3. Low costs;
4. No impact on dietary habits;
5. Rather small inconvenience for the Respondent.

Source of errors

A. Interviewer’s errors

1. Haste;
2. Lack of friendliness to the Respondent;
3. Departure from standardized questions;
4. Inadequate knowledge of current product range and package sizes;
5. Inadequate knowledge of recipes and modes of food processing, measures used at home;
6. Mistakes made while writing down the quantities of products and dishes consumed;
7. Failure to check and verify the Questionnaire after its completion.

B. Respondent’s errors

1. Forgetting products and drinks consumed, and conscious or unconscious leaving out some foods consumed;
2. Attempting to impress the interviewer by relating more healthful dietary habits;
3. Mentioning foods and drinks consumed some other day;
4. Inability or unwillingness to define the amount consumed;
5. Underassessing large amounts and overassessing small amounts consumed.
LIST OF APPENDICIES

1. LIST OF INVESTIGATORS AT THE FIELDWORK, THEIR ID NUMBERS AND RANGE OF DUTIES
2. INVITATION AND INFORMATION LETTER ABOUT STUDY
3. CHECK LIST
4. INFORM CONSENT TO PARTICIPATE IN STUDY
5. INFORM CONSENT TO GENETIC TESTS
6. CORE QUESTIONNAIRE
7. NUTRITION QUESTIONNAIRE
8. PSYCHOLOGICAL QUESTIONNAIRES
9. INDIVIDUAL BIOCHEMISTRY FORM
10. LETTER TO PARTICIPANTS ON SURVEY RESULTS
11. TRAINING / EDUCATIONAL MATERIALS (IN POLISH – ADOPTEO FROM EHES-JA TRAINNIG MATERIALS)
   A. RR and pulse measurement
   B. Waist and hip circumference measurement
   C. Height and weight measurement
### LIST OF INVESTIGATORS AT THE FIELDWORK, THEIR ID NUMBERS AND RANGE OF DUTIES

<table>
<thead>
<tr>
<th>ID No</th>
<th>Name of investigator</th>
<th>Range of duties</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>..................</td>
<td>Coordinator of a study</td>
</tr>
<tr>
<td>02</td>
<td>..................</td>
<td>Nurse: blood sample taking</td>
</tr>
<tr>
<td>03</td>
<td>..................</td>
<td>Medical technician ECG, core questionnaire</td>
</tr>
<tr>
<td>04</td>
<td>..................</td>
<td>PR person, manager of website, interviewer</td>
</tr>
</tbody>
</table>
| 05    | ..................   | Manager of data set base  
                         | Trainer of data set management |
| 06    | ..................   | Interviewer, blood pressure measurement and anthropometry |
| 07    | ..................   | Principal statistician |
| 08    | ..................   | Physician, trainer |
| 09    | ..................   | Interviver psychosocial questionnaire |
| 10    | ..................   | Physician, trainer |
| 11    | ..................   | Registration, anthropometry, core questionnaire |
| 12    | ..................   | Dietary questionnaire |
| 13    | ..................   | Dietary questionnaire |
| 14    | ..................   | Secretary |
INVITATION TO AND INFORMATION OF THE 6859(<– A STUDY MEASURING THE HEALTH OF 32/+,6+

Dear Sir or Madam,

The underlying causes of cardiovascular diseases include atherosclerosis, coronary artery disease, myocardial infarction, brain stroke or vascular diseases. They are the main causes of morbidity, disability and premature deaths in developed countries, including Poland. Although there seem to be some signs of improvement, cardiovascular mortality rates in Poland still almost double those recorded in the countries in the western part of the European Union. In 2008, cardiovascular diseases killed 41,707 Polish men and 19,064 women aged below 74 years, which meant that more than 160 people died prematurely in Poland every day. This very bad situation results mainly from unhealthful lifestyle, which leads to the development of atherosclerosis and, consequently, of cardiovascular diseases.

The most significant atherosclerosis risk factors include smoking, unhealthful food, low physical activity, hypertension, obesity and high cholesterol levels. Of note is the fact that early arterial atherosclerotic changes are observed as early as in adolescents or even children – for years such changes accumulate while remaining clinically silent initially. Clinical manifestations of cardiovascular diseases occur suddenly (sudden death, myocardial infarction, stroke) when atherosclerosis is very severe. That is why it is so crucial to detect atherosclerosis risk factors early and to introduce relevant treatment so that a severe disease or even premature death could be delayed or prevented.

Under the auspices of the European Union, an international programme under the name of the ............................................................................ has been recently introduced. In Poland, this survey will be carried out by the Department of Epidemiology and Prevention of Cardiovascular Diseases and of Health Promotion of the Institute of Cardiology on a randomly selected group of right-bank Warsaw dwellers. The aim of the study will be to assess the health state of Warsaw dwellers in terms of the risk for cardiovascular diseases. Since the study is so important, it is to be carried out under the auspices of the Epidemiology and Prevention Section of the Polish Cardiac Society. On the 3rd of August 2010, the Institute of Cardiology Bioethics Board granted its agreement to perform the study (Ref. 1217).

We are glad to inform you that you have been randomly selected to participate in the study. Consequently, we wish to invite you to undergo relevant examinations which are free of charge and whose role is to assess your health condition, with a particular attention focused on the cardiovascular
system. The study is based on the guidelines and recommendations from international scientific societies and the European Union for assessing the health condition of the European population. The examinations will take around 2 hours. Apart from taking history which will include questions about your health, lifestyle, past diseases, and diets, health professionals will measure your height, weight, waist and hip circumferences, arterial blood pressure. A blood sample (around 12 ml) will also be taken to measure the levels of total cholesterol, HDL-cholesterol, LDL-cholesterol, triglycerides and glucose, i.e. the factors which influence the development of cardiovascular diseases. You will also undergo rest electrocardiogram. Finally, a 10-year risk for a cardiovascular disease development will be calculated based on all findings.

All findings are confidential and will be sent to you in a sealed letter together with due recommendations. Besides, the findings will be digitally encoded, which will make them impossible to be associated with you. The participation in the study is absolutely free of charge and voluntary. Yet we do hope you will take the opportunity to have an additional health check and, by participating in the study, to contribute to better knowledge and understanding of the risk for cardiovascular diseases in Polish community.

Thus, we kindly ask you to come
on ................................... at ........................................

to the INSTITUTE OF CARDIOLOGY
Centrum Naukowo-Badawcze, Warszawa-Anin
ul. Niemodlińska 33
(bus lines 115, 125 and 525 to the bus stop at IX Poprzeczna).

Will you please:
- Refrain from eating or drinking anything for at least 8 hours (but not more than 14 hours) before coming;
- Be ready to inform us about any medications you are taking currently. (Take with you medication boxes/packages);
- Take with you an ID document with the personal identification number (PESEL) in it.

Any additional information is available from the Department of Epidemiology and Prevention of Cardiovascular Diseases and of Health Promotion (phone # 22 815 65 56 between 1:00 and 2:30 pm).

In case you are unable to come on the date and/or at the time proposed, will you please arrange a convenient appointment time by phoning 22 815 65 56 between 1:00 and 2:30 pm.
Yours respectfully

Head of the Department of Epidemiology and Prevention of Cardiovascular Diseases and of Health Promotion

Wojciech Drygas, MD, PhD

National Coordinator for the SURVEY

Grażyna Broda, MD, PhD
Participant’s name ...................................................................................................................

Date of examination ................................................................................. (DD.MM. YYYY)

PESEL number ....................................................................................

RECEPTION - REGISTRATION: ........................................... Investigator Code No: ___ Signature: ______
   A. Informed consent: □ Yes □ No
   B. Informed consent genetic: □ Yes □ No
   C. Blood pressure measurement: □ Yes □ No
   D. Height: □ Yes □ No
   E. Weight: □ Yes □ No
   F. Waist and hip circumferences: □ Yes □ No

BLOOD SAMPLE TAKING: .............................................. Investigator Code No: ___ Signature: ______
   G. Biochemistry: □ Yes □ No
   H. DNS isolate: □ Yes □ No

CORE QUESTIONNAIRE: ................................................ Investigator Code No: ___ Signature: ______
   I. Core questionnaire: □ Yes □ No

NUTRITION QUESTIONNAIRE: ....................... Investigator Code No: ___ Signature: ______
   J. Nutrition questionnaire: □ Yes □ No

PSYCHO-SOCIAL QUESTIONNAIRE: ..................... Investigator Code No: ___ Signature: ______
   K. Psycho-social questionnaire: □ Yes □ No

ECG: ................................................................. Investigator Code No: ___ Signature: ______
   L. ECG: □ Yes □ No

PHYSICIAN: ............................................................. Investigator Code No: ___ Signature: ______
   M. Review of questionnaires: □ Yes □ No
   N. Questionnaire: □ Yes □ No

   medication taken and reason for medication taking

SURVEY RESULTS SENDING TO PARTICIPANT: ..... Investigator Code No: ___ Signature: ______
   O. Date: ............................................................. (DD.MM. YYYY)

Notes:
INFORM CONSENT

Participant’s Name:

I have declared, that I was informed in detail on the aim of the study.
All my doubts have been explained.
I have understood that my personal data will be coded and they will be not disclosed to outsiders.
I also have understood that at any time period I can resign from the study without any personal consequences.

