Airline Food Allergy Risk Communication

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Introduction

There are over 170 foods known to provoke allergic reactions; of these, the most common foods responsible for inducing 90% reported allergic reactions are peanuts, milk, eggs, wheat, nuts (e.g., hazelnuts, walnuts, etc.), soybeans, fish, crustaceans and shellfish[1]. In aviation, allergy research showed that common reactions occurring on commercial airlines include those associated with peanuts and tree nuts. Peanut and nut allergies cause considerable concern due to the fact that it is responsible for the majority of severe food allergic reactions–anaphylaxis. However, limited data exists detailing the prevalence and characteristics of in-flight reactions to foods.

This study aimed to investigate inclusion of food-allergy control in airline management policies and risk-based information provision for passengers with food allergies.

Methods

- **Study design:** This study is qualitative in nature collated publically available information from airline websites to determine food allergy polices.
- **Approach:** For research and consulting in the aviation industry, Skytrax is a leading company in the world specialized in studying aviation. Many studies in the aviation sector have been based on the Skytrax results. Similarly, this study investigated the websites of the best European airlines in 2018 as classified by Skytrax[1].
- **Sampling:** This study purposively surveyed the websites of "The best European airlines" as in 2018 were classified by Skytrax**.**
- **Analysis of data:** Publically available data was obtained from airlines' websites and was classified, coded and categorized using NVivo10, and was thematically analysed using a content analysis approach.

Ethics approval was obtained from Fayoum University to conduct this research (2019).

References

1.Greenhawt, M, MacGillivray, F, Batty, G. Said, M. Weiss C. (2013) International study of risk-mitigating factors and in-flight allergic reactions to peanut and tree nut. *The Journal of Allergy and Clinical Immunology: In Practice*; 1 (2): 186-194

Results

- Overall, 75% of airline policies included in this study (n=39) published a food allergy related policy on their websites (Table 1); 76% of such airlines focused on nut and/or peanut allergy.
- Of the 25% airlines without food allergy policies, 40% provided special meals, including gluten-free meal (GFML); however, no food allergy policy was available on such websites.
- While 40% of airlines reportedly served nut and peanuts products; over half (57%) of airlines with policies airlines were found to serve peanut/tree nut free meals.
- All airlines sampled reported they could not guarantee that food served on board is completely peanuts/peanut products free or that other passengers do not bring such products with them.
- 30% airlines allowed food allergy passengers to bring their own foods.
- The majority of airlines (55-62%) required passengers with a food allergy to inform airlines at time of ticket purchase, and to report the allergy to cabin crew when boarding the aircraft. This is indicated in the International Air Travel Association requirements for 'Allergen-Sensitive Passengers'

Table 1. Summary of airline food allergy policies (n=39).

Themes/criteria	Total n (%)
Available allergy policy	29 (74.4)
Tip bringing allergy medicine	21 (53.8)
Making a request of the airline while ticket buying.	18 (46.2)
Peanut/tree nut free meals.	17 (43.6)
Inform cabin crew of your allergy when boarding.	16 (41.0)
Emergency medication protocol.	13 (33.3)
Solid snack policy	13 (33.3)
Serving nut and peanuts products.	12 (30.8)
Bringing own foods.	9 (23.1)
Allergy/ asthma training.	9 (23.1)
Creating a buffer zone/ inclusion area.	8 (20.5)
Announcement that passengers not eat peanut/tree nuts.	8 (20.5)
Wiping their seat and tray table.	2 (5.1)
Avoiding use of an airline-provided pillow and blanket.	1 (2.6)

Conclusions

- **This study demonstrates that airline communication about food allergy via websites is lacking and varied approaches to airline food allergy policy was determined.**
- **A lack of airline allergen policy may result in food-allergic passengers' exposure to food safety risks during air travel.**
- **Further, more extensive research is required to investigate airline allergen policies from a international perspective, accounting for long- and short-haul flights.**

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