

## Guernsey Weight Management Survey

As we know, National rates of Obesity and overweight have hit headlines repeatedly, because of fears for the on-going health of current and future generations. We are looking at services in Guernsey and the new ~Health Improvement Commission heralds the exciting review of our current activities. In order to inform future services, we undertook an island wide survey.

### Sample

The aim of the 2017 questionnaire was to try and understand what people who had already tried to manage their own weight found the most helpful. Therefore, the entire population of Guernsey was eligible to fill out this questionnaire. In order to achieve as many responses as possible, adverts and links were set up on the local States of Guernsey website, the local Guernsey Press and further promotion was delivered by working with local groups including the Kings Club Gym, who had, along with others, been consulted as to what questions they believed needed to be included on this survey. This meant that the questionnaire could receive up to 62,000 respondents (States of Guernsey Data and Analysis, 2017).

### Methodology

A questionnaire was designed by the dietetic department with the Health Promotion Unit and in consultation with local weight loss and fitness groups. The questionnaire was preliminarily developed by a dietetic support worker and was then informed by focus groups on weight management services with men to help understand what would appeal most to men, as men were identified in the literature as the least likely to attend weight management services. Questions were then also adjusted based on discussions with local groups who dealt directly with individuals using weight management services. The questionnaire aimed to cover the weight management situation the respondent was in at the time of completing the survey, what hadn't or had worked for them in the past and then what they would want to see in future services. The results of the questionnaire were collected using an online questionnaire website. A dietetic support worker then analysed the results.

### Guernsey analysis

#### Sample size

89 participants answered to this questionnaire between October 2017 and December 2017.

This low level of respondents means that all results should be taken as a useful indicator, but not a definitive statement of fact, at a population level this would be a 0.01% response. It is not possible to do statistical analysis which is meaningful therefore, but it will inform decisions in a useful way.

#### *Gender*

There was a roughly equal split between men and women, with 37 (41.6%) of respondents being men and 49 (55.1%) respondents being women, 1(1.1%) respondent did not wish to say and 2 (2.3%) did not respond to this question.

#### *Age*

In terms of age, there was a wide variation of age, with 6 (6.7%) 18-24 year old respondents, 18 (20.2%) 25-34 year old respondents, 21 (23.6%) 35-44 year old respondents, 24 (27.0%) 45-54 year

old respondents, 16 (8.0%) 55-64 year old respondents, 3 (3.4%) 65-74 year old respondents and 1 (1.1%) 75+ year old respondent. (see Figure 1)

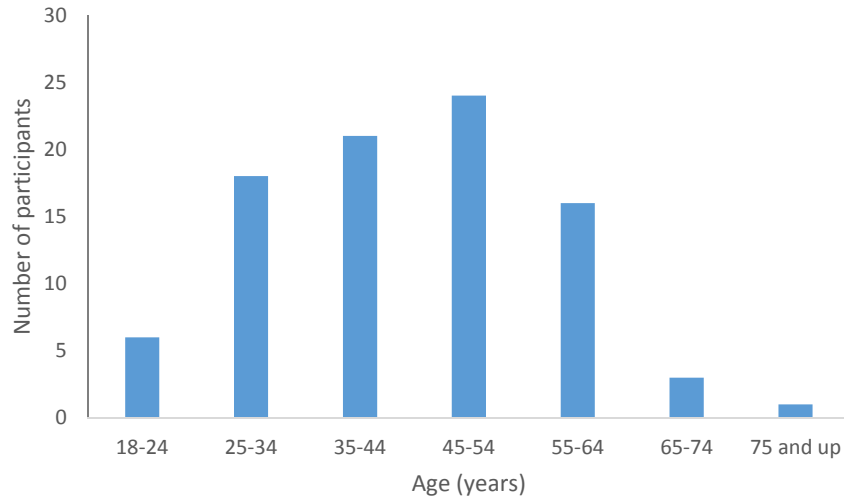


Figure 1. The age distribution of the sample.

### *Body Mass Index*

88 (98.9%) participants gave both their height and weight details, allowing us to calculate an accurate BMI for each individual. As can be seen in Figure 2, the modal category of Body Mass Index (BMI) was the 20-25 range, which indicates that the majority of the participants in this questionnaire were a healthy weight (World Health Organization, 2009). However, 21 (23.9%) were BMI 25-29.99, which classifies them as overweight and 28 (31.8%) of participants were of BMI 30-35.99, 36-40.99 or 40 and up, which classifies them as obese, with increasing severity. From this data, the mean BMI was 28.6. Only those with a BMI of 30 and above are eligible for current States weight management services, and their needs will differ from those with lower BMI.

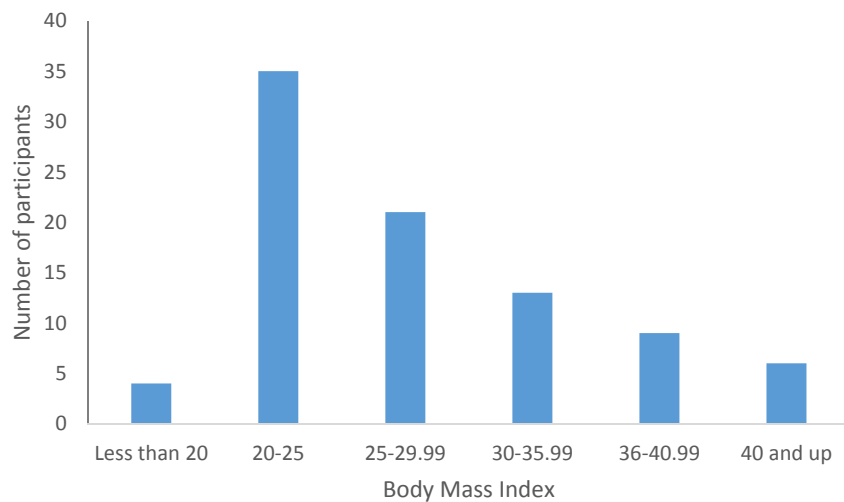


Figure 2. The distribution of the body mass index for this sample.

### *Body image*

Participants rated their perceived and ideal body images using a pictorial scale, adapted from Sorensen, Stunkard, Teasdale and Higgins (1983), where they chose the image that represented their answer. For perceived body image, participants rated themselves on average as a 5.3, which is around the middle of the scale and rated by other papers as being slightly overweight (Grant, Chittleborough, & Taylor, 2016). The average rating for the body image participants believed to be ideal was 3.7, which is towards the lower end of the scale and has been previously used to represent a healthy weight. This meant that the difference between their own perceived body image and what they perceived to be an ideal body image was only 1.5 on average.

### **Gender differences**

The average rating for women for perceived body image was 5.2, in roughly the same position as the whole sample's perceived image and similarly, had an average of 3.5 for their ideal body image. The difference between their own perceived body image and what they perceived to be an ideal body image was slightly higher than average at 1.7.

The average rating for men for their perceived body image was 5.4, also around the midpoint of the scale, and had a slightly higher ideal body image value of 3.9. Compared to women, the difference between their own perceived body image and what they perceived to be an ideal body image was lower at 1.3.