I am giving consent for the following:
- conducting interview with me for assessment my health status and cardiovascular risk
- measurement blood pressure and anthropometry
- taking blood sample for laboratory measurements
- processing my data for research purposes only.

Participant’s name                      Investigator’s name

Place                                     Data
INTRODUCTION
We are asking you to consent to have a blood sample (around 10 ml) taken for tests described below.
Your DNA (genetic material) will be extracted from the blood sample. The aim of the test is to find an association between individual genetic (hereditary) features and health conditions. In particular, the test is to focus on the role genes play in the development of obesity, hypertension, and disorders in lipid and carbohydrate metabolisms; thus, how genetic factors influence the risk for the development of cardiovascular diseases and diabetes.

Personal data protection
All the genetic information obtained from the analysis of blood samples is treated as confidential and will be used solely for the purpose of scientific studies. In order to prevent the personal data about a participant from being disclosed to anyone, all genetic test findings will be labeled with an individual code number (without any information about a participant’s name or address) different from the individual number of a blood sample. Test-tubes with isolated DNA will be stored at the Institute of Cardiology for up to 20 years. After that time, if there are still some samples unused in genetic tests, they will be destroyed in accordance with relevant regulations. You can demand your blood sample to be destroyed at any time. To have it done you need to communicate with Prof. Grażyna Broda, MD, PhD from the Institute of Cardiology in Warsaw (phone # 022 815-65-56).

Potential benefits for the study participants
Those participating in the genetic study do not benefit directly. Indirect benefits include broadening the medical knowledge, which will contribute to better understanding of the causes of cardiovascular diseases and diabetes and, consequently, their more effective prevention and treatment.

CONSENT TO THE PARTICIPATION IN THE STUDY
I confirm that I have read and understood the information about the study and I give my consent to participate in the genetic testing.
I understand that I can demand at any time that my blood sample be destroyed. To have it done I only need to communicate with Prof. Grażyna Broda, MD, PhD from the Institute of Cardiology in Warsaw (phone # 022 815-65-56).

……………………………..          ………………………….    …………………………….
Participant’s Name and Surname Date (in participant’s handwriting) Participant’s signature
…………………………………………………… …………………………………..
Investigator’s Name and Surname Date
CORE QUESTIONNAIRE

CHAPTER I

IDENTIFICATION DATA
1. Date of examination (day, month, year) ___________ Q0103
2. Time examination started (hour, min) ___________ Q0104

CHAPTER II

DEMOGRAPHIC DATA
3. Gender 1. Male 2. Female … Q0201
4. Date of birth (day, month, year) ___________ Q0202
5. What is your formal marital status? Q0203
   1. single
   2. married (including partnership)
   3. widow, widower
   4. divorced, separation
6. Do you live with your spouse or partner? Q0261
   1. Yes
   2. No
7. How many people live in your household (including yourself)? ___________ person(s) Q0262
8. What is your education? Q0204
   1. no formal education
   2. primary education
   3. lower secondary education
   4. upper secondary education
   5. post secondary but not tertiary education
   6. first stage of tertiary education
   7. second stage of tertiary education(University)
   8. basic vocational after primary school
   9. basic vocational after lower high school
9. How many years have you spend on education ___________ Q0263
10. What is the average net income per capita in your household (after deduction of all taxes)? Q0205
    1. below 500 PLN
    2. from 501-1000 PLN
    3. from 1001-1500 PLN
    4. from 1501-2000 PLN
    5. 2001-2500 PLN
    6. 2501-3000 PLN
    7. >3000 PLN
    8. I do not know / It is hard to say
    9. I refuse to answer

CHAPTER III

DATA ON WORK AND PHYSICAL ACTIVITY
1. How would you define your current labour status? Q0301
   1. I work for pay or profit (go to Q 3)
   2. I am unemployed
   3. I am learning (school, college, university)
4. I am a pensioner
5. I am permanently unable to work (disability pension)
6. I have been on long term sick leave (at least for 6 months)
7. I am in active military service
8. I am a housewife
9. I am a farmer
10. I am on maternity (paternity) leave
11. others; what? …………………………………… Q0301

2. Have you ever worked for pay or profit? Q0361
1. Yes
2. No (go to Q 9)

3. What is/was the character of your employment Q0362
1. full time job
2. self-employment (go to Q 5)
3. work at home without payment (go to Q 5)

4. What is/was the employment contract? Q0363
1. for an unspecified time
2. for a specified time

5. How are/were you employed by your main employer: Q0364
1. on the full time basis
2. on the part time basis

6. How do/did you commute (Tick only one answer) Q0302
1. by public transport (go to Q. 8)
2. by car (go to Q 8)
3. I walk or cycle

7. How many minutes a day does it take you to commute (both ways)? Q0303
1. less than 15 min.
2. from 15 to 30 min.
3. from 31 to 60 min.
4. over 60 minutes

8. Is/Was your professional work: Q0304
1. hard manual labour (at least 50% of time you spend doing hard manual work)
2. in sitting position (more than half of time you work sitting or standing)
3. other, neither of those mentioned above

9. Do you happen to perform some physical activity (e.g. jog, cycle, swim, do exercises, do gardening, and so on) for at least 30 min. without a break? Q0305
1. Yes
2. No (go to Q. 11)

10. How often are you physically active? Q0306
1. every day
2. almost every day (4-6 times a week)
3. every second or third day
4. once a week
5. twice or three times a month
6. once a month or less often

Chapter IV
TOBACCO SMOKING

IV A. CURRENT TOBACCO SMOKING
1. Do you currently smoke cigarettes or other tobacco products? Q0401
1. Yes, regularly (at least 1 cigarette a day)
2. Yes, occasionally (usually less than one cigarette a day) go to Part B
3. Not at all (go to Part B)
2. (refers to regular smokers)
   a) What type of tobacco products do you smoke every day? (more than one answer possible)
   1. manufactured cigarettes Q0461_1
   2. hand-made cigarettes Q0461_2
   3. cigars Q0461_3
   4. pipe Q0461_4
   5. others Q0461_5
   b) On average, how many cigarettes, cigars or pipes a day do you smoke? Q0462
   1. manufactured cigarettes Q0462_1
   2. hand-made cigarettes Q0462_2
   3. cigars Q0462_3
   4. pipe Q0462_4
   5. others Q0462_5
   c) How long (how many years) have you smoked cigarettes (other tobacco products) regularly? Sum up all separate periods of regular smoking. If you do not remember the exact number of years, what is an approximate? Q0463
d) How old were you when you started smoking cigarettes (other tobacco products)? (Age in years) Q0402
e) Do you inhale while smoking cigarettes (other tobacco products)? Q0405
   1. Yes, deeply
   2. Yes, but only a little
   3. No
   f) Why do you smoke cigarettes (other tobacco products)? (Tick one, most important cause) Q0406
   1. for company
   2. it is pleasurable
   3. it calms me down
   4. it is my habit
   5. others
   6. it is hard to say
   g) Have you ever tried to give up smoking cigarettes (other tobacco products)? Q0407K
   1. Yes*
   *If you have, how many times? Q0407X
   2. No
   h) Do you wish you would stop smoking? Q0408
   1. Yes
   2. No (go to Chapter V)
   3. I cannot make up my mind (go to Chapter V)
   i) If you do, why do you wish you would stop smoking cigarettes (other tobacco products)? (Tick one, most important cause) Q0409
   1. because of the current illness
   2. for fear of a disease
   3. because of physicians’ recommendations
   4. because my friends insist
   5. because my family wishes so
   6. for financial reasons
   7. I am determined to do so (it is reasonable)
   8. for other reasons
   Go to Chapter V

IV B. EX-SMOKERS OR THOSE WHO NEVER SMOKED

a). Have you ever smoked cigarettes regularly for at least one year? Q0411
   1. Yes
   2. No (go to point h)
   b) How old were you when you stopped smoking? (Age in years) Q0412
c) Did you try to stop smoking before? Q0464
1. Yes*
   *If you did, how many times? Q0464X
2. No

d) If you stopped smoking during the last year, was it: Q0413K
1. less than a month ago
2. 1-6 months ago
3. 6-12 months ago
4. N/A, I gave up smoking earlier

e) What was the most important reason for giving up smoking cigarettes? (Tick one, most important) Q0414
1. because of the current illness
2. for fear of a disease
3. because of physicians’ recommendations
4. because my friends insisted
5. because my family wished so
6. for financial reasons
7. it was reasonable
8. for other reasons

f) What was the largest number of cigarettes you smoked a day during one year? (Number of cigarettes) Q0415

g) How old were you when you started smoking cigarettes? (Age in years) Q0416

h) On average, how many hours a day do you spend in a room where other people smoke? Q0410K
1. never or almost never (go to Chapter V)
2. less than one hour a day
3. 1-5 hours daily
4. more than 5h daily

i) How often are you with cigarette smokers in public places or transport? (bars, restaurants, shopping centres, trains, and so on) Q0465
1. never or almost never
2. less than one hour a day
3. 1-5 hours daily
4. more than 5h daily

j) How often are you with cigarette smokers at work? Q0466
1. never or almost never
2. less than one hour a day
3. 1-5 hours daily
4. more than 5h daily
5. N/A (I do not work or I do not work out of home)

CHAPTER V ALCOHOL CONSUMPTION

1. In the last 12 months, have you drunk even once vodka, wine or beer? Q0501
1. Yes
2. No (go to Chapter VI)

2. How often do you drink strong alcohol (brandy, whisky)? Q0502
1. every day or almost every day
2. 3 or 4 times a week
3. 1 or 2 times a week
4. 1 or 2 times a month
5. less often than once a month
6. I do not drink strong alcohol (go to Q4)

