

Dear Editor,

A COMPARISON OF MILK-FEEDING IN CHILDREN WITH NEURODEVELOPMENTAL DISORDERS

Research has shown that children with a neurodevelopmental disorder have greater food selectivity compared to children without a clinical diagnosis (1); however, less is known about early feeding practices and whether such practices predict later childhood food selectivity. In this retrospective pilot study, differences in milk-feeding and its relation to food selectivity (as measured by the Child Eating Behaviour Questionnaire; 2) were explored in ninety-eight mothers of children with a neurodevelopmental disorder (Tourette syndrome [TS] $n=27$; Autism Spectrum Disorders [ASD] $n=27$; Attention-Deficit/Hyperactive Disorder [ADHD] $n=17$) and a control group ($n=27$). Ethical approval was obtained by the University of Hertfordshire (protocol number: aLMS/PGT/UH/02784(4)). The descriptive statistics are detailed in Table 1. No differences in early milk-feeding practices, in terms of mode and duration between the groups, were identified ($p > .05$). While the duration of being formula-fed failed to predict childhood food selectivity in any of the groups, breastfeeding duration did positively predict greater food selectivity for children with ASD ($R^2 = .30$, $F [1, 20] = 8.70$, $p = .01$, $\beta = .55$, $p = .01$). Previous research has indicated that mothers of children with ASD do not recall concerns with feeding, such as latching or early weight gain, prior to the age of six months. Although, children have been found to be slower feeders and accept food later during infancy (3), which may provide a possible explanation for the longer breastfeeding duration predicting greater levels of food selectivity in children with ASD. It is possible that other factors, such as sensory properties of food and family environment, are more prominent and are likely to override any early influence of milk-feeding in these groups (4).

We conclude that these initial findings indicate no differences in early milk-feeding practices for children with and without a neurodevelopmental disorder, although further research is needed to investigate these findings and confirm these conclusions. To fully understand the development of eating patterns in children with TS future research could investigate possible differences during the weaning phase when solids, which have greater sensory variations, are introduced. Due to the limited sample size, it was also beyond the scope of the current study to explore differences between children who had a mixture of breast and formula milk

compared to children who only had one form of milk and subsequently, should be considered in future research as this limited the conclusions we can draw from this pilot study.

Table 1. Descriptive statistics for milk feeding across the four groups.

	CG (n=27)	TS (n=27)	ASD(n=27)	ADHD(n=17)
Demographics				
Age (y)	9.72(2.38)	10.21(2.58)	10.46(3.23)	10.81(3.57)
Height (cm)	143.45(16.51)	146.72(17.61)	144.74(26.43)	147.83(28.02)
Weight (kg)	37.39(18.39)	39.38(17.76)	42.43(19.21)	60.53(10.56)
BMIz	-.48(1.94)	.55(4.08)	.94(1.34)	.60(2.20)
Birth weight (kg)	3.53(.56)	3.56(.52)	3.26(.65)	3.42(.71)
Maternal age at birth (y)	27.61(6.10)	30.27(7.63)	31.03(3.47)	31.60(6.90)
Milk feeding				
<i>Breastfed duration (months)</i>	8.78(6.18)	6.98(12.31)	10.76(11.65)	8.35(8.13)
<2 months	3	6	1	3
2–6 months	4	9	5	3
>6 months	11	3	10	6
Never breastfed	9	9	12	5
<i>Formula-fed duration (months)</i>	9.20(5.13)	13.25(7.28)	11.55(5.75)	12.43(4.57)
<2 months	0	0	0	0
2–6 months	8	4	7	1
>6 months	12	16	15	12
Never formula-fed	7	4	4	2

Data presented are means (SD) values or number, as indicated

CG=Control group; TS=Tourette syndrome; ASD=Autism Spectrum Disorders; ADHD=Attention-Deficit/Hyperactive Disorder

References

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