

Additional file 5. Summary of coding framework and theme development

Themes	Sub-themes	Example codes
Theme 1: Using the resource	1a. Content clarity, navigation and design	Clearer to more sub-headings, difficult to navigate, layout of website was good
	1b. Interactivity	Checked out external resources or links, participant decides how many links to follow or open, 'rate your eating habits' quiz provided direction on browsing the website
	1c. Credibility and trust	Improving credibility of the website, participant confident in evaluating information presented on website, website seems or feels credible
	1d. Overall experience and learning impact	Dietary or lifestyle changes made since visiting the website, information on website is reassuring, participant has learnt more about fibre
Theme 2: Drawing on lived experiences and dietary beliefs	2a. Dietary consciousness	Conscious about fibre intake or gut health, conscious about fish intake, conscious about the types of fat or oil they have
	2b. Social context of food	Ambivalence towards social norms about eating with others, caregiving experiences, eating or preparing meals together with or for friends or loved ones
	2c. Personal dietary beliefs and preferences	Always been on a diet or interested in losing weight, dietary considerations or food preferences in relation to upbringing or familiarity, food or meal preferences or avoidance due to food intolerances, preferences or health condition
Theme 3: Connecting nutrition and frailty	Nil sub-themes	Body weight and its impact on frailty or falls risk, impact and importance of nutrition on frailty, increasing awareness or understanding of frailty
Theme 4: Tailoring	4a. Personalisation of nutrition care	Participant felt some information was not specific or targeted or relevant enough or

nutrition and learning		was conflicting, participant finds the website to be targeted for older adults who need to put on weight, participant likes the option to personalise the website for themselves
	4b. Expanding content and topics	Additional information on gut health for older adults, additional section on meal planning or meeting daily nutrient needs, additional section targeted to widowed men or older adults living alone
	4c. Additional features to enhance learning	An auditory component would be helpful, connecting with older adults using videos, discussion board, comment section or feedback channel
	4d. Design considerations for older adult end-users	Attention span considerations for videos, digital literacy of user, not all older adults are interested or knowledgeable in nutrition or health (health literacy)
Theme 5: Learning in different ways	5a. Resource browsing behaviours	Not looking for any particular information or resources when browsing, participant browses the website until they find something they are interested in, participant needed time to familiarise with how to use the website
	5b. Evaluating and verifying information	Confirms online information with books, cross-checking accuracy of online information with other similar websites, participant perceives self to be knowledgeable to discern credible or relevant health information online
	5c. Learning preferences, motivations and goals	Change in learning styles due to ageing, combined learning style preferred, participant keen to learn or broaden their own nutrition and health knowledge
	6a. Self-awareness and resilience	Acknowledges one's diet or health or nutrition knowledge is not perfect, nutrition

Theme 6: Empowering older adults		knowledge of what is suitable for their body and keeps them healthy, participant perceives self to be knowledgeable in nutrition or to have a good diet
	6b. Supporting ageing in place	Eating or cooking when living alone, meal delivery options for older adults, more resources needed to support older adults living alone,