3. If you drink vodka or another strong alcohol, how many milliliters do you drink then? Q0503
1. 25 ml
2. 50 ml
3. 51 - 100 ml
4. How often do you drink wine? Q0504
   1. every day or almost every day
   2. 3 or 4 times a week
   3. 1 or 2 times a week
   4. 1 or 2 times a month
   5. less often than once a month
   6. I do not drink wine (go to Q 6)
5. If you drink wine, how much on average do you drink then? Q0505
   1. 1/8 of a bottle (glass around 100 ml)
   2. 1/4 of a bottle
   3. 1/2 of a bottle
   4. 1/2-1 of a bottle
   5. 1 - 2 bottles
   6. more
6. How often do you drink beer? Q0506
   1. every day or almost every day
   2. 3 or 4 times a week
   3. 1 or 2 times a week
   4. 1 or 2 times a month
   5. less often than once a month
   6. I do not drink beer (go to Chapter VI)
7. If you drink beer, how many litres of beer do you drink on average? (If (s)he drinks one can, encode 0.3 or 0.5) Q0507

CHAPTER VI CARDIOVASCULAR DISEASES

IN HISTORY VI A. ANGINA

1. Have you ever felt pain or uneasiness in your chest? Q0601
   1. Yes (go to Q).
   2. No
2. Have you ever felt burden or pressure in your chest? Q0602
   1. Yes
   2. No (go to Part B)
3. Do these symptoms occur now when you are in a hurry or walk uphill? Q0603
   1. Yes
   2. No (go to Part B)
   3. I never am in a hurry or walk uphill (go to Part B)
4. Do these symptoms occur when you take your time walking on a flat ground? Q0604
   1. Yes
   2. No
5. What do you do when such symptoms appear while you are walking? Q0605
   1. I stop or slow down
   2. I take nitroglycerin/sorbonit and walk on
3. I keep on walking without changing the pace (go to Part B)
6. What happens with the feeling of pain, uneasiness, burden or pressure when you stop? Q0606
   1. it disappears totally
   2. it does not disappear totally (go to Part B)
7. How long does it take for the symptoms to disappear totally after you stop? Q0607
   1. 10 min. or less
   2. more than 10 min. (go to Part B)
8. In which place(s) do you feel pain, uneasiness, burden or pressure?
   a) sternum (upper or middle part) Q0608
   1. Yes
   2. No
b) sternum (lower part) Q0609
1. Yes
2. No
c) left part of the chest front Q0610
1. Yes
2. No
d) left arm Q0611
1. Yes
2. No
e) other localization Q0612
1. Yes
2. No
9. Have you ever seen a physician because of these symptoms? Q0613
1. Yes
2. No
10. If you have, what was the diagnosis? Q0614
1. coronary artery disease or angina pectoris
2. something else or I do not remember

VI B. DISEASES – PRESENT AND PAST
1. Do you suffer now from a chronic disease or have some problems with health (a chronic disease is one that lasts or is expected to last at least 6 months)? Q0661
1. Yes
2. No (go to Q 3)
3. I do not know (go to Q 3)
4. I refuse to answer (go to Q 3)
2. To what extent have these health problems limited your everyday activity in the last 6 months? Q0662
1. They limited it very much
2. They limited it to a moderate degree
3. They limited it only a little or not at all
4. I do not know, it is hard to say
5. I refuse to answer
3. Have you ever been hospitalized because of the following diseases?
a) myocardial infarction Q0615
1. Yes
2. No
3. I do not remember
   How many times ever: |___|___| Q0615N
   How old were you when the first episode occurred? |___|___| Q0615R
b) exacerbated coronary artery disease (chest pains) Q0615L
1. Yes
2. No
3. I do not remember
   How many times ever: |___|___| Q0615LN
   How old were you when the first episode occurred? |___|___| Q0615LR
c) brain stroke Q0617
1. Yes
2. No
3. I do not remember
   How many times ever: |___|___| Q0617N
   How old were you when the first episode occurred? |___|___| Q0617R
d) cardiac insufficiency (dyspnea, swelling) Q0618K
1. Yes
2. No
3. I do not remember
   How many times ever: |___|___| Q0618KN
   How old were you when the first episode occurred? |___|___| Q0618KR
e) atrial fibrillation Q0619K
1. Yes
   How many times ever: | ____ | ____ | Q0618KN
   How old were you when the first episode occurred? | ____ | ____ | Q0618KR
2. No
3. I do not remember
f) arrhythmias other than atrial fibrillation Q0619L
1. Yes
   How many times ever: | ____ | ____ | Q0619LN
   How old were you when the first episode occurred? | ____ | ____ | Q0619LR
2. No
3. I do not remember
g) coronary artery by-pass grafting; angioplasty (balloon) Q0620L
1. Yes
   How many times ever: | ____ | ____ | Q0620LN
   How old were you when the first episode occurred? | ____ | ____ | Q0620LR
2. No
3. I do not remember
h) pacemaker / cardioverter-defibrillator implantation Q0621L
1. Yes
   How many times ever: | ____ | ____ | Q0621LN
   How old were you when the first episode occurred? | ____ | ____ | Q0621LR
2. No
3. I do not remember
4. Have you ever been diagnosed with any of the illnesses indicated below? 
   **Answers encode:**
   1. Yes 2. No 3. I do not know 4. I refuse to answer

<table>
<thead>
<tr>
<th>Illness</th>
<th>Ever</th>
<th>If so, has it been in the last 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma (including allergic asthma)</td>
<td>Q0671</td>
<td>Q0671A</td>
</tr>
<tr>
<td>Chronic bronchitis, COPD emphysema</td>
<td>Q0672</td>
<td>Q0672A</td>
</tr>
<tr>
<td>Atrial fibrillation</td>
<td>Q0673</td>
<td>Q0673A</td>
</tr>
<tr>
<td>Arrhythmias other than atrial fibrillation</td>
<td>Q0674</td>
<td>Q0674A</td>
</tr>
<tr>
<td>Lower extremity diseases (atherosclerosis, intermittent claudicating, Burger's disease)</td>
<td>Q0675</td>
<td>Q0675A</td>
</tr>
<tr>
<td>Myocardial infarction</td>
<td>Q0676</td>
<td>Q0676A</td>
</tr>
<tr>
<td>Coronary artery disease (angina pectoris</td>
<td>Q0677</td>
<td>Q0677A</td>
</tr>
<tr>
<td>High blood pressure (arterial hypertension)</td>
<td>Q0678</td>
<td>Q0678A</td>
</tr>
<tr>
<td>Increased cholesterol levels</td>
<td>Q0679</td>
<td>Q0679A</td>
</tr>
<tr>
<td>Brain stroke (hemorrhagic, ischemic)</td>
<td>Q0680</td>
<td>Q0680A</td>
</tr>
<tr>
<td>Rheumatoid arthritis</td>
<td>Q0681</td>
<td>Q0681A</td>
</tr>
<tr>
<td>Osteoarthritis</td>
<td>Q0682</td>
<td>Q0682A</td>
</tr>
<tr>
<td>Lumbar spine diseases</td>
<td>Q0683</td>
<td>Q0683A</td>
</tr>
<tr>
<td>Cervical spine diseases</td>
<td>Q0684</td>
<td>Q0684A</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Q0685</td>
<td>Q0685A</td>
</tr>
<tr>
<td>Food allergy (rhinitis, conjunctivitis, dermatitis, allergies other than asthma)</td>
<td>Q0686</td>
<td>Q0686A</td>
</tr>
<tr>
<td>Gastric or duodenum ulcer</td>
<td>Q0687</td>
<td>Q0687A</td>
</tr>
<tr>
<td>Liver cirrhosis or dysfunction</td>
<td>Q0688</td>
<td>Q0688A</td>
</tr>
<tr>
<td>Malignant neoplasm except leukemia and lymphoma</td>
<td>Q0689</td>
<td>Q0689A</td>
</tr>
<tr>
<td>Migraine headache</td>
<td>Q0690</td>
<td>Q0690A</td>
</tr>
<tr>
<td>Urinary incontinence</td>
<td>Q0691</td>
<td>Q0691A</td>
</tr>
<tr>
<td>Chronic anxiety</td>
<td>Q0692</td>
<td>Q0692A</td>
</tr>
<tr>
<td>Chronic depression</td>
<td>Q0693</td>
<td>Q0693A</td>
</tr>
<tr>
<td>Other mental disorders</td>
<td>Q0694</td>
<td>Q0694A</td>
</tr>
<tr>
<td>Persistent trauma or accident-related defect</td>
<td>Q0695</td>
<td>Q0695A</td>
</tr>
</tbody>
</table>
5. Are you being treated due to diseases which have been diagnosed or were the cause of your hospitalisation? Q0627K
1. Yes
2. No
3. N/A

6. Have you been using regularly aspirin specimens in the last two weeks? Q0628K
1. Yes – I use aspirin in the prophylaxis of coronary artery disease or in the treatment of cardiac diseases
2. Yes – I use aspirin for other reasons than heart diseases
3. No – I do not use aspirin
4. I do not remember

VI C. ARTERIAL HYPERTENSION
1a) Do you know the upper limits of the normal blood pressure? Q0629
1. Yes
2. I do not (go to Q 2)

1b) What are they? Q0630S/R
2. Do you know what your arterial blood pressure is? Q0631
1. Yes
2. No (go to Q 4)
3. Is your blood pressure ... Q0632
1. normal or low
2. high
3. I do not know, it is hard to say
   Ask about the particular pressure. If the person does not know, explain that a pressure which is too high is at least 140/90 mmHg.

