**LITERATURE SURVEY**

Self-monitoring is the centrepiece of behavioural weight loss intervention programs. This article presents a systematic review of the literature on three components of self-monitoring in behavioural weight loss studies: diet, exercise and self-weighing. This review included articles that were published between 1993 and 2009 that reported on the relationship between weight loss and these self-monitoring strategies. Of the 22 studies identified, 14 focused on dietary self-monitoring, one on self-monitoring exercise and six on self-weighing. A wide array of methods was used to perform self-monitoring; the paper diary was used most often. Adherence to self-monitoring was reported most frequently as the number of diaries completed or the frequency of log-ins or reported weights. The use of technology, which included the Internet, personal digital assistants and electronic digital scales were reported in five studies. Descriptive designs were used in the earlier studies while more recent reports involved prospective studies and randomized trials that examined the effect of self-monitoring on weight loss. A significant association between self-monitoring and weight loss was consistently found; however, the level of evidence was weak because of methodological limitations. The most significant limitations of the reviewed studies were the homogenous samples and reliance on self-report. In all but two studies, the samples were predominantly White and female. This review highlights the need for studies in more diverse populations, for objective measures of adherence to self-monitoring, and for studies that establish the required dose of self-monitoring for successful outcomes.