

Identifying Preferred Features of Weight Loss Programs for Adults With or at Risk of Type 2 Diabetes: A Discrete Choice Experiment With 3,960 Adults in the U.K.

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What do U.K. adults with or at risk of type 2 diabetes prefer in weight loss programs?

Analyzing choices of 3,960 participants living with overweight across seven characteristics of weight loss programs

Why?



- Losing weight can reduce people's risk of developing a range of health problems.



- 75% of people decline current weight loss programs in the U.K.



- Understanding what people like and dislike about different programs could help us make more appealing programs.

What?



- Similar preferences regardless of diabetes status.



- Preference for healthy eating over meal replacement diets.



- Favoring individual over group activities.



- Choosing programs with higher 10-15 kg weight loss goals.



- Online content preferred to in-person interactions.



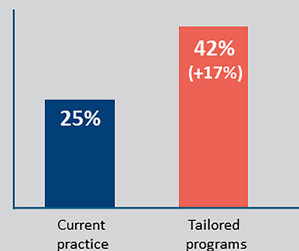
- Specific preferences noted in women and ethnic minorities.

So?



We modeled the data to see what difference incorporating such preferences might make.

% of people accepting a weight loss program



Identifying preferred features of weight loss programs for adults with or at risk of type 2 diabetes: a discrete choice experiment with 3,960 adults in the U.K.

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ARTICLE HIGHLIGHTS

• Why did we undertake this study?

Weight loss programs are recommended to improve outcomes in type 2 diabetes but require patient commitment.

• What is the specific question(s) we wanted to answer?

Preferences for weight loss programs are essential for guiding patients to weight loss programs that are most likely work for them, so what are they?

• What did we find?

Important features of weight loss programs were the style of diet, individual (vs. group-based), amount of weight loss, and online delivery (vs. in person). Weight loss was more important to women than to men. Individuals from ethnic minority populations identified more with programs where others shared their characteristics.

• What are the implications of our findings?

Tailoring programs to individual preferences could increase participation by 17 percentage points (from 25% to 42%).



Identifying Preferred Features of Weight Loss Programs for Adults With or at Risk of Type 2 Diabetes: A Discrete Choice Experiment With 3,960 Adults in the U.K.

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OBJECTIVE

To understand preferences for features of weight loss programs among adults with or at risk of type 2 diabetes in the U.K.

RESEARCH DESIGN AND METHODS

We conducted a discrete choice experiment with 3,960 U.K. adults living with overweight ($n = 675$ with type 2 diabetes). Preferences for seven characteristics of weight loss programs were analyzed. Simulations from choice models using the experimental data predicted uptake of available weight loss programs. Patient groups comprising those who have experience with weight loss programs, including from minority communities, informed the experimental design.

RESULTS

Preferences did not differ between individuals with and without type 2 diabetes. Preferences were strongest for type of diet. Healthy eating was most preferred relative to total diet replacement (odds ratio [OR] 2.24; 95% CI 2.04–2.44). Individual interventions were more popular than group interventions (OR 1.40; 95% CI 1.34–1.47). Participants preferred programs offering weight loss of 10–15 kg (OR 1.37; 95% CI 1.28–1.47) to those offering loss of 2–4 kg. Online content was preferred over in-person contact (OR 1.24; 95% CI 1.18–1.30). There were few differences in preferences by gender or ethnicity, although weight loss was more important to women than to men, and individuals from ethnic minority populations identified more with programs where others shared their characteristics. Modeling suggested that tailoring programs to individual preferences could increase participation by ~17 percentage points (68% in relative terms).

CONCLUSIONS

Offering a range of weight loss programs targeting the preferred attributes of different patient groups could potentially encourage more people to participate in weight loss programs and support those living with overweight to reduce their weight.

Weight loss improves multiple cardiometabolic risks. Evidence demonstrates that the likelihood of remission from type 2 diabetes is linearly related to weight loss.

