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Portion size effects on weight gain in a free living setting

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Abstract

Objective—Examine the effect of weekday exposure over six months to different lunch sizes on energy intake and body weight in a free-living sample of working adults.

Design and Methods—Adults (n=233) were randomly assigned to one of three lunch size groups (400 kcal; 800 kcal; 1600 kcal) or to a no-free lunch control group for six months. Weight and energy intake were measured at baseline, and months 1, 3, and 6.

Results—Lunch energy was significantly higher in the 800 and 1600 kcal groups compared to the 400 kcal group ($p < 0.0001$). Total energy was significantly higher for the 1600 kcal group compared to the 400 and 800 kcal groups ($p = 0.02$). Body weight change at six months did not significantly differ at the 5% level by experimental group (1600 kcal group: +1.1 kg (sd=0.44); 800 kcal group: -0.1 kg (sd=0.42); 400 kcal group: -0.1 kg (sd=0.43); control group: 1.1 (sd=0.42); $p=.07$). Weight gain over time was significant in the 1600 kcal box lunch group ($p < 0.05$).

Conclusions—Weekday exposure for six months to a 1600 kcal lunch caused significant increases in total energy intake and weight gain.

Keywords

portion size; energy intake; weight gain

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CONFLICT OF INTEREST STATEMENT

The authors have no conflict of interest to declare.

NRM, JW, LJH, AFG, JEB contributed to the development of the intervention and measurement protocols and contributed to writing the paper. JW conducted the primary statistical analyses. RWJ and PRP contributed to writing the paper. PRP assisted with logistical aspects of intervention recruitment, implementation and evaluation.

All authors have no conflict of interest to declare.

INTRODUCTION

The food environment in the US has been transformed during the past two decades concurrent with the epidemic rise in obesity.¹ The pervasive availability of food and large portion sizes are aspects of the food environment that are potential contributors to overeating and excess weight gain.^{2,3} However, at present, there is little experimental evidence available to evaluate the potential public health impact of exposure to large portion sizes on energy intake or body weight.

Large portion sizes have been studied extensively in highly controlled laboratory settings and consistently show increases in energy intake over a short time frame.⁴⁻⁶ This effect is robust across gender, body mass index, age and individual differences in measures of stable eating behaviors such as dietary restraint and disinhibition. In the longest-duration laboratory study conducted to date, participants were exposed to 50% larger portion sizes than usual for 11 days.⁶ Energy intake during this period increased by 423 kcal per day and was sustained for the entire eleven-day period. Body weight change was not reported.

Three cross-sectional studies examined the effects of portion size on a single eating episode in a naturalistic environment.⁷⁻⁹ These cross-sectional studies neither examined effects within the same people over time, nor effects on total energy intake.

Portion size effects on total energy intake and body weight over time within the same individuals have been examined in only one study, conducted by our research team.¹⁰

In a within-subjects counterbalanced cross-over design, participants received an 800 kcal and a 1600 kcal box lunch weekdays for four weeks for each condition. Mean 24-hour energy intake was 278 kcal/day higher in the large portion compared with the standard portion condition ($p < .001$). Average weight change was 0.64 kg during the large portion and 0.06 kg during the standard portion conditions ($p = 0.13$).

Clearly the effects of large portion sizes on energy intake appear to be robust in the laboratory, and in the few cross-sectional field studies conducted to date. However, studies have yet to examine the effects of large portion sizes in the context of the entire day's energy intake in a free-living population. The effect of large portion size exposure on body weight change over a longer time period is unknown. Are people able to self-regulate energy intake over time despite exposure to large portion sizes, and thus maintain a stable body weight? An answer to this question is critical to understand whether the current food environment is contributing importantly to the obesity epidemic.

This paper reports the results of a randomized trial that examined the effects of weekday exposure to one of three different lunch energy sizes on energy intake and body weight in a free living sample of adults over six months. It was hypothesized that exposure to large energy sizes at lunch would cause increases in lunch energy intake, total energy intake, and body weight during the six month experimental period compared to exposure to smaller portion sizes.

METHODS and PROCEDURES

Study Design Overview

The study design was a randomized controlled trial. Individuals were randomized to one of three conditions: a free box lunch of one of three calorie sizes; or to a no-free-lunch control group. Evaluation data were collected at baseline prior to randomization, and at six months. Dietary recalls and measured body weight were collected additionally at months one and three. The study was conducted from September 2010 through February 2013 and approved by the University of Minnesota Institutional Review Board.

Sample and Recruitment—The study was conducted at a large metropolitan medical complex that employed over 2,000 full time staff of diverse demographic backgrounds. The study purpose was described as “a study to examine the feasibility of offering box lunches at the worksite”. Interested participants were screened by telephone to determine eligibility. Eligibility criteria were: 1) age 18–60 years; 2) nonsmoker; 3) speak and read in English; 4) not taking medications that affect appetite or body weight; 5) able to pick up lunches at the medical complex Monday through Friday during the lunch hours; 6) not allergic to the foods in the study lunches; 7) willing to eat the foods in the study lunches (examples were provided of the types of foods); 8) not currently on a diet to lose weight; 9) no diagnosed eating disorder; 10) not planning to move from the area during the next six months; 11) not currently taking part in another research study; 12) not currently pregnant, nursing or pregnant in the last 12 months. Two-hundred thirty-three participants provided complete data at baseline and were randomized (Box Lunch Conditions: 400 kcal: n=57; 800 kcal: n=59; 1600 kcal: n=56; Control: n=61).

