BELCOHORT
NEWSLETTER

February 2025

We are pleased to inform you that the **BELCOHORT project** has now entered the follow-up phase. Following the initial data collection, you will now receive an invitation to **complete the first follow-up questionnaire** along with this newsletter. From this point forward, you will be invited to complete a follow-up questionnaire once a year and you may also be contacted to participate in specific studies.
In this second newsletter, we will share some **initial results** from the first data collection and keep you updated on our activities and opportunities to take part in specific data collections planned for this year.
In addition, we are recruiting **new participants** to join BELCOHORT in 2025.

INVITE OTHERS TO JOIN BELCOHORT

Help us grow the BELCOHORT study by inviting people from your environment to participate! Registration is open until **April 30, 2025**, for all residents of Belgium aged **18 to 79 years**. Share this opportunity with friends, family, and colleagues, or post about it on social media. Interested individuals can visit our website at www.belcohort.be for subscription and more details, or contact us directly via email at belcohort@sciensano.be or by phone at 02/642 57 26 (NL) or 02/642 51 46 (FR).

NEXT BELCOHORT QUESTIONNAIRES

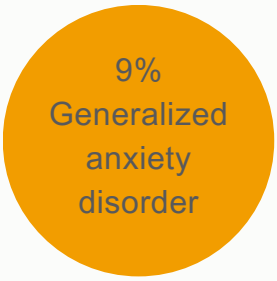
We would like to thank you for your participation in the **BELCOHORT study**. The continuation of your participation is important to monitor health changes over time in our cohort. Along with this newsletter, you will receive an invitation to complete the first follow-up questionnaire. Please complete it **as soon as possible**. The people who did not complete the first two questionnaires will receive a new questionnaire.
The coming year you may also be contacted for the additional initiatives, but participation will always be on a voluntary basis.

WE PRESENT SOME FIRST RESULTS

Based on the data collected in 2024, we present the following preliminary results. The first BELCOHORT questionnaire was completed by **1,514 participants**, with **52% men** and **48% women**. Age distribution is as follows: 6% are aged 18-29, 34% are 30-49, 39% are 50-64, and 20% are 65 and older. 73% of the participants have a higher education diploma. Additionally, 69 participants are currently enrolled in school.

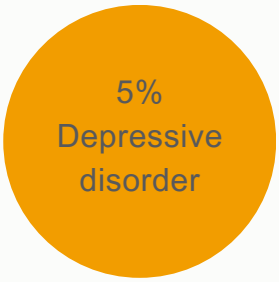
LEVEL OF WELL-BEING IN SPRING 2024

Anxiety



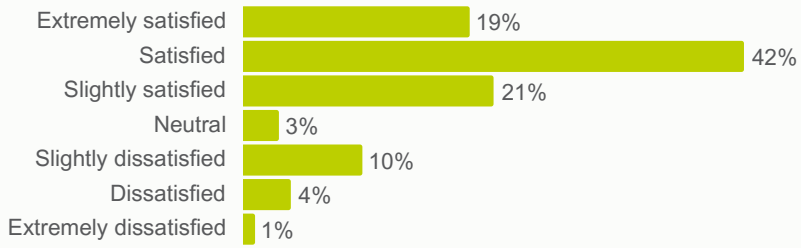
9% of the participants experienced **anxiety** (measured with the GAD-7 scale)

Depression



5% of the participants experienced **depression** (measured with the PHQ-9 scale)

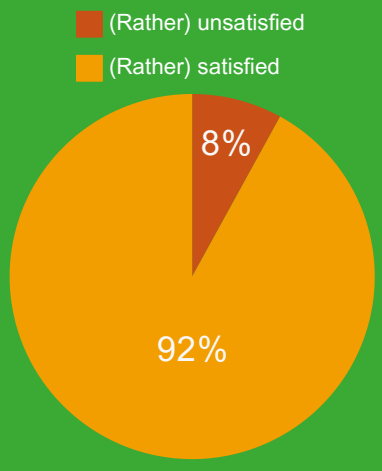
Life satisfaction



The majority of participants reported a positive **level of life satisfaction**, with 82% being slightly satisfied to extremely satisfied, while 15% were dissatisfied to some degree, and 3% remained neutral.

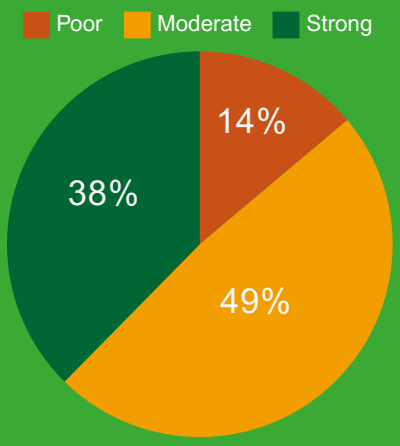
SOCIAL HEALTH IN SPRING 2024

Satisfaction social contacts



92% of participants are (rather) **satisfied** with their social contacts, while 8% are (rather) **unsatisfied**.

Quality of social support



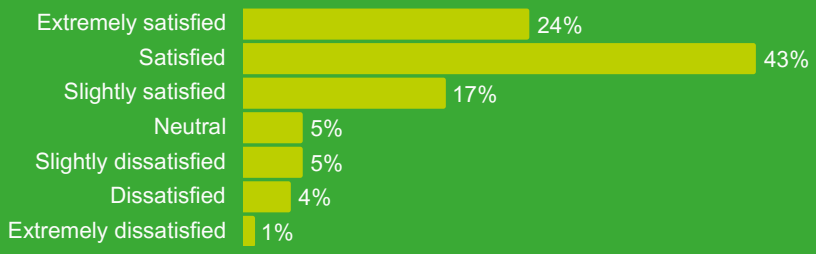
Participants rated their social support as **poor** (14%), **moderate** (49%), or **strong** (38%).

