

FIT, Do Something Different and Weight Loss

At a time when obesity is on the increase, methods of weight loss and weight control are constantly under review. Dieting is the most common method used to deal with weight problems yet there is a lack of consistent evidence for the effectiveness of diets. Diets can bring about weight loss in the short term but this is often modest and difficult to sustain. Consequently this results in weight cycling and 'yo-yo' dieting which can have adverse effects on health and even mortality rates in the long term. Paradoxically, it seems that as more and more diets become available, obesity rates continue to rise and this may be because diets do not change the habits that are central to overeating.

An alternative perspective, which is supported in this report, is to view bad eating behaviours as habitual and held within a web of behavioural habits. From this perspective bad eating habits are difficult to break because they are held within a web of other behaviours. People have a set of habitual behaviours that co-exist with each other. Therefore rather than tackling overeating habits directly – which as dieting has shown is ineffective – an alternative solution is to change the peripheral behaviours which encapsulate eating behaviours and maintain overeating.

The Do Something Different (DSD) approach offers this alternative tool. This method – backed up by objective measures of the person using The FIT Profiler - encourages people to Do Something Different on a daily basis in order to break existing behavioural habits. A key aspect of the DSD tool is to expand FIT Behavioural Flexibility to enable the HabitWeb to be weakened. In this way, the behavioural habit chains that govern eating behaviours are broken, allowing people to behave in a more flexible manner. Tackling behaviourally flexible – a key action lever in FIT Science – allows people to respond more appropriately and to connect their wants with their behaviours. Therefore people break free from their habitual eating and take conscious control of their eating behaviours. The following study reports on the effectiveness of DSD – backed up with FIT Science measures - as a practical tool for breaking habits, increasing behavioural flexibility and facilitating weight loss.

Participants

The 70 participants (10 male, 60 females) were recruited via the local community. All participants were overweight or in the upper end of the healthy BMI range and had no medical contraindications.

Procedure

The study used a longitudinal design. Participants were weighed at the outset and at the end of the 4-week DSD programme. A sub-group of 55 participants were also weighed at 1 month and 2 months following completion of the FIT DSD programme. The FIT Profiler was also completed before and after the DSD intervention and also 2 months post-intervention for the sub-sample of 55. The FIT Profiler provided measures of behavioural flexibility and anxiety and depression. The DSD programme was presented in task booklets that were distributed to participants at the outset of the trial.

The DSD programme instructed participants to complete daily and weekly tasks which introduce new behaviours to behavioural repertoires and break existing habitual patterns. The daily tasks were simple new or different behaviours or activities such as not watching T.V. for the day or writing a story or poem. The weekly habit breaking challenges included contacting an out of touch old friend or changing your newspaper or stop reading one. The daily or weekly tasks did not target eating or exercise behaviours directly. Participants followed the DSD programme for 4 consecutive weeks.

Outcomes

The effectiveness of the DSD programme for weight loss was assessed by comparing participants' weight measures before and after the DSD intervention. Follow-up weight measures were also obtained 1-month and 2-months post-intervention for the sub-sample of 55 and these were used to assess weight loss in the longer term.

The sample mean weights at each time point are shown in Table 1 below. As can be seen from the table, participants lost weight throughout the trial. The average weight

loss whilst participants were following the DSD programme (from T1-T2) was 1.99kg. This equates to a healthy average weight loss of 0.49kg per week. This weight loss was also maintained in the longer term and continued post-intervention. At 2-months post intervention participants had lost an average of 4.9kg.

Table 1: Participants' mean weight (kgs) and BMI before and after the DSD intervention, and at follow-up

		Pre-trial (T1)	End of intervention (T2)	1 month post- intervention (T3)	2 months post- intervention (T4)
Weight kg	N = 70	86.0 (SD = 16.4)	84.0 (SD = 16.4)	- -	(80.08) (varied T4 times)
	N = 55	85.3 (SD = 16.2)	83.9 (SD = 16.2)	82.1 (SD = 16.4)	80.4 (SD = 16.5)
BMI	N = 70	31.4 (SD = 6.4)	30.7 (SD = 6.5)	- -	- -
	N = 55	31.3 (SD = 6.3)	30.8 (SD = 6.3)	30.0 (SD = 6.2)	29.4 (SD = 6.2)

The weight losses throughout the trial (T1-T4) also resulted in changes in participants' BMI classifications. The number of participants classified as 'obese' and 'overweight' decreased whereas the number of participants with 'healthy' BMIs increased by 340% over the trial (T1-T4, see Table 2). During the DSD intervention (T1-T2) 8 participants moved to a lower BMI group and over the trial period (T1-T4), 24 participants moved to a lower BMI group.

Table 2: Number of participants with healthy, overweight, and obese BMI scores at pre-trial, after the DSD intervention, and at 1 and 2 months post-intervention.

BMI classification		Pre-trial (T1)	End of intervention (T2)	1 month post- intervention (T3)	2 months post- intervention (T4)
Healthy	N = 70	7	11	-	-
	N = 55	5	9	12	17
Overweight	N = 70	28	28	-	-
	N = 55	23	21	22	18
Obese	N = 70	35	31	-	-
	N = 55	27	25	21	20

The weight losses throughout the trial were driven by increases in behavioural flexibility. At the outset of the trial (T1) participants had a mean behavioural flexibility score of 27.13. Participants' behavioural flexibility increased after the DSD programme and at the end of the intervention (T2) the mean Behavioural Flexibility score was 33.27. The changes in behavioural flexibility related to weight loss and participants with higher levels of behavioural flexibility at the end of the study experienced greater weight losses.

Positive changes in affect were also reported and participants' levels of anxiety and depression were lower after the DSD intervention (at T2). These reductions also continued post-intervention and were maintained in the longer term (see Table 3).

Table 3: Participants' anxiety and depression scores before and after the DSD intervention, and at follow-up

		Pre-trial (T1)	End of intervention (T2)	1 month post- intervention (T3)	2 months post- intervention (T4)
Anxiety	N = 70	10.26 (SD = 2.30)	9.37 (SD = 2.60)	-	-
	N = 55	9.98 (SD = 2.28)	8.84 (SD = 2.29)	-	8.61 (SD = 2.48)
Depression	N = 70	8.56 (SD = 2.63)	7.51 (SD = 2.60)	-	-
	N = 55	8.25 (SD = 2.62)	6.75 (SD = 2.63)	-	6.35 (SD = 2.73)

Conclusions

This research presents an alternative and very effective weight loss tool. By Doing Something Different on a daily basis participants expanded their behavioural repertoire and increased their behavioural flexibility. This enabled them to modify their habit webs and break the chains that support over-eating behaviours.

The weight losses throughout the programme were gradual and maintained post-intervention. Participants lost healthy amounts of weight and were able to sustain these losses in the long term without reliance upon willpower. This avoids the negative health risks that are often caused by rapid short-term weight changes associated with calorie controlled diets. Furthermore, 'yo-yo' dieting and weight cycling is no longer an issue because participants have changed the core of their behaviours not just eating behaviours.

Not only does the DSD programme offer an effective weight loss tool, it also has beneficial effects on anxiety and depression levels and allows for personal development overall. The programme requires an individual to take control and

behave consciously rather than on automatic pilot. This affords people greater awareness of their actions and the choices they are making. These qualities are important components of FITness in general and associate with a host of additional individual benefits (see other reports in this series). Taking control in one area may prime individuals to take control in another. Thus the DSD programme represents a short-term intervention that yields great potential for sustained weight loss and also wide-ranging and long-term benefits for the individual overall.