

## Short Note

# Iodized Salt Intake and Goiter Reduction: A Study in a Small Population of Southern Italy

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Salt iodization is recommended by the WHO as a strategy to eradicate iodine deficiency disorders [1]. The second survey on iodine nutrition performed by the Italian National Observatory for Monitoring Iodine Prophylaxis (OSNAMI) at the Italian National Institute of Health (years 2015–2019) showed that 71% of the Italian families used iodized salt and reported goiter reduction in schoolchildren (11–13 years) [2,3].

In line with such results, we here report evidence obtained in an adult population (age range: 17–45) residing in Tufo, a small town in Campania. In the population of the Southern Italy macro area, the small risks associated to iodine supplementation are far outweighed by the substantial benefits of correcting iodine deficiency [4]. We analysed data obtained from the study of 200 individuals (77% males and 23% women), who underwent thyroid examination and echography. Goiter nodules were observed in the 37.6% of females and the 47.8% of males. The 69% of the studied subjects habitually took iodized salt. We compared these data with those we obtained, in 1990–93, in a study of 45 adults of the same community (i.e., residing in Tufo) and age range, in 1990–93; notably, only the 1.03% of them consumed iodized salt. The 86% of this population presented with thyroid goiter nodules. A chi-squared analysis of the correlation between iodized salt intake and detection of thyroid nodules resulted in a  $p$  value  $<0.0001$  (Figure 1).

Therefore, it appears that the increased consumption of iodized salt has led, in this small population whose habitat can be considered invariant from 1990 to today, to a great reduction in the incidence of thyroid goiter. In accordance with more extensive and significant studies, our results reflect the efficacy of the Italian model of iodine prophylaxis.

## REFERENCES

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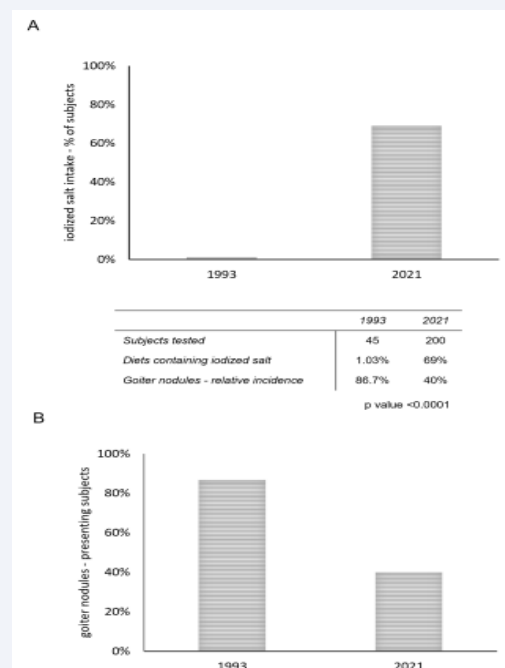
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## Keywords

- Iodized salt, Goiter, Thyroid, Southern Italy



**Figure 1** Comparison of data collection campaigns: A) Presence of iodized salt in the diets of the subjects included the two observational campaigns; B) Incidence (%) of goiter nodules in the observed population.

Dati 2015–2019. Roma: Istituto Superiore di Sanità, 2021; Rapporti ISTISAN 21/6.

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