



1 Article

2 **The Use of Added Salt and Sugar in the Diet of Polish and Austrian Toddlers.**
3 **Associated Factors and Dietary Patterns, Feeding and Maternal Practices**

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Table S1. Univariate regression analysis models of factors influencing the use of added salt, sugar, and salt and sugar in Polish toddlers (*n* = 4110).

Variable	12 - 24 months (<i>n</i> = 2680)			25 - 36 months (<i>n</i> = 1430)		
	AS OR (95% CI)	ASu OR (95% CI)	AS&Su OR (95% CI)	AS OR (95% CI)	ASu OR (95% CI)	AS&Su OR (95% CI)
Toddler age:	1.18 (1.16 – 1.21)***	1.14 (1.11 – 1.16)***	1.16 (1.14 – 1.19)***	1.02 (0.99 – 1.06)	1.02 (0.99 – 1.05)	1.01 (0.98 – 1.04)
Maternal age:						
< 25 years	0.88 (0.62 – 1.24)	1.27 (0.89 – 1.81)	1.13 (0.77 – 1.65)	1.54 (0.76 – 3.14)	2.38 (1.22 – 4.63)**	2.28 (1.24 – 4.22)**
25–29 years	0.93 (0.79 – 1.10)	1.03 (0.87 – 1.23)	1.04 (0.86 – 1.26)	1.38 (1.03 – 1.85)*	1.45 (1.12 – 1.89)**	1.46 (1.13 – 1.88)**
30–34 years	1	1	1	1	1	1
35–39 years	1.06 (0.83 – 1.35)	0.81 (0.62 – 1.06)	0.85 (0.64 – 1.13)	1.29 (0.92 – 1.82)	0.95 (0.71 – 1.28)	1.10 (0.82 – 1.47)
≥ 40 years	0.73 (0.37 – 1.43)	0.24 (0.08 – 0.69)**	0.35 (0.12 – 1.00)*	1.45 (0.58 – 3.62)	0.67 (0.31 – 1.42)	0.83 (0.39 – 1.78)
Maternal education:						
Primary and vocational	2.41 (1.06 – 5.46)*	1.81 (0.87 – 3.77)	2.67 (1.28 – 5.56)**	3.28 (0.41 – 25.98)	1.65 (0.43 – 6.42)	2.33 (0.60 – 9.06)
High school	1.16 (0.91 – 1.46)	1.19 (0.94 – 1.52)	1.30 (1.01 – 1.68)*	1.69 (1.10 – 2.59)*	1.13 (0.80 – 1.58)	1.26 (0.90 – 1.75)
University	1	1	1	1	1	1
Parity:						
Primiparias	1	1	1	1	1	1
Multiparias	1.81 (1.52 – 2.16)***	1.34 (1.13 – 1.60)***	1.54 (1.28 – 1.85)***	1.41 (1.11 – 1.80)**	1.30 (1.05 – 1.61)**	1.36 (1.10 – 1.68)**
Living area:						
Rural	1.14 (0.93 – 1.39)	1.22 (0.99 – 1.49)	1.23 (0.99 – 1.53)	1.20 (0.86 – 1.66)	1.34 (1.01 – 1.79)*	1.34 (1.02 – 1.77)*
Urban	1	1	1	1	1	1
Macroeconomic region (GDP EU-28 average):						
47–50%	1.12 (0.87 – 1.45)	0.95 (0.72 – 1.24)	0.93 (0.70 – 1.24)	1.00 (0.66 – 1.51)	1.18 (0.82 – 1.70)	1.11 (0.77 – 1.59)
51–100%	0.98 (0.81 – 1.18)	1.03 (0.85 – 1.25)	0.94 (0.77 – 1.16)	0.98 (0.73 – 1.30)	1.14 (0.89 – 1.47)	1.13 (0.88 – 1.45)
101–110%	1	1	1	1	1	1
Average monthly income per capita (PLN):						

