



Title	Protein-sparing Modified Fast Diet: Efficacy, Safety and Clinical Use – Literature Review
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Aim

To review the literature on protein-sparing modified fast (PSMF) diets and practices of physicians who recommend this type of diet to their patients.

Conclusions and results

The PSMF diet, which is generally defined as a very-low-calorie diet with an energy intake less or not greater than 3350 kJ (800 kcal) per day, is in no way indicated for people who are not overweight. In cases where people are required to lose weight, the leading recommendation by nutrition experts is to prescribe a personalized, balanced, moderately low-calorie diet. Experts are divided on the place of the PSMF diet as a therapeutic option for obesity. Some believe that the PSMF diet has no place in the current range of dietary interventions. Others, in official position statements, do not exclude its use and consider that it may be used for limited indications. Examination of the scientific evidence provided in studies on PSMF diets in clinical settings reveals the following: 1) Compliance with this diet is difficult, and attrition rates are high; 2) Short-term weight loss is rapid and significant and is accompanied by short-term changes in clinical and biological parameters suggesting improvements in some associated risks; 3) Its long-term efficacy for weight loss remains less certain, given the conflicting outcomes of the two meta-analyses evaluating this aspect; 4) No evidence was found to conclude on the benefit of repeated courses of PSMF; 5) Given the lack of evidence of long-term efficacy of this diet, and the need for medical monitoring, the principle of medical precaution is warranted; 6) When used, the PSMF diet should be an integral part of the patient's general support program conducted by a multidisciplinary team.

Methods

Identify systematic and narrative literature reviews, randomized controlled trials, and observational studies in MEDLINE, Cochrane Library, Dissertation & Theses, and Web of Science; Web search for expert recommen-

dations and position statements on the PSMF diet and on the medical management of overweight; target the conduct and pathophysiology of the PSMF diet, its indications, safety, and efficacy in terms of weight loss and impact on overweight-related risk factors, psychological aspects, and the costs it incurs or saves, along with issues affecting care organization and involvement of professionals in such care.

Further research/reviews required

Need for: studies establishing the optimal amount of time that the protein-sparing stage should last; more studies on the safety of the PSMF diet in preoperative situations; studies on the effects of this diet on patient's mood and potential eating behavior problems; more studies on the cost of the PSMF diet or on the economic benefits that it could potentially generate; more studies on the extent and nature of health professional involvement in the process of a PSMF diet; in-depth studies on the potential costs and savings generated by PSMF diets; and studies drawing up a profile of the use of this type of diet in Québec and the outcomes achieved.