

DESCRIPTION FOR THE GENERAL PUBLIC (IN ENGLISH)

In recent years, the tobacco industry has been promoting heated tobacco products (HTP) around the world as a less harmful product than smoking cigarettes. As current research suggests, this new non flammable tobacco product emits significantly lower levels of tar, carbonyls, volatile organic compounds, carbon monoxide, free radicals, or nitrosamines compared to traditional cigarettes, and therefore may reduce the health risk of smokers. However, this doesn't eliminate the risk of developing tobacco-related diseases. IQOS (I-Quit-Ordinary-Smoking) can be a preliminary product for the use of tobacco among non-smokers, young people. There is an increase in the number of young people reaching for IQOS who "follow fashion", but also want a "safe cigarette" so it is important to examine the characteristics of people reaching for heated tobacco, the level of use and the health effects they can cause. The aim of the study is to evaluate the impact of using heated tobacco among young people (w wieku 18-30 lat) on health status using selected health assessment parameters.

The planned project assumes that the study will include 65 IQOS smokers who have never smoked or IQOS smokers who have quit smoking for six months and 65 daily smokers, who have smoked at least 5 cigarettes a day since at least 1 year and haven't used any other substitutes for smoking for at least a year (the period was chosen to be able to see any potential health effects associated with exposure to heated tobacco) and 65 people who never smoked or didn't use any tobacco substitutes, aged 18-30 recruited from among students of universities, colleges and schools in Lodz and IQOS points of sale. Regular smokers will be a person who smoke at least 5 cigarettes a day for at least a year. IQOS smokers will be only IQOS smokers during recruitment (minimum 6 months before the start of the study, at least 5 sticks of heated tobacco daily).

Persons who wish to participate in the study after reading the study protocol and signing consent to participate in the study will be asked to complete a questionnaire. The interview will include data on socio-demographic characteristics, lifestyle, and exposure to nicotine smoke. The information obtained from the interview will be included in the analysis as potential confounders. Participants will undergo a physical examination along with height and weight measurements with BMI calculation, as well as waist to hip ratio (WHR). In addition, blood pressure will be assessed and saliva will be collected. On the next day, study participants will be invited to the CKD Medical Diagnostic Laboratory at the Medical University of Lodz and spirometry. The health status will be assessed by testing blood morphological parameters: morphology, hemoglobin, CRP, uric acid, fibrinogen, lipid parameters: total cholesterol, triglycerides, LDL, HDL, apo A1, apo B and glucose level, lung function (spirometry) The study participants will receive a physical examination along with height and weight measurements with the BMI calculation, as well as waist to hip ratio (WHR). Additionally, blood pressure will be assessed. The health status parameters were chosen as early cardiovascular indicators (blood parameters, blood pressure) and chronic respiratory diseases (spirometry). In addition, tobacco smoking verification will be based on salivary cotinine analysis. The clinical part will be performed in the Medical Diagnostic Laboratory of the Medical University of Lodz. Salivary cotinine analysis will be performed at the Department of Biological and Environmental Monitoring, Institute of Occupational Medicine in Lodz. Health measurements and spirometry will be performed under the supervision and consultation with internal medicine specialists, cardiologists, and pulmonologists. The advantage of the proposed project over previously published works is the assessment of the impact of exposure to heated tobacco among young people on the state of health using selected health parameters indicating early health effects that may later cause chronic diseases such as respiratory or cardiovascular diseases. Another advantage of the proposed project is the assessment of cotinine concentration in saliva, which verifies exposure to tobacco smoke from heated tobacco devices. The proposed study will also be one of the first to provide information on the use of IQOS and potential health effects among young people. The proposed project is a unique analysis of the early impact of heated tobacco on young people in Poland. A comprehensive analysis of the interview, laboratory tests, and assessment of selected health biomarkers will allow developing recommendations regarding the impact of using IQOS on the health of young people in Poland. The submitted project is an original research work (this type of research has not been conducted in Poland, and individual studies in the world deal with this topic). Currently, many young adults reach for IQOS, which is why the subject of the proposed project is so important.