Box Lunch Intervention Exposure Procedure—The intervention consisted of Monday-Friday lunch box pick-ups by participants at the worksite for a six-month period. Staff distributed lunch boxes at a central location during the hours 11:00 am – 1:00 pm. Participants were required to pick up their own lunch boxes, but were not further instructed about consumption of the lunch. Overall, 91% of the lunches were picked up by participants (85% up on time; an additional 6% one day late). Participants randomized to the control condition did not receive a box lunch and were instructed to continue their usual lunch patterns.

Box Lunch Experimental Conditions—This experiment was a community-based intervention to examine portion size effects on energy intake and body weight in a free-living setting among a working population-based sample. It was not a feeding study and its focus was not on the metabolic or clinical aspects of macronutrient or energy density variations on energy intake. The research team collaborated with a grocery/catering retailer to develop the study menus and prepare the foods. The overall goal was to develop menus with specific energy content and highly similar foods of sizes that accommodated the energy requirements of each experimental condition.

The energy sizes of the experimental conditions were 400 kcal, 800 kcal, and 1600 kcal. There was some variation in the types of foods provided across the energy size conditions. However, overall the menus were planned to be similar and the foods were for the most part

identical across conditions (see Appendix for menus). Fifteen different box lunch menus were created and pilot tested prior to the beginning of the study. Menus were implemented on a three-week repeating cycle. However, the conditions were on different cycles, so that participants assigned to different conditions could not directly compare their lunch box items on any given day. The same size box was used in all three conditions. Only water was served as a beverage.

Box Lunch Quality Control—Every day an extra box lunch was ordered to conduct quality control measures. The research staff disassembled each box lunch item into ingredient components, weighed and measured them, and the energy intake values for each food item were calculated using the NDS-R software system.^{11–13} The goal was to ensure that the box lunches did not deviate by more than 5% kcals above or below the kcal goal for each box lunch condition. This quality control process was conducted daily throughout the 27-month study period (a total of 515 box lunch meals). Over all the menu meals evaluated, the median deviation in kcals was small (23 kcals, 33 kcals and 16 kcals, in the 400, 800, and 1600 kcal conditions, respectively). Quality control analyses showed that 52% of the lunches measured were within the 5% kcal range. Ten percent of the lunches were below 95% kcals and 37% were above 105% kcals.

Data Collection Protocol—Data were collected by trained research staff blinded to study condition at a University research building located about a mile from the medical complex. Similar data collection procedures took place at six months when the intervention ended. Participants were paid \$125 for each of the baseline and six-month measurements (two clinic visits at each of baseline and six months) and \$50 each for the one month and three month set of three dietary recall interviews and measured body weight.

Measures

Body weight and height—All anthropometric measures were conducted by trained and certified research staff according to standardized protocols.¹⁴ Body weight was measured to the nearest 0.1 kg using a calibrated electronic scale (Befour Inc, Saukville, WI). Height was measured to the nearest 0.1 cm with a wall-mounted stadiometer. Body weight was measured with participants in light clothing and without shoes. All measures were performed in duplicate. If there was greater than or equal to 1 cm or 0.5 kg deviation between the two measures, a third measurement was taken. The mean values of the two measures in closest agreement were used in analysis.

Dietary intake—Energy intake was measured using three unannounced 24-hour dietary recalls measured at baseline, one, three and six months (twelve dietary recalls per person during the six month study). Dietary recalls were conducted on non-consecutive days (two weekdays and one weekend day; all three within a time window of 21 days maximum) over the telephone using Nutrition Data System for Research (NDSR) software (Nutrition Coordinating Center (NCC), University of Minnesota, Minneapolis, MN. Trained and certified staff at NCC collected the recalls.

Physical activity—Physical activity (PA) was measured objectively at baseline and at six months using a commercially available ActiGraph GT1M accelerometer (ActiGraph, Pensacola, FL).^{16,17} Study participants were instructed to wear the GT1M monitor on the right hip for seven complete days except while sleeping or during water activity (e.g., bathing, swimming, showering and sleep).

Demographic variables—Demographic information was self-reported, and included household income before taxes, age, ethnicity, race, education level, job type and marital status.

Statistical Analysis

Planned Intent-to-Treat Analysis of Baseline to Six Month Changes—Two-hundred thirty-three participants provided data at baseline and were randomized. Two hundred twenty-nine (99.1%) participants were weighed at six months. Unless otherwise specified, analyses of baseline to six-month changes were performed in the intent-to-treat framework, including all randomized participants with available measurements at both time points. Analyses were conducted using SAS (Cary, NC) and R (R Development Core Team, 2012).¹⁸

The planned primary analysis for the trial was an intent-to-treat comparison of the six-month change in body weight between the four randomized groups (control, and the three box lunch sizes). The same intent-to-treat approach was used to assess the secondary outcomes of lunch energy intake and total energy intake. A secondary analysis used the longitudinal measurements collected at baseline, months one, three and six to examine the rate of change in body weight and energy intake over the six-month intervention period.