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One effective intervention, currently being implemented by NHS England, is a total diet replacement (TDR) program with specially prepared, nutritionally complete products replacing all meals (1). Although TDR programs are known to be effective, ~75% of those invited decline to participate in these programs (1). Therefore, there is a need to identify alternative weight loss programs for individuals with type 2 diabetes living with overweight or obesity who are unwilling to try a TDR program. Understanding which features of weight loss programs are appealing and how preferences vary across individual characteristics could help health care systems provide more suitable and effective weight loss programs for diverse patient groups.

There are no systematic reviews of quantitative preference studies for weight loss programs. In three small studies, adults living with overweight or obesity variously expressed a preference for weight loss programs that featured diet and exercise rather than diet only, less exercise, maximal weight loss, more clinician involvement, personal rather than group-based interaction, tailored versus generic support, shorter travel times, and lower cost (2–6). A study of 55 individuals with metabolic syndrome found that participants initially preferred flexible diets over restricted meal programs, and group-based exercise programs over individual ones. However, over the course of 16 weeks, the cost of the program dominated their preferences (7). Crane et al. (8) enrolled 221 men (77% non-Hispanic) of low socioeconomic status. Participants preferred online over in-person weight loss interventions, small rather than large dietary changes, and weight loss interventions without over those with competition. However, none of these studies included more than four options for weight loss program characteristics, which does not represent the wide variety of weight loss programs available.

The aim of this study was to measure preferences for different features of weight loss programs, representative of the wide variety of weight loss programs currently available, using a large, representative sample of U.K. adults living with overweight or obesity, including a specific subgroup with type 2 diabetes. We used a discrete choice experiment (DCE) to identify preferences, a method shown to have good predictive

ability for corresponding real-world behaviors (9).

RESEARCH DESIGN AND METHODS

Sampling

Participants were recruited by Qualtrics using e-mail lists to which individuals signed up and were paid for participating. We included U.K. adults (age ≥ 18 years) with a reported BMI of ≥ 25 kg/m². Quotas (age, gender, and region) based on the U.K. census were used to increase representativeness. We also enrolled participants with type 2 diabetes, but we did so without quotas, because such participants are harder to find.

DCE

A DCE is a technique used widely in health to understand people's preferences by asking them to make specific choices. Here, participants were presented with a choice of two weight loss programs. Each program was defined by a set of attributes, such as type of diet and amount of weight lost, and the variation in each attribute is referred to as a level. By making a series of choices between a weight loss program with one set of attribute levels and the other with alternative attribute levels, participants implicitly reveal the degree to which each attribute is important to them and the value they place on each level of the attribute.

This DCE was designed according to health-based principles, ranging from technicalities such as design efficiency to participant-centered considerations such as checking experimental tasks were as clear as possible to participants (10–12). Individuals made 10 choices between two alternative weight loss programs and an opt-out option (i.e., "neither of these"). The alternatives were described by attributes and levels (below) representing different characteristics of weight loss programs. A questionnaire collected sociodemographic information.

Attributes and Levels

Seven attributes described the characteristics of weight loss programs in the choice tasks, summarized in Table 1. The full descriptions, as presented to respondents, are shown in Supplementary Material 1.

Attributes and levels were based on several sources of evidence: a rapid

review of current weight loss programs available in the U.K., one-on-one interviews with eight individuals with experience of weight loss programs (i.e., our public advisory group [PAG]), collaborative work with a general public member of the research team to represent their views, and consultation with subject matter experts (researchers, clinicians, commissioners, and providers of weight loss programs to the National Health Service [NHS]). Our public advisory group members were recruited from the general public, including individuals from traditionally underserved populations such as ethnic minority populations and individuals of low socioeconomic status (13). A focus group with 10 members of the public with relevant experience helped to maximize understanding of the experiment through discussion of drafts and refinement of the descriptions of the attributes. For example, the TDR type of diet was expressed as "all meal replacement products" because this was clearer to focus group participants.

