Name	**Dutch Famine Birth Cohort (DFBC)**
Description	The cohort was set up to investigate the effects of acute maternal undernutrition during specific stages of gestation on the offspring's adult health. The main outcomes of interest of the DFBC are chronic cardiovascular and metabolic diseases, ageing and mental health. Differences in various outcomes have been found between participants exposed to famine and unexposed participants. Although statistically significant, these differences are not very large, therefore adjusting for exposure group enables researchers to use DFBC data in pooled analyses.
Location	Amsterdam (at birth)
Lead Institute	AMC
Cohort size	2414 respondents
Start Cohort	1994 (912 respondents)
Follow-up	2002 (860 respondents) 2008 (601 respondents F1 and 482 respondents F2) 2012 (151 respondents) * subsample 2018 (595 respondents) 2019 (92 respondents) * subsample
Variables and Measurement methods	Measurements: self-reported questionnaire and clinical measurements. 2008 and 2018 participants assessed via self-reported questionnaires only. <u>Main variables collected (available across all waves):</u> Self-reported: • general information, medical information, lifestyle factors, physical activity, weight history, reproductive history, self-perceived health, medication use (except 2018, see below) Clinical highlights: • anthropometrics • glucose concentration, glucose-tolerance test • blood pressure • ECG • IMT • lipid profile • psychosocial stress testing • cognitive function • MRI of the brain <u>Wave specific variables collected:</u> Variables collected in 1994: • lung function Variables collected in 2002: • ultrasound examinations of the arterial walls of the carotid and femoral arteries, , psychological Stress tests (cortisol, HR and BP), genomic DNA from blood plasma, intravenous glucose tolerance test in a subsample (n=94), synacthen test in a subsample (n=98); Variables collected in 2008:

	• transgenerational effects based on F2 questionnaire (general information, birth characteristics, self-perceived health, exercise, medical information, lifestyle factors); F0-F1-F2 (grandmother-parent-child) buccal swab for DNA methylation; Variables collected in 2012: • brain imaging (MRI) (white matter hyper intensities, cerebral micro bleeds, total cortical, hippocampal and lacunar volume, brain perfusion, resting brain state conditions, BrainAge, brain perfusion), physical performance, visual acuity, cellular aging (telomere length); Variables collected in 2018: • daily life functioning, pain complaints, mood, memory, attention, and cognition, diseases, tasks and activities in daily life, social activities, quality of life, medical care consumption, stressful life events, health problems resulting from stressful events, and childhood experiences; Variables collected in 2019: • brain Imaging (MRI) (white matter hyper intensities, cerebral micro bleeds, structural total and area brain volumes, brain perfusion, BrainAge, resting brain state conditions, active brain state conditions during Stroop selective attention task)
Availability and type of -omic data	GWAS, DNA methylation, metabolomics, lipidomics
Design paper	Bleker et al. 2021 BMJ
Website	https://www.hongerwinter.nl/