Linear regression models were used to evaluate differences in outcomes at six months. Despite randomization, job type and education were not balanced between groups, so they were adjusted for in the regression models. Models were also adjusted for baseline values of the outcomes (weight, or energy intake) to achieve a possible gain in precision. For the analysis of the rate of change, using all four data points (baseline, months one, three and six), generalized estimating equations¹⁹ with an independence working correlation structure were used. Differences in the rate of change of outcomes over time were investigated via the interaction term of continuous time (in months) and a four-level categorical variable designating the experimental groups. Main effects for time and experimental condition were included, as were the adjustment covariates job type and education.

RESULTS

Demographic and Baseline Variables

Demographic and baseline variables by treatment group are shown in Table 1. The proportion of college-educated individuals and clerical workers differed by study condition. As noted above, analyses were adjusted for education and job type to account for these chance imbalances.

Baseline Lunch Energy Intake and Nutrient Values Compared with Box Lunches

Participant baseline lunch energy intake and nutrient values based on three 24-hour dietary recalls are shown in Table 2, along with the computed average mean energy and nutrient values for each of the box lunch energy groups (400, 800 and 1600 kcal). These data show that the percent fat, protein and carbohydrates in the three portion conditions were similar to participants' baseline lunch intake. However, the fruit and vegetable servings provided in the lunch boxes were higher compared with participants' usual lunch intake.

Lunch Energy Intake Change Over Six Months Box Lunch Intervention

Table 3 shows adjusted mean lunch energy intake at six months by intervention group. In paired contrasts, the 1600 kcal box lunch group reported significantly higher lunch energy intake compared with each of the other groups (including the control group; $p < 0.0001$). Lunch energy intake increased significantly over time in the 1600 kcal lunch box group and decreased significantly over time in the 400 kcal box lunch group ($p < 0.05$ to reject the null hypothesis of no change in lunch energy intake over time for both groups; Table 4).

Total Energy Intake Change Over Six Months Box Lunch Intervention

Table 3 shows adjusted mean total energy intake at six months by intervention group. The 1600 kcal box lunch group reported significantly higher total energy intake compared with the 800 kcal and 400 kcal box lunch groups ($p = 0.02$). Total energy intake decreased significantly over time in both the 400 kcal and 800 kcal box lunch groups ($p < 0.05$)(Table 4).

Weight Change Over Six-Month Box Lunch Intervention

Table 3 shows adjusted mean change in body weight over six months by treatment group. Overall, the differences between groups were not statistically significant at the 5% level ($p = 0.07$). Increase in weight over time was statistically significant in the 1600 kcal box lunch group ($p < 0.05$)(Table 4).

Physical Activity Change Over Six-Month Intervention Period

Physical activity change over six months did not significantly differ by treatment group. Adjusted for baseline value, job type and education, physical activity means (se) (moderate/vigorous mins/day) at six months were: control: 27.5 (1.9); 400 kcal: 28.0 (1.9); 800 kcal: 31.8 (1.9); 1600 kcal: 26.1 (2.0) ($p = 0.20$).

DISCUSSION

This study is a test in a real-world setting of a robust experimental finding that to date was produced only in tightly controlled laboratory feeding studies. It examined the effects of large box lunch energy sizes on energy intake and body weight change over six months in a naturalistic setting among a sample of working adults. The naturalistic setting of the experiment was designed to shed light on the potential effects of the widespread increases in portion sizes in both packaged and restaurant foods on energy intake and weight gain, and ultimately the population-wide obesity epidemic.

The original hypothesis was that the 1600 kcal lunch group would increase lunch and total energy intake, and gain weight, over the six months exposure. The 800 kcal condition was hypothesized to represent a typical lunch energy exposure and the 400 kcal condition was thought to represent a smaller than typical exposure. The control group was not expected to increase energy intake or body weight.

The results of the study were surprising and informative. As hypothesized, lunch energy intake was significantly higher in the large box lunch condition (1600 kcal) and in the medium box lunch condition (800 kcal) compared to the smallest box lunch condition (400 kcal). These results are consistent with experimental laboratory studies conducted over short time periods⁴⁻⁶ and cross-sectional studies conducted field settings.⁷⁻⁹ Thus, relative to small box lunch energy sizes, larger box lunch energy sizes delivered over six months led to higher energy lunch intake, and this effect persisted for up to six months.

Higher energy intake at lunch would not be problematic if people spontaneously reduced their intake at other meals. The study results suggest that over six months, people may have compensated to some extent, but not entirely. Interestingly, the comparison group's change in energy intake did not differ from the 1600 kcal box lunch group. It appears that in this study's comparison group, change in total energy intake was the same as that of people exposed to a large free box lunch every weekday. Also of interest is the significant reduction in the total energy intake of the 400 kcal box lunch group, relative to the 1600 kcal and no-free-box-lunch comparison group.