SOCIODEMOGRAPHIC FACTORS

	<500	1.68 (0.85 – 3.33)	1.09 (0.54 – 2.22)	1.86 (0.91 – 3.83)	2.51 (0.71 – 8.85)	2.27 (0.80 – 6.40)	2.56 (0.96 – 6.82)
	500–1000	1.37 (1.02 – 1.85)*	1.41 (1.03 – 1.92)*	1.75 (1.25 – 2.47)***	1.31 (0.83 – 2.07)	1.05 (0.70 – 1.58)	1.12 (0.75 – 1.67)
	1001–2000	1.17 (0.90 – 1.51)	1.17 (0.88 – 1.54)	1.33 (0.98 – 1.82)	1.13 (0.77 – 1.65)	0.93 (0.66 – 1.31)	1.00 (0.72 – 1.41)
	2001–2500	1.43 (1.07 – 1.91)**	1.34 (0.99 – 1.81)	1.68 (1.20 – 2.34)**	1.23 (0.80 – 1.89)	1.03 (0.70 – 1.52)	1.02 (0.69 – 1.49)
	2501–3000	1	1	1	1	1	1
	≥3001	0.98 (0.74 – 1.28)	0.95 (0.71 – 1.28)	1.11 (0.79 – 1.55)	1.11 (0.74 – 1.66)	0.83 (0.58 – 1.20)	0.82 (0.57 – 1.17)
FEEDING-RELATED FACTORS	Timing of CFI:						
	<4 months	1.53 (0.87 – 2.67)	1.30 (0.74 – 2.29)	1.24 (0.67 – 2.29)	1.98 (0.94 – 4.19)	0.83 (0.46 – 1.50)	1.06 (0.59 – 1.91)
	4–6 months	1.36 (1.16 – 1.59)***	1.08 (0.91 – 1.27)	1.25 (1.04 – 1.49)*	1.48 (1.16 – 1.90)**	1.26 (1.01 – 1.58)*	1.40 (1.12 – 1.75)**
	≥7 months	1	1	1	1	1	1
	Complementary feeding method:						
	Spoon feeding	1.45 (1.21 – 1.74)***	0.99 (0.82 – 1.19)	1.14 (0.93 – 1.38)	1.15 (0.87 – 1.53)	1.09 (0.85 – 1.39)	1.12 (0.88 – 1.42)
	Mixed	1	1	1	1	1	1
	BLW	0.70 (0.57 – 0.87)***	1.00 (0.80 – 1.24)	0.82 (0.64 – 1.05)	0.70 (0.52 – 0.95)*	0.67 (0.50 – 0.88)**	0.66 (0.50 – 0.88)**
	Types of CF:						
	Commercial	1.59 (1.28 – 1.97)***	0.87 (0.70 – 1.09)	1.09 (0.85 – 1.39)	0.96 (0.69 – 1.34)	0.97 (0.73 – 1.30)	1.02 (0.77 – 1.36)
	Homemade	1.22 (1.02 – 1.45)*	0.96 (0.80 – 1.16)	1.14 (0.94 – 1.40)	0.99 (0.75 – 1.30)	0.99 (0.78 – 1.27)	0.98 (0.77 – 1.24)
	Family	1	1	1	1	1	1
	Currently BF:						
	No	1.77 (1.51 – 2.07)***	1.30 (1.11 – 1.53)**	1.48 (1.25 – 1.77)***	1.51 (1.17 – 1.95)**	1.07 (0.85 – 1.35)	1.20 (0.95 – 1.51)
	Yes	1	1	1	1	1	1
	EBF duration:						
	Never BF	1.35 (0.94 – 1.93)	1.61 (1.13 – 2.31)**	1.60 (1.09 – 2.33)*	2.51 (1.31 – 4.81)**	1.34 (0.82 – 2.21)	1.51 (0.93 – 2.46)
	Never EBF	1.06 (0.89 – 1.25)	1.03 (0.86 – 1.23)	1.07 (0.88 – 1.30)	1.34 (1.02 – 1.75)*	1.15 (0.90 – 1.47)	1.21 (0.95 – 1.54)
1–3 months	2.00 (1.10 – 3.62)*	0.94 (0.51 – 1.72)	1.41 (0.77 – 2.60)	1.52 (0.67 – 3.44)	1.04 (0.52 – 2.08)	1.36 (0.68 – 2.71)	
4–5 months	2.08 (1.52 – 2.86)***	1.80 (1.33 – 2.44)***	1.98 (1.45 – 2.71)***	1.97 (1.26 – 3.08)**	1.21 (0.83 – 1.76)	1.38 (0.95 – 1.98)	
6–7 months	1	1	1	1	1	1	
>7 months	0.80 (0.21 – 2.99)	0.26 (0.03 – 2.06)	0.39 (0.05 – 3.11)	0.79 (0.23 – 2.74)	0.93 (0.28 – 3.11)	0.95 (0.29 – 3.17)	