A Bayesian D-efficient design generated the set of choice tasks (12). Priors were obtained from a pilot study of 51 individuals. Individuals were randomly assigned to four blocks of 10 choice tasks. Each individual answered 10 choice tasks, balancing concerns of learning and respondent fatigue (14). Our sample size was sufficient to ensure statistical power based on the pilot parameter estimates (15). An example of a choice task is presented in Supplementary Material 2. To make the choice tasks more realistic, restrictions were imposed on the design to prevent the appearance of implausible combinations of attributes. For example, the "printed information only" level of the attribute "way of taking part" was not allowed to be in the choice if the "size of support session" attribute was "group-based." This is because it is not possible to deliver only printed information in a group support setting, so having this combination appear in the choice tasks would have been implausible. The full set is listed in Supplementary Material 3.

Randomization to Weight Loss Information

During our formative public engagement, few people knew that diabetes could enter remission, nor did they realize the magnitude of weight loss required to

Table 1—Attributes and levels used in the DCE

Attribute	Levels
1. Way of taking part	Talking in person (e.g., at a community center) Talking online (e.g., app/Zoom) Online content only Printed information only
2. Size of support session	Group-based Only me
3. People (or instructor) are like me	Yes No
4. Amount of weight lost	2–4 kg (4–9 lb) 5–9 kg (11 lb to 1 stone, 6 lb) 10–15 kg (1 stone, 8 lb to 2 stone, 5 lb) >15 kg (2 stone, 5 lb)
5. Frequency of visits	One-off Twice per week Once per week Twice per month Once per month
6. Length of weight loss plan	<1 month 1–3 months 3–6 months 6–12 months >12 months
7. Type of diet	Calorie counting All meal replacement products (TDR) Some meal replacement products Food group-based Healthy eating Intermittent fasting

achieve this. In response, we randomly assigned respondents to one of two arms before the DCE, using the experiment-within-experiment approach (16). In one arm, respondents were exposed to a prime explaining that for individuals with type 2 diabetes, a weight loss of ≥ 10 kg (on average) improves chances of achieving normal glucose control without medication. In the other arm, no information was given. This allowed testing of whether preferences for weight loss programs are affected by knowing the importance of marked weight loss for diabetes remission.

Data Quality

Respondents were given narrative and visual information describing the alternatives, attributes, and levels. A practice choice task before the experiment helped respondents to understand the experiment. All information was framed to increase understanding, drawing on qualitative work and public input. We used a pilot study and asked respondents to report misunderstandings and/or difficulties and adjusted questions if needed. None

of the respondents reported difficulty in understanding, and none reported any discomfort in taking the survey. Forced responses prevented respondents from skipping past questions in the survey; an attention check was embedded part-way through the survey; and a minimum time threshold of 2 min, based on pilot data, removed respondents who rushed through. Questions on relative attribute importance assessed the consistency with the model estimates. Duplicate survey responses were rejected. A summary is provided in Supplementary Material 4.

Statistical Analyses

The main analyses were preregistered before collection of the data (17); full details are provided in Supplementary Material 5.

Multinomial logit models were used to analyze the experimental choices. Alternative-specific constants and dummy-coded attribute levels were independent variables. A joint coefficient on both weight loss program alternatives was specified relative to the “neither of

these” option and yielded a measure of “any weight loss program” versus “no weight loss program.” A nesting structure allowed for correlation between the weight loss programs, the implication being that individuals first chose between “any weight loss program” versus “no weight loss program” and then between weight loss programs conditional on choosing the “any weight loss program” option. Attribute levels were treated as normal distributions to allow for preference heterogeneity. We therefore estimated mixed nested logit models. Statistical significance was examined with *t*-ratios (i.e., two-tailed Student *t*-tests).