Most importantly, does exposure to large energy sizes at lunch over a six-month period lead to excess weight gain? Participants in the large box lunch group gained significant weight over the six-month period, but weight changes in the 400 kcal and 800 kcal box lunch conditions were not significantly different from zero.

The control group gained more weight than expected over the six month study. Their energy intake and weight change may reflect the normal intake of this sample of working people who live in an obesogenic environment. The stability of body weight and decrease in energy intake observed in the small lunch condition might mitigate the rate of weight gain in such an environment. These findings are consistent with the single laboratory study on small portion size exposure over a two day period that resulted in lower energy intake.⁴ The use of portion-controlled prepackaged meals also is associated with larger weight losses in clinical weight loss trials.²⁰⁻²² Since the participants in this free-living working adult sample were overweight, the small box lunch condition may have provided support for lower energy intake at lunch that was not compensated later during the day. This effect, if replicated, could be a promising strategy to support overweight adults' effort to reduce energy intake and promote weight stability or weight loss over long time periods. Results from the weight loss literature show that the effects of portion controlled food provision are limited to the period during which food provision is provided.²²

The mechanisms that explain the relative decrease in energy intake and weight stability are not clear, but are important questions to pursue in future studies. A better understanding of how people consciously attend to and self-regulate portion sizes in their natural environment

is critical to development of effective eating behavior interventions in the community that could help prevent excess energy intake and weight gain.^{23–25} If people are not paying attention to or consciously self-regulating intake in the face of large portion size exposures, then package size regulation appears to be an even more critical intervention to prevent excess energy intake at meals.

The strengths of the present study are many. Its six-month duration, randomized experimental design, use of state of the science dietary intake measures, direct measures of body weight, high intervention exposure rates (91% dose delivered) and high rate of cohort retention (99% at six months) also support the validity of the results. Limitations include the lack of interpretive consistency for the control group in relation to the three box lunch groups. Participants randomized to the control group did not receive daily free lunches for six months. It is not clear whether this may have led to changes in eating behaviors as a result of knowledge of being assigned to the control condition (no free lunch; eg., compensatory rivalry or resentful demoralization).²⁶ In addition to energy, the lunch conditions differed in composition in ways that might have affected satiety and energy intake. The fruit, vegetable and fiber composition of the box lunches was high relative to the participants' baseline lunch intake, and the foods across conditions, although similar, were not identical. The validity of the dietary intake assessments may have been higher for the box lunch groups than for the control group during the experimental period because objective information was available on the food ingredients and sizes for the box lunches.^{12,13,27} Therefore, food types and portion sizes consumed could be estimated more accurately for participants in one of the three box lunch conditions compared to those in the control group. Under-reporting of dietary intake is a well-established shortcoming of self-report dietary intake methods such as recalls.²⁷ However, assuming the magnitude of under-reporting is similar across experimental groups, between group comparisons should not be affected by this bias in reporting.

The main conclusion of the present study is that chronic exposure to a high energy lunch weekdays for six months may represent a risk for excess energy intake and weight gain. Exposure to small lunch sizes is associated with relative decreases in energy intake and with weight stability. Future studies are needed to clarify whether chronic exposure to large portion sizes across several settings presents a risk for excess energy intake and weight gain. Also of interest is whether chronic exposure to smaller energy meals can enhance weight control in a free-living overweight population, and specification of the mechanisms of this effect.

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What is already known about this subject

- Large portion sizes are associated with higher energy intake in laboratory feeding studies
- No studies have examined portion size effects in free-living people over lengthy time periods

What this study adds

- Exposure to large lunch sizes over six months caused higher lunch and total energy intake and significant weight gain.
- Exposure to small or medium lunch sizes over six months was associated with weight maintenance.

Table 1

Baseline Demographic Variables (Unadjusted Mean(sd) or Percent) (N=233)

	Total	Control	400	800	1600
n	233	61	57	59	56
Age (yrs)	42.6(11.2)	42.8(10.4)	40.4(10.8)	44.1(12.0)	42.9(11.6)
Sex (% female)	67.4	68.9	73.7	67.8	58.9
BMI (kg/m ²)	29.8(6.4)	29.3(6.4)	30.9(6.9)	30.5(6.7)	28.7(5.6)
Weight (kg)	85.4(19.7)	84.6(20.3)	87.5(20.5)	86.6(20.5)	82.9(17.3)
Race (% white)	69.1	73.8	62.5	71.9	67.9
Married/Living with (%) Partner	58.8	49.2	57.9	50.9	51.8
Education (%) [*]					
< College	15.0	11.5	24.6	10.1	14.3
Some College	33.5	27.9	33.3	49.2	23.2
College degree	33.5	39.3	29.8	30.5	33.9
College +	18.0	21.3 ^{AB}	12.3 ^B	10.2 ^B	28.6 ^A
JobType (%) [*]					
patient care	33.3	38.3	27.8	31.6	42.3
administration	11.1	13.3	7.4	15.8	7.3
clerical	38.5	41.7 ^A	51.9 ^A	38.6 ^{AB}	21.8 ^B
service/labor	4.9	1.7	9.3	1.8	7.3
other	9.3	5.0	3.7	12.3	16.4
Income (%)					
\$40,000	21.4	18.6	24.6	24.1	18.2
\$40,000-\$80,000	41.9	37.3	49.1	39.7	41.8
>\$80,000	36.7	44.1	26.3	36.2	40.0
Moderate/Vigorous PA (mins/day)	27.5(17.2)	26.4(15.2)	24.5(14.6)	27.3(16.7)	31.8(21.3)
Energy Intake (kcal/day)	2012(679)	1981(630)	1953 (554)	2111(717)	2002(800)
Lunch energy (kcal/day)	516(262)	540 (278)	519 (223)	534 (305)	468 (233)