4. When was your blood pressure measured last? Q0633K
1. during the last month
2. during the last 6 months
3. during the last year
4. during the last two years
5. more than two years ago
6. never
7. I do not remember

5. Have you ever been diagnosed with an elevated blood pressure? Q0634
1. Yes
2. No (go to Part D)
3. My blood pressure was sometimes elevated but the physician after observation excluded hypertension (go to Part D)
4. I do not remember (go to Part D)

6. How old were you (approximately) when your blood pressure was diagnosed as elevated? Age in years Q0635

7. Have you ever used any medication because your arterial blood pressure was elevated? Q0636
1. Yes
2. No (go to Part D)
3. I do not remember (go to Part D)

8. Have you been taking these drugs regularly for the last two weeks? Q0637
1. Yes
2. No (go to 10)

9. Have you been taking hypotensive drugs in the last 3 days? Q0638
1. Yes
2. No

10. Have you ever been hospitalised because of hypertension? Q0639
1. Yes
2. No
3. I do not remember

11. Has any member of your family been diagnosed with hypertension? Q0696
1. Yes, father or paternal relatives
2. Yes, mother or maternal relatives
3. Yes, siblings or children
4. No or I do not remember

VI D. CHOLESTEROL
1. Have you ever been diagnosed with an elevated cholesterol level? Q0640K
   1. Yes
   2. No (go to Q 6)
   3. I do not remember (go to Q 6)
2. How old were you when an elevated cholesterol level was diagnosed? Q0641
   Age in years
3. In the last two weeks, have you used regularly any medication prescribed to lower your cholesterol level? Q0642
   1. Yes
   2. No (go to Q 5)
   3. I am not sure (go to Q 5)
4. Have you used any medication lowering your cholesterol level in the last 3 days? Q0643
   1. Yes
   2. No
   3. I am not sure
5. Do you use any special diet prescribed by a health professional to lower your cholesterol level? Q0644
   1. Yes
   2. No
   3. I am not sure
6. In the last 12 months, have you had your blood cholesterol level measured? Q0645
   1. Yes
   2. No
   3. I do not remember

CHAPTER VII
OTHER DISEASES IN HISTORY
VII A. DIABETES MELLITUS
1. Has any member of your family been diagnosed with diabetes? Q0761
   1. Yes*
   2. No (go to Q 2)
   3. I do not remember (go to Q 2)
*If the answer is Yes, has it been in:
   a) father or paternal relatives Q0762
      1. Yes
      2. No
      3. I do not remember
   b) mother or maternal relatives Q0763
      1. Yes
      2. No
      3. I do not remember
   c) siblings or children Q0764
      1. Yes
      2. No
      3. I do not remember
2. Have you ever been diagnosed with diabetes? Q0701K
   1. Yes
   2. No (go to Part B)
   3. Sometimes my glucose level was elevated but the physician excluded diabetes (go to Part B)
4. I do not remember (go to Part B)
3. How old were you when you were diagnosed with diabetes? (Age in years) Q0702
4. How is your diabetes treated? Q0703
1. initially tablets, now insulin
2. initially tablets, now insulin and tablets
3. insulin from the beginning
4. tablets from the beginning
5. only diet from the beginning
6. I do nothing
7. others
5. In the last two weeks have you used any anti-diabetes medication? Q0704
1. Yes
2. No
6. Have you used any anti-diabetes medication in the last 3 days? Q0765
1. Yes
2. No (go to Q. 7)
7. Have you been hospitalized because of your diabetes? Q0766
1. Yes
2. No
3. I do not remember
8. Do you check your blood sugar level yourself (glucometer with strips)? Q0767
1. Yes, regularly
2. Yes, irregularly
3. No

VII B. OBESITY
1. Have you ever been informed by a health professional that you are overweight or obese? Q0705
1. Yes
2. No (go to Q. 3)
3. I do not remember (go to Q. 3)
2. How old (approximately) were you when you were diagnosed overweight or obese? (Age in years) Q0706
3. Do you think you are overweight or obese? Q0707
1. Yes
2. No
3. I do not know
4. Do you know your body weight? Q0708
1. Yes
2. No (go to Q 6)
5. What is your body weight: kg Q0709
6. In the last 12 months, has your body weight increased by more than 5 kg? Q0710
1. Yes
2. No
3. I do not remember

VII C. MENSTRUATION AND PREGNANCY
For women only
1. Do you menstruate? Q0711K
1. Yes, regularly (go to Q 4)
2. Yes, irregularly (go to Q 4)
3. No, I am pregnant (go to Q 6)
4. No
NOTE! Encode No if she has not menstruated for longer than 6 months. Encode Yes, irregularly if she has not menstruated for shorter than 6 months.
2. How old were you when you stopped menstruating? (Age in years) Q0712
3. What is the cause of your not menstruating? Q0713K
1. I am after menopause
2. I underwent surgical hysterectomy
3. I do not know
4. others
4. Do you take hormonal drugs because of your abnormal menstruation or lack of it?
   Q0714
   1. Yes
   2. No
5. Do you take hormonal contraceptives? Q0715
   1. Yes
   2. No
6. How many children have you had?
   Number of children |   |   | Q0757

    VII D. HEALTH STATE

1. What do you think your health state is? Q0716K
   1. very good
   2. good
   3. fair
   4. bad
   5. very bad
   6. I do not know
   7. I refuse to answer

    VII E. INFORMATION ABOUT FAMILY

1. Is your father alive? Q0717
   1. alive (go to Q. 3)
   2. died in an accident
   3. died of neoplastic disease
   4. died of respiratory and circulatory failure
   5. died of brain stroke (ischemic, hemorrhagic)
   6. died of a heart attack (myocardial infarction)
   7. died of other or unknown causes
   8. I do not know
2. How old was your father when he died? Q0718K
   Age in years   or 2. I do not know
3. Did you father have a myocardial infarction or brain stroke? Q0719
   1. Yes
   2. No (go to Q. 5)
   3. I do not know (go to Q. 5)
4. How old was your father when he had first myocardial infarction or brain stroke?
   (Age in years, at first event) (may be approximate) Q0720
5. Is your mother alive? Q0721
   1. alive (go to Q 7)
   2. died in an accident
   3. died of neoplastic disease
   4. died of respiratory and circulatory failure
   5. died of brain stroke (ischemic, hemorrhagic)
   6. died of a heart attack (myocardial infarction)
   7. died of other or unknown causes
   8. I do not know
6. How old was your mother when she died? Q0722K
   1. Age in years   or 2. I do not know
7. Did you mother have a myocardial infarction or brain stroke? Q0723
   1. Yes
   2. No (go to Chapter VIII)
   3. I do not know (go to Chapter VIII)
8. How old was your mother when she had first myocardial infarction or brain stroke?
   (Age in years, at first event) (may be approximate) Q0724
CHAPTER VIII
HEALTH CARE

1. Have you been hospitalized in the last 12 months? Q0801
   1. Yes
      If the answer is Yes, how many times Q0801X
   2. No

2. Have you had a medical consultation in the last 12 months? Q0802
   1. Yes (go to Q 4)
      If the answer is Yes, how many times Q0802X
   2. No

3. Why did you not have a medical consultation? Q0803
   1. It was difficult to arrange an appointment
   2. I had no time for treatment
   3. There was no need
   4. others

4. Where do you most often seek medical consultations? Q0804L
   1. in primary health centers (e.g. family doctor)
   2. in specialized health centers (within social health insurance)
   3. privately, (e.g. doctor’s private practice, doctors’ cooperatives, within a pre-paid system, and so on)
   4. I never seek medical consultations
   5. others

5. During your visits to a doctor’s office, have you usually:
   a) had your blood pressure measured? Q0805
      1. Yes
      2. No
      3. I do not remember
   b) been advised to stop smoking? Q0806
      1. Yes
      2. No
      3. I do not smoke
      4. I do not remember
   c) been instructed about your dietary habits? Q0807
      1. Yes
      2. No
      3. I do not remember
   d) been advised to increase your physical activity (apart from professional and house work)? Q0808
      1. Yes
      2. No
      3. I do not remember

6. Did you buy all drugs prescribed during the latest visit? Q0809K
   1. Doctor prescribed nothing/I do not seek doctor’s consultations (go to Chapter IX)
   2. Yes, I did and am compliant (go to Chapter IX)
   3. Yes, I did and but am not compliant (go to Chapter IX)
   4. I did not

7. Why did you not buy the medications prescribed? Q0810
   1. lack of money for drugs
   2. I thought not all the drugs were necessary

CHAPTER IX HEALTH AWARENESS

1. Do you know what diseases and complications may be caused by untreated arterial hypertension? (Do not read answers to everyone!)
You can mark a few answers. Wait for the person to answer by themselves; do not show / read answers itemized. Mark the options given. In case you are in doubt, make sure you understand correctly. Other answers, not itemized, put in point 7 (others).