AS – added salt; ASu – added sugar; AS&Su – added salt and sugar; BF – breastfeeding; BLW – Baby-Led Weaning; CF – complementary foods; CFI – complementary feeding introduction;

CI – confidence interval; CF – complementary foods; EBF – exclusive breastfeeding; GDP – Gross Domestic Product; OR – odds ratio; TSF – traditional spoonfeeding;

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$.

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Table S2. Univariate regression analysis models of factors influencing the use of added salt, sugar, and salt and sugar in Austrian toddlers ($n = 1783$).

Variable	12 - 24 months ($n = 941$)			25 - 36 months ($n = 842$)		
	AS OR (95% CI)	ASu OR (95% CI)	AS&Su OR (95% CI)	AS OR (95% CI)	ASu OR (95% CI)	AS&Su OR (95% CI)
Toddler age:	1.16 (1.11 – 1.21)***	1.13 (1.09 – 1.18)***	1.14 (1.09 – 1.18)***	1.02 (0.97 – 1.08)	1.04 (1.00 – 1.08)*	1.05 (1.01 – 1.09)*
Maternal age:						
< 25 years	1.56 (0.78 – 3.11)	1.17 (0.65 – 2.12)	1.24 (0.69 – 2.23)	0.58 (0.19 – 1.81)	0.72 (0.30 – 1.70)	0.61 (0.25 – 1.49)
25–29 years	1.08 (0.75 – 1.56)	0.99 (0.70 – 1.40)	0.97 (0.68 – 1.38)	0.77 (0.45 – 1.31)	0.87 (0.61 – 1.24)	0.88 (0.62 – 1.26)
30–34 years	1	1	1	1	1	1
35–39 years	0.97 (0.66 – 1.42)	0.85 (0.58 – 1.25)	0.85 (0.58 – 1.26)	0.85 (0.51 – 1.42)	0.91 (0.65 – 1.27)	0.88 (0.63 – 1.23)
≥ 40 years	0.89 (0.40 – 2.00)	0.99 (0.44 – 2.21)	1.05 (0.47 – 2.34)	0.64 (0.29 – 1.42)	1.11 (0.63 – 1.96)	1.07 (0.61 – 1.89)
Maternal education:						
Primary and vocational	1.28 (0.90 – 1.80)	1.32 (0.96 – 1.81)	1.34 (0.98 – 1.85)	1.01 (0.63 – 1.61)	1.06 (0.77 – 1.45)	1.01 (0.74 – 1.39)
High school	0.51 (0.25 – 1.06)	0.78 (0.33 – 1.84)	0.68 (0.28 – 1.69)	2.21 (0.52 – 9.44)	1.57 (0.77 – 3.21)	1.43 (0.70 – 2.91)
University	1	1	1	1	1	1
Parity:						
Primiparias	1	1	1	1	1	1
Multiparias	1.48 (1.09 – 2.01)**	1.82 (1.37 – 2.43)***	1.82 (1.36 – 2.44)***	0.85 (0.55 – 1.30)	1.10 (0.83 – 1.45)	1.13 (0.85 – 1.49)
Living area:						
Rural	1.47 (1.10 – 1.98)**	1.72 (1.28 – 2.31)***	1.73 (1.28 – 2.34)***	1.16 (0.77 – 1.75)	1.23 (0.94 – 1.62)	1.20 (0.91 – 1.58)
Urban	1	1	1	1	1	1
Macroeconomic region (GDP EU-28 average):						
47–50%	-	-	-	-	-	-
51–100%	1.18 (0.58 – 2.38)	1.43 (0.78 – 2.60)	1.48 (0.81 – 2.70)	3.55 (0.83 – 15.12)	0.38 (0.19 – 0.74)**	0.39 (0.20 – 0.76)**
101–110%	1	1	1	1	1	1
111–130%	0.83 (0.57 – 1.19)	1.20 (0.85 – 1.69)	1.15 (0.81 – 1.63)	1.11 (0.68 – 1.83)	0.81 (0.58 – 1.14)	0.76 (0.54 – 1.06)
131–150%	1.01 (0.58 – 1.75)	0.64 (0.36 – 1.13)	0.61 (0.34 – 1.10)	2.07 (0.91 – 4.75)	0.64 (0.41 – 1.02)	0.63 (0.40 – 1.00)
>150%	0.66 (0.44 – 1.01)	0.85 (0.55 – 1.32)	0.82 (0.53 – 1.28)	0.97 (0.55 – 1.71)	0.58 (0.39 – 0.86)**	0.56 (0.37 – 0.83)*
Average monthly income per capita (EUR):						