Note:

* p < .05 difference between treatment groups

Different superscripts show significantly different means; post hoc analysis (p < .05)

Table 2
 Baseline Participant Lunch Intake (N=233) and the Intervention Box Lunch Nutrients

	Box Lunch Nutrient Values							
	Baseline Participant Lunch Intake*		400 kcal Box Lunch		800 kcal Box Lunch		1600 kcal Box Lunch	
	mean	sd	mean	sd	mean	sd	mean	sd
Kcal	516	262	413	11	821	20	1604	42.9
% Fat	35	14	32	5	36	4	38	3.9
% Protein	19	9	21	5	21	4	19	2.6
% Carbohydrate	47	17	48	5	45	5	46	4.8
Fiber (g)	5.2	3.6	6.1	3.0	9.1	4.1	14.2	6.9
Added Sugar (g)	12.5	19.3	9.0	6.8	15.2	11.7	47.1	13.4
Fruit Servings (cups)	0.15	0.35	0.56	0.33	0.83	0.36	0.95	0.51
Vegetable Servings (cups)	0.62	0.69	1.17	0.90	1.60	1.24	2.08	1.55
Energy Density (kcal/g)	0.9	0.7	0.5	0.1	0.8	0.1	1.2	0.2

* Calculated from three nonconsecutive day, unannounced telephone-administered 24-hour recalls (two weekday; one weekend day)

Table 3

Change in Lunch Energy, Total Energy and Body Weight Over Six Months by Treatment Group

	Treatment Group			
	No box lunch Mean (SE)	400 kcal Mean (SE)	800kcal Mean (SE)	1600kcal Mean (SE)
Lunch energy (kcal) **	492 ^{AB} (28)	417 ^A (30)	557 ^B (29)	636 ^C (30)
Total energy (kcal) *	1938 ^{AC} (66)	1718 ^B (70)	1792 ^{AB} (68)	1996 ^C (71)
Weight change (kg)	1.1 (.42)	-0.1 (.43)	-0.1 (.42)	1.1 (.44)

NOTE: Lunch and total energy: Least squared mean at six months, adjusted for baseline value, education and job type. Weight change: Least-squared mean increase at six months, adjusted for baseline value, education and job type.

** significant difference, $p < .00001$.

* significant difference, $p = 0.02$.

Different superscripts differ at $p < 0.05$ in pairwise comparisons.

Table 4

Rate of Change in Lunch Energy, Total Energy and Body Weight Over Six Months by Treatment Group.

	Treatment Group			
	No box lunch Mean	400 kcal Mean	800kcal Mean	1600kcal Mean
Lunch Energy (kcal/month)	-7.9	-16.2*	0.5	16.9*
Total Energy (kcal/month)	-11.1	-40.1*	-33.2*	-0.66
Weight Change (kg/month)	0.24*	-0.01	-0.01	0.19*

Note: Results of longitudinal analysis using marginal linear regression model (GEE) with independence working correlation, adjusted for baseline BMI, education and job type.

* significantly different from zero ($p < 0.05$).