Simulating Choice Probabilities of Weight Loss Programs

The dependent variable in regression models was the selection of “weight loss plan 1,” “weight loss plan 2,” or “neither of these.” After estimation, we used the fitted model to predict (simulate) choice probabilities for each of these outcomes. That is, for each observation in the data, the model predicted a probability for all three outcomes, the sum of which was 1 (i.e., each individual has to choose something). The probability was calculated from the specific attribute values in a given choice task and the estimated parameter for each attribute. By summing the probability for “weight loss plan 1” and “weight loss plan 2,” the probability of “any weight loss plan” was derived. Then, for each observation, we recovered the probability of “any weight loss plan” and “neither of these” (or equivalently “not to have a weight loss plan”).

Using the estimated parameters, we simulated choices for any combination of attributes by setting the attribute values in the data and applying these to the model. In this way, we predicted probabilities of choosing weight loss programs based on participants’ preferences regarding five different weight loss plans, four of which were commonly used in the U.K., and a “most popular” weight loss program possible with the attributes and levels used in the experiment, regardless of its availability in practice. Supplementary Material 6 shows the attributes and levels. Simulations used sample enumeration (18) with 95% Krinsky-Robb CIs (19).

A known issue with stated responses in DCEs is hypothetical bias, where individuals' stated behaviors do not match those observed in the real world (20). In our experiment, individuals may have focused more on choosing between weight loss programs rather than the choice to attend a program or not. Accordingly, the model may predict much higher engagement in a program than would be seen in the real world. To mitigate this, we used data from a clinical trial to set base predictions to a level that was observed in real-world behavior, a procedure known as model calibration (21); details are provided in Supplementary Material 5.

Analyses were conducted in R. Regressions used the Apollo package (22). Code scripts are available on request. Ethical approval was granted from the Oxford Tropical Research Ethics Committee at the University of Oxford (Oxford, U.K.; REF: R81951/RE001).

RESULTS

Our sample comprised 3,960 individuals, including 675 (21%) with type 2 diabetes. Supplementary Material 7 lists participant characteristics. The average age was 46 years (similar for participants with and without diabetes). Approximately 20% of participants were from ethnic minority populations (in line with the U.K. population). There were more men than women with type 2 diabetes, reflecting the population with type 2 diabetes. Similar to the proportion in U.K. (i.e., 47%), 44% of participants had a degree (23). Region of residence was balanced across respondents with and without diabetes. Participants with type 2 diabetes had a higher mean BMI than those without (mean BMI 32.1 kg/m² (SD 5.9) vs. 30.2 kg/m² (SD 5.0)). Most participants (59%) had at least one long-term health condition. Approximately 16% smoked. Two percent reported having had bariatric surgery. Sixty-three percent were currently working.

Comparison of Preferences in Participants With and Without Type 2 Diabetes and Bariatric Surgery

None of the interactions between the attributes and diabetes status were statistically significant (Supplementary Material 8). No interactions were significant for those

who had undergone bariatric surgery. We therefore used the pooled sample for all analyses.

Behavioral Priming

There was no evidence that randomly assigning participants to information about the amount of weight loss necessary to achieve remission from diabetes influenced the outcome (Supplementary Materials 13 and 14). This was also the case among participants with diabetes.

Preferences for Attributes of Weight Loss Programs

Figure 1 presents the odds ratios (ORs) for weight loss program choice for each of the attributes (Supplementary Material 9 provides model estimates). These reflect the sample level preferences for the attributes. These are means of estimated normal distributions of preferences. The full distributions for each attribute level are presented in Supplementary Material 10.

