

## THE MAASTRICHT STUDY: CATEGORY INDEX

### Anthropometric characteristics

- Basic anthropometric characteristics
  - Objectively measured basic anthropometric characteristics
  - Self reported basic anthropometric characteristics
- Birth characteristics
- Body composition
  - Bioelectrical impedance analysis
  - DXAscan body composition
  - MRI abdomen
  - Skinfold measurement

### Biomarkers

- Blood cells
  - Blood cell counts
  - Flow cytometry (FACS)
- Continuous Glucose Monitoring
- Serum plasma
  - Amino acids
  - Beta cell function
  - Cardiac markers
  - Endothelial dysfunction
  - Glucose Cpeptide Insulin OGTT
  - Inflammation
  - Insulin resistance
  - Kynurenines and Vitamins B2 and B6
  - Metabolomics
  - Plasma AGEs dicarbonyls
  - Serum plasma other
  - Serum plasma QC values
  - Standard clinical chemistry
- Skin autofluorescence
- Urine (24h)
- Urine portion

### Cardiovascular health

- Arterial plaques
- Arterial stiffness
  - Aortic stiffness (cfPWV)
  - Blood pressure during vascular measurements
  - Brachial stiffness
  - Carotid stiffness
  - Femoral stiffness
- Autonomic cardiovascular function
  - Baroreflex sensitivity measurement
  - Frequency domain analysis
- Blood pressure
  - 24h blood pressure measurement
  - Ankle Brachial Index measurement
  - Blood pressure variability
  - Home blood pressure measurement (7days)
  - Office blood pressure measurement
- Cardiac function and structure characteristics
  - Echocardiography
  - Electrocardiography
    - ECG 12lead
    - ECG 24h
    - ECG 256channel
- Cardiorespiratory fitness (bicycle test)
- Microcirculation
  - Capillary microscopy
  - Heat induced hyperemia test
  - Presence of microvascular disease
  - Retinal microcirculation measurement
  - Vasomotion
- Self reported cardiovascular health
  - Cardiovascular disease history
  - Family history of CVD
  - Rose Questionnaire

## Demographic characteristics

Basic demographic characteristics

Education

Employment

Employment status

Job stress

Working conditions

Housing conditions

Income and poverty

Neighbourhood characteristics

Neighbourhood conditions

Neighbourhood solidarity

Walkability (NEWSa)

## Ear health

Objectively measured hearing status (HearCheck)

Self reported hearing status

General data on hearing

HHDI

HHIEs

IOIHA

MiniTQ

## Eye health

Anterior\_Segment\_(Scheimpflug)\_Imaging

Corneal Confocal Microscopy

Dynamic Vessel Analysis

Eye diseases

Eye measurement remarks

Funduscopy

Intra ocular pressure

Optical Coherence Tomography

Refraction

Visual acuity

Visual field analysis (HEP)