Appendix 1

All Salads

Salad	Ingredients	1600 cal						800 cal						400 cal					
		Amount	Unit	Grams	Calories	Fat (g)	Amount	Unit	Grams	Calories	Fat (g)	Amount	Unit	Grams	Calories	Fat (g)			
Caribbean Turkey Salad	Iceberg lettuce	6.0	oz	170.1	23.8	0.24	5.0	oz	141.8	19.9	0.20	3	oz	85.1	11.9	0.10			
	Smoked turkey breast	5.0	oz	141.8	198.5	1.70	4.0	oz	113.4	158.8	1.34	2.5	oz	70.9	99.2	0.84			
	Diced mango	6.0	oz	170.1	110.6	0.46	5.0	oz	141.8	92.1	0.38	3	oz	85.1	55.3	0.23			
	Sliced strawberries	5.0	oz	141.8	45.3	0.43	4.0	oz	113.4	36.3	0.34	3	oz	85.1	27.2	0.26			
	Daikon radishes	2.0	oz	56.7	10.2	0.06	2.0	oz	56.7	10.2	0.06	1	oz	28.4	5.1	0.03			
	Cheddar cheese	1.5	oz	42.5	171.4	14.09													
	Light Raspberry Vinaigrette	4.0	fl oz	128.0	215.3	16.50	3.0	fl oz	96.0	161.4	12.40	2	fl oz	64.0	107.60	8.30			
	Breadstick	2.0	each	84.0	261.7	8.83	1.0	each	42.0	130.9	4.40								
	Butter pat	1	each	10.0	71.7	8.11	1	each	10.0	71.7	8.10								
	Brownie	Old Fashion Brownie	3.5oz	3.5oz	99.2	448.5	27.20	1	bite	21.0	97.7	5.70	1	bite	21.0	97.70	5.70		
Bottled Water	Bottled Water	16.9	fl oz		0.0	0.00	16.9	fl oz		0.0	0.00	16.9	fl oz		0.0	0.00			
Toasted Sesame Chicken Salad					1557.0	77.62				779.0	32.92				404.0	15.46			
	Iceberg lettuce	6	oz	170.1	28.9	0.51	5	oz	141.8	24.1	0.43	4	oz	113.4	19.3	0.34			
	Sliced chicken breast	6	oz	170.1	294.3	7.67	3	oz	85.1	147.1	3.84	1	oz	28.4	49	1.28			
	Pea pods	4	oz	113.4	47.6	0.23	3	oz	85.1	35.7	0.17	2	oz	56.7	23.8	0.11			
	Red bell pepper, sliced	5	oz	141.8	43.9	0.43	4	oz	113.4	35.2	0.34	2	oz	56.7	17.58	0.17			
	Mandarin oranges	5	oz	141.8	53.9	0.06	3	oz	85.1	32.3	0.03	2	oz	56.7	21.55	0.02			
	Wonton strips	2	oz	56.7	312	16.3	1	oz	28.4	156	8.13	0.5	oz	14.2	77.98	4.07			
	Green onion chopped	3	oz	85.5	27.2	0.16	1.5	oz	42.5	13.6	0.08	0.5	oz	14.2	4.54	0.03			
	Sesame seeds	2	tbs	18.8	118.3	11.48													
	Light toasted sesame dressing	3.5	fl oz	112.0	207.6	7	2.5	fl oz	80.0	148	5	1.5	fl oz	48.0	89	3.00			
whole wheat dinner roll	1	each	41.1	101.5	1.4														
butter	1	pat	10.0	71.7	8.1														
Lemon bar	3	oz	85.1	348.7	14.1	2	oz	56.7	232.4	9.38	1	oz	28.4	116.2	4.69				
Bottled Water	Bottled Water	16.9	fl oz		0	0	16.9	fl oz		0	0	16.9	fl oz		0	0.00			

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Salad	Ingredients	1600 cal						800 cal						400 cal					
		Amount	Unit	Grams	Calories	Fat (g)	Amount	Unit	Grams	Calories	Fat (g)	Amount	Unit	Grams	Calories	Fat (g)			
Greek Salad	Romaine Lettuce	6	oz	170.1	28.9	0.51	5	oz	141.8	24.1	0.43	4	oz	113.4	19.3	0.34			
	Shaved Red Onion	1	oz	28.4	11.3	0.03	1	oz	28.4	11.3	0.03	.5	oz	14.2	5.7	0.01			
	Roasted Red Pepper	4	oz	113.4	31.8	0.23	3	oz	85.1	24	0.17	2	oz	56.7	15.9	0.11			
	Garbanzo Beans	3	oz	85.1	139.5	2.20	2	oz	56.7	93.00	1.50	1	oz	28.4	46.50	0.73			
	Diced Cucumber	4	oz	113.4	17	0.13	3	oz	85.1	12.80	0.09	2	oz	56.7	8.50	0.06			
	Feta Cheese	3	oz	85.1	224.5	18.10	2	oz	56.7	149.7	12.00	0.5	oz	14.2	37	3.02			
	Diced Tomatoes	4	oz	113.4	20.40	0.23	3	oz	85.1	15.31	0.17	2	oz	56.7	10.20	0.11			
	Artichoke Heart	5	oz	141.8	75.10	0.48	3	oz	85.1	45.80	0.29	2	oz	56.7	30.00	0.19			
	Sliced Chicken Breast	5	oz	141.8	245.2	6.40	3	oz	85.1	147.1	3.84	1	oz	28.4	49	1.30			
	Black olives	2	oz	56.7	65.2	6.00	1	oz	28.4	32.6	3.03	1	oz	28.4	32.60	3.00			
	Light Balsamic Vinaigrette	4	fl oz	128.0	94.00	6.40	3	fl oz	96.0	70.50	4.83	2	fl oz	64.0	47.00	3.20			
	Whole Wheat Dinner Roll	1	each	41.1	101.5	1.40													
	Butter Pat	1	each	10.0	71.7	8.10													
	Grapes	1	cup	151.0	104.2	0.24	1	cup	151.0	104.2	0.24								
	Brownie	Old Fashion Brownie	3 oz	85.1	384.4	23.30	1	bite	21.0	97.7	5.70	1	bite	21.0	97.70	5.69			
Bottled Water		16.9	fl oz		0.0	0.00	16.9	fl oz		0.0	0.00	16.9	fl oz		0.0	0.00			
				1614.7	73.75				828.1	32.32				399.4	17.76				
Chicken Caesar Salad	Romaine Lettuce	6	oz	170.1	28.9	0.51	5	oz	141.8	24.1	0.43	4	oz	114.4	19.3	0.34			
	Lite Caesar Dressing	4	fl oz	120.0	132	5.28	3	fl oz	90.0	99	3.96	2	fl oz	60	66	2.64			
	Sliced Chicken Breast	4	oz	113.4	196.2	5.11	3	oz	85.1	147.1	3.84	1.5	oz	42.5	73.6	1.92			
	Parmesan Cheese	2	oz	56.7	244.40	16.22	1.5	oz	42.5	183.3	12.20	0.5	oz	14.2	61.10	4.06			
	Croutons	1.5	oz	42.5	197.7	7.80	1	oz	28.4	131.80	5.19	0.5	oz	14.2	65.90	2.59			
	Whole Wheat Dinner Roll	1	each	41.1	101.5	1.38	1	each	41.1	101.5	1.38	1	each	41.1	101.5	1.38			
	Butter pat	1	each	10.0	71.7	8.11	1	each	10.0	71.7	8.11								
	Strawberries	1	cup	144.0	46.1	0.43	1	cup	144.0	46.1	0.43	1	cup	144	46.1	0.43			
	Jumbo Chocolate Chip Cookie	1	each	141.0	617.8	22.04													
	Bottled Water		16.9	fl oz		0.0	0.00	16.9	fl oz		0.0	0.00	16.9	fl oz		0.0	0.00		

