

Study Title	Authors	Publication Year	Journal/Source	Study Location	Study Design	Duration of Intervention	Age
Breaking habits with mindful snacking? An email-based intervention targeting unwanted snacking habits in an Australian sample	Dibb-Smith, et al	2018	ScienceDirect	Australia	Pre-post Intervention Study	2 weeks	Mean age: 42.89
Videogames That Encourage Healthy Behavior Did Not Alter Fasting Insulin or Other Diabetes Risks in Children: Randomized Clinical Trial	Baranowski, et al	2019	PubMed	United States of America	Randomized Controlled Trial	3 months (12 weeks)	Mean age: 11.18
Image-Based Dietary Assessment and Tailored Feedback Using Mobile Technology: Mediating Behavior Change in Young Adults	Shoneye, et al	2018	Web of Science	Australia	Longitudinal Intervention Study	6 months	Mean age: 24
Effectiveness of information technology-enabled 'SMART Eating' health promotion intervention: A cluster randomized controlled trial	Kaur, et al	2020	PubMed	India	Randomized Controlled Trial	6 months	Mean age: 53
Impact on Dietary Intake of Two Levels of Technology-Assisted Personalized Nutrition: A Randomized Trial	Rollo, et al	2020	PubMed	Australia	Randomized Controlled Trial	12 weeks	Mean age: 39.2
Experiences with using persuasive technology in a diet trial for older adults	van der Lubbe, et al	2021	ACM	Netherlands	Quasi-experimental Design (with two conditions: the normal condition and the gamification condition)	200 days (but some had an extended period due to COVID-19)	Mean age: 74

Study Title	Gender Distribution	Health Status	Sample Size	Technologies	Behavior Change Technique	Mode of Delivery
Breaking habits with mindful snacking? An email-based intervention targeting unwanted snacking habits in an Australian sample	86% female, 14% male	No specific health status	78	E-mail with intervention material attached to the mail	Mindfull eating exercises, self-determined practice, recording of plans	E-mail
Videogames That Encourage Healthy Behavior Did Not Alter Fasting Insulin or Other Diabetes Risks in Children: Randomized Clinical Trial	40% female, 60% male	Obese or overweight	145	Role-playing videogames	Tailored goal setting, motivational statements	Online (through the two videogames)
Image-Based Dietary Assessment and Tailored Feedback Using Mobile Technology: Mediating Behavior Change in Young Adults	65,24% female, 35,76% male	Overweight: 23.2%, Obese: 10.4%	143	Image-based dietary assessment system, iPod Touch, text messages	Self-monitoring, feedback	Mixed-mode (in-person, online, telephone)
Effectiveness of information technology-enabled 'SMART Eating' health promotion intervention: A cluster randomized controlled trial	76% female, 24% males	Overweight or obese: 85%, one or the other medical condition: 44% (with prevalence of diabetes and hypertension at 18% and 34%)	668	SMS, email, social networking application, 'SMART Eating' website	Nutritional education	Mixed-Mode (online, telephone)
Impact on Dietary Intake of Two Levels of Technology-Assisted Personalized Nutrition: A Randomized Trial	86% female, 14% male	Average BMI: 26.4 (overweight)	45	Video calls, text message, dietary monitoring mobile application	Feedback, self-monitoring, goal setting	Mixed-Mode (online, telephone)
Experiences with using persuasive technology in a diet trial for older adults	15 females, 21 males	Older adults with a relatively low protein intake.	36	Tablet application	Self-monitoring, notification messages, gamification elements	Online

Study Title	Integration with Other Components	Type of Comparison	Description of Comparison Group	Primary Outcomes	Secondary Outcomes
Breaking habits with mindful snacking? An email-based intervention targeting unwanted snacking habits in an Australian sample	Commonwealth Scientific and Industrial Research Organisation (CSIRO)	Within-subjects design	/	Increase in mindful eating scores, less eating of snack food, lower self-compassion	/
Videogames That Encourage Healthy Behavior Did Not Alter Fasting Insulin or Other Diabetes Risks in Children: Randomized Clinical Trial	/	Between-group comparison (treatment vs wait list control)	Control group consisted of children who would receive no video game based intervention and were measured after the 5-month post-baseline assessment	Child fasting insulin levels	BMI (Body Mass Index)
Image-Based Dietary Assessment and Tailored Feedback Using Mobile Technology: Mediating Behavior Change in Young Adults	Australian Guide to Healthy Eating (AGHE),	/	/	Changes in dietary intake	Experiences with the dietary feedback text messages
Effectiveness of information technology-enabled 'SMART Eating' health promotion intervention: A cluster randomized controlled trial	'SMART Eating' kit-kitchen calendar, dining table mat, and measuring spoons	Between-group comparison	The comparison group received a pictorial pamphlet in Hindi containing dietary recommendations from the National Institute of Nutrition. They were asked to read it, make dietary changes accordingly, and share the information with their families. The pamphlet included visuals and information on seasonal fruits and vegetables, recommended portion sizes of fat, sugar, and salt, and tips for reducing their intake. The comparison group served as a reference to evaluate the effectiveness of the intervention.	Changes in mean dietary intakes of fat, sugar, salt, and fruit and vegetables	Changes in body mass index (BMI), blood pressure, haemoglobin, fasting plasma glucose (FPG), and serum lipids
Impact on Dietary Intake of Two Levels of Technology-Assisted Personalized Nutrition: A Randomized Trial	Australian Eating Survey (AES)	Between-group comparison	The comparison group received low personalization. It did not have structured video calls with a dietitian or dietary self-monitoring with text message feedback.	Change in overall Australian Recommended Food Score (ARFS)	Changes in macronutrient and micronutrient intake
Experiences with using persuasive technology in a diet trial for older adults	Personalized dietary advice to increase protein intake, foodbox	Treatment comparison	The comparison group involves participants who receive the app and the foodbox but without the gamification elements.	Adherence, protein intake, experience diet	Experience persuasive technology, protein knowledge