Participants expressed the strongest preferences for type of diet. TDR diets were, all else being equal, the least popular choice, with healthy eating the most preferred choice relative to TDR (OR 2.24; 95% CI 2.04–2.44). Other diet types were preferred to TDR, but to a lesser extent: calorie counting (OR 1.74; 95% CI 1.61–1.88), food group-based (OR 1.64; 95% CI 1.52–1.77), intermittent fasting (OR 1.47; 95% CI 1.36–1.58), and some meal replacement (OR 1.42; 95% CI 1.31–1.53). Participants preferred relatively shorter (1–3 months [OR 1.14; 95% CI 1.08–1.20] or 3- to 6-month [OR 1.20; 95% CI 1.11–1.28]) programs to those lasting longer than 12 months, but these preferences were weakly held (i.e., lower ORs compared with other features). The only preference for frequency of contact was that weekly contact was preferred to monthly (OR 1.09; 95% CI 1.03–1.16). Participants strongly preferred weight loss programs that led to substantial weight loss (10–15 kg vs. 2–4 kg; OR 1.37; 95% CI 1.28–1.47); programs offering slightly greater or smaller weight losses than this were still preferred to those offering only small weight losses (5–9 kg vs. 2–4 kg; OR 1.18; 95% CI 1.12–1.24) and losses >15 kg vs. 2–4 kg (OR 1.20; 95% CI 1.13–1.26). Participants preferred programs that enrolled “people like me” to those that did not and, in the case that

there was only an instructor, preferred programs in which the instructor was “like me” (OR 1.07; 95% CI 1.04–1.11). Participants preferred one-to-one support to treatment in a group setting (OR 1.40; 95% CI 1.34–1.47). Talking in person was less popular than talking online (OR 1.08; 95% CI 1.03–1.13) or receiving online content (OR 1.24; 95% CI 1.18–1.30), which was the most popular option; participants were indifferent between talking in person and receiving printed content (OR 1.02; 95% CI 0.89–1.13).

Individual Characteristics

We tested prespecified interactions of gender, ethnicity, and BMI with the attributes, presented in full in Supplementary Material 11. There was evidence of two interactions only. First, women preferred greater weight loss more strongly than men. Second, participants in an ethnic minority preferred group formats with people of the same background more strongly than White respondents. In a post hoc analysis, we found that higher weight loss was more strongly preferred by people with BMI ≥40 kg/m².

Figure 2 presents simulated choice probabilities for five weight loss programs (calibrated using U.K.-based clinical trial of TDR [1] and our clinicians' guidance; results shown in Supplementary Material 5). One of these was designed to represent the theoretically most popular program based on the attributes and levels in the experiment. This 3- to 6-month plan featured online content, individual support, an instructor “like me,” 10–15 kg weight loss, weekly sessions, and healthy eating. The simulated likelihood of participation was 0.42 (95% CI 0.39–0.44). If offered to participants, 42% of the choices would be this program, and 58% of the choices would be not to participate. The simulated likelihood of participation in the least popular of the four currently available programs, a group-based community weight management program, was 0.22 (95% CI 0.21–0.24). Other currently available weight loss programs were between these two limits: TDR (all meals replaced by formula liquid products; OR 0.25; 95% CI 0.23–0.27), online one-on-one support for a “real food” weight loss diet (OR 0.31; 95% CI 0.29–0.33), and online

