Better ageing with personalized lifestyle support from a health coach using a digital app – a population-based intervention study in Germany

Submission date	Recruitment status	[X] Prospectively registered
26/03/2025	Not yet recruiting	Protocol
Registration date	Overall study status	Statistical analysis plan
12/06/2025	Ongoing	Results
Last Edited	Condition category	Individual participant data
12/06/2025	Other	[X] Record updated in last year

Plain English summary of protocol

Background and study aims

Ageing is commonly associated with a decline in clinical and functional status and perceived well-being. This decline is associated with multi-morbidity, defined by the coexistence of two or more chronic disease conditions. Living with multi-morbidity impairs an individual's quality of life, health span and lifespan.

The study aims are to assess the effect of a personalised, digitally delivered lifestyle intervention on clinical status (waist circumference), functional status (hand grip strength) and perceived well-being (WHO 5 well-being index) after 1 year. The study will also evaluate the effect of the lifestyle intervention on the onset and severity of multimorbidity and death after 3 years.

The KORA Digital-Fit study is part of the STAGE project. STAGE is a European Research and Innovation project studying healthy ageing and multi-morbidity using a life-course approach (https://stage-healthyageing.eu).

Who can participate?

Men and women aged 50-79 years from the population-based KORA cohort (Cooperative Health Research in the Region of Augsburg) who are part of the baseline surveys will be invited to participate.

What does the study involve?

Participants will be assigned to the intervention or standard of care group according to personal preference and eligibility. The digital intervention will provide personalised digital health coaching aimed at managing and preventing chronic conditions like obesity, type 2 diabetes, and cardiovascular diseases. Both the intervention group and matched participants of the standard of care group will undergo an end-of-study assessment after 1 year, as well as a telephone interview after 3 years.

What are the possible benefits and risks of participating?

The intervention group will be informed about individual lifelong health. The findings are beneficial as they will be used to develop qualitative prevention concepts for the ageing population.

Where is the study run from? KORA Study Center (Germany)

When is the study starting and how long is it expected to run for? January 2024 to December 2029

Who is funding the study?

The KORA study was initiated and financed by the Helmholtz Zentrum München – German Research Center for Environmental Health, which is funded by the German Federal Ministry of Education and Research (BMBF) and by the State of Bavaria. Data collection in the KORA study is done in cooperation with the University Hospital of Augsburg. The KORA Digital-Fit study is part of the STAGE project. STAGE has received funding from the European Union's Horizon Europe Research and Innovation Programme under grant agreement no 101137146. UK participants in Horizon Europe Project STAGE are supported by UKRI grant numbers 10112787 (Beta Technology), 10099041 (University of Bristol) and 10109957 (Imperial College London).

Who is the main contact? Prof. Dr Annette Peters, annette.peters@helmholtz-munich.de

Study website

https://www.helmholtz-munich.de/en/epi/cohort/kora/kora-studienzentrum

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Additional identifiers

EudraCT/CTIS number

Nil known

IRAS number

ClinicalTrials.gov number

Nil known

Secondary identifying numbers

24110

Study information

Scientific Title

Life-course informed, digitally supported, person-centred intervention study for the prevention of ageing with multi-morbidity in the population-based KORA study, Germany

Acronym

KORA Digital-Fit Study

Study objectives

The primary objective is to assess whether a personalized, digital delivered lifestyle intervention changes clinical status, functional status and perceived well-being after 1 year.

Ethics approval required

Ethics approval required

Ethics approval(s)

Approved 09/03/2025, Ethics Committee of the Bavarian State Medical Association (Mühlbaurstraße 16, München, 81677, Germany; +49 (0)894147335; ethikkommission@blaek.de), ref: 24110

Study design

Single-center open-label two-armed parallel-group controlled study

Primary study design

Interventional

Secondary study design

Non randomised study

Study setting(s)

Other

Study type(s)

Prevention

Participant information sheet

Not available in web format, please use contact details to request a participant information sheet

Health condition(s) or problem(s) studied

Stay healthy through ageing and prevention of multimorbidity

Interventions

A digitally delivered lifestyle intervention based on coaching regarding a healthy lifestyle with the overarching aim of ameliorating waist circumference, increasing muscle strength and perceived well-being over 1 year compared to standard of care.

Participants will be assigned to the intervention or standard of care group according to personal preference and eligibility. The digital intervention will provide personalised digital health coaching aimed at managing and preventing chronic conditions like obesity, type 2 diabetes and cardiovascular diseases. Both the intervention group and matched participants of the standard of care group will undergo an end-of-study assessment after 1 year, as well as a telephone interview after 3 years.

Intervention Type

Behavioural

Primary outcome measure

- 1. Waist circumference is measured using measuring tape at baseline and 1 year
- 2. Hand grip strength is measured using a hand dynamometer at baseline and 1 year
- 3. Well-being measured using the WHO-5 well-being index (self-report questionnaire) at baseline and 1 year

Secondary outcome measures

- 1. Multi-morbidity is measured by self-report at 3 years
- 2. Mortality is measured from record data at 3 years

Overall study start date

01/01/2024

Completion date

Eligibility

Key inclusion criteria

- 1. Men and women aged 50-79 years from the KORA study
- 2. Informed consent for the planned study procedures

For the intervention arm:

- 1. Informed consent for the intervention study
- 2. Digital literacy and compatible personal device

Participant type(s)

Population

Age group

Mixed

Lower age limit

50 Years

Upper age limit

79 Years

Sex

Both

Target number of participants

3000

Key exclusion criteria

Participants who report a pre-existing severe comorbidity and/or a medical condition associated with a life expectancy of less than 1 year

Date of first enrolment

01/01/2026

Date of final enrolment

31/12/2026

Locations

Countries of recruitment

Germany

Study participating centre Kora Study Center

Beim Glaspalast 1

Sponsor information

Organisation

Helmholtz Zentrum München

Sponsor details

Deutsches Forschungszentrum für Gesundheit und Umwelt (GmbH) Ingolstädter Landstraße 1 Neuherberg Germany 85764

Sponsor type

Research organisation

Website

https://www.helmholtz-munich.de

ROR

https://ror.org/00cfam450

Funder(s)

Funder type

Not defined

Funder Name

Deutsches Forschungszentrum für Gesundheit und Umwelt, Helmholtz Zentrum München

Alternative Name(s)

German Research Center for Environmental Health, Helmholtz Zentrum München

Funding Body Type

Private sector organisation

Funding Body Subtype

Research institutes and centers

Location

Germany

Funder Name

European Union Horizon Europe Research and Innovation Programme under grant agreement no 101137146

Results and Publications

Publication and dissemination plan

Planned publication in a high-impact peer-reviewed journal

Intention to publish date

31/12/2029

Individual participant data (IPD) sharing plan

The datasets generated during and/or analyzed during the current study will be shared within the STAGE project. It will be available upon request from Helmholtz Munich in 2030.

IPD sharing plan summary

Available on request, Data sharing statement to be made available at a later date