

Name	<b>Donor InSight (DIS)</b>
Description	Donor InSight is a cohort study among the Dutch blood donor population. It aims to examine donor behavior, health effects of donation and donor characteristics. This is needed to enhance strategies to recruit new donors, minimize donor deferrals and monitor donor health.
Location	Nationwide
Lead Institute	Sanquin
Cohort size	DIS-I: 31,338 participants DIS-II: 34,823 participants DIS-III: 3,046 participants (sampled from the total donor population in the Netherlands)
Start Cohort	2007 (DIS-I)
Follow-up	2012 (DIS-II) 2015 (DIS-III)
Socio-demographic variables at baseline	<ul style="list-style-type: none"> <li>• Age</li> <li>• Sex</li> <li>• Highest educational attainment</li> <li>• Ethnicity</li> <li>• Marital status</li> <li>• Religion</li> <li>• Employment status</li> </ul>
Variables and Measurement methods	<p>Measurements: questionnaires, linkage to the Dutch donor database</p> <p>Variables in the Dutch donor database:</p> <ul style="list-style-type: none"> <li>• Number and timing of donations</li> <li>• Donation screening data, including blood pressure, haemoglobin levels, ferritin levels (from 2017 onwards on selected donations) and blood borne infections (HCV, HBV, HEV, HIV, HTLV and syphilis)</li> <li>• Donor deferrals + reasons for deferral</li> </ul> <p>Variables in DIS-III dataset:</p> <p><u>Questionnaires (<i>name questionnaires</i>)</u></p> <ul style="list-style-type: none"> <li>• Demographic characteristics</li> <li>• Donation-related symptoms</li> <li>• Donor behavior/motivation</li> <li>• Lifestyle (smoking, alcohol use)</li> <li>• Food Frequency Questionnaire (FFQ)</li> <li>• Diagnoses of disease, medication use</li> <li>• Family composition and medical history</li> <li>• Physical activity (IPAQ)</li> <li>• Menstruation (including PBAC), menopause and pregnancy</li> <li>• Health Status (SF12)</li> <li>• Cognitive functioning (cognitive failure questionnaire)</li> <li>• Iron deficiency-related symptoms (RLS, pica, fatigue)</li> </ul> <p><u>Measurements (DIS-III):</u></p> <ul style="list-style-type: none"> <li>• Full blood count (Sysmex)</li> <li>• Iron metabolism (ferritin, zinc protoporphyrin)</li> <li>• DNA isolation and SNP array (UK Biobank Axiome Array)</li> <li>• Blood lipid profile (total/HDL cholesterol, TG)</li> <li>• Accelerometer data in a subset of the participants (Actigraph)</li> </ul>

Availability and Type of -omic data	Genomic data is available in DIS-III participants Microbiome data is available in a subset of DIS-III participants
Design paper	<a href="#">Timmer et al. 2018</a>
website	<a href="http://www.sanquin.org/dis">www.sanquin.org/dis</a>