


# Intention to Return in Residents of Tomioka, Fukushima Prefecture, Japan Stratified by Sex After the Accident at Fukushima Daiichi Nuclear Power Station

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## Abbreviation:

ITR: intention to return

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To the Editor,

Recently, we identified factors associated with intention to return (ITR) in residents of Tomioka Town, Fukushima Prefecture (Japan) and found that being male, as well as risk perceptions on radiation exposure and health effects, were significantly associated with ITR.<sup>1</sup> Since we noted that factors which might be associated with ITR differed between men and women, we conducted an additional study to identify the factors associated with ITR in male and female residents of Tomioka Town, respectively.

We conducted logistic regression analysis and revealed that, for both men and women, consultation requests for radiation health effects were positively associated with ITR, and anxiety about personal health effects was negatively associated with ITR (Table 1). In contrast, having been born in Tomioka was positively significantly associated with ITR only in men, whereas anxieties about drinking tap water and consuming food were negatively associated with ITR only in women.

These results suggested that attachment to one's hometown is an important key factor for ITR in men, whereas the safety of food and water is a key factor for ITR in women. A previous study showed that risk perception and anxiety were consistently high among women following a nuclear disaster.<sup>2</sup> In the recovery phase of a nuclear disaster, it is important for specialists to communicate with women, especially about the safety of food and water in their hometown.

Eight years have passed since the accident in Fukushima. For the recovery of the community in Fukushima, risk communication about radiation exposure and the health effects considering the background of each resident is essential.

## References

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	Unit	Model 1				Model 2			
		Men		Women		Men		Women	
		OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Born in Tomioka	Yes/No	2.0 <sup>a</sup>	1.55–2.76	0.9	0.97–1.02	1.9 <sup>a</sup>	1.44–2.76	1.1	0.96–1.02
Anxiety about personal health effects	Yes/No	0.3 <sup>a</sup>	0.20–0.44	0.4 <sup>a</sup>	0.27–0.62	0.3 <sup>a</sup>	0.18–0.38	0.5 <sup>a</sup>	0.30–0.72
Anxiety about drinking tap water	Yes/No	0.7	0.49–1.11	0.4 <sup>a</sup>	0.26–0.72		–		–
Anxiety about consuming food	Yes/No		–		–	1.0	0.65–1.45	0.4 <sup>a</sup>	0.24–0.65
Consultation request for radiation health effects	Yes/No	3.9 <sup>a</sup>	2.71–5.30	2.5 <sup>a</sup>	1.75–3.70	3.9 <sup>a</sup>	2.70–5.51	2.6 <sup>a</sup>	1.79–3.80

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**Table 1.** Factors Associated with ITR in Residents of Tomioka Stratified by Sex  
Abbreviation: ITR, intention to return.

<sup>a</sup>P <.01.