The difference in BMI was not significantly different  $F(2,89) = 2.53, p = 0.086$ .

### *Job Activity*

All participants responded to this question. In terms of job activity, 2 (2.3%) respondents rated their job as extremely active, 6 (6.7%) respondents rated their job as quite active, 10 (11.2%) rated their job as slightly active, 10 (11.2%) rated their job as neither active nor inactive, 2 (2.3%) rated their job as slightly inactive, 16 (18.0%) rated their job as quite inactive and 39 (43.8%) rated their job as not active at all. 4 (4.5%) did not respond to this question as they rated it as not applicable to them.

### **Gender differences**

On average, men had slightly more active jobs than women with 17 (45.9%) of men rating their jobs as slightly active, quite active or extremely active compared to 11 (22.5%) women (see Figure 3).



Figure 3. Distribution of job activity levels in the sample, analysed by gender.

*Household income*

All participants responded to this question. The survey also asked about participants' household income and asked them to select a bracket in which their income fell. As can be seen in Figure 4, no participant earned less than £10,000 a year. 5 (5.6%) earned between £10,000-£19,999, 3 (3.4%) earned between £20,000-£29,999, 36 (40.5%) earned between £30,000-£59,999, 25 (28.1%) earned between £60,000-£99,999, 13 (14.6%) earned £100,000 and up. 7 (7.9%) respondents responded that they did not know their total household income. There was little difference between genders.

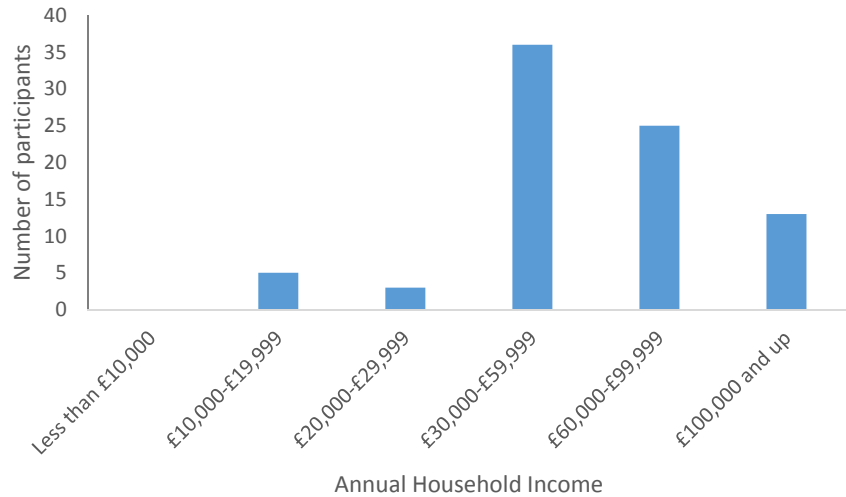


Figure 4. Distribution of household income in the sample.

### Weight loss history

When asked whether they had attempted to manage their weight previously, 26 (29.2%) responded that they were always trying to lose weight, 2 (2.25%) responded that they were always being told to lose weight, 40 (44.9%) reported that every now and again they tried to lose weight, 20 (22.5%) reported that they did not worry about their weight. 1 (1.1%) did not answer this question (see Figure 5).

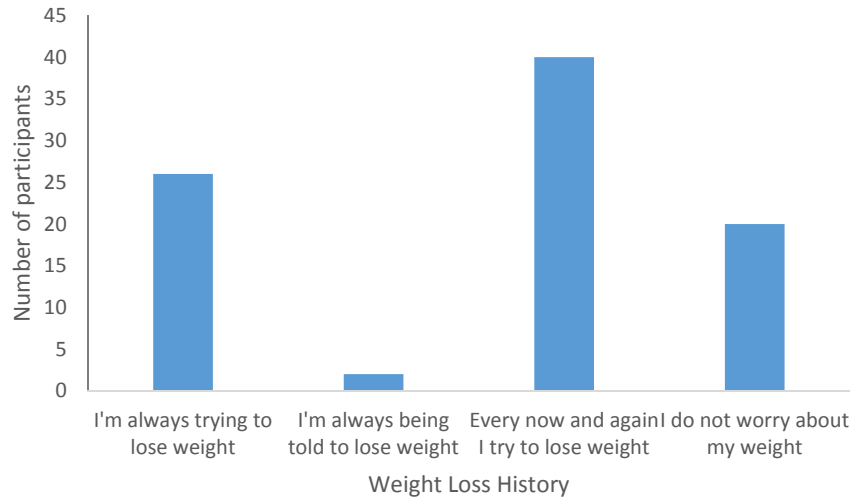


Figure 5. Weight loss histories from the sample.

As part of their weight management history, participants were also asked how long ago they tried to reduce their weight. 46 (51.7%) reported that they had attempted to lose weight within the last 6 months, 11 (12.4%) had attempted to lose weight 6-12 months ago, 6 (6.7%) had attempted to lose weight 1-2 years ago, 3 (3.4%) had attempted to lose weight 3-4 years ago and 2 (2.25%) had attempted to lose weight over 5 years ago. 21 (23.6%) did not respond to this question (see Figure 6).

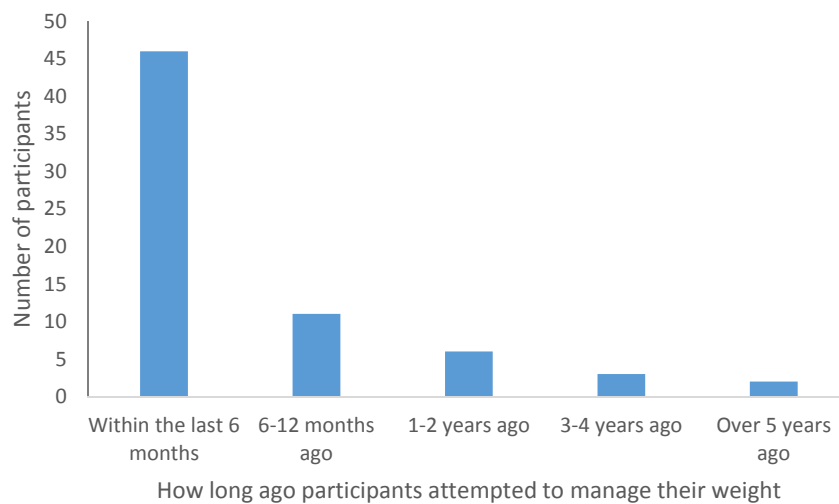


Figure 6. How long ago the sample last tried to manage their weight.

Previous weight management experiences

Changing what they ate.

67 (75.3%) of respondents had changed what they ate during their last weight loss attempt. 66 of those 67 participants went on to answer what they felt was the best way to change their diet to help lose weight. From the options available, participants that changed their diet rated reducing their portions as the most effective strategy with 27 (40.9%) respondents, then stopping snacking between meals with 23 (34.9%) respondents, then calorie counting with 19 (28.8%) respondents (see Figure 7).

The strategies that no participants rated as the most effective included undertaking a gluten-free diet and taking lipotrim.