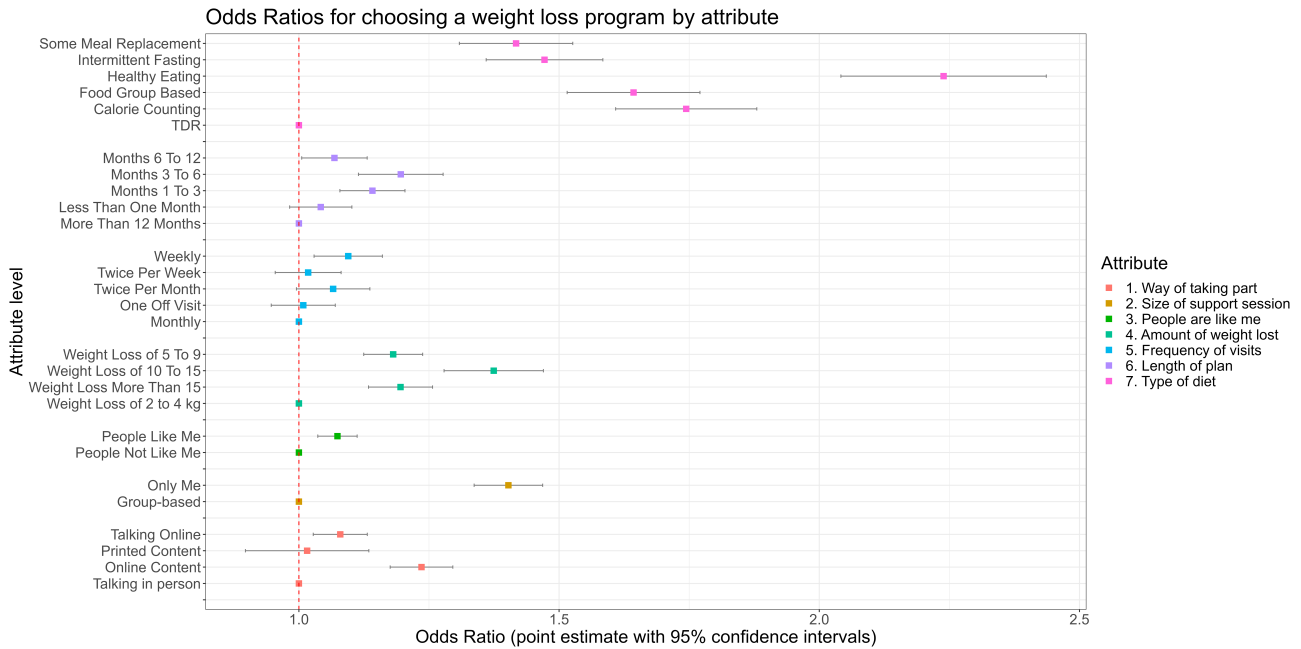


Figure 1—ORs for choosing weight loss programs by attribute. Point estimates and 95% CIs are shown. For each attribute, the attribute levels are compared with the reference level (i.e., the omitted attribute level). The reference levels are as follows (corresponding attribute numbers are in parentheses): talking in person (1), group-based (2), people are not like me (3), weight loss of 2–4 kg (4), monthly (5), more than 12 months (6), and all meal replacement/TDR (7).

healthy eating information with low weight loss (OR 0.33; 95% CI 0.31–0.35).

Sensitivity Analyses

Mixed nested logit models were preferred to simpler nested logit models on the basis of improvements in model fit (Vuong test for non-nested models) and

allowance for heterogeneity in respondents’ preferences, mitigating the risk of parameter bias.

Including oversampled (by the survey firm on some quotas) participants did not change the results (Supplementary Material 12). Survey questions on relative attribute importance corroborated findings from the choice models.

CONCLUSIONS

This study estimated preferences for attributes of weight loss programs to understand weight loss program participation in a sample of individuals living with overweight and obesity. The strongest preferences were related to type of diet, with TDR the least favored among a set of five

