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The ORIGINS Project: A platform for nutrition research discovery

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The ORIGINS Project⁽¹⁾ is the largest longitudinal cohort study in Australia, recruiting 10,000 pregnant women and their partners in Perth, Western Australia, and following up until their children turn 5 years of age. The goal of the project is to reduce the rising epidemic of non-communicable disease, through a 'healthy start to life'. Data and biological samples are collected from the families at multiple time-points from pregnancy until early childhood. The comprehensive collection of data has developed an extensive biobank and databank which can be used as a platform for nutrition research. Data is collected on 'active' participants (in-depth data and sample collections), and 'non-active' participants (routine and linked data). Data collected includes nutrition, physical health, mental health, physical activity and environmental factors. Nutrition data is collected from mothers through the Australian Eating Survey⁽²⁾ and from children through the Food Frequency Questionnaire.⁽³⁾ Additional nutrition data is also collected, including method of infant feeding, nutritional supplements, food allergies, and the Mediterranean Diet Index.⁽⁴⁾ From a total cohort of over 5,000 mothers, the mean age was 31 years, body mass index was 25.1 kg/m² and half were of British (29%) or Australian (21%) descent. The majority of women were married (90%), almost half had a university degree (43%) and most were in paid employment (70%). During pregnancy, 77% were taking nutritional supplements, and 15% had a high Mediterranean Diet Index score.⁽⁴⁾ On leaving hospital, 49% were exclusively breastfeeding, 5% were formula feeding, and 17% were mixed feeding. At the 1-year timepoint, 3% of the cohort were identified as having a nut food allergy, and 9% had other food allergies. The ORIGINS Project provides a platform for researchers to assess nutrition and other facets of health in pregnant women and children, providing predictors of non-communicable diseases. The comprehensive nature of the data provides a unique and longitudinal insight into young families.

References

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