**Gender differences**

42 (85.7%) of the women respondents answered this question, with 41 (97.6%) reporting that they did change their diet. Again, reducing portions, calorie counting and stopping snacking between meals appeared as the most popular methods women chose to manage their weight, with 16 (39.0%), 12 (29.3%) and 12 (29.3%) women respectively, but they also reported reducing their alcohol intake with 13 (31.7%) women.

24 (64.9%) of the men respondents answered this question, with 23 (95.8%) reporting that they did change their diet. Again, stopping snacking between meals, reducing portions and calorie counting were rated as the most effective ways to help manage their weight, with 10 (43.5%), 10 (43.5%) and 6 (26.1%), respectively.

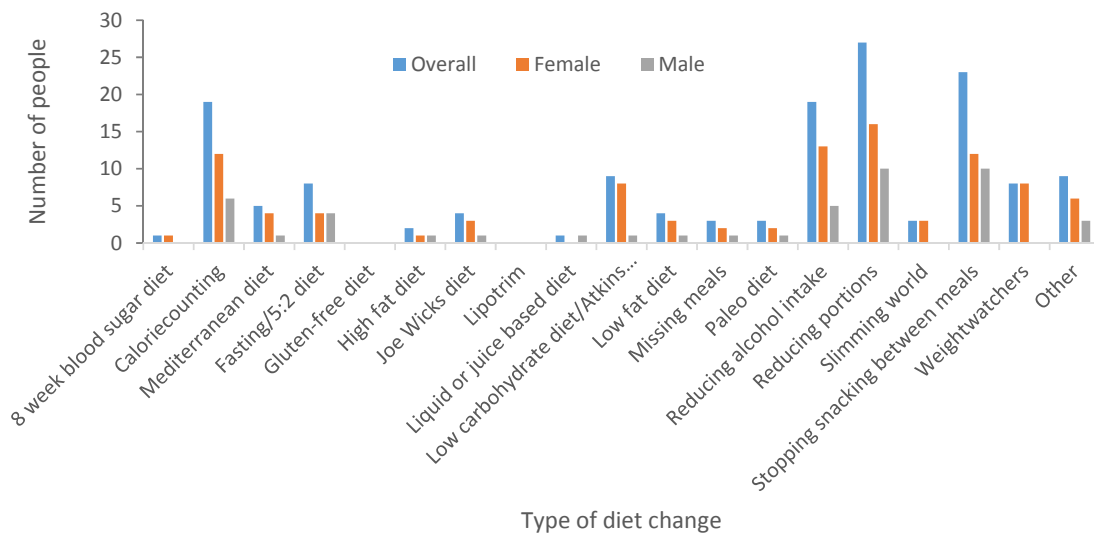


Figure 7. Participants ranking of how helpful dietary changes were in helping them manage their weight.

## Having support

Only 20 (22.5%) of participants reported having support when they last tried to lose weight. Of those 20 participants, they all went on to rate what they considered to be the most effective form of support. The most effective form of support was using a support group, as rated by 7 (35.0%) of respondents, followed by using apps and having friends or family to offer support as both rated by 6 (30.0%) of respondents (see Figure 8).

The strategies that no participants rated as the most effective included the health promotion unit's weight management course, the health trainers, the practice nurse or the support worker. This is probably because respondents could not comment on this.

## Gender differences

40 (81.6%) women responded to this question, with a much closer result, 13 (32.5%) answered that they did have support last time they tried to manage their weight. From this result, the most popular forms of support included using a support group (with Weightwatchers being the most commonly mentioned) with 7 (50.0%) respondents, friends and family with 5 (35.7%) respondents, and using apps with 4 (28.6) respondents.

24 (64.9%) men responded to this question with only 5 (20.8%) reporting having some sort of support when they last tried to manage their weight. For these men, the forms of support rated as the most effective included using apps and independent personal trainers with 2(40.0%) respondents in each.

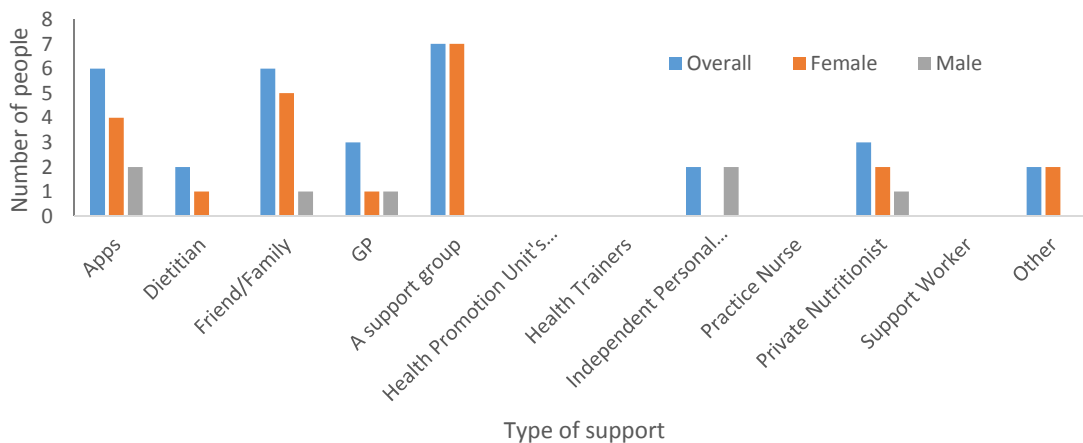


Figure 8. Participants ranking of how helpful support was in helping them manage their weight.

## Physical Activity

53 (59.6%) of participants reported changing their level of physical activity when they last tried to lose weight. Of those 53 respondents, 51 then went on to rate what they considered the most helpful form of physical activity. The most helpful form of physical activity was rated as walking with 32 (62.8%) respondents, followed by cycling with 22 (43.1%) respondents, then jogging with 21 (41.2%) respondents (see Figure 9).

The exercise on prescription programme Lifefit was the only form of physical activity not rated as a helpful of physical activity by any respondent.

**Gender differences**

41 (83.7%) women responded to this question, with 31 (75.6%) reporting changing their level of physical activity when they last tried to reduce their weight. The types of physical activity rated as the most helpful included walking, cycling and jogging, with 20 (66.7%), 11 (36.7%) and 11 (36.7%) respondents each, however using a gym or personal trainer was also rated as quite popular with 10 (33.3%) respondents.

24 (64.9%) of men responded to this question, with 20 (83.3%) men reporting changing their level of physical activity during their last attempt of managing their weight. The forms of physical activity men rated as the most helpful included the same forms as rated by the women, cycling, jogging, walking and using a gym or personal trainer with 10 (52.6%), 9 (47.4%), 11 (57.9%) and 6 (31.6%), respectively.