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Salad	Ingredients	1600 cal						800 cal						400 cal					
		Amount	Unit	Grams	Calories	Fat (g)	Amount	Unit	Grams	Calories	Fat (g)	Amount	Unit	Grams	Calories	Fat (g)			
Southwest Chicken Salad	Romaine Lettuce	6	oz	170.1	28.9	0.51	5	oz	141.8	24.1	0.43	4	oz	113.4	19.3	0.34			
	Sliced Chicken Breast	4	oz	113.4	196.2	5.11	3	oz	85.1	147.1	3.84	2	oz	56.7	98.1	2.56			
	Shredded Cheddar Cheese	2	oz	56.7	228.5	18.79	1.5	oz	42.5	171.4	14.09	0.5	oz	14.2	57.1	4.70			
	Corn	1	oz	28.4	23.0	0.26	1	oz	28.4	23.0	0.26	1	oz	28.4	23.00	0.26			
	Black Beans	1	oz	28.4	39.7	0.18	1	oz	28.4	39.7	0.18	1	oz	28.4	39.70	0.18			
	Red Bell Pepper, diced	3	oz	85.1	26.4	0.26	3	oz	85.1	26.4	0.26	2	oz	56.7	17.60	0.17			
	Cilantro	0.5	oz	14.2	3.3	0.07	0.5	oz	14.2	3.3	0.07	0.5	oz	14.2	3.3	0.07			
	Chopped Green Onion	0.5	oz	14.2	4.5	0.03	0.5	oz	14.2	4.5	0.03	0.5	oz	14.2	4.5	0.03			
	Diced Tomato	4	oz	113.4	20.40	0.23	3	oz	85.1	15.30	0.17	2	oz	56.7	10.20	0.11			
	Light SW Ranch Dressing	4	fl oz	122.5	240.00	15.00	3	fl oz	91.9	180.00	11.40	1.5	oz	45.9	90.0	5.70			
	Diced Pineapple	5	oz	141.8	70.9	0.17	4	oz	113.4	56.7	0.14	3	oz	85.0	42.5	0.10			
	Baked Tortilla Chips, lowfat	1	oz	28.4	119.4	2.88	1	oz	28.4	119.4	2.88								
	Jumbo Chocolate Chip Cookie	1	each	141.0	621.0	22.15													
	Bottled Water	16.9	fl oz		0.0	0.00	16.9	fl oz		0.0	0.00	16.9	fl oz		0.0	0.00			
Cobb Salad					1622.2	65.64				810.9	33.75				405.3	14.22			
	Romaine Lettuce	6	oz	170.1	28.9	0.51	5	oz	141.8	24	0.43	4	oz	113.4	19.3	0.34			
	Turkey breast	5	oz	141.8	198.40	1.70	3	oz	85.1	119.10	1.00	1.5	oz	42.5	59.5	0.50			
	Bacon	0.75	oz	21.3	115	9.00	0.5	oz	14.2	76.6	6.00	0.25	oz	7.1	38.00	3.00			
	Eggs	2	oz	56.7	87.9	6.00	1	oz	28.4	43.9	3.00	0.5	oz	14.2	22	1.50			
	Cheddar cheese	3	oz	85.1	342.7	28.20	1	oz	28.4	114.25	9.40	0.5	oz	14.2	57.1	4.70			
	Blue cheese dressing lowfat	4	fl oz	124.5	123	9.00	2.5	fl oz	77.8	76.7	5.00	1.5	fl oz	46.7	46	3.00			
	Breadsticks	2	each	84.0	261.8	8.83	1	each	42.0	130.9	4.40								
	Cantaloupe melon	6	oz	170.1	57.8	0.32	4	oz	113.4	38.6	0.22	4	oz	113.4	38.6	0.22			
	Rice Krispie Treat	3	oz	85.1	413.6	7.20	1.5	oz	42.5	206.8	3.60	1	oz	28.4	124.0	2.16			
	Bottled Water	16.9	fl oz		0.0	0.00	16.9	fl oz		0.0	0.00	16.9	fl oz		0.0	0.00			
					1629.1	70.76				830.9	33.05				404.5	15.42			

