

Psychological characteristics associated with food avoidance
behaviour and perceived (non-medically diagnosed) food
intolerance in Australia

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ABSTRACT OF THESIS

Background

The aim of this thesis was to increase understanding of the discrepancy reported in the literature between perceived and medically diagnosed food intolerance. It also addressed the emerging trend in modern health decision making towards self-diagnosis and self-management of symptoms through the use of non-medically supervised exclusion diets. The hypothesis was investigated that specific individual-level psychological characteristics may underpin this phenomenon. Of particular interest was to explore factors, which are associated with the belief that reported symptoms are due to an intolerance or sensitivity to certain foods, in the absence of formal medical diagnosis. Underlying this was the question whether the psychogenic characteristics previously associated with perceived food intolerance in mostly clinical studies, which are thought to result in the misperception and misattribution of symptoms, could be generalised to people with perceived food intolerance in the general population.

Aims of the thesis

- To extend understanding of predictors of food avoidance in the Australian adult population beyond wheat avoidance to dairy avoidance. As part of that to investigate the symptoms, diagnoses and the potential for misattributions leading to self-prescribed food avoidance (Study 1).
- To explore the associated symptoms, the sources of diagnosis, and the psychological predictors of reporting of non-medically diagnosed (NMD) and medically diagnosed (MD) food intolerances in the Australian population (Study 2).
- To explore whether somatosensory amplification, described in previous research as a predisposing condition that leads to perceived food intolerance through the process of somatisation, is potentially a response to the

experiencing of very severe symptoms, rather than a cause of the condition and its symptoms (Study 3).

Results

Study 1 The avoidance of dairy appeared to rely substantially on a NMD connection between ingestion and symptoms, and was associated with increased reporting of past food intolerance. It was also predicted by worry about illness. These findings raised questions regarding the individual-level characteristics that may predispose individuals to attribute symptoms to the consumption of certain foods and, without a medical diagnosis, to subsequently label themselves as food intolerant. They also directed attention to the possible contribution of illness worry to the amplification and misattribution of these symptoms. Study 2 found that many adult Australians classify themselves as food intolerant without a supporting medical diagnosis. Having a NMD intolerance was associated with increased receptiveness to complementary and alternative medicine. Null effects for neuroticism cast doubt on the role of anxiety and negative affect suggested by clinical research. The found association of somatosensory amplification with both MD and NMD intolerances indicates that extra-vigilance in respect of symptoms is not peculiar to the latter. Study 3 revealed that the tendency to amplify symptoms and attribute them to a threatening disease was weaker in patients reporting food intolerance than those reporting IBS, with or without food intolerance. The findings support the view that severity and amplification of symptoms are markers of IBS-like symptoms and are not peculiar to the perception that one has a food intolerance.

Conclusions

The findings in this thesis supports the view that perceived food intolerance is unlikely to be a phenomenon, the result of psychiatric disturbance. Attributing adverse symptoms to specific foods is also unlikely to be due to psychosomatic reactions, of the kind observed in functional somatic syndromes. The origins of this behaviour appear to fall outside the

mainstream medicinal practice, with significant adherence to complementary and alternative medicine, and notable rejection of doctor's advice. This may reflect a tendency of people to exercise control over their health and to feel responsible for managing the risks of presumed food intolerance, without the need for medical evidence or oversight.

THESIS DECLARATION

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name, in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

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Prelude

The overarching aim of this thesis was to increase understanding of the discrepancy reported in the literature between self-reported and medically diagnosed food intolerance and the emerging trend in health decision making towards self-diagnosis and self-management through the use of non-medically supervised exclusion diets. This thesis investigated the hypothesis that specific individual-level psychological characteristics may underpin this phenomenon, explaining why some individuals may be predisposed to associate a range of generic symptoms to the consumption of certain food items or components. Of particular interest was to increase understanding of the factors, which are associated with the belief that the symptoms they report are due to an intolerance or sensitivity to certain foods in the absence of formal medical diagnosis. Underlying this is the question whether the psychological characteristics previously associated with perceived food intolerance in mostly small clinical studies can be generalised to people with perceived food intolerance in the general population.

The first chapter of the thesis provides a review of the relevant literature, which includes an overview of the types of adverse reactions typically attributed to food, types of diagnosis (for allergy, and intolerance) and general food avoidance behaviour. It provides a detailed explanation of the meanings, definitions and current guidelines for the classification and diagnosis of adverse reactions, as well as of the distinction between allergies and intolerances.

The first chapter includes a literature review of Western population studies, which have reported prevalence figures of food allergies and intolerances, as well of small clinical and community studies, which have focused on psychological characteristics in people with food intolerance. It also discusses the main findings of the recent Australian population study on

wheat avoidance, which has raised important questions for addressing in this thesis. The chapter ends with the overall aims of the thesis.

The Introduction and Literature Review is followed by the Exegesis in Chapter 2. The exegesis provides an overview of the main research, a brief summary of the aims, methods, and results from each of the three conducted research studies, as well as how they link together. It also brings together the findings from each research paper and provides a conclusion in the context of their overall significance.

Chapter 3 through Chapter 5 represent the manuscripts of the three papers in the thesis. The first paper was published in the journal of Public Health Nutrition, the second paper was presented at the international 2015 European Health Psychology (EHPS) conference in Cyprus, and was submitted for publication to the journal of Public Health Nutrition, and the third paper was presented at the 2016 EHPS conference in Aberdeen, Scotland.

The sixth and final chapter provides a summary of the results from each of the papers, and a discussion of the implications and significance. The sixth chapter also addresses the limitations of the research and provides suggestions for future research. The thesis concludes with a list of references for all chapters.