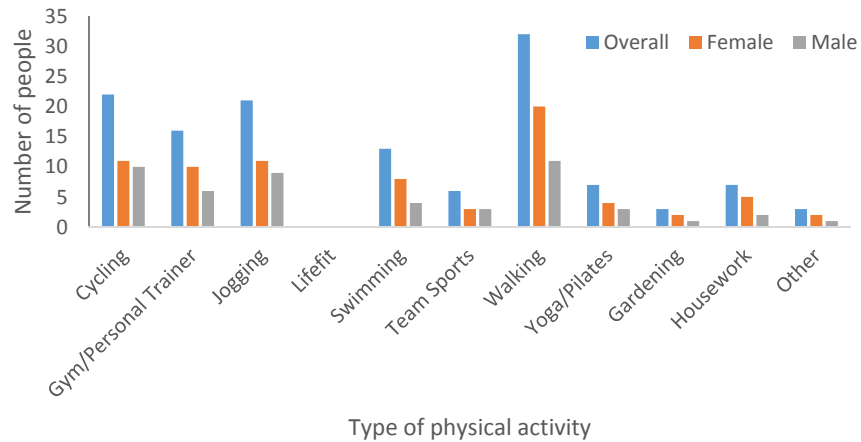


Figure 9. Participants ranking of how helpful forms of physical activity were in helping them manage their weight.

Participants also rated how much of their chosen physical activity they did a day. The modal category overall was 21-30 minutes a day, followed closely by 31 minutes- 1 hour a day (see Figure 10). When analysed by gender, the modal category for women was 31 minutes- 1 hour a day, followed closely by 21-30 minutes a day. For men, their modal category was slightly higher, exercising more than an hour a day, followed by 21-30 minutes a day.



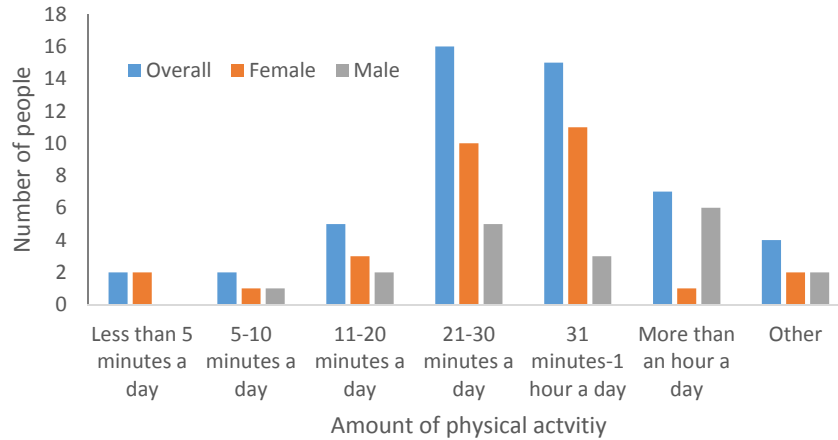


Figure 10. Amount of physical activity participants completed a day.

#### Alternative methods

Only 3 (3.4%) respondents reported using any other method to help reduce their weight. Of those 3 respondents, 2 went on to report what other methods they used to help reduce their weight. One responded that colonic irrigation and medication helped them to lose weight and one incorrectly cited using Slimfast as an alternate method to lose weight.

#### Gender differences

The three respondents who reported using any other methods to reduce their weight were all female. No male respondents used any other methods to maintain their weight.

#### Overall opinion

The most popular method of weight loss was rated as changing your diet (see Figure 11), with 29 (32.6%) respondents specifically citing changing their diet, including eating less, cutting out snacking and reducing their calorie intake as effective ways they have lost weight.

When analysed by gender, whilst both men and women put an emphasis on exercising and eating healthy and the right amount to maintain your weight, women regarded support as also important, with 7 women mentioning it compared to only 1 man.

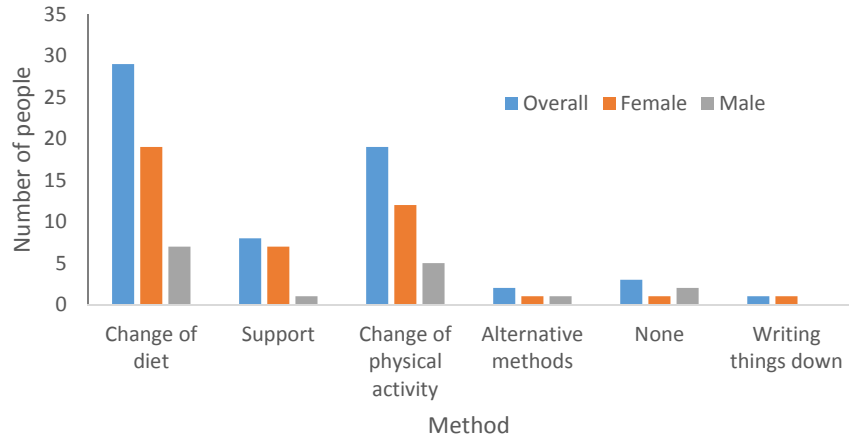


Figure 11. Most popular method of managing weight.

#### Weight loss success

As part of the questionnaire, participants were asked how successful their attempt at managing their weight had been, and report how much weight they had lost. The modal category for weight loss was 6-10 pounds at a time (see Figure 12). When analysed by gender, women had a tendency to lose more weight at a time than men with 2 women reporting losing more than 50 pounds, with no men reporting that, but the modal category for men was higher at 21-50 pounds compared to women whose modal category was 6-10 pounds.

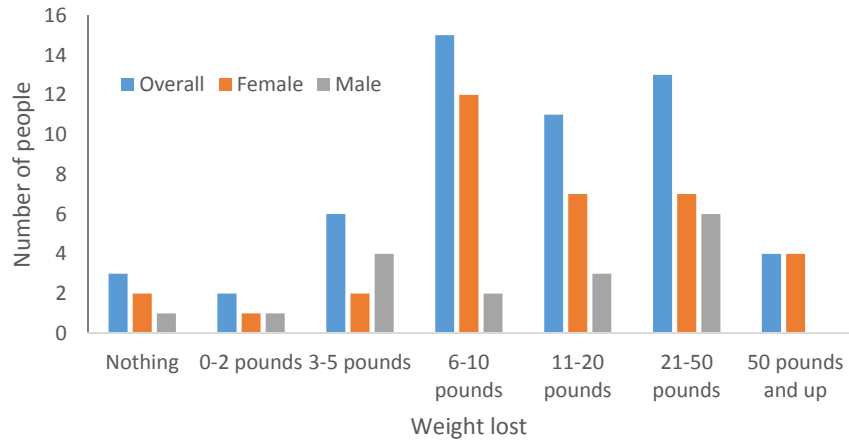


Figure 12. Amount of weight lost by patients during last weight management attempt.

The questionnaire also asked participants to rate how their weight management improved their quality of life, rating it from 0 (Did not improve their quality of life at all) to 10 (Completely improved

their quality of life). In terms of quality of life, 51 (57.3%) respondents rated whether the weight loss improved their quality of life. The average rating for participants' quality of life was 3 out of 10, representing that the weight loss only slightly improved participants' quality of life.

When analysed by gender, although neither women nor men rated their weight loss as completely improving their quality of life, men were bunched higher than women, whereas women were more spaced out at the lower end of the scale (see Figure 13).

