i) The database used: sample_data.Rda

This database is a subset of the original data I used in my undergraduate thesis entitled "A Study on the Effect of the Brazilian Conditional Cash Transfer Program on Child Nutrition." This extracted sample covers data from the northern region of Brazil, with 1786 observations of 39 variables. The original data comes from the POF (IBGE) for the years 2017-2018. The variables are:

- **ESTRATO_POF:** strata of the original research sampling plan;
- **ID:** household identifier;
- **carboidrato_f:** average consumption of carbohydrates by children in the household, measured in grams;
- **trat_dom:** dummy variable that identifies a household that is in the treatment group, that receives the PBF.
- **pesofinal_c:** sample weights;
- **branco:** dummy variable that identifies if the guardians of the children are white;
- **chefefamilia_mulher:** dummy variable that identifies if the head of household is a woman;
- **casado:** dummy variable that identifies if the guardians of the children are married;
- **n_filhos:** number of children in the household;
- **idaderesponsavel_m:** average age of guardians in the household;
- **idadefilhos_m:** average age of children in the household;
- **renda_percapita:** per capita income;
- **UF_i:** dummy variable that identifies each state of the country.

ii) What the code does: sample_script.R

The purpose of the script is to measure the impact of receiving conditional income transfers through the Bolsa Família Program (PBF) on children's carbohydrate consumption. To assess this, three methods have been considered and their algorithms developed. The primary method is Propensity Score Matching (PSM), given that the treated households self-select to participate in the program, leading to selection bias. The PSW method (considering the inverse probability of treatment) and Ordinary Least Squares (OLS) are used as comparison methods. It is important to highlight that all three models take into account the complex sample structure, meaning they incorporate the sample weights. Consequently, the algorithms were developed with this purpose in mind.

iii) Main outputs

Regarding the PSM method, the balance of covariates is assessed after the matching algorithm. Thus, the **"bal_t1"** table shows that the variables used to align the treatment group with the control group are comparable in their means. Furthermore, the **"t1"** table presents the overall results, indicating a positive and significant impact of the Bolsa Família Program (PBF) on carbohydrate consumption by children beneficiaries of the program, across the three models used.