WORK SITUATION IN SPRING 2024

Paid job

67% of the participants are in a paid job

Satisfaction with job



Work absence due to illness or health problems

13% of the participants were absent of their work in the last 2 weeks

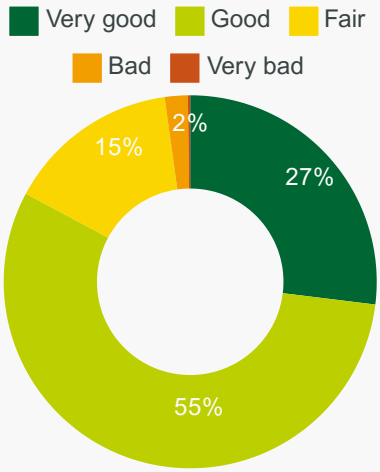
Mean of 22 days of absence in the last 3 months

Productivity impairment

45% On average, participants reported that their health conditions impaired their work productivity by 45%. (measured by the WPAI scale)

PHYSICAL HEALTH IN SPRING 2024

Subjective health



Looking at the graph, 83% of participants rate their health as good or very good, 15% as fair, and 2% as bad or very bad.

Diseases

The most frequently reported diseases among participants include are **Osteoarthritis** (23%), **migraine** (18%), **depression** (16%), **back or neck hernia** (15%), **tinnitus** (14%), **burnout** (13%), **eczema** (12%), **thyroid problems** (9%), **irritable bowel syndrome** (9%), **anxiety disorders** (8%), and **cardiac arrhythmias** (7%).

Mean global subjective health score

The mean subjective global health score among participants is 80 out of 100.

COMPARISON PAPER/ONLINE VERSION OF THE QUESTIONNAIRE

Our analysis shows **notable differences** between participants who completed the paper questionnaire and those who responded online. The paper version had a higher proportion of women (57% vs. 45%) and more participants aged 50-69 (48% vs. 37% for ages 50-64, and 30% vs. 17% for ages 65+). Additionally, more respondents in the online group have a higher education diploma (79% vs. 52%) and reported a higher level of life satisfaction and subjective health ratings. The prevalence of certain health conditions was higher in the paper group, with significantly more cases of diabetes (7% vs. 3%), COPD (6% vs. 1%), stroke (3% vs. 1%), and osteoarthritis (34% vs. 20%). However, there was no significant difference in the distribution of Belgian vs. non-EU country of birth between the two groups.

UPCOMING PROJECTS

WEAHCOP STUDY

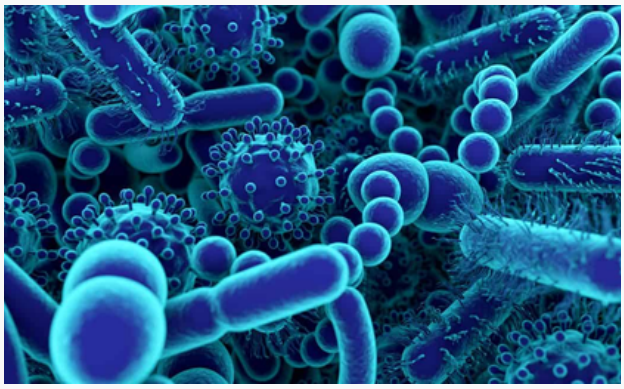
The **WEAHCOP project**, initially set to begin in late 2024, will now start in **2025**. This study, in collaboration with Maastricht University and TNO (the Netherlands Organization for Applied Scientific Research), will assess the feasibility of using wearables (e.g. smartwatches) and apps for data collection in population health research. The WEAHCOP project will include a **subsample of BELCOHORT participants**, and will aim to assess the feasibility of data collection using these new technologies in a population cohort.

Participants will also receive a **feedback** on their own results. Participation in this study is of course voluntary and initially relatively few people will be invited to this project. However in the future it is the purpose to collect such information in a much larger group.

STUDY ON MENTAL HEALTH AND EMPLOYMENT SITUATION

In the initial phase of the **BELCOHORT study**, our key aim is to showcase the significance of a comprehensive database that integrates longitudinal data on various factors such as health, lifestyle, socio-demographic details, and environmental information. In a specific study, the association between **employment status** and **mental health** will be investigated. Research questions like 'What is the impact of labour market transitions on the mental health and wellbeing?' and 'What is the impact of changes in mental health status on the employment situation?' will be addressed. The BELCOHORT data infrastructure will be used to better understand causality patterns in this association and the underlying mechanisms.

MICROBIOME STUDY



The **BELCOHORT study** will include a new **Microbiome project** aimed at understanding the role of microbiomes - tiny ecosystems of bacteria and other microbes in our bodies - in health and environmental exposure. This pilot study will collect **saliva, nasal, fecal, and urine samples** from a representative group of participants across Belgium to establish a baseline of the country's "healthy" microbiome.

By analyzing this baseline and linking it to data on **lifestyle**, **chemical exposure** (measured with wristbands), and **health**, researchers aim to uncover how factors like pesticides affect the microbiome and overall health. This study will lay the groundwork for future large-scale investigations to improve public health strategies and policies.