

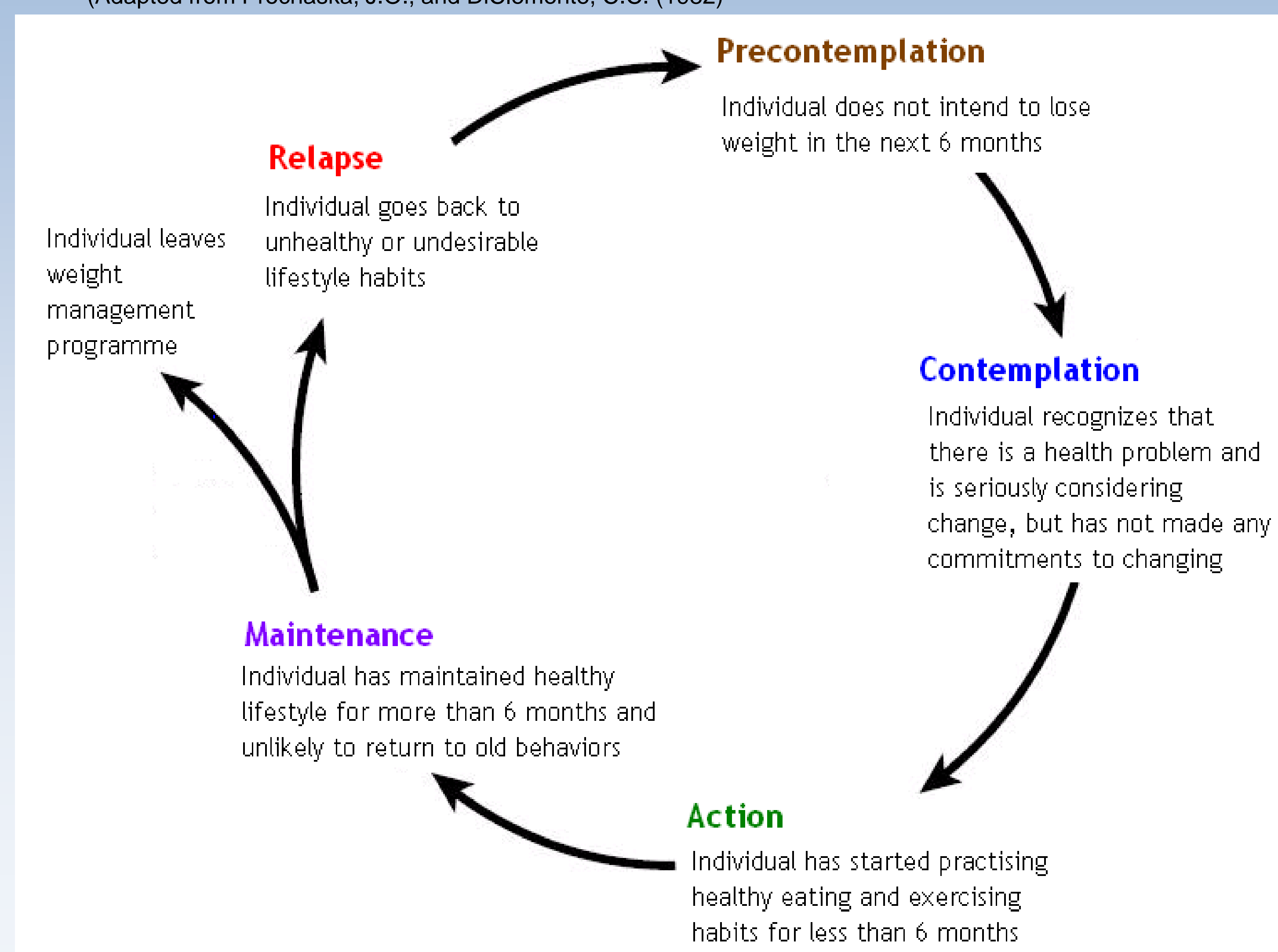
Introduction

From KKH's 2011 health screening results, 14.5% of participating staff were at high risk of diabetes and heart disease (Body Mass Index $\geq 27.5\text{kg/m}^2$).

Aim

To use the Transtheoretical Model of Behavioral Change (TTM)¹ to organize a staff weight management programme, to increase healthy behaviors and reduce Body Mass Index (BMI).

Figure 1. Stages of Behavior Change
 (Adapted from Prochaska, J.O., and DiClemente, C.C. (1982))