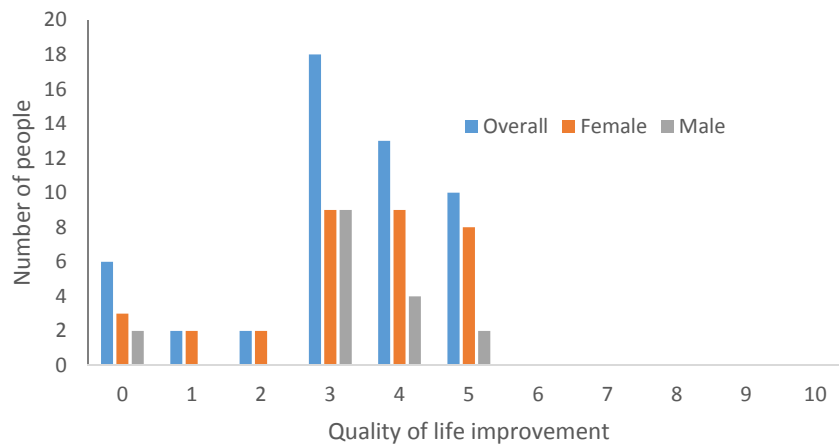


Figure 13. Quality of life improvements after previous weight management attempt.

As part of the success of their previous weight loss attempts, the questionnaire asked participants whether they were able to keep the weight that they had lost off. 59 (66.3%) respondents responded to this question. 17 of those who responded (28.8%) reported being able to keep the weight off, 24 (40.7%) reported not being able to keep the weight off and 16 (27.1%) reported being partly able to keep the weight off. 2 (3.4%) respondents answered that they did not know if they had managed to keep their weight off (see Figure 14).

#### Gender differences

37 (75.5%) women answered. 9 (24.3%) kept the weight off. 16 (43.2%) didn't keep the weight off. 10 (27.0%) partly kept the weight off. 2 (5.4%) didn't know.

20 (54.1%) men answered. 7 (35%) men reported managing to keep the weight off but equally 7 (35%) reporting not managing to keep the weight off, 6 (30%) reported managing to keep part of the weight off.

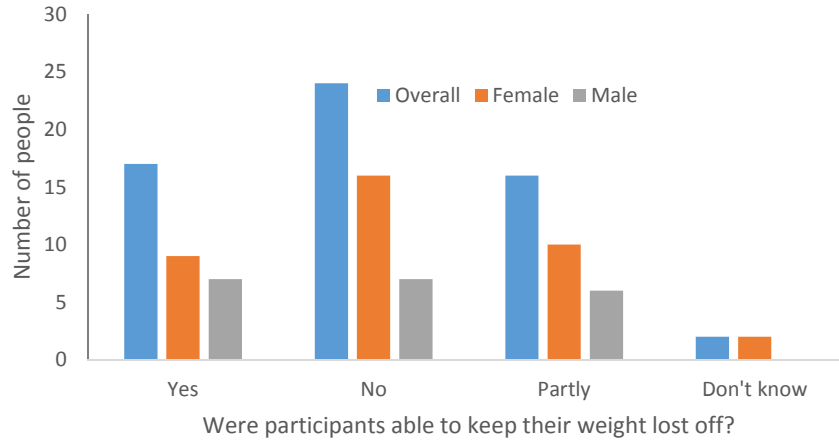


Figure 14. Whether participants were able to keep their weight maintained after previous weight management attempt.

In terms of how long it took participants to gain back the weight they had previously lost, 35 (39.3%) respondents responded how long it took (see Figure 15 below). 1 (2.6%) respondent didn't know how long it took for them to regain their weight.

When analysed by gender both men and women had modal categories in the lower categories, with the women's modal category being 4-6 months and the men's being 0-3 months. Again, men were more bunched together at the lower end of the scale whereas women were more dispersed, however this did not result in a different trend.

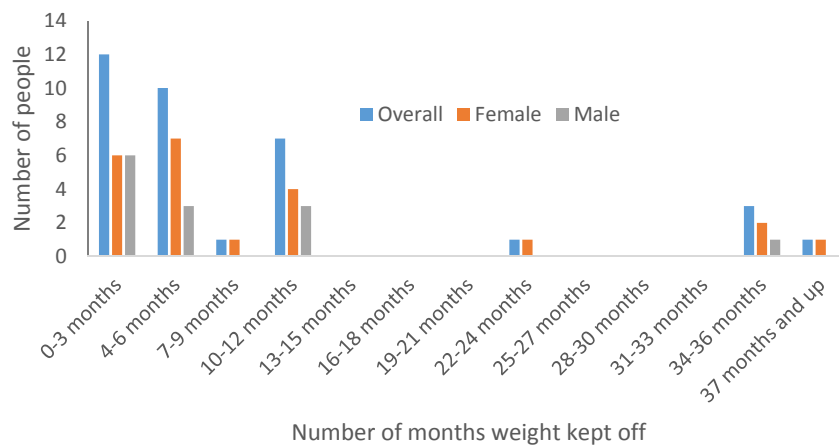


Figure 15. How long participants were able to maintain their weight after previous weight management attempt.

The questionnaire also asked them, if they did not keep off the weight, to rate how much weight they regained. 39 (43.8%) participants responded but three answers were removed; two due to the fact that the respondents reported not regaining any weight, and one explaining that this weight was due to a gain in muscle, not fat. This resulted in 36 (40.5%) responses.

There were no notable differences when analysed by gender, both men and women’s modal categories were in the lower end of the scale at 6-10 pounds regained (see Figure 16).

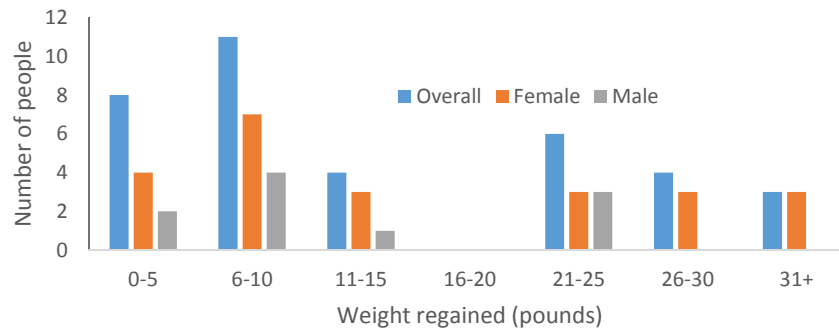


Figure 16. Amount of weight regained after participants’ previous weight management attempt.

#### Future of weight management

To inform future weight management strategies and find the most effective strategy for the largest amount of people, the questionnaire asked participants to rate different aspects of previous weight management courses on how helpful they felt these features were in helping them to reduce their weight (see Tables 1 and 2).

The aspects rated as most helpful included, exercising regularly with 61.8% of participants rating it as very or extremely helpful, followed by fitting more physical activity into their day with 60.7% of participants, then keeping a food diary with 37.1% of participants.

The aspects rated as least helpful included having the service at a hospital or medical building with 32.6% of participants rating it as only slightly or not at all helpful, followed by having the service in a sports setting with 25.8% of participants, then attending a same sex group and paying to use a programme with 24.7% of participants rating it as only slightly or not at all helpful each.