1. hemorrhagic stroke or ischemic stroke Q0901
2. atherosclerosis Q0902
3. heart disease (eg myocardial infarction) Q0903
4. kidney diseases Q0904
5. vision disturbances Q0905
6. I do not know Q0906
7. others, what?
   a) …………………………………….. Q0907
   b) …………………………………….. Q0908
   c) …………………………………….. Q0909
   d) …………………………………….. Q0910

2. What methods of preventing heart diseases, other than taking drugs, do you know? (Do not read answers!)
   You can mark a few answers. Wait for the person to answer by themselves; do not show / read answers itemized. Mark the options given. In case you are in doubt, make sure you understand correctly. Other answers, not itemized, put in point 10 (others).
   1. overweight people should lose weight Q0911
   2. more physical activity Q0912
   3. giving up smoking Q0913
   4. less alcohol Q0914
   5. less salt in food Q0915
   6. regular life style, proper rest, avoiding stress Q0916
   7. less fat in food Q0917
   8. vegetables and fruit eaten regularly Q0918
   9. I do not know any Q0919
   10. others, what?
      a) …………………………………….. Q0920
      b) …………………………………….. Q0921
      c) …………………………………….. Q0922
      d) …………………………………….. Q0923

Make sure all fields are filled in.

Thank you for your time.

CHAPTER XIV. INFORMATION ON DRUGS USED

1. In the last two weeks, have you taken any drugs, vitamins or diet supplements? Q1203K
   1. Yes
   2. No
   3. I do not know
   4. I refuse to answer

2. If the answer is Yes, what was the cause of taking drugs? (write in clearly the main diseases due to which the drugs were taken)
   a) .............................................................................................. Q1204
   b) .............................................................................................. Q1205
   c) .............................................................................................. Q1206
   d) .............................................................................................. Q1208

3. Do you happen to miss consecutive doses of drugs? Q1209
   1. Yes, seldom (20% or less)
   2. Yes, often (more than 20%)
   3. never

   For each drug answers are coded:
   Commercial name of drug Q1210
   Form Q1211
   Number of days in the latest two weeks when the drug has been taken Q1212
   Daily dose: Q1213

CHAPTER XV
PHYSICAL EXAMINATION QUESTIONNAIRE

1. Date of examination (day, month, year) Q1303

A. ANTHROPOMETRIC DATA

1. Height with shoes off (exact to 0.5 cm), Id of measuring device Q1361
   - Height not measured because:
     1. patient is on wheelchair/does not move
     2. patient is unable to stand
     3. of hairdo
     4. height is beyond the limits of the measuring device – its upper limit is Q1362X
     5. of patient’s refusal
     6. others, itemize

   Other observations affecting the measurement result:

   .................................................................................................................. 01363

2. Body mass – shoes off (exact to 100 g), Id of weighing machine Q1366
   - gestation over 20 weeks Q1364
     1. Yes
     2. No
     - give body mass before pregnancy: Q1365

   3. Body mass not measured because:
     1. patient is on wheelchair/does not move
     2. patient is unable to stand
     3. body mass was beyond the limits of the weighing machine – its upper limit is Q1367X
     4. of refusal
     5. of massive hernia, stoma or other circumstances preventing the measurement from being made
     6. others, itemize ...

   4. Body mass was measured: Q1368
     1. in light underwear
     2. without overcoat
     3. others, itemize ................................................................. Q1368X

   Other observations affecting the measurement result:

   .................................................................................................................. 01369

5. Waist circumference (exact to 0.5 cm), Id of measuring tape Q1369

6. Waist circumference was not measured because:
     1. patient is on wheelchair/does not move
     2. patient is unable to stand
     3. circumference was beyond the limits of the measuring tape – its upper limit is Q1370X

4. of massive hernia, stoma or other circumstances preventing the measurement from being made

5. of refusal

6. others, itemize ................................................................. Q1370Y

   Waist circumference was measured: Q1371
     1. directly on skin
     2. in light underwear
     3. without overcoat
     4. others, itemize ................................................................. Q1371X

7. Other observations affecting the measurement result

   .................................................................................................................. 01371Y

8. Hip circumference (exact to 0.5 cm), Id of measuring tape Q1372

9. Hip circumference was not measured because:
     1. patient is on wheelchair/does not move
     2. patient is unable to stand
     3. circumference was beyond the limits of the measuring tape – its upper limit is Q1372X

4. of refusal
5. others, itemize ................................................................. Q1372Y
10. Hip circumference was measured: Q1373
   1. directly on skin
   2. in light underwear
   3. without overcoat
   4. others, itemize ................................................................. Q1373X
Other observations affecting the measurement result

B. ARTERIAL BLOOD PRESSURE
1. Id of the person performing the measurement Q1374
2. Why the blood pressure measurement was not performed: Q1375
   1. Both extremities amputated
   2. Prostheses on both arms
   3. Open wounds on both arms
   4. Rash on both arms
   5. Both arms so deformed that putting on a cuff was impossible
   6. Bilateral axillary lymphectomy (e.g. after mastectomy)
   7. Others, what: ................................................................. Q1375X
3. Date of measurement (dd.mm.yyyy): ................................................................. Q1376
4. Time of measurement (hh:mm): .................................................................
5. Ambient temperature: ................................................................. ºC Q1377
6. Type of measuring device: ................................................................. Q1378
7. Number of device: ................................................................. Q1379
8. Arm circumference (in cm) ................................................................. Q1380
9. Cuff size (depending on the arm size in cm) Q1381
   1. small (to 21 cm)
   2. medium (22-31 cm)
   3. large (32 and more)
10. Arm measured: Q1382
   1. Right
   2. Left
11. The cause why the measurement was performed on the left arm: Q1383
   1. Right arm amputated
   2. Prosthesis on right arm
   3. Open wounds on right arm
   4. Rash on right arm
   5. IV cannulation on right arm
   6. Right axillary lymphectomy (e.g. after mastectomy)
   7. Right arm so deformed that putting on a cuff was impossible
   8. Others, what: ................................................................. Q1383X
12. Patient’s position during measurement: Q1384
   1. Sitting
   2. Standing
13. The cause why the measurement was performed with the patient standing:

14. Heart rate (60s.): ................................................................. Q1385
15. Was the rhythm regular? Q1386
   1. Yes
   2. No
16. Blood pressure measurements
   1st measurement: – systolic pressure ................................................................. Q1387
      – diastolic pressure .................................................................
   2nd measurement – systolic pressure ................................................................. Q1388
      – diastolic pressure .................................................................
   3rd measurement – systolic pressure ................................................................. Q1389
      – diastolic pressure .................................................................
17. Remarks from the person performing the measurement (anything that might affect the measurement findings)
18. Include information about measurement error:
QUESTIONNAIRE CONCERNING NUTRITION

I. IDENTIFYING DATA

1. Surname  [blank]  First name  [blank]
   (3 first letters)

2. Voivodship No  [blank]

3. Commune No  [blank]

4. Registrytium No  [blank]

5. Date of screen  (day, month, year)  [blank]

6. Dietary recall number  (put 1 or 2 or 3)  [blank]

II. DIETARY HABITS

1. Do you add usually salt to your foods and dishes?
   1. yes  2. no  3. sometimes

2. Do you usually remove visible fat from meat, sausages and skin from poultry?
   1. yes  2. no  3. sometimes

3. Have you changed significantly your diet in the last year?
   1. yes  2. no

4. How do you estimate the correctness of your nutritional habits?
   1. correct  2. not correct  3. cannot say
III. FOOD FREQUENCY QUESTIONNAIRE

1. How often during the past 2-3 months did you eat the following products?

<table>
<thead>
<tr>
<th>Products</th>
<th>During week</th>
<th>Rarer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>everyday</td>
<td>6-4 x</td>
</tr>
<tr>
<td>Milk, sour milk, kefir, yoghurt, milk drinks</td>
<td></td>
<td>3-2 x</td>
</tr>
<tr>
<td>Cottage cheese</td>
<td></td>
<td>1 x</td>
</tr>
<tr>
<td>Hard cheese</td>
<td></td>
<td>rarer than</td>
</tr>
<tr>
<td>Meat: beef, pork, veal, lamb, organ meats</td>
<td></td>
<td>once a week</td>
</tr>
<tr>
<td>Poultry and meat products from poultry</td>
<td></td>
<td>never</td>
</tr>
<tr>
<td>Meat products from pork, beef, veal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh, canned and smoked fish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eggs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Butter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soft margarine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mix-butter with margarine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lard,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oils</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiled vegetables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Row vegetables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legumes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruit and vegetables juices</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Are you on any special diet?

1. no
2. yes, low caloric diet
3. yes, low fat diet
4. yes, other
5. yes, low cholesterol diet
6. yes, diabetic diet

DIETA
IV. DATA CONCERNING DIET WITHIN 24 HOUR

1. Evaluation of regular timing of meals ..................................................

2. Food intake during this particular day

   1. typical
   2. untypical

3. Food intake during last 24 hours

   I. Meal (first breakfast) ______ hour

   II. Meal (second breakfast, lunch) ______ hour

   III. Meal (dinner) ______ hour
IV. Meal (supper)  _____ hour

Other meals (snacks and beverages between  _____ hour meals)

---

4. Did you take any vitamins or minerals supplements yesterday?
1. yes  2. no

*If yes:*
Which? ................................................................................................................................

How much?
....................................................................................................................................

