

# The relationship between diet, the gut microbiome and health outcomes: perceptions of consumers and nutrition professionals

Georgina Williams, Eleanor Beck, Linda Tapsell,  
University of Wollongong, Australia 2522  
[gw659@uowmail.edu.au](mailto:gw659@uowmail.edu.au), @GWilliamsAPD

## Background

The concept of 'gut health' is increasingly prevalent across scientific literature, food industry and social media. Despite this, heterogeneity in study design and inadequately captured dietary data means **we cannot yet define a 'healthy gut' or provide specific dietary recommendations to achieve this.**

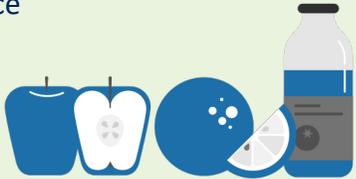
## Aims

- To explore **consumer and dietitian** perspectives of the **term 'gut health'**, associated **dietary influences**, **information sources**, and **behaviours** related to gut health
- Inform **science communication** to take **advantage** of the **growing body of research**
- recognise what is required to **enable translational research outcomes** which can be **adopted in practice**

## Methods

- Online focus groups (consumers, n=38)
- Online interviews (dietitians, n=14)
- Thematic analysis (in duplicate)
- University of Wollongong Ethics, ETH20 20/355

## Results

Consumers	Dietitians
<b>Gut health equates with wellbeing</b> <ul style="list-style-type: none"> <li>Multi-factorial</li> <li>Related to microbiota, unclear on specifics</li> </ul>	<b>Dietetic practice regarding 'gut health' is multifaceted</b> <ul style="list-style-type: none"> <li>Gut health = gastrointestinal system function</li> <li>Microbiota play a role, not the whole picture</li> </ul>
<b>There are divergent perceptions of how diet influences gut health</b> <ul style="list-style-type: none"> <li>Fermented foods and probiotics prioritised</li> </ul>	<b>Current practice in gut health aligns with national dietary guidelines</b> <ul style="list-style-type: none"> <li>Probiotics and fermented foods not essential for health, may be 'added bonus'</li> </ul>
<b>Interest in scientific evidence does not necessarily influence dietary behaviour</b> Mixed perspectives: <ul style="list-style-type: none"> <li>Uncertainties regarding how to access or evaluate</li> <li>Secondary to own experience</li> <li>Scepticism around scientific literature and government recommendations</li> </ul> <p>Consumers are most likely to seek information from social media or social networks</p>	<b>Dietitians seek evidence-based information</b> <ul style="list-style-type: none"> <li>Crucial to all practice</li> <li>Current evidence base is 'complicated', 'overwhelming', 'ever-changing'</li> <li>Evidence base limits confidence in current practice</li> </ul> 
<b>Gastrointestinal symptoms influence dietary behaviour</b> <ul style="list-style-type: none"> <li>'Go with what I know'</li> <li>Curative rather than preventative approach</li> </ul>	<b>Symptom management remains the primary concern</b> <ul style="list-style-type: none"> <li>Individualised and wholistic management</li> <li>Added benefit i.e., not focus of care</li> </ul>

## Future Recommendations:

- Consumers need **transparent, and practical** recommendations
- Consider dissemination of scientific literature **via social media**
- Education on role of diet-microbiome in **preventative health** is required
- Dietitians have a role for dietetics** in gut health research and translation
- Translational evidence and practice guidelines** are required for practice change
- Opportunistic focus** on interest in gut health to promote dietary guidelines
- Advocacy needed:** establish dietetics profession as experts in diet-microbiota practice