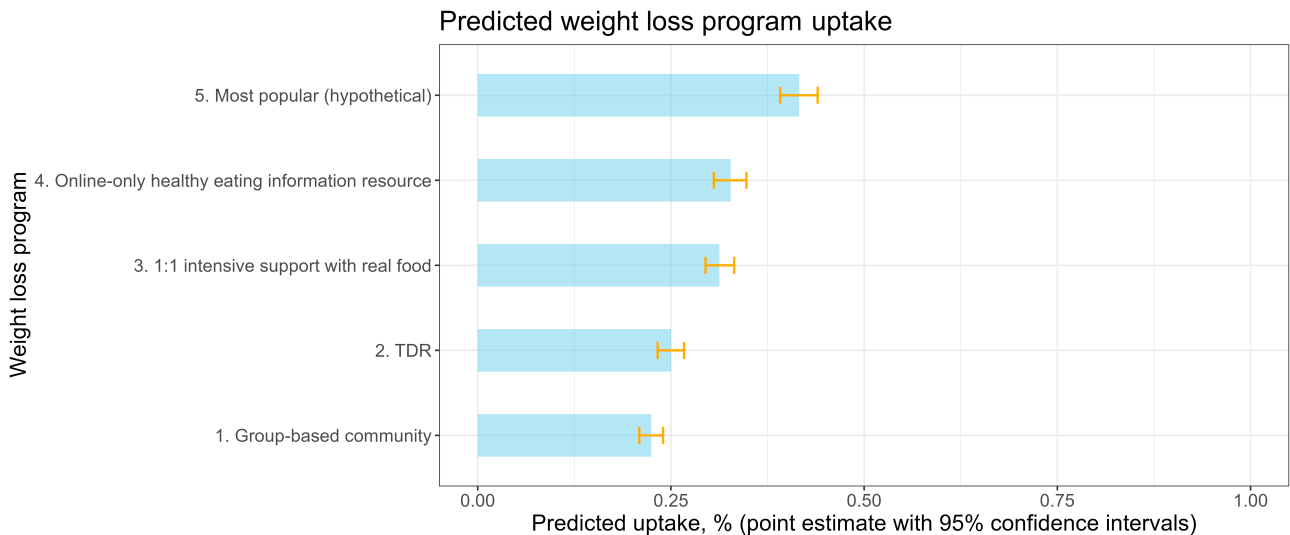


Figure 2—Simulated choice probabilities for five weight loss programs (Attribute/level combinations listed in Supplementary Material). Four of these (1–4) are currently available, and 5 is a hypothetical weight loss program that would be the most popular with the attribute levels available. We present the probability of selecting a particular program compared with choosing to lose weight without attending a program. The probabilities also represent the sample uptake, so 42% would choose the most popular program and 58% would not participate. The uptakes of the remaining programs were 33%, online-only healthy eating information resource; 31%, one-on-one intensive support with real food; 25%, TDR; and 22%, group-based community.

and healthy eating preferred most over TDR. The amount of weight lost and preferring weight loss programs alone, rather than in a group, were also important. The TDR program delivered high weight loss, but in predictions, it was less preferred to others that did not (e.g., online healthy eating), because the preference for style of diet had more bearing on choices than the amount of weight lost. There was no evidence that these preferences differed by whether participants had type 2 diabetes. There was some evidence that women preferred programs that resulted in greater weight loss than men. Furthermore, individuals from ethnic minority populations were more likely to prefer attending a group program with other people from the same background. Last, we found evidence that those with high BMI preferred programs that could deliver higher weight loss. There was no evidence that providing information on the need for greater weight loss to put type 2 diabetes into remission changed preferences.

Strengths of this study include an experimental design underpinned by a scoping review of existing weight loss programs and the input from a diverse group of people with experience in trying to lose weight and using weight loss programs, clinicians, and other stakeholders. This ensured that we studied the features of programs that are representative of weight loss programs currently available and described them in a way that was understood by members of the public. We also used a large, nationally representative sample. Oversampling individuals with type 2 diabetes meant we were able to assess whether preferences for weight management differed from those of the general population in this group; we found no evidence that they did so. We took steps to ensure the quality of the data and conducted a series of sensitivity analyses to verify our findings. We used advanced modeling techniques to yield robust estimates. An experiment-within-experiment design allowed us to test the impact of a behavioral prime.

Limitations include that obesity-related behaviors are potentially subject to misreporting because of social stigma and/or social desirability bias (24). In this setting, it could have manifested in