5. Did you take these supplements because of current diseases?
1. yes  2. no
## Regional Center Name

### Address

---

### PSYCHO-SOCIAL QUESTIONNAIRE

---

### X. DEPRESSION QUESTIONNAIRE

(To fill-in by a respondent. Please fill-in each question)

<table>
<thead>
<tr>
<th>After reading each of a given statement (in each group), please mark the answers with „X” (0-3)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A.</strong></td>
</tr>
<tr>
<td>0. I am neither sad nor gloomy</td>
</tr>
<tr>
<td>1. I often feel sad and gloomy</td>
</tr>
<tr>
<td>2. I am sad and gloomy all the time and I can't get rid of it</td>
</tr>
<tr>
<td>3. I am so sad and unhappy that I can't stand it</td>
</tr>
<tr>
<td><strong>B.</strong></td>
</tr>
<tr>
<td>0. I do not particularly worry about the future</td>
</tr>
<tr>
<td>1. I often worry about the future</td>
</tr>
<tr>
<td>2. I worry that I have nothing to look forward to</td>
</tr>
<tr>
<td>3. I feel the future is hopeless and nothing can change it</td>
</tr>
<tr>
<td><strong>C.</strong></td>
</tr>
<tr>
<td>0. I do not feel like a failure</td>
</tr>
<tr>
<td>1. I do not feel I have failed more than the average person</td>
</tr>
<tr>
<td>2. When I look back at what I have done I can see a lot of failures</td>
</tr>
<tr>
<td>3. I feel I am a complete failure</td>
</tr>
<tr>
<td><strong>D.</strong></td>
</tr>
<tr>
<td>0. I get a lot of pleasure out of what I’m doing</td>
</tr>
<tr>
<td>1. I don't enjoy what I’m doing</td>
</tr>
<tr>
<td>2. I don't get real satisfaction with anything</td>
</tr>
<tr>
<td>3. I am dissatisfied and bored with everything</td>
</tr>
<tr>
<td><strong>E.</strong></td>
</tr>
<tr>
<td>0. I don't feel guilty about myself or others</td>
</tr>
<tr>
<td>1. I often have a guilty conscience</td>
</tr>
<tr>
<td>2. I often feel guilty</td>
</tr>
<tr>
<td>3. I feel guilty all of the time</td>
</tr>
<tr>
<td><strong>F.</strong></td>
</tr>
</tbody>
</table>

---

---
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0.</td>
<td>I don’t feel I deserve a punishment</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>I think I deserve a punishment</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>I expect to be punished</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>I feel I am being punished</td>
<td></td>
</tr>
</tbody>
</table>

### G.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0.</td>
<td>I am satisfied with myself</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>I am not satisfied with myself</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>I am disgusted with myself</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>I hate myself</td>
<td></td>
</tr>
<tr>
<td>Q1108</td>
<td>H.</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>----</td>
<td></td>
</tr>
<tr>
<td>0. I don't feel I am any worse than anybody else.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. I am critical of myself for my weaknesses or mistakes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I blame myself all the time for my faults</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I blame myself for everything bad that happens</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q1109</th>
<th>I.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. I have no thoughts of killing myself</td>
<td></td>
</tr>
<tr>
<td>1. I think about committing suicide but I couldn't do it</td>
<td></td>
</tr>
<tr>
<td>2. I wish to commit suicide.</td>
<td></td>
</tr>
<tr>
<td>3. I will commit suicide when I had the chance</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q1110</th>
<th>J.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. I don't cry more often than others</td>
<td></td>
</tr>
<tr>
<td>1. I cry more often now than I used to</td>
<td></td>
</tr>
<tr>
<td>2. I feel like crying all the time</td>
<td></td>
</tr>
<tr>
<td>3. I wish I could cry</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q1111</th>
<th>K.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. I am not more irritated by things than in the past</td>
<td></td>
</tr>
<tr>
<td>1. I am more irritated and obnoxious than in the past</td>
<td></td>
</tr>
<tr>
<td>2. I feel irritated and nervous all the time</td>
<td></td>
</tr>
<tr>
<td>3. I feel indifferent about everything that irritated me in the past</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q1112</th>
<th>L.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. People interest me like in the past</td>
<td></td>
</tr>
<tr>
<td>1. I am less interested in other people than I used to be</td>
<td></td>
</tr>
<tr>
<td>2. I have lost most of my interest in other people</td>
<td></td>
</tr>
<tr>
<td>3. I have lost all my interest in other people</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q1113</th>
<th>M.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. I make decisions easily as in the past</td>
<td></td>
</tr>
<tr>
<td>1. I put off making decisions more than ever</td>
<td></td>
</tr>
<tr>
<td>2. I have great difficulty in making decisions more than I used to</td>
<td></td>
</tr>
<tr>
<td>3. I can't make decisions at all anymore</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q1114</th>
<th>N.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. I don't feel that I look any worse than I used to</td>
<td></td>
</tr>
<tr>
<td>1. I am worried that I look old or unattractive</td>
<td></td>
</tr>
<tr>
<td>2. I feel I look worse and worse</td>
<td></td>
</tr>
<tr>
<td>3. I am convinced that I look ugly and disgusting</td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Question</td>
</tr>
<tr>
<td>----------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>O.</td>
<td>I can work as before</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>P.</td>
<td>I sleep as well as in the past</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Q.</td>
<td>I don't get more tired than usual</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>R.</td>
<td>My appetite is not worse than usual</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>S.</td>
<td>I haven't lost much weight</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>T.</td>
<td>I am not worried about my health more than usual</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>U.</td>
<td>My interest in sex hasn’t changed</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### XI. SOCIAL SUPPORT QUESTIONNAIRE
(To fill-in by a respondent. Please fill-in each question)

#### A. FAMILY LIFE

1. How many people (adults and children) live in your household?  
   
   [ ] people

2. Do you have favourite pet?  
   
   1. Yes  
   2. No  

   If Yes. How many do you have?  
   [ ]

3. Are you married now or have you ever been married?  
   
   1. Yes  
   2. No (skip to part B)

4. How many times have you been married?  
   [ ]

5. For each marriage, please indicate your age when you got married, how many years lasted your each marriage and what happened with each marriage?

<table>
<thead>
<tr>
<th>Your age at the beginning</th>
<th>Number of years married</th>
<th>What happened with the marriage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. First marriage</td>
<td></td>
<td>1. Still married  3. divorced</td>
</tr>
<tr>
<td>[ ] years old</td>
<td>[ ] years</td>
<td>2. Separated  4. widowed</td>
</tr>
</tbody>
</table>

| 2. Second marriage        |                         | 1. Still married  3. divorced  |
|   [ ] years old           | [ ] years               | 2. Separated  4. widowed       |

| 3. Third marriage         |                         | 1. Still married  3. divorced  |
|   [ ] years old           | [ ] years               | 2. Separated  4. widowed       |
**B. CHILDREN**

1. Have you ever had any children? (please include adopted children or children you bring up now or you brought up in the past)  
   1. Yes  
   2. No (skip to part C)  

2. How many children do you have?  

3. How old are your children?  
   1. ___ years old  
   2. ___ years old  
   3. ___ years old  
   4. ___ years old  
   5. ___ years old  
   6. ___ years old  
   7. ___ years old  
   8. ___ years old  
   9. ___ years old  

**B.1. CONTACT WITH CHILDREN**

In the following questions we are asking about your current contact with your children.

4. How many of your children do you see at least once a month?  
   ___  

5. How many of your children do you see at least once a week?  
   ___  

6. How many of your children do you talk to on the phone or write to at least once a month?  
   ___  

7. How many of your children do you talk to on the phone or write to at least once a week?  
   ___  

8. How many of your children are you ….. ?  
   (Include each child in only one category)
### C. CONTACT WITH CLOSE RELATIVES

In the following questions we are asking you about current contact with close relatives (such relatives might include for example: parents, grandparents, brothers, sisters, aunts, uncles or cousins).

1. **How many relatives are close to (apart from your children)?**  
   (People you feel at ease with or can talk to about private matters or can ask for help)  
   (circle one)  
   none  1  2  3  4  5  6  7  8  9  10 +

2. **How many of these close relatives do you see at least once a month?**

3. **How many of these relatives do you see at least once a week?**

4. **How many of these close relatives do you talk to on the phone or write to at least once a month?**

5. **How many of these relatives do you talk to on the phone or write to at least once a week?**

6. **How satisfied are you with the contact you have with your relatives?**  
   (Please check only one category)  
   1. Very satisfied  
   2. Somewhat satisfied  
   3. Weakly satisfied
### D. CONTACT WITH CLOSE FRIENDS

In the following questions we are asking you about current contact with close friends.