#### Gender differences

For women, the aspects rated as most helpful included exercising regularly with 69.4% rating it as very or extremely helpful, fitting more physical activity into their day with 65.3% and keeping a food diary with 51.0%.

The aspects women rated the least helpful included having the service at the hospital or in a medical building with 32.7% rating it as only slightly or not at all helpful, followed by having the service in a sports setting, paying to use a programme and being taught practical skills with 28.6% each.

The aspects men rated as most helpful included having online resources available with 29.7% of male participants rating it as very or extremely helpful, exercising regularly with 51.4% and fitting more physical activity into their day with 54.1% of male participants.

The aspects men rated as not helpful to managing their weight included meeting weight management groups or individuals in person with 29.7% of male participants rating it as only slightly or not at all helpful having the service at the hospital or in a medical building with 35.1%, then working with a group, having the service at a sports setting, having a healthcare professional leading the service attending a same-sex group and having a person of the opposite sex leading the service with 24.3% of male participants rating is as only slightly helpful or not at all helpful each.

Table 1. Percentages of total, female or male members of the sample who rated that aspect as very helpful or extremely helpful

	Total (%)	Female (%)	Male (%)
Working with a group	23.6	28.6	16.2
Paying to use a programme	15.7	18.4	13.5
Keeping a food diary	37.1	51.0	16.2
Having online resources available	32.6	36.7	29.7
Having regular communication with someone	29.2	34.7	21.6
Using an app	24.7	28.6	18.9
Exercising regularly	61.8	69.4	51.4
Meeting weight management groups/individuals in person	14.6	26.5	0.0
Having a healthcare professional leading the service	12.4	18.4	2.7
Having a person who has been through weight management leading the service	19.1	22.5	13.5
Having the service in a community setting	11.2	10.2	8.1
Having the service in a sports setting	5.6	2.0	10.8
Having the service at the hospital or in a medical building	3.4	4.1	0.0
Be provided information on weight management	30.3	30.6	27.0
Being taught practical skills (e.g cooking)	25.8	28.6	18.9

Bringing your partner with you	13.5	12.3	13.5
Attending a same-sex group	6.7	4.1	5.4
Attending a mixed-sex group	7.9	6.1	5.4
Having a person of the same sex leading the service	7.9	10.2	2.7
Having a person of the opposite sex leading the service	4.5	6.1	0.0
Fitting more physical activity into my day	60.7	65.3	54.1

Table 2. Percentages of total, female or male members of the sample who rated that aspect as slightly or not at all helpful.

	Total (%)	Female (%)	Male (%)
Working with a group	22.5	20.4	24.3
Paying to use a programme	24.7	28.6	21.6
Keeping a food diary	20.2	20.4	21.6
Having online resources available	13.5	12.3	13.5
Having regular communication with someone	15.7	14.3	18.9
Using an app	20.2	20.4	18.9
Exercising regularly	4.5	2.0	8.1
Meeting weight management groups/individuals in person	21.4	16.3	29.7
Having a healthcare professional leading the service	19.1	16.3	24.3
Having a person who has been through weight management leading the service	19.1	20.4	18.9
Having the service in a community setting	22.5	26.5	18.9
Having the service in a sports setting	25.8	28.6	24.3
Having the service at the hospital or in a medical building	32.6	32.7	35.1

Be provided information on weight management	16.9	16.3	18.9
Being taught practical skills (e.g cooking)	22.5	28.6	16.2
Bringing your partner with you	21.4	24.5	18.9
Attending a same-sex group	24.7	26.5	24.3
Attending a mixed-sex group	20.2	22.5	18.9
Having a person of the same sex leading the service	14.6	12.3	18.9
Having a person of the opposite sex leading the service	20.2	18.4	24.3
Fitting more physical activity into my day	6.7	8.2	5.4

Practical aspects for future services.

Time of day

Participants were asked to rate what time of day they would prefer any future weight management services to be run. 69 (77.5%) participants responded to this question. The most popular times were early evening (5pm-6.59pm) and late evening (7pm-9pm) with 41 (59.2%) and 32 (46.4%) respondents voting for these times, respectively (see Figure 17). This trend favouring evening times was found when specifically looking at women and men, with only slightly more men preferring late evening (55.6% of those who voted) to early evening (48.2%).

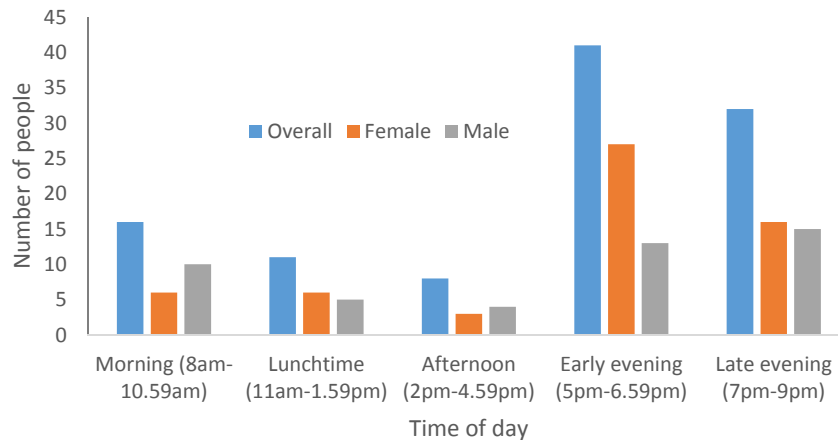


Figure 17. Participant's ratings of their preferred time of day for future weight management services



### Day of the week

Participants were given the option of which day of the week they would like any future services to be run. 69 (77.5%) participants responded to this question. The most popular day for any future services to be run was on a Wednesday with 45 (65.2%) respondents, then Monday with 44 (63.8%) respondents then Tuesday and Thursday, both with 42 (60.9%) respondents (see Figure 18). This trend was also found when specifically looking at women.

Although men also preferred Wednesday as a day to run any future services, with 18 (66.7%) men voting for that option, Saturday was another popular option amongst men, with 17 (63.0%) men voting for this option alongside Tuesday and Thursday with 17 (63.0%) men each voting for these days.

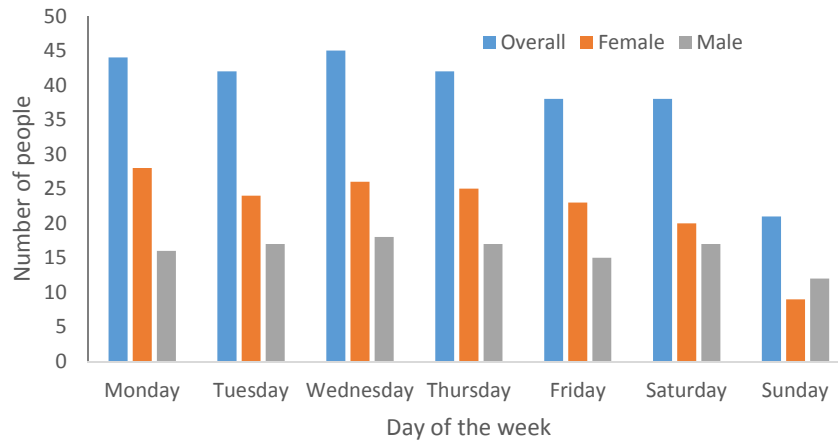


Figure 18. Participants' ratings of their preferred day of the week for future weight management services.

