

Summary of the METS study behavioral intervention.

There were 8 in-person sessions and 7 phone sessions. In-person sessions were combined with the scheduled study visit and took approximately 30 minutes (10 minutes weigh-in/homework check, 10 minutes instruction, 10 minutes review). Phone sessions took 10-15 minutes. Subjects received a scale and a pedometer for home use and were instructed to record daily food intake, weights and pedometer readings, and to choose three daily exercises.

At each session, the clinician started by checking the participant's homework and weight. If the participant was achieving their goals, positive reinforcement was provided. If the participant was not meeting their goals, the clinician tried to think of creative ways to find success or to revise the goal in some way to make it more achievable for the participant. Next, the clinician provided the lesson for the day. The lessons were written as scripts, but the wording could be modified to make it comfortable to the clinician. Finally, during the review phase, participants were asked to demonstrate their understanding of the lesson and the upcoming homework.

At each in-person session, participants received a diary in which they recorded their homework and their progress. Participants received a new diary for each session and handed in the diary from the previous session. Between in-person sessions, participants had a phone session with the clinician to assess progress, to troubleshoot if there were problems, and to encourage success.

In-person behavioral treatment sessions:

Session 1: Participants were taught about the relationships between how much people eat, how much energy they use and how much they weigh. They were provided a food diary and their homework was to record their daily weight and daily food intake.

Session 2: Participants were taught about the relationship between exercise and burning calories. Homework was to record daily food intake, record daily weight and pedometer readings and to choose 3 different exercises and do them twice daily.

Session 3: Participants were instructed to work on controlling the urge to overeat. Homework was to resist the urge to overeat and to write down when they have been successful.

Session 4: Participants were taught about how energy is used while carrying out normal, everyday activities and instructed on ways to expend more energy in their daily lives. Homework was to choose 3 ways to use energy and to perform these activities each day.

Session 5: Participants were taught about how food cues can encourage eating even when people aren't hungry. Homework was to eat only in designated areas and to choose smaller portion sizes.

Session 6: Participants were instructed about how eating too quickly or to not pause while eating can lead to overeating simply because the signals that reduce sensations of hunger have not been activated yet. Homework was to think about chewing food completely before taking the next bite.

Session 7: Participants were instructed about the importance of developing self-control about overeating. Many people are taught from an early age the importance of eating everything on their plate – a practice that can lead to overeating. Homework was to leave some food uneaten on their plate at each meal.

Session 8: Participants were instructed about how excessive snacking can occur because of food cues around us rather than because of hunger. Strategies were reviewed on how to cut back on snacking such as delaying food intake, engaging in a favorite activity instead of snacking and substituting snacks for lower-calorie foods whenever possible.

Supplemental Table 1. Distribution of antipsychotic medications between the treatment arms.

Antipsychotic Medication	Metformin N	Placebo N	Total N (%)[*]
aripiprazole	19	17	36 (24)
clozapine	17	15	32 (21)
risperidone	13	18	31 (21)
olanzapine	14	14	28 (19)
quetiapine	10	5	15 (10)
ziprasidone	6	6	12 (8)
haloperidol	4	5	9 (6)
paliperidone	4	3	7 (5)
fluphenazine	4	2	6 (4)
perphenazine	3	1	4 (3)
thiothixene	1	0	1 (1)
loxitane	1	0	1 (1)

*36 (24.7%) subjects were taking two antipsychotics.

Supplemental Table 2. Distribution of concomitant medications with potential for weight gain between the treatment arms.

	Metformin N	Placebo N	Total N (%)
lithium	6	8	14 (9)
valproic acid	5	7	12 (8)
tricyclic antidepressants	2	2	4 (3)
mirtazapine	2	1	3 (2)

Supplemental Figure 1. Flowchart of subject participation and data analysis