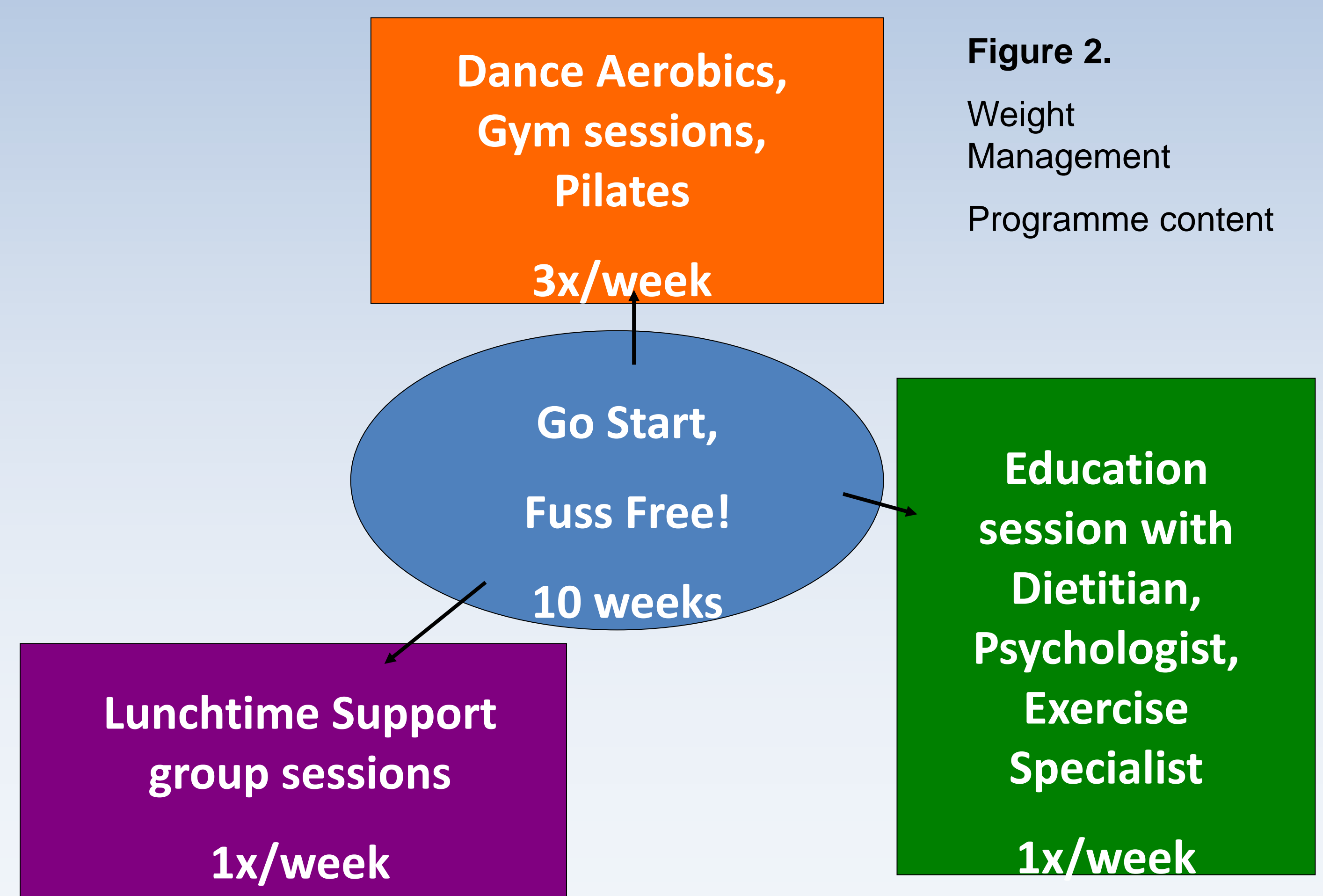


Methods & subjects

We invited staff who had a BMI of 27.5kg/m^2 or greater to participate in our weight management programme titled "Go Start, Fuss Free" (Figure 2).

Primary outcomes: Barriers to healthy lifestyle activities, Nutrition knowledge survey.

Secondary outcomes: Height, Weight, BMI, Blood pressure, Total cholesterol and Fasting glucose.



Results

20 participants responded to our invitation, of which only 14 staff attended the first session (Table 1), mostly from the 'Action' stage (64%). Only two participants attended the weekly sessions consistently, and there was a visible reduction in their 'Barriers to Physical Activity' and BMI.

Those who dropped out stated the following reasons:

- Work Conflicts (Lunch meetings or shift work)
- Family commitments
- Lack of support from supervisors

Table 1. Baseline characteristics of participants (n=14)

Average BMI	31kg/m ²
Average Total Cholesterol	5.4 mmol/L
Average Nutrition knowledge score	4.5 out of 6
Top 3 barriers to physical activity	1. Lack of energy 2. Lack of time 3. Lack of motivation

Discussion

We believe that interventions should be dependent on readiness to adopt healthy lifestyles. Using the TTM was important; most participants were in the 'Action' phase and would have benefited from the resources and education that we provided.

Unfortunately, our attrition rate is higher than most weight management programmes (0-60%)². We hypothesize that this was mostly because most of our participants were shift workers and were unable to change their shifts, or unable to coincide their break time with our sessions. More support from supervisors and management may help to reduce drop-out.

Conclusion

Staff weight management programmes can be tailored and targeted specifically to employees in a particular stage of change. The workplace is an important place for health promotion. It is important to have support from supervisors for staff weight management programmes to be successful.

¹Prochaska, JO; DiClemente, CC. (1983). "Stages and processes of self-change of smoking: toward an integrative model of change." J Consult Clin Psychol, Jun;51(3):390-5.

²Tsai, A. G. and T. A. Wadden (2005). "Systematic review: an evaluation of major commercial weight loss programs in the United States." Ann Intern Med 142(1): 56-66.