SOCIODEMOGRAPHIC FACTORS

	<1000	0.91 (0.45 – 1.81)	0.97 (0.47 – 1.99)	1.19 (0.57 – 2.51)	1.42 (0.62 – 3.23)	0.97 (0.53 – 1.77)	0.90 (0.49 – 1.65)
	1000-1500	1.22 (0.68 – 2.21)	1.51 (0.84 – 2.72)	1.66 (0.90 – 3.07)	2.26 (1.12 – 4.58)*	1.19 (0.74 – 1.93)	1.18 (0.73 – 1.91)
	1501-2000	1.24 (0.71 – 2.15)	1.00 (0.57 – 1.77)	1.24 (0.69 – 2.25)	1.51 (0.82 – 2.78)	1.15 (0.73 – 1.81)	1.15 (0.73 – 1.82)
	2001-3000	1.07 (0.61 – 1.87)	1.18 (0.66 – 2.09)	1.40 (0.77 – 2.55)	1.67 (0.88 – 3.17)	1.10 (0.69 – 1.75)	1.10 (0.69 – 1.76)
	3001-5000	1	1	1	1	1	1
	≥5001	1.04 (0.30 – 3.62)	1.50 (0.46 – 4.92)	1.85 (0.56 – 6.15)	1.65 (0.45 – 6.05)	1.43 (0.60 – 3.42)	1.26 (0.53 – 3.02)
	Timing of CFI:						
	<4 months	1.11 (0.51 – 2.43)	0.85 (0.39 – 1.87)	0.76 (0.34 – 1.71)	1.85 (0.61 – 5.60)	1.21 (0.60 – 2.45)	1.00 (0.49 – 2.04)
	4-6 months	1.13 (0.79 – 1.62)	0.99 (0.69 – 1.40)	0.96 (0.67 – 1.36)	1.70 (1.07 – 2.71)*	1.02 (0.73 – 1.44)	1.00 (0.71 – 1.41)
	≥7 months	1	1	1	1	1	1
	Complementary feeding method:						
	Spoon feeding	0.89 (0.64 – 1.22)	1.10 (0.81 – 1.49)	1.06 (0.78 – 1.45)	1.25 (0.78 – 2.02)	1.04 (0.77 – 1.40)	0.99 (0.73 – 1.33)
	Mixed	1	1	1	1	1	1
	BLW	0.60 (0.39 – 0.92)*	0.71 (0.44 – 1.13)	0.66 (0.41 – 1.08)	0.63 (0.37 – 1.08)	0.83 (0.55 – 1.24)	0.77 (0.51 – 1.15)
	Types of CF:						
	Commercial	1.33 (0.86 – 2.06)	1.08 (0.72 – 1.62)	1.17 (0.78 – 1.77)	2.05 (1.08 – 3.87)*	0.99 (0.67 – 1.46)	1.03 (0.70 – 1.51)
	Homemade	1.00 (0.70 – 1.41)	0.90 (0.64 – 1.28)	0.96 (0.68 – 1.36)	1.12 (0.70 – 1.79)	0.93 (0.67 – 1.30)	0.93 (0.67 – 1.30)
	Family	1	1	1	1	1	1
	Currently BF:						
	No	1.88 (1.39 – 2.53)***	1.73 (1.27 – 2.35)***	1.72 (1.26 – 2.35)***	1.13 (0.69 – 1.88)	1.01 (0.72 – 1.43)	1.08 (0.76 – 1.53)
	Yes	1	1	1	1	1	1
	EBF duration:						
	Never BF	0.89 (0.50 – 1.58)	1.20 (0.67 – 2.12)	1.20 (0.67 – 2.12)	1.92 (0.77 – 4.79)	1.89 (1.13 – 3.16)*	1.71 (1.02 – 2.86)*
	Never EBF	1.41 (0.94 – 2.10)	1.29 (0.88 – 1.88)	1.19 (0.81 – 1.74)	1.08 (0.63 – 1.85)	1.52 (1.05 – 2.20)*	1.42 (0.98 – 2.06)
	1-3 months	0.71 (0.39 – 1.31)	1.19 (0.63 – 2.24)	0.91 (0.47 – 1.78)	1.07 (0.46 – 2.46)	1.57 (0.90 – 2.76)	1.38 (0.79 – 2.43)
	4-5 months	1.00 (0.67 – 1.50)	1.00 (0.66 – 1.51)	0.96 (0.63 – 1.45)	1.14 (0.65 – 1.99)	1.45 (0.99 – 2.12)	1.40 (0.96 – 2.05)
	6-7 months	1	1	1	1	1	1
	>7 months	1.38 (0.50 – 3.85)	1.47 (0.60 – 3.60)	1.47 (0.60 – 3.60)	0.41 (0.15 – 1.14)	1.35 (0.56 – 3.27)	1.35 (0.56 – 3.27)