Study Title	Effect Size	Confidence Interval	Statistical Significances	Participant Adherence
Breaking habits with mindful snacking? An email-based intervention targeting unwanted snacking habits in an Australian sample	MEQ: +0.31, Habit Strength: +0.75, Self-Compassion: +0.21	95%	MEQ: not significant (after Bonferroni correction), Habit Strength: significant (p < .001), Self-Compassion: significant (p = .001), Habitual Snacking Behavior: insignificant, Practice as a Predictor: insignificant	49,36%
Videogames That Encourage Healthy Behavior Did Not Alter Fasting Insulin or Other Diabetes Risks in Children: Randomized Clinical Trial	/	95%	Child fasting insulin: not significant (p = 0.681), BMI: significant (p = 0.0008),	72%
Image-Based Dietary Assessment and Tailored Feedback Using Mobile Technology: Mediating Behavior Change in Young Adults	/	95%	Dietary feedback text messages to think about their vegetable intake to increase their intake by half a serving: significant, text messages to contemplate their consumption of energy-dense nutrient-poor (EDNP) foods to decrease their intake by over half a serving compared: significant	87%
Effectiveness of information technology-enabled 'SMART Eating' health promotion intervention: A cluster randomized controlled trial	Fat: -12%, sugar: -23%, salt: -4%, fruit and vegetables: +20%, BMI: -1%, diastolic blood pressure: -4%, fasting plasma glucose: -5%, total cholesterol: +4%, triglycerides: 13%	95%	Intake of fat: significant (p<0,001), intake of sugar: significant (p<0,001) , intake of salt: significant (p<0,001), intake of fruit and vegetables: significant (p<0,001), BMI: significant (p<0.01), diastolic blood pressure: significant (p<0.001), fasting plasma glucose: significant (p<0,05), total cholesterol: not significant, triglycerides: significant (p < 0.001)	91.3%
Impact on Dietary Intake of Two Levels of Technology-Assisted Personalized Nutrition: A Randomized Trial	ARFS: +5.6 points, energy intake from all energy-dense, nutrient-poor foods: -7.2%, core foods (fruits, vegetables, dairy, grains, meat and meat alternatives): +11.7%, takeaway foods sub-group: -3.4%	95%	Total ARFS: significant (p < 0.05), Energy intake derived from energy-dense, nutrient-poor foods: significant	90%
Experiences with using persuasive technology in a diet trial for older adults	/	95%	Proteine intake: not significant (p-value = 0.621), number of days that a PT participant uses the app influences the protein intake: not significant (p-value = 0.285), correlation between the days with input and the number of profile visits for participants: not significant (p-value = 0.179), participants feel that they have a good understanding of the amount of protein in different types of products (Normal vs Gameification): not significant (p-value = 0.391), correlation between the number of games played and the average score of participants: significant (p-value = 0.006)	76%

Study Title	Limitations	Risk of Bias
Breaking habits with mindful snacking? An email-based intervention targeting unwanted snacking habits in an Australian sample	Self-reporting bias, limited generalizability, lack of control group, short-term follow-up, limited intervention duration, self-selection bias, limited intervention components, potential response bias	Moderate
Videogames That Encourage Healthy Behavior Did Not Alter Fasting Insulin or Other Diabetes Risks in Children: Randomized Clinical Trial	Non-representative sample, high dropout rate, self-reported dietary intake, lack of alternative methods, measurement reactivity, contamination of intervention and comparison groups, unlikely occurrence of material exchange	Low
Image-Based Dietary Assessment and Tailored Feedback Using Mobile Technology: Mediating Behavior Change in Young Adults	Assessment of diet, lack of measures, perceptions and misperceptions, dietary assessment methods, generalizability	Low
Effectiveness of information technology-enabled 'SMART Eating' health promotion intervention: A cluster randomized controlled trial	Lack of blinding, selection of only one family member, low male participation, insufficient sample size for subgroup analysis, lack of time measurement on the website, password protection issues, resource constraints	Low
Impact on Dietary Intake of Two Levels of Technology-Assisted Personalized Nutrition: A Randomized Trial	Lack of blinding, self-reported dietary intake, potential for social desirability bias, limited sample size, short intervention duration, lack of long-term follow-up, potential for dropout bias	Moderate
Experiences with using persuasive technology in a diet trial for older adults	Lack of blinding, self-reported dietary intake, potential for social desirability bias, potential for dropout bias, short intervention duration, limited generalizability	Moderate