respondents choosing weight loss programs more often than they otherwise might have. Indeed, DCEs are vulnerable to hypothetical bias; that is, what respondents report in surveys is not necessarily what they do in real-life settings (20). This is potentially a limiting issue insofar as measured preferences may differ from those in reality. Some signals from the analysis help to mitigate these concerns. First, many individuals chose “neither of these” weight loss programs (~20% of all choices). Second, in the survey feedback, respondent comments such as, “I avoided all intermittent fasting ones as I have tried it and hated it” gave reassurance that the experiment worked as intended. Further, we took steps to mitigate this by designing the experiment based on available weight loss programs in the real world, engaging users of weight loss programs in our design processes, and using results from clinical trials to base our predicted choice probabilities on observed behaviors, which made a substantial difference to the predicted participation rates. Although using results from a clinical trial to calibrate our model improved the accuracy of our estimates, we note that trials are subject to forms of selection bias, in this case recruitment through primary care, which may mean the participation rate in trials differs systematically from that in routine practice. Both the estimated preferences and the predicted probabilities should be treated with some caution, because they are ultimately hypothetical choices in an online experiment and not behavior. Moreover, previous research (7) and clinical experience suggests that although many people believe they will not enjoy or have success with particular dietary programs, notably TDR, this perception frequently changes over time based on direct experience. Therefore, it is important to acknowledge that a hypothetical choice may not necessarily reflect what people choose or have success with in practice. However, it is possible that understanding people’s preferences for weight loss programs could help to make more programs available with characteristics that people will identify as the “right diet for them” and that may in turn promote uptake and adherence (25).

Previous studies (2–6,8) found that individuals preferred interventions that involved diet and exercise rather than diet only, required less exercise, maximized

weight loss, had more clinician involvement, were personal rather than group-based, offered tailored versus generic support, were cheaper, minimized the risk of diabetes, and required lower travel times to access. Our results are not directly comparable, because we focused specifically on diet-based interventions, and we found that type of diet was the leading driver of preferences. In two studies (4,5), weight loss was more important than type of diet (although the diet options were unspecific [i.e., “restrictive,” “flexible,” and “no diet”]). Other studies (e.g., Johnson et al. [5]) used cost as an attribute, which is important in settings where individuals pay for weight loss programs, such as in the U.S.

There are important implications of these findings for the provision of weight loss programs. First, based on the results of recent trials (1,26), TDR is becoming the mainstay of dietary interventions for diabetes remission; however, it was the least popular diet generally, despite the promise of significant weight loss. This finding may help explain the relatively low participation rate observed in the national rollout of this treatment in a pilot program in the U.K. and implies that efforts may be needed to promote this approach. Second, the least popular option was a group-based community weight management program; however, this is one of the most common options offered by local areas for the treatment of obesity or adopted by individuals looking to lose weight. Uptake may be enhanced by offering one or more of the more preferred features (e.g., online resources), subject to cost. Indeed, many providers are now incorporating these aspects into their programs.

The promise of weight loss of at least 5 kg is also important, perhaps reflecting a sense of what is worthwhile. This goal may have been reinforced by targets outlined in many clinical guidelines, which recommend initial realistic targets of ~5% weight loss (27). Although evidence suggests that greater weight loss brings greater clinical benefit, and greater weight losses are certainly important, if the goal is diabetes remission, at a population level even small reductions are beneficial (1,28). Nonetheless, the unsurprising desire for substantial weight loss within relatively short periods of time

should focus attention on more intensive programs.

The notion of “healthy eating” was very attractive to participants. However, this was not precisely defined, and in practice, it may be harder to develop programs universally perceived as healthy. For example, there is considerable debate about the healthy carbohydrate content in the diet, especially for individuals with diabetes. TDR programs are nutritionally complete, which is hard to achieve in energy-restricted diets based on usual foods; however, their ultra-processed nature may be perceived as unhealthy. Nonetheless, because the desire for a healthy diet in association with the opportunity to lose weight is important, emphasizing the nutritional value of any dietary intervention could promote uptake.

This study suggests that the theoretically most preferred weight loss program for the average participant would be available online, delivered one-on-one to the individual, supporting weight loss of 10–15 kg, with weekly contact, following a “healthy eating” type of diet, for 3–6 months, where the instructor or health coach shares characteristics of the individual. Although such a program is not currently available (it is at this time hypothetical), our modeling suggests that offering a program such as this could increase participation by 17 percentage points, or 68% in relative terms, compared with TDR.

In conclusion, we have described patient preferences for attributes of weight loss programs. It is possible that creating programs that match these may increase uptake of weight loss programs, and these preferences can be used by commissioners to design pathways to support more people in accessing weight loss programs.

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