

Online Tools

The online weight loss tools included food, activity, and weight trackers, along with a few other tools. The food tracker allowed users to see their calorie and nutrient intake, while the activity tracker allowed users to record their daily exercise. By entering both food intake and activity, users were able to see if they were burning more calories than they were eating by using the calorie balance feature. A sample screen from the food tracker is shown below.

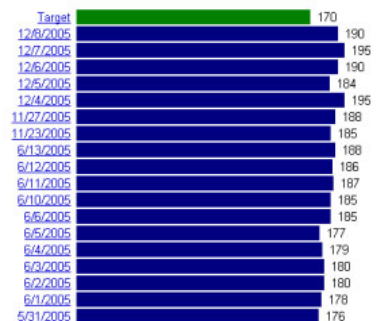
Food/Beverages for April 24, 2006

Total Calories:	393.7	Total Carbohydrates:	19.0 g
[Your calorie balance]			
Average calories consumed per day:	393.7	Total Dietary Fiber:	4.0 g
Total Fat:	17.1 g	Total Sugars:	4.0 g
Total Saturated Fat:	6.5 g	Total Protein:	41.2 g
Total Cholesterol:	117.2 mg	Total Calcium:	68.1 mg
Total Sodium:	399.2 mg		

4/24/2006	
12 PM	<input checked="" type="checkbox"/> BEEF,TENDERLOIN,LN&FAT,0"FAT,CHOIC,CKD,BRLD (1 steak (yield from 161 g raw meat)) add to favorites Edit Delete Calories:291.1, Tot. Fat:15.6g, Sat. Fat:6.1g, Chol:117.2mg, Sodium:99.3mg, Tot. Carbs:0.0g, Dietary Fiber:0.0g, Sugars:0.0g, Protein:35.2g, Calcium:22.7mg
12 PM	<input checked="" type="checkbox"/> ASPARAGUS,CKD,BLD,DRND (1 cup) add to favorites Edit Delete Calories:39.6, Tot. Fat:0.4g, Sat. Fat:0.1g, Chol:0.0mg, Sodium:25.2mg, Tot. Carbs:7.4g, Dietary Fiber:3.6g, Sugars:2.3g, Protein:4.3g, Calcium:41.4mg
12 PM	<input type="checkbox"/> BISCUITS,PLN OR BTTRMLK,REFR DOUGH,LOWER FAT,BKD (1 biscuit (2-1/4" dia)) add to favorites Edit Delete Calories:63.0, Tot. Fat:1.1g, Sat. Fat:0.3g, Chol:0.0mg, Sodium:304.7mg, Tot. Carbs:11.6g, Dietary Fiber:0.4g, Sugars:1.7g, Protein:1.6g, Calcium:4.0mg

The weight tracker gave users a visual record of their weight changes, as shown below.

[Add a new weight](#) | [Your target weight](#) | [Your BMI](#) | [Print page](#)



Thank you for your participation in the Aurora Healthy Lifestyle Study!

Aurora Healthy Lifestyle Study

Results Summary



If you have any questions about the study or this document, please contact the study coordinator or principal investigator using the contact information below.

Study Coordinator

Andrea Schreiber
(414) 219-5069
andrea.schreiber@aurora.org

Principal Investigator

Dr. Alison Lux
(414) 372-8080, x1332
alux@mhsl.org

Background

The Aurora Healthy Lifestyle Study was designed to study the effects of internet-based weight loss tools on the weight and overall health of a group of Aurora metro-area employees and their families. Half of the participants were given access to the online weight loss tools (experimental group), while the other half did not have access to the tools (control group). Both groups participated in regular biometric assessments and were given information about healthy eating and exercise through paper handouts and a bi-weekly electronic newsletter. By examining the differences between the two groups at the end of the 18-month study, the study team hoped to measure the effectiveness of the online tools.

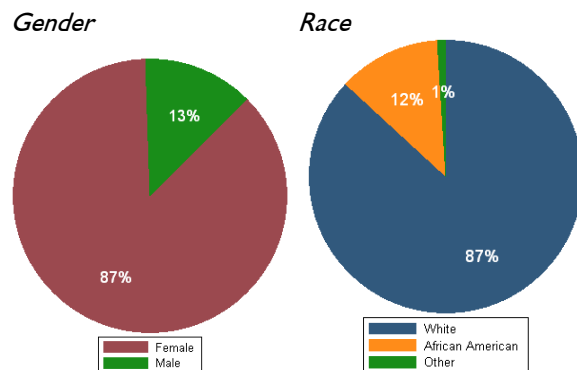
Goals

The study examined whether participants' use of the online tools had an impact on:

- Weight loss
- Overall physical and mental health
- Health behaviors and health risk
- Employee productivity and health costs

Participants

- 439 participants were enrolled at the time that the groups were formed
 - 220 in experimental group
 - 219 in control group
- 400 employees; 39 family members



Results

Weight Loss

- There was no difference in weight loss between the groups at the end of the 12-month intervention or at the 18-month follow-up assessment.
- At the final assessment, the average participant had lost 0.12% of their starting body mass index (BMI).
- Of the participants for whom baseline and final data were collected, 44% lost some weight over the course of the study, while 55% gained some weight.

Overall Physical and Mental Health

Physical health was measured by blood pressure, cholesterol (total and HDL), hemoglobin A1c, and self-reports of activity.

- No real changes were seen in blood pressure.
- Total cholesterol varied widely throughout the study and there was no difference between the groups.
- HDL cholesterol was significantly lower among those participants who attended all of the biometric assessments.
- Hemoglobin A1c varied by age, race, and BMI, but these variations were small and not clinically meaningful.
- There was no difference between the groups in reported aerobic activity at any time during the study.
- At the 18-month time point, those in the experimental group reported higher levels of strength and flexibility activity.
- Overall health was measured using the SF-12 online survey. No differences existed between the groups in health scores at any point during the study.

Health Behaviors and Health Risk

- Health behaviors and risk were assessed using the online Health Risk Assessment (HRA) survey.

- The survey was administered at baseline but not at the end of the study, as had been planned.
- During the study Aurora changed HRA providers. The scores on the new HRA would not be comparable to the original HRA, so the survey was dropped from the final assessment.

Employee Productivity and Health Costs

- Productivity was to be measured using unscheduled paid time off data. This data was not available, so changes in employee productivity could not be measured.
- The analysis of changes in health care costs is still being completed.

Online Tools Use

- Usage of the online tools was lower than expected.
 - 25% of experimental group participants never logged in to the tools
 - 85% of experimental group participants logged in to the tools 12 or fewer times
- Participants were asked to comment on the tools at the end of the study. Frequent comments included:
 - Tools were too time consuming
 - Tools were awkward or difficult to use

Conclusion

There was no difference between groups in BMI or other health measures at the end of the study. Since very few participants in the experimental group used the online tools, it is difficult to assess whether the tools could be effective in promoting weight loss. Further research on how to best implement a set of online tools, including an incentive structure that encourages participants to use the tools, should be considered before implementing a set of online weight management tools in an employee population.