

Maintenance of weight loss one year since a diet vs. exercise-based successful interventions, among Lebanese adult overweight/obese women

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OBJECTIVE: To evaluate maintenance of weight loss, among women who followed a diet or a physical exercise program, since at least one year at the time of the survey (one year after the intervention), and determine factors associated with weight loss maintenance.

METHODS: Observational, retrospective study on a sample of 60 women who successfully lost weight after following a diet (n=30) or exercise (n=30) one year later. Random sample of women were interviewed in 5 different sports and diet centers. A scale and a stadiometer were used to take the measurements of height and weight of women, in the interview a 24h recall of food eaten, an IPAQ (International Physical Activity Questionnaire), and FFQ (Food Frequency Questionnaire), were used to collect data.

RESULTS: The percentage of overweight or obese women; who maintained their weight loss for at least one year after a diet or sports exercise is 18.3% (10% in diet group and 26.7% in sport's group with a significant difference between groups). Factors associated with weight loss maintenance are: following a Mediterranean diet, a high fiber consumption; a diet with a lower percentage of saturated fatty acids, a high percentage of protein in actual diet, and higher ratio of Mono-Unsaturated Fatty Acids/ Saturated Fatty Acids in maintainers versus non maintainers ($p < 0.005$). There is an inverse association between the fact of skipping meals and weight loss maintenance. Moreover, a longer duration of follow-up, and practicing more minutes of exercise per week, are also associated to weight maintenance. After correction for confounders, the most influential factor for weight maintenance is the duration of follow-up, this

factor was more in play in maintenance of weight for at least one year regardless of the group women belongs to.

CONCLUSION: In this sample of women, adopting healthier eating habits, and exercising enough are keys to success in weight loss maintenance one year after a weight loss intervention regardless of the kind of method used.

Key words: diet, physical activity, maintenance, body weight.