1. How many friends do you have that you are close to? (People you feel at ease with or can talk to about private matters or can ask for help)
   
   z nikim 1 2 3 4 5 6 7 8 9 10 i więcej

2. How many of them do you see at least once a month?

3. How many of them do you see at least once a week?

4. How many of them do you talk to on the phone or write to at least once a month?

5. How many of them do you talk to on the phone or write to at least once a week?

6. How satisfied are you with the contact you have with your friends?
   
   (Please check only one category)

### E. Groups Organizations.

1. Do you now belong to the following groups or organisations? (How active are you in these groups?)

<table>
<thead>
<tr>
<th>A. Social or recreational groups?</th>
<th>1. No</th>
<th>2. Yes, very active</th>
<th>3. Yes, somewhat active</th>
<th>4. Yes, not active</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. Labour unions, commercial groups, professional organizations?</td>
<td>1. No</td>
<td>2. Yes, very active</td>
<td>3. Yes, somewhat active</td>
<td>4. Yes, not active</td>
</tr>
<tr>
<td>C. Political parties, groups or clubs?</td>
<td>1. No</td>
<td>2. Yes, very active</td>
<td>3. Yes, somewhat active</td>
<td>4. Yes, not active</td>
</tr>
<tr>
<td>D. Groups concerned with public issues (community betterment, charity or service?)</td>
<td>1. No</td>
<td>2. Yes, very active</td>
<td>3. Yes, somewhat active</td>
<td>4. Yes, not active</td>
</tr>
<tr>
<td>E. Any other groups? (please specify)</td>
<td>1. No</td>
<td>2. Yes, very active</td>
<td>3. Yes, somewhat active</td>
<td>4. Yes, not active</td>
</tr>
</tbody>
</table>
WHOQOL-BREF

The following questions ask how you feel about your quality of life, health, or other areas of your life. I will read out each question to you, along with the response options. **Please choose the answer that appears most appropriate.** If you are unsure about which response to give to a question, the first response you think of is often the best one.

Please keep in mind your standards, hopes, pleasures and concerns. We ask that you think about your life in the last four weeks.

<table>
<thead>
<tr>
<th></th>
<th>Very poor</th>
<th>Poor</th>
<th>Neither poor nor good</th>
<th>Good</th>
<th>Very good</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>How would you rate your quality of life?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Very dissatisfied</th>
<th>Dissatisfied</th>
<th>Neither satisfied nor dissatisfied</th>
<th>Satisfied</th>
<th>Very satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>How satisfied are you with your health?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

The following questions ask about how much you have experienced certain things in the last four weeks.

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A little</th>
<th>A moderate amount</th>
<th>Very much</th>
<th>An extreme amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>To what extent do you feel that physical pain prevents you from doing what you need to do?</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>4.</td>
<td>How much do you need any medical treatment to function in your daily life?</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>5.</td>
<td>How much do you enjoy life?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6.</td>
<td>To what extent do you feel your life to be meaningful?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A little</th>
<th>A moderate amount</th>
<th>Very much</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.</td>
<td>How well are you able to concentrate?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8.</td>
<td>How safe do you feel in your daily life?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9.</td>
<td>How healthy is your physical environment?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
The following questions ask about how completely you experience or were able to do certain things in the last four weeks.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Not at all</th>
<th>A little</th>
<th>Moderately</th>
<th>Mostly</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Do you have enough energy for everyday life?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>11. Are you able to accept your bodily appearance?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>12. Have you enough money to meet your needs?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>13. How available to you is the information that you need in your day-to-day life?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>14. To what extent do you have the opportunity for leisure activities?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Very poor</td>
<td>Poor</td>
<td>Neither poor nor good</td>
<td>Good</td>
<td>Very good</td>
</tr>
<tr>
<td>15. How well are you able to get around?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Very dissatisfied</td>
<td>Dissatisfied</td>
<td>Neither satisfied nor dissatisfied</td>
<td>Satisfied</td>
<td>Very satisfied</td>
</tr>
<tr>
<td>16. How satisfied are you with your sleep?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>17. How satisfied are you with your ability to perform your daily living activities?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>18. How satisfied are you with your capacity for work?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>19. How satisfied are you with yourself?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
20. How satisfied are you with your personal relationships?  

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

21. How satisfied are you with your sex life?  

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

22. How satisfied are you with the support you get from your friends?  

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

23. How satisfied are you with the conditions of your living place?  

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

24. How satisfied are you with your access to health services?  

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

25. How satisfied are you with your transport?  

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

The following question refers to how often you have felt or experienced certain things in the last four weeks.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Seldom</th>
<th>Quite often</th>
<th>Very often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>26. How often do you have negative feelings such as blue mood, despair, anxiety, depression?</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
INDIVIDUAL BIOCHEMISTRY FORM

Participant’s identification code

1. Did the respondent sigh informed consent to undergo biochemical test?  Yes □  No □
2. Are the any contrindications to draw a blond sample? (anticoagulant therapy, bleeding disorders)  Yes □  No □
3. Time of fasting (hour, min.)
4. Identification code of investigator
5. Date of sampling collection (day/month/year)
6. Pose of subject Turing blond collection: sitting □  supine □
7. The reason for supine position:
   - faiteend □
   - subject permanently □
   - other □  specify:

8. Arm used for blond collection: left □  right □
9. Reason for use of right arm:
   - amputation of left arm □
   - no vain founded on left arm □
   - other □  specify:

10. Reason for not collecting blond sample:
    - no vain founded □
    - other □  specify:

11. Tubes collected:
    - with red cap (lipids):  Yes □  No □
    - with gray cap (glucose):  Yes □  No □
    - with lilac cap (DNA isolation):  Yes □  No □
Letter to participants
on survey results – template

Mrs/Mr ........................................
Name of participants

Dear Madam/Sir
Thank you very much for participation in the National Survey, conducted by the team of

........................................ on ........................................
date

I. The findings obtained from the questionnaire

1. Hypertension Yes No
2. Diabetes Yes No
3. Overweight or obesity Yes No
4. Smoking Yes No
5. Low physical activity Yes No
6. Positive Familial history on CVD Yes No

II. Results of physical examination

1. Weight ........................................kg
2. Height ........................................cm
3. Waist circumference .............cm (Norma: Men<102 cm; Women< 88 cm
4. BMI ........................................kg/m² (< 25 – normal value
   25-29,9 overweight
   ≥ 30 – obesity )
5. Mean values of blood pressure:
   systolic ........................................mmHg (Norm. <140mmHg)
   diastolic ........................................mmHg (Norm. < 90 mmHg)
6. Resting ECG
   a) no significant disturbances were found in the record
   b) Record of ECG abnormal ........................................

III. Biochemical tests: (original lab sheet with your results, enclosed)

Basing on the lab results we have stated

1. High cholesterol level Yes No (Norm <5,0 mmol/l)
2. Low HDL-cholesterol level Yes No (Norm M≥1,0 mmol/l
   W≥1,3 mmol/l)
3. High LDL-cholesterol level Yes No (Norm <3,0 mmol/l)
4. High triglyceride level  Yes  No  (Norm <1.7 mmol/l)
5. High fasting glucose level  Yes  No  (Norm <6.1 mmol/l)

IV. 10 years risk of total CVD using SCORE calculation

Your CVD risk is .................% (high risk ≥5%)

Please present this letter to your general practitioner!

Lifestyle Recommendation
• No smoking
• 30 min of any moderately vigorous exercise on most days of the week
• Weight reduction if BMI≥25 kg/m² and especially if BMI≥30 kg/m²
• Check regularly your blood pressure, cholesterol level and glucose level
• Healthy food choices
Procedura pomiaru ciśnienia tętniczego krwi

Przygotowała dr n. med. Aleksandra Piwońska w oparciu o materiały EHES
Wyposażenie

Zegar + termometr

Taśma do pomiaru

Urządzenie do pomiaru

Mankiety
Kryteria wykluczające z pomiaru ciśnienia

- Pomiar ciśnienia **nie może być wykonany** w przypadku, gdy u osoby badanej stwierdzamy:
  - amputację obu ramion
  - protezy na obu ramionach
  - otwarte rany/uszkodzenia na obu ramionach
  - wysypkę na obu ramionach
  - zniekształcenia obu ramion uniemożliwiające prawidłowe założenie mankietu
  - usunięte węzły chłonne z obu pach
Pokój badań

- Pokój badań powinien być:
  - cichy
  - z umiarkowaną temperaturą
  - pomiar temperatury powinien być wykonywany i zapisywany dla każdego pacjenta
  - jakiekolwiek zakłócenia w trakcie pomiaru ciśnienia powinny być odnotowane w karcie pomiaru
Instrukcja dla badanego

- Przed pomiarem ciśnienia (przynajmniej 30 min.) badany nie powinien:
  - jeść
  - pić (z wyjątkiem wody)
  - palić papierosów
  - wykonywać dużych wysiłków fizycznych
  - powinien mieć opróżniony pęcherz moczowy
Instrukcja dla osoby wykonującej pomiar

• pomiar ciśnienia wykonuje osoba przeszkolona

• każda osoba mierząca powinna mieć numer identyfikacyjny, który należy zapisywać na karcie pomiarów

• Pomiar powinien być wykonany sprawdzonymi i oznakowanymi aparatami (typ i numer aparatu należy wpisać do karty pomiaru)

• Ustawienie aparatu:
  • Na stole, przed osobą mierzącą
  • Badany nie może widzieć wyniku pomiaru!!!
Pozycja osoby badanej

- **pozycja siedząca** z opartymi plecami
- stopy oparte o podłogę (jeżeli badany nie dotyka nogami do podłogi należy podłożyć coś na czym można oprzeć nogi)
- nie skrzyżowane nogi, badany nie powinien machać nogami
- jeżeli osoba badana nie jest w stanie siedzieć można wykonać pomiar w pozycji **stojącej** odnotowując ten fakt w karcie pomiaru
Ułożenie ramienia

Pomiar na **lewym ramieniu** tylko w przypadku, gdy:

- amputacja prawej kończyny górnej
- proteza na prawym ramieniu
- wysypka na prawym ramieniu
- otwarte rany, sińce na prawym ramieniu
- przetoka tętniczo-żylna na prawym ramieniu

(należy odnotować ten fakt w karcie pomiaru)
Odzież

Luźne rękawy podwinąć

Zdjąć obcisłe rękawy
Wybór mankietu

- Przed wykonaniem pomiaru ciśnienia należy zmierzyć (z dokładnością do 1cm) największy obwód ramienia

- na podstawie w/w pomiaru należy wybrać mankiet i odnotować wybór:
  - mały mankiet: obwód ramienia <22cm
  - średni mankiet: obwód ramienia 22cm-31cm
  - Duży mankiet: obwód ramienia ≥ 32cm
Pomiar ciśnienia

- Badany powinien pozostać w pozycji siedzącej przez 5 min. przed wykonaniem pomiaru ciśnienia.
- W trakcie pomiaru badany nie powinien mówić.
- Mankiet powinien być położony około 2-3 cm powyżej zgięcia łokciowego, a położenie jego górnej krawędzi nie powinno być ograniczone przez odzież.

