

Abstract

What Are the Most Promising Strategies to Decrease Animal Protein and/or Increase Plant Protein Uptake in Foodservice Settings? [†]

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Abstract: Moving towards healthy sustainable diets which replace a proportion of animal with plant-based protein requires effective population-based strategies. A variety of strategies in food service settings can support this. This systematic review aimed to evaluate the effectiveness of strategies to decrease animal protein and/or increase plant protein in foodservice settings. Outcomes included uptake (primary outcome), satisfaction, financial, environmental, and dietary intake (secondary outcomes). Both quantitative and qualitative outcomes were included. Seven databases were searched to identify peer-reviewed studies conducted in commercial and institutional foodservices using any strategy to decrease beef, lamb, pork, poultry, eggs, fish or seafood and/or increase legumes/pulses, legume/pulse-based meat substitutes or nuts. Titles/abstracts then full texts were screened independently by two authors. Quality appraisal was completed using the Mixed Methods Appraisal Tool. From 20,002 records identified, 38 studies from 29 manuscripts met the eligibility criteria, of which 16% were high quality. Almost half the manuscripts were published in the last two years. Most took place in institutional settings ($n = 30$) and all were in Europe or the United States. Strategies included forced restriction ($n = 4$), menu re-design ($n = 6$), recipe re-design ($n = 6$), service re-design ($n = 4$), menu labelling ($n = 7$), prompt at point of sale ($n = 7$) and multi-pronged strategies ($n = 4$). Menu labelling and re-designing menus, recipes, and service increased uptake of target foods in most studies with the largest consistent changes with menu re-design. Most recipe and service re-design strategies had a positive or neutral effect on satisfaction. Few studies explored financial, dietary or environmental outcomes. Future meat reduction initiatives should focus on menu and recipe re-design as these do not appear to negatively impact consumer satisfaction. More studies are needed to evaluate financial, environmental, and dietary outcomes.

Keywords: sustainability; vegetarian; plant-based; plant-forward; foodservice



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