PREVAILING DIETARY PATTERNS IN 5-6 YEAR OLD CHILDREN AND SOCIO-ECONOMIC STATUS: THE ABCD COHORT

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Rationale: Dietary patterns may be more predictive for weight development than individual foods or nutrients. We identified dietary patterns in children (aged 5-6y) in the multi-ethnic Amsterdam Born Children and their Development (ABCD) cohort.

Methods: A validated FFQ was completed by parents of 2,769 children (5.7±0.5y, 51% boys). Energy-adjusted intake (g/d) of 41 predefined food groups was calculated and dietary patterns were derived using PCA. Children were categorized in three socio-economic status (SES) groups based on mother’s post-primary education (<6y=low, n=313; 6-10y=middle, n=980; >10y=high, n=1476) and related to tertiles of dietary pattern scores to describe its association. GLM and Post-hoc Bonferroni test were used to test interaction between dietary pattern score and SES.

Results: PCA identified 4 major dietary patterns explaining 21% of the total variation of dietary intake. Pattern 1 “snacking” was defined by high component loadings on food groups snacks, biscuits, candy's and refined grain products; pattern 2 “full-fat” by high loadings on full-fat spreads and full-fat cheese; pattern 3 by high loadings on meats, sauces, boiled potatoes and healthy warm meals; and pattern 4 “healthy” was defined by high loadings on fruits, vegetables, fish, water/tea and whole grain breakfast products. Dietary pattern score was significantly related to SES (p<0.001). Children with high pattern scores on the “snacking” pattern were more often from low SES group (23%, vs “full-fat”10%, “meats” 15% and “healthy” 14%). Children with high pattern scores on the “full-fat” pattern were more often from high SES group (56%, vs “snacking” 35%, “meats 46% and “healthy” 49%).

Conclusion: In this multi-ethnic group where low SES was relatively underpresented, dietary pattern score was significantly related to SES. Further research investigating the consequences of dietary patterns on weight development is needed.

Disclosure of Interest: None Declared

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