### How to hear about the service

Participants were also asked how they would like to hear about this service. 68 (76.4%) participants responded to this question. The most popular option as to how participants wanted to hear about any future service was through a States website with 32 (47.1%) respondents, then hearing it themselves with 30 (44.1%) respondents, then from hearing about it on the radio with 27 (39.7%) respondents (see Figure 19). This trend was also found when specifically looking at women.

Although the majority of men also wanted to hear about this service through a States website with 16 (61.5%) men favouring this method, hearing about it from their GP and through the workplace as well as seeing an advert in the GP practice were also popular options, with 12 (46.2%), 12 (46.2%) and 11 (42.3%) men voting for these options each.

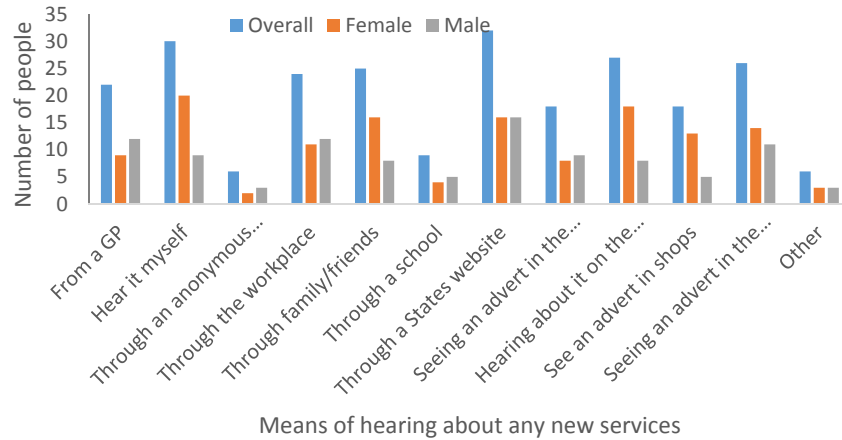


Figure 19. Participants' ratings of their preferred means of hearing about future weight management services.

#### Previous barriers

To inform future weight management strategies, participants were asked what had stopped them from accessing weight management services in the past. 50 (56.2%) participants responded to this question.

The most common barriers to accessing weight management services reported was that participants personally did not believe it would work for them or did not want to be patronised and told they were overweight, other aspects included that they did not have the time to attend any weight management services, with some citing work and their families as taking up a lot of their time (see Figure 20).

When analysed by gender, cost was a big issue for women with no men mentioning cost as a factor in their attendance to weight management services. Similarly, women were more doubtful of their motivation or ability to keep up their weight management. The male respondents seemed more doubtful of the effectiveness of existing services, with this being their modal category for attending.

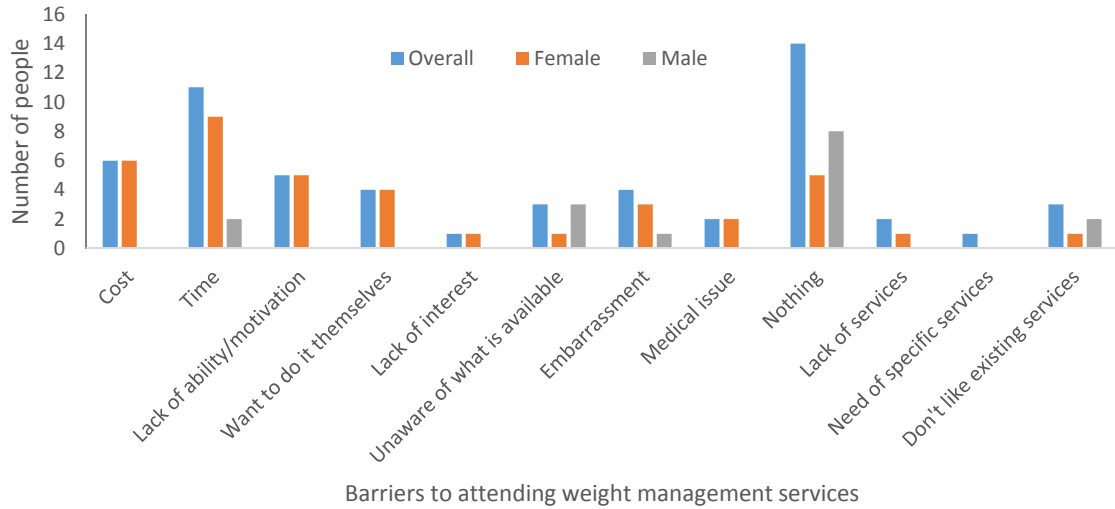


Figure 20. Participants' barriers to attending current weight management services

### Why do they want to lose weight?

Participants were also asked for their motivations as to why they wanted to lose weight. 60 (67.4%) participants responded to this question. The most commonly cited reasons overall was for health reasons and to maintain their health for the future, followed by improving their appearance (see Figure 21). This pattern was also found in women. For men, although health was the main motivator behind losing weight, there were also a few that stated that even if their weight was not healthy, that they were happy like that and would not aim to maintain their weight.

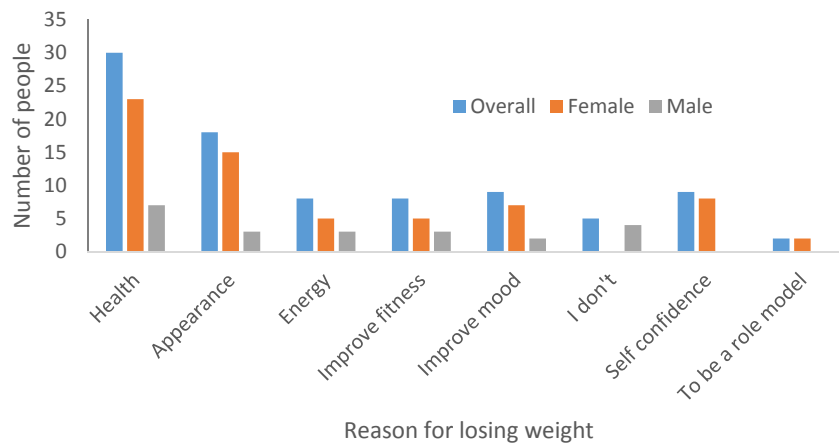


Figure 21. Participants' reasons for losing weight.

**What is the best way to lose weight in the long term?**

Participants were asked in the questionnaire which method they thought was the best way to reduce their weight in the long term. 59 (66.3%) participants responded to this question.

The most popular ways to lose weight by all participants were increasing activity and exercise levels, followed by changing their diet, including eating healthily, eating a balanced diet and reducing their portion sizes (see Figure 22). This pattern was found in both men and women when analysed by gender.