Mankiet powinien być położony 2-3 cm powyżej dołu łokciowego.
Pomiar automatycznym aparatem

- Po założeniu mankietu pomiar wykonać wg instrukcji dla aparatu
- Wykonać pomiar ciśnienia tętniczego krwi 3 razy w odstępie 1-minutowym pomiędzy pomiarami
Kontrola sprzętu

• Codzienna kontrola:
  • stanu naładowania baterii
  • przewodów gumowych pod kątem ewentualnych uszkodzeń oraz prawidłowości połączenia
POMIAR OBWODU TALII I BIODER

Przygotowała dr n. med. M. Polakowska w oparciu o materiały EHES
Dlaczego mierzymy obwód pasa?

- Obwód talii jest używany do określenia otyłości brzusznej, która ma wpływ na występowanie chorób układu krążenia i cukrzycy typu 2.
Wyposażenie

- Nierozciągliwa taśma (150cm)
- Lustro obejmujące całą sylwetkę
- Poziomnica
Kryteria wykluczające

- Jeśli uczestnik/czka
  - jest unieruchomiony lub na wózku inwalidzkim
  - ma trudności w utrzymaniu pozycji stojącej
  - jest w ciąży (20 tydzień lub powyżej)
  - ma przepuklinę brzuszną
Protokół EHES dla pomiaru obwodu talii

Badany proszony jest o:

- Odsłonięcie talii, poprzez rozluźnienie paska, obniżenie spodni/spódnicy
- Stanie w lekkim rozkroku (10 cm odległości między stopami), rozkładając ciężar ciała równomiernie na obie nogi
- Ręce swobodnie opuścić wzdłuż ciała
Mierzący znajduje na ciele miejsce pomiaru obwodu talii, które znajduje się:

- pomiędzy dolnym brzegiem żebra a górnym brzegiem grzebienia biodrowego
Pozioma pozycja taśmy jest weryfikowana przez:
- trzymanie taśmy napiętej
- poproszenie uczestnika, żeby się obrócił/lub sprawdzić w lustrze
- Uczestnik proponowany jest o normalne oddychanie; odczyt wyniku pomiaru powinien nastąpić na końcu lekkiego wydechu.
Trudności w pomiarze obwodu pasa

- Znalezienie prawidłowego miejsca pomiaru nie zawsze jest łatwe
Zapisywanie informacji

- Obwód talii jest zapisywany z dokładnością do 0,5 cm
- Jeśli pomiar nie został wykonany, przyczynę należy odnotować w kwestionariuszu
- Obwód talii podany przez uczestnika nie jest akceptowany
Pomiar obwodu bioder

- Pomiar powinien odbywać się bez ubrania wierzchniego (bezpośrednio na skórze/w lekkiej bieliźnie)
- Badany stoi w pozycji wyprostowanej, rozluźniony, z równomiernie rozłożonym ciężarem ciała na obie stopy
- Mierzymy na poziomie największego uwypuklenia mięśni pośladkowych
c.d.

- Taśmę trzymamy na tej wysokości poziomo, kontrolując w lustrze
- Pomiar jest zapisywany z dokładnością do 0,5 cm
- Jeśli wymiar jest większy niż długość taśmy, powinno to być odnotowane z wpisem długości taśmy
Kalibracja i sprawdzanie wyposażenia

- Długość taśmy mierzącej powinna być sprawdzona przy pomocy liniału (najczęściej o długości 150 cm) o skalibrowanej długości, w regularnych odstępach czasowych (co najmniej raz w miesiącu)
Pomiar wzrostu i masy ciała

Przygotował dr n. med. Jerzy Piwoński w oparciu o materiały EHES
Dlaczego mierzymy masę ciała i wzrost?

- Otyłość stanowi ogólnoswiatowy problem zdrowotny oraz jest czynnikiem ryzyka wielu chorób, jak cukrzyca czy choroby układu krążenia.

- W celu obliczenia BMI (kg (masa ciała)/m² (wzrost w m))

- Pomiary wzrostu i masy ciała są potrzebne, gdyż wzrost i waga podane przez badanych nie są wystarczająco wiarygodne, aby śledzić trendy populacyjne i robić porównania pomiędzy populacjami.
Pomiar wzrostu
Sprzęt

- Wzrostomierz
- Schodki (podest)
- Poziomica
- Liniał wzorcowy o dł. 150 - 200cm
Kryteria wykluczające

- Jeżeli badany:
  - Nie może się poruszać lub jest na wózku
  - Ma trudności z utrzymaniem pozycji stojącej
  - Ma fryzurę, która uniemożliwia prawidłowe użycie sprzętu do pomiaru
Protokół EHES dla pomiaru wzrostu

- Wzrost powinien być mierzony bez butów, ciężkiego ubrania, nakrycia głowy, skomplikowanych fryzur na głowie (np. upięte koki), i bez ozdób do włosów

- Badany powinien stać wyprostowany, tyłem do wzrostomierza, głowa, ramiona, pośladki i pięty powinny dotykać wzrostomierza
• Mała przerwa pomiędzy stopami (10cm)

• Stopy ustawione prosto

• Kanał ucha powinien być w jednej linii z kością policzkową
• Górną część wzrostomierza należy opuścić tak, aby spłaszczyć i lekko przycisnąć włosy
• Odczyt wzrostu powinien być wykonany z poziomu oczu mierzącego
Jeżeli badany jest wyższy niż osoba dokonująca pomiaru, osoba mierząca wzrost powinna stanąć na schodkach.

Jeżeli badany jest wyższy niż długość wzrostomierza, do zaakceptowania jest podanie wzrostu przez badanego i odnotowanie tego faktu w kwestionariuszu.
Odczyt

- Wzrost jest odczytywany z dokładnością skali wzrostomierza (do 0,5cm)

- Jeżeli wzrost nie został zmierzony powinien zostać określony i podany powód braku pomiaru
Kalibracja i sprawdzanie sprzętu

- Poziome i pionowe ustawienie wzrostomierza powinno być sprawdzane przy użyciu poziomicy.

- Na początku i końcu każdego dnia wzrostomierz powinien być sprawdzany wzorcowym linialem i korygowany, jeżeli błąd przekracza 2 mm.

Fakt sprawdzenia sprzętu powinien zostać odnotowany w log-book.
Pomiar masy ciała
Sprzęt

- Waga elektroniczna przeznaczona do badań medycznych z certyfikatem
- Odważniki kalibracyjne
- Poziomica
Kryteria wykluczające

- Jeżeli badany
  - Nie może się poruszać lub jest na wózku inwalidzkim
  - Ma problemy z utrzymaniem pozycji stojącej
Protokół EHES dla pomiaru masy ciała

Badany powinien:

- Zdjąć wierzchnie ubranie (marynarka, płaszcz)
- Zdjąć buty
- Opróżnić kieszenie
• Waga powinna być ustawiona na twardym podłożu (nie na wykładzinie). Jeżeli to niemożliwe, należy zastosować platformę z twardego drewna, podłożoną pod wagę. Za pomocą poziomicy należy sprawdzić, czy płaszczyzna, na której stoi waga jest pozioma.

• Badany powinien stać w centralnej części platformy wagi

• **10 cm** przerwy pomiędzy stopami

• Ciężar ciała rozłożony jednakowo na obie nogi
Odczyt

- Masa ciała jest odczytywana z dokładnością skali wagi (najczęściej 0,1kg lub 0,2kg)

- Jeżeli badana jest w ciąży, powinno się odnotować tydzień ciąży oraz masę ciała sprzed ciąży

- Jeżeli masa ciała badanego przekracza maksimum skali wagi, akceptowana jest masa ciała podana przez badanego (odnotować ten fakt w kwestionariuszu i podać maksimum skali)

- Jeżeli waga nie została zmierzona powinno się odnotować powód braku pomiaru
Kalibracja i sprawdzanie sprzętu

- Waga powinna stać na twardym podłożu
- Za pomocą poziomicy powinno się sprawdzić, czy płaszczyzna, na której stoi waga jest pozioma
- Na początku i na końcu każdego dnia powinna zostać przeprowadzona kalibracja wagi za pomocą standardowych odważników kalibracyjnych
- Re-kalibracja jest konieczna, jeżeli błąd pomiaru jest większy niż 0,2kg.

- **Wynik testu i re-kalibracja powinny zostać odnotowane w log-book**
Dziękuję za uwagę!