

Title: Sodium consumption patterns according to sociodemographic characteristics in an Ecuadorian population

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Background and Objectives

The World Health Organization (WHO), states that one of the most important risk factors in the emergence of chronic non communicable diseases (NCDs), is the high consumption of sodium and salt in the diet. Due to this, the average of sodium intake in an Ecuadorian population was studied according to its sociodemographic characteristics.

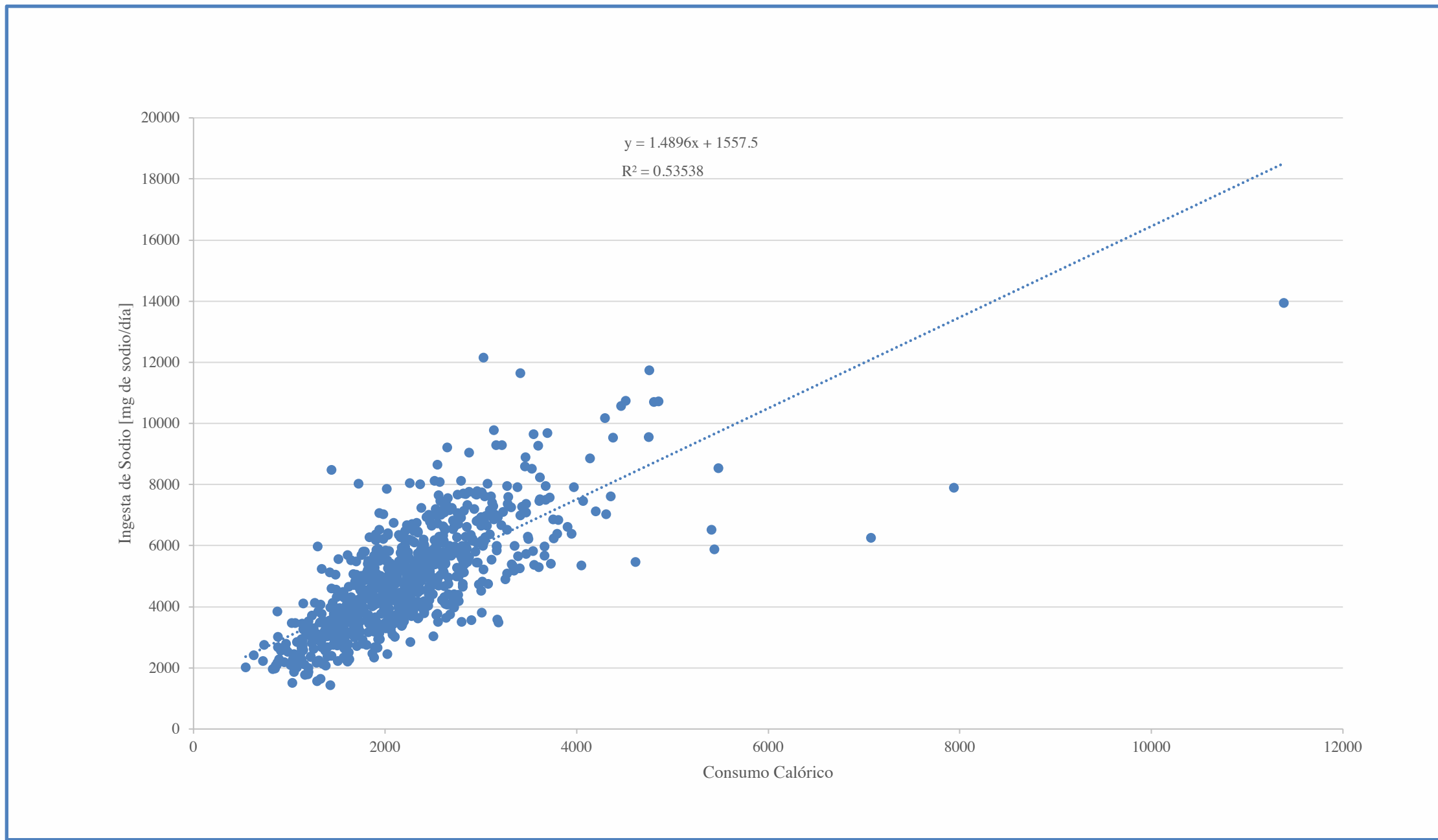
Methods

A sample of 800 Ecuadorian participants between 15 and 65 years old, living in the urban area of different cities of the Coast and Sierra of Ecuador, was studied. Two 24-hour recall surveys were performed according to the multi-step methodology on non-consecutive days, so it can be determined the relationship of average sodium intake and total caloric intake per day. Sodium intake was analyzed according to the different sociodemographic characteristics (sex, age, region of residence and socioeconomic level) by applying statistical tests T-student, one-way ANOVA and Post Hoc Bonferroni.

Results

GENERAL CHARACTERISTICS OF THE SAMPLE (n 800)						
		Men		Women		Total
		n=397	49.6%	n=403	50.4%	N=800 100%
Region						
Costa	215	54.2%	225	55.8%	440	55%
Sierra	182	45.8%	178	44.2%	360	45%
Age range (years)						
15 a 19.9	72	18.1%	56	13.9%	128	16%
20 a 34.9	164	41.3%	152	37.7%	316	39.5%
35 a 49.9	106	26.7%	116	28.8%	222	27.75%
50 a 65	55	13.9%	79	18.9%	134	16.75%
Socioeconomic level						
Alto	49	12.3%	55	13.6%	104	13%
Medio	150	37.8%	147	36.5%	297	37.1%
Bajo	198	49.9%	201	49.9%	399	49.9%

INTAKE OF SODIUM IN RELATION TO CALORIC INTAKE



Conclusions

- The average sodium intake found exceeds the amount of sodium recommended by the World Health Organization (2300 mg) by 113%.
- There is a positive correlation coefficient between the caloric and sodium intake.
- The foods that contribute more sodium in the Ecuadorian diet (popcorn, bacon, pork rind) are not necessarily the most consumed.

Conflict of interest

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Keywords: Sodium, chronic non communicable diseases, consumption pattern, sociodemographic.

Further Collaborators: On behalf of ELANS Study Group.

AVARAGE SODIUM INTAKE (mg), ACORDING TO THE CHARACTERISTICS OF THE SAMPLE

Demographic variables	Average of sodium/day (mg)	Statistical Significance (valor p)
Sex	Men 5387,4	0.00
	Women 4423,7	
Region	Costa 4953,8	0,38
	Sierra 4838,5	
Age range	15 to 19.9 4779,8	0,00
	20 to 34.9 5195,2	
	35 to 49.9 4823,9	
	50 to 65 4456,5	
Socioeconomic level	High 4794,6	0,78
	Medium 4962,1	
	Low 4908	
Total average		4901.9

SODIUM CONTENT (mg) OF FOOD CONSUMED BY THE SAMPLE OF THE STUDY

Food	Sodium content (mg) in 100 g of food
Popcorn	2667.2
Bacon	2667.2
Pork rind	2310
Pigskin	1818
Olives	1556
Parmesan cheese	1529
Cured ham	1500
Swiss cheese	1370
Chicken sausage	1250
Sausage	1235