AS – added salt; ASu – added sugar; AS&Su – added salt and sugar; BF – breastfeeding; BLW – Baby-Led Weaning; CF – complementary foods; CFI – complementary feeding introduction;

CI – confidence interval; CF – complementary foods; EBF – exclusive breastfeeding; GDP – Gross Domestic Product; OR – odds ratio; TSF – traditional spoonfeeding;

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$.

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Table S3. Sources of knowledge about children nutrition according to the country, age group and use of added salt, sugar, and both salt and sugar.

Variable	12 - 24 months						25 - 36 months						
	AS		ASu		AS&Su		AS		ASu		AS&Su		
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	
Poland	Internet	93.1	94.3	93.9	93.6	93.5	93.8	90.9	88.8	88.4	91.7*	92.1	88.5*
	Books	62.2	68.5***	64.2	65.7	62.0	66.3*	62.6	72.4***	69.2	62.3**	61.2	69.2**
	Magazines	14.3	11.4*	13.0	12.8	13.9	12.5	15.8	16.7	14.3	17.2	17.8	14.2
	TV	4.7	2.0***	4.5	2.8*	5.2	2.8**	3.6	3.6	3.9	3.3	3.4	3.7
	Family or friends	49.9	40.6***	49.6	43.3**	53.2	42.7***	47.1	39.9**	40.5	48.5**	49.9	40.5***
	Doctor or midwife	32.0	27.7	31.6	29.1	32.5	29.1	34.7	32.5	33.4	34.6	35.0	33.2
	Nutritionist or dietitian	11.4	15.8***	12.2	14.2	10.7	14.5**	8.2	11.5	10.4	8.1	7.9	10.2
Austria	Internet	85.2	86.5	85.1	85.7	84.9	85.8	80.7	81.1	81.4	80.1	81.3	80.1
	Books	80.7	79.7	76.6	81.9	76.5	81.9	80.7	83.0	82.0	79.8	81.8	80.1
	Magazines	26.8	27.0	26.8	26.9	25.9	27.2	29.9	36.8	30.9	30.6	31.3	30.1
	TV	8.1	7.6	8.4	7.8	8.0	8.0	7.5	11.3	7.0	9.1	7.5	8.5
	Family or friends	82.4	77.6	86.2	79.3*	87.3	79.0**	77.3	71.7	74.3	79.3	74.7	79.0
	Doctor or midwife	65.5	63.7	71.6	62.5**	71.7	62.6**	67.1	59.4	63.2	69.7*	63.1	69.9*
	Nutritionist or dietitian	36.8	50.2***	33.3	42.8**	33.1	42.8**	35.6	48.1**	39.3	34.7	39.7	34.0

AS – added salt; ASu – added sugar; AS&Su – added salt and sugar; * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$.

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