## Health behaviour

Alcohol consumption

Diet

Diet pattern scores

*Dutch Healthy Eating Index (DHD15)*

*Other\_diet\_patterns*

Food Frequency Questionnaire

*Food intake (FIT)*

Artificial sweeteners

Beverages

Bread

Cereal products

Cheese

Clinical formulas

Eggs

Fats Oils Savoury sauces

Fish

Fruits

Herbs Spices

Legumes

Meat products Poultry

Milk products

Miscellaneous foods

Mixed dishes

Nuts Seeds Snacks

Pastry Biscuits

Potatoes

Savoury bread spreads

Soups

Soy Vegetarian products

Sugar Sweets Sweet sauces

Vegetables

*Nutrient intake (NIT)*

Amino acid intake

Dietary AGEs Dicarbonyls

Macronutrients Alcohol

Macronutrients Carbohydrates

Macronutrients Energy

Macronutrients Fats

Macronutrients Proteins

Micronutrients Minerals

Micronutrients Vitamins

Non nutrients Artificial sweeteners

Water

- Physical activity
  - Accelerometry (ActivPAL)
    - Activity during daytime*
      - Daytime activity avg day
      - Daytime activity avg weekday
      - Daytime activity avg weekendday
      - Daytime activity per day
    - Activity during nighttime*
      - Nighttime activity avg night
      - Nighttime activity avg weekendnight
      - Nighttime activity avg weeknight
      - Nighttime activity per night
    - Activity per hour*
      - Hourly activity avg day
      - Hourly activity avg weekday
      - Hourly activity avg weekendday
      - Hourly activity for 7days
  - Physical activity questionnaire
  - Sedentary behaviour questionnaire
- Pursuit of healthier lifestyle
- Sleep
  - Epworth Sleepiness Scale
  - Sleep questionnaire
- Smoking
  - Basic smoking questionnaire
  - Nicotine dependence (FTND)
  - Smoking cessation

#### Health economic evaluation

- Care use and costs
- Quality of life
  - EQ5D
  - SF36

#### Maastricht Study characteristics

#### Medication

- Medication interview
- Pharmacy data

#### Metabolic health

- Diabetes
  - Diabetes status
  - Diabetic complications
    - Foot wound and amputation*
    - Presence of microvascular disease*
  - Family history of diabetes
  - Hypoglycemia
  - Markers glucose metabolism
  - Problem Areas In Diabetes questionnaire
- Metabolic syndrome

#### Musculoskeletal health

- Bone composition
  - DXAscan bone mineral density
  - DXAscan vertebral fracture assessment
  - HR pQCT
- Bone fractures (hospital record)
- Joint examination findings
  - Knee Xray
  - Rheumatological examination
- Physical function
  - Cardiorespiratory fitness (bicycle test)
  - Muscle strenght
    - Handgrip strength*
    - Isometric muscle strength*
  - Performance based physical function
    - 6 minute walk test*
    - Timed chair stand test*
  - Self reported physical function
    - Activity restriction (GARS4)*
    - IPA autonomy outdoors*
    - Mobility*
    - SF36*
- Self reported musculoskeletal health
  - Bone fractures and falls
  - Chronic musculoskeletal disease and pain
  - Gout

## Neurological health

- Autonomic cardiovascular function
- Brain structure characteristics
  - FreeSurfer\_output
    - Cortical\_area
    - Cortical\_thickness
    - Hippocampal\_subfields
    - Subcortical\_volumes
    - Quality\_control\_FreeSurfer
  - MRI brain
  - MRI connectivity
- Cognitive performance
  - Concept Shifting Test
  - Forgetfulness
  - General cognition (summary measures)
  - Groninger Intelligentie Test
  - Letter Digit Substitution Test
  - MMSE
  - Stroop Colour Word Test
  - Word Fluency Test
  - Word Learning Test
- Peripheral nerve function
  - Electromyography
  - Vibratory sense (neurothesiometer)
- Self reported neurological health
  - Migraine
  - Nerve disease history
  - Neuropathic pain (DN4)
  - Parkinson

## Other health characteristics

- Cancer
- Gastrointestinal health
- Infections
  - Nose and throat swabs
  - Self reported infections
- Pain
- Quality of life

## Psychosocial characteristics

- Aggression
- Anxiety
  - GAD7
  - MINI anxiety
- Depression
  - Depression history
  - MINI depression
  - MINI dysthymia
  - PHQ9
- Fairness and justice perception
- Mindfulness
- Need for cognition
- Parental style
- Personal mastery
- Personality
  - Nijmeegse Quick Big Five (QBF)
  - Type D personality test (DS14)
- Self control
- Self efficacy
- Shame
- Social inadequacy
- Social participation
- Social support and network

## Respiratory health

- Lung function (spirometry)
- Respiration during sleep (apnea meter)
- Self reported respiratory health
  - ATS DLD78
  - Respiratory health history

## Urogenital health

- Kidney disease history
- Menstruation and menopause
- Obstetric history