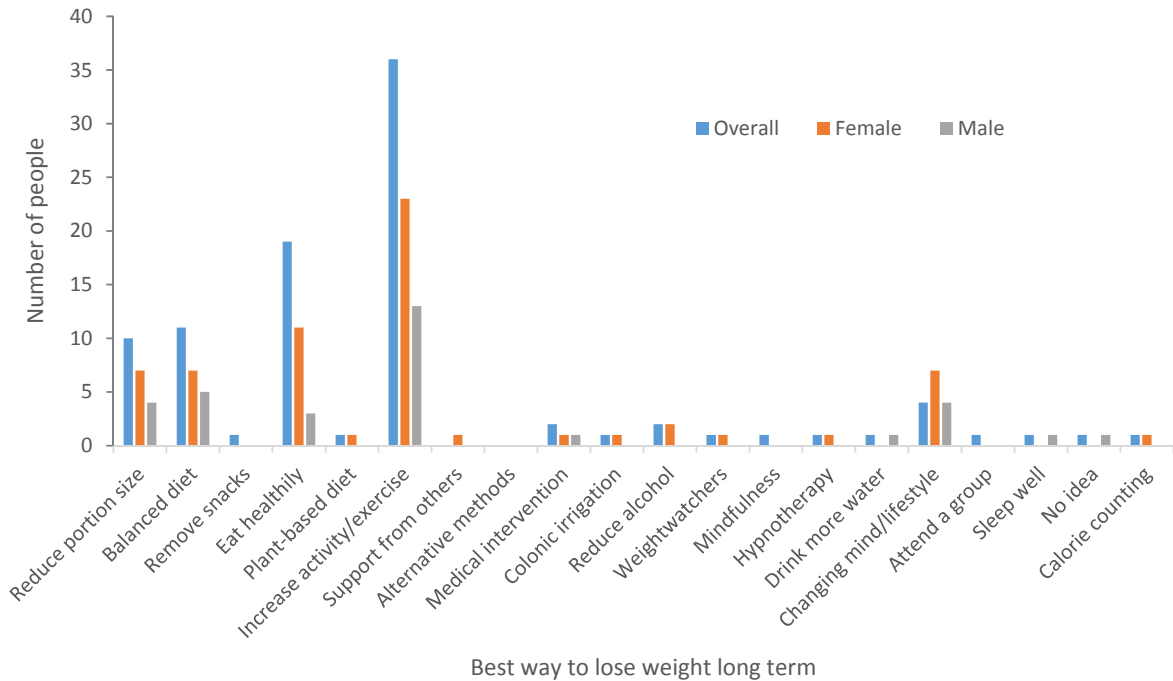


Figure 22. Participants’ rating of the best way to lose weight long term.

**What would they like to see?**

In the final few questions, participants were asked about their future weight management services. One question they were asked what they would like to see in future weight management strategies. 47 (52.8%) participants responded to the question.

Overall, participants wanted to see more services available and particularly in schools (see Figure 23). For women, services in schools was equally as important as having support groups and having online advice and help, with those options being the most highly rated among women, but with only 4 votes for each option, these opinions may not be representative of the women on the island as a whole. For men, they wanted to see more advertising to encourage healthy eating, as well as identifying the cause of the weight problem and subsidised facilities for parents, however these

were only voted for by two men for each option, so may not be truly representative of all men in the island.

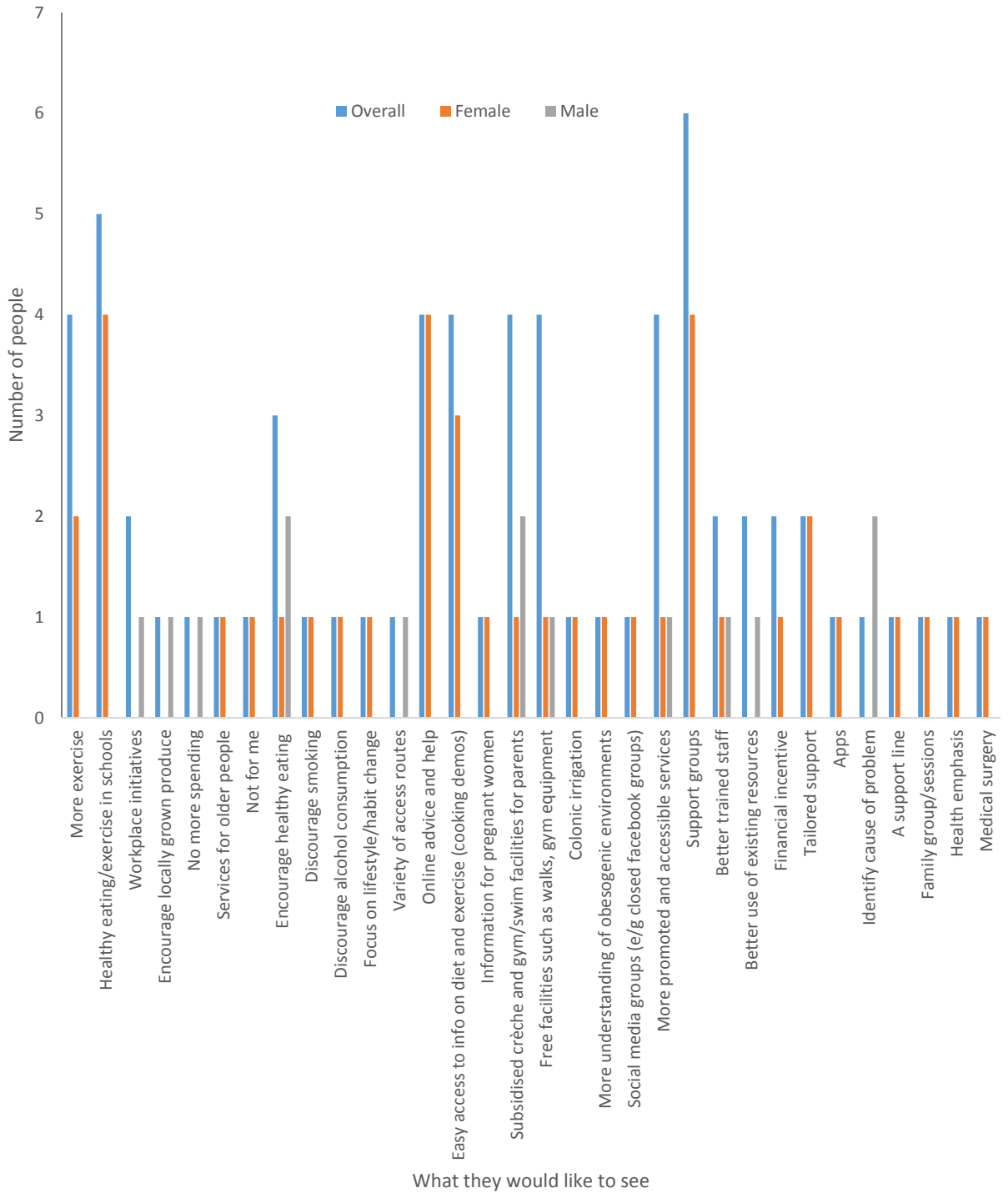


Figure 23. What participants would like to see in future weight management services.