

## Age – harmonisation notes

### Studies (waves) with relevant data (ALL)

ALSPAC (1,2,3,4), Ballabeina (1,2), Belgian Preschool 1, Belgian Preschool 2, Belgian Preschool 3, CHAMPS UK, CHAMPS US, CLAN (1,2,3), CoSCIS (1,2,3), EYHS Denmark (1,2,3), EYHS Estonia, EYHS Norway (1,2), EYHS Portugal (1,2), HEAPS (1,2), IBDS (1-7), KISS (1,2,3), MAGIC, NHANES 2003-04, NHANES 2005-06, PEACH (1,2,3), Pelotas (1,2,3), SPEEDY (1,2,3), TAAG (1,2,3).

### Variable(s) created

<b>Name</b>	<b>Description / Coding</b>
ICAD_Age	Participant age in years. Missing coded as '999'

Variable derived for all available waves within each study.

ICAD\_Age was derived as elapsed time (in years) between participant date of birth and the date of accelerometer assessment for each available wave. Where an assessment wave did not include accelerometry (see study specific notes), ICAD\_Age was derived from supporting information provided by the study investigators (either participant age at that assessment or date on which participant completed the assessment). A small number of studies (Belgian Preschool 1, Belgian Preschool 3, NHANES 2003-04, NHANES 2005-06, IBDS) did not provide information on participant date of birth. In all cases, however, the study investigators submitted a derived age variable linked to each available wave of assessment.

Kinesoft outputs two variables (HeaderStartDate, FinalStartDate) that indicate the date on which accelerometer assessment took place. These are both provided in the 'Vitals' group of accelerometer variables. HeaderStartDate indicates the date on which the device was initialised. FinalStartDate indicates the date on which the first valid day of accelerometer data was collected. FinalStartDate was used preferentially when deriving the age variable. In cases where FinalStartDate was missing (n≈200) HeaderStartDate was used instead. The format of HeaderStartDate is inconsistent between and within studies (sometimes dd/mm/yyyy, sometimes mm/dd/yyyy). The Stata code used to ensure that day/month of assessment was coded appropriately is available on request. In most cases, the difference between HeaderStartDate and FinalStartDate was only a few days.

### Study specific notes

**ALSPAC** – Wave 4 was conducted when participants were approximately 17 years of age (Assessment name: Teen Focus 4). Accelerometry was not included as part of this assessment. For this wave, ICAD\_Age was derived from a variable (name: FJ003a) indicating age in months at the time of the clinic visit undertaken as part of the Teen Focus 4 assessment.

**Pelotas** – Wave 2 of Pelotas (conducted at approx' age 15 years) did not include accelerometer assessment. ICAD\_Age for wave 2 was calculated as elapsed time (in years) between participant date of birth and the date on which the participant completed the questionnaire as part of the wave 2 survey. Wave 3 of Pelotas (conducted at approx' age 18 years) did include accelerometry but this data was not included in ICAD. A range of non-accelerometer variables from this wave, however, are included in ICAD. The study investigators provided a variable indicating participant age at completion of wave 3.

**IBDS** - Information on participant date of birth was not provided by the study investigators. However, age at the point of accelerometer assessment was provided for each of the six waves of data collection.

**NHANES 2003-04 / 2005-06** - NHANES does not include participant date of birth in its downloadable data releases. Age in months (variable name: ridagemn) at the point of completing the screening interview is available. This was divided by 12 for use in ICAD\_Age.

**Belgian Preschool 1/3** - Information was provided on year of birth only. Participant age at the time of assessment was provided by the study investigators.