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Salad	Ingredients	1600 cal						800 cal						400 cal					
		Amount	Unit	Grams	Calories	Fat (g)	Amount	Unit	Grams	Calories	Fat (g)	Amount	Unit	Grams	Calories	Fat (g)			
Artisan Blue Salad	Romaine Lettuce	5	oz	141.8	24	0.43	4	oz	113.4	19.3	0.34	3	oz	85.1	14.46	0.26			
	Crumbled Blue Cheese	2	oz	56.7	200.15	16.30	1	oz	28.4	100	8.15	0.25	oz	7.1	25	2.00			
	Raspberries	4	oz	113.4	59	0.74	3	oz	85.1	44.2	0.55	2	oz	56.7	29.5	0.37			
	Diced Cucumber	4	oz	113.4	17	0.13	2	oz	56.7	8.5	0.06	1	oz	28.4	4.25	0.03			
	Diced Mango	5	oz	141.8	92.1	0.38	3	oz	85.1	55.3	0.23	1	oz	28.4	18.4	0.07			
	Light Raspberry Vinaigrette	4	fl oz	128.0	215.2	16.50	3	fl oz	96.0	161.4	12.40	2	fl oz	64.0	107.6	8.26			
	Sliced Chicken Breast	4	oz	113.4	196.2	5.11	2	oz	56.7	98.1	2.56	1	oz	28.4	49	1.28			
	Caramelized Walnuts	0.5	oz	14.2	92.7	9.20	0.5	oz	14.2	92.7	9.20								
	Shaved Red Onion	1	oz	28.4	11.3	0.03	0.5	oz	14.2	5.7	0.01	0.25	oz	7.1	2.8	0.01			
	Breadstick or Roll	2	breadstick	84.0	274.50	10.27	1	breadstick	42.0	137.20	5.10	1	dinner roll	41.1	101.50	1.38			
	Dessert	3.4oz	rice krispie treat	96.4	468.0	9.40	0.75oz	rice krispie treat	21.3	103.4	1.80	1	mini sugar cookie	15.0	68	3.09			
	Bottled Water	16.9	fl oz		0.0	0.00	16.9	fl oz		0.0	0.00	16.9	fl oz		0.0	0.00			
					1650.2	68.49				825.8	40.40				420.5	16.75			

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Appendix 2

All Sandwiches

Sandwich	Ingredients	1600 cal						800 cal						400 cal					
		Amount	Unit	Grams	Calories	Fat (g)	Amount	Unit	Grams	Calories	Fat (g)	Amount	Unit	Grams	Calories	Fat (g)			
Turkey Club Wrap	Flour Tortilla	1	12"	102.7	320.0	7.96	1	10"	71.3	222.4	5.53	1	8"	45.6	142.4	3.54			
	Leaf Lettuce	2	oz	56.7	8.5	0.09	1	oz	28.4	4.3	0.04	1	oz	28.4	4.3	0.04			
	Applewood smoked bacon	2	oz	56.7	306.7	23.70	0.75	oz	21.3	11.5	9.00	0.25	oz	7.1	38.3	2.96			
	Smoked Turkey	4	oz	113.4	158.80	1.34	2	oz	56.7	79.4	0.67	1	oz	28.4	39.70	0.34			
	Sliced Tomato	1	oz	28.4	5.10	0.06	1	oz	28.4	5.1	0.06	1	oz	28.4	5.10	0.06			
	Sliced cheddar cheese, low fat	2	oz	56.7	98.0	3.97	1	oz	28.4	49	1.98	0		0	0.0	0.00			
	Mayonnaise, lowfat/light	2	tb	30	97.0	9.90	1	tb	15	48.6	4.96	0.5	tb	7.5	24.30	2.48			
	Baked Lays Potato Chips	2	oz	56.7	230.8	4.00	1	cup	28.4	115.4	2.00	0							
	Whole Strawberries	1.5	cup	216	69.0	0.65	1	oz	144	46	0.43	1	cup	144	46.1	0.43			
	Old Fashioned Brownie	2	oz	56.7	256.0	15.50	1	oz	28.4	128.1	7.80	1	bite	21	97.7	5.70			
Bottled Water	16.9	fl oz		0.0	0.00	16.9	fl oz		0	0.00	16.9	fl oz		0.0	0.00				
					1549.9	67.17				813.3	32.47				397.9	15.5			
Chicken Caesar Wrap	Flour Tortilla	1	12"	102.7	320.3	7.90	1	10"	71.3	222.4	5.50	1	8"	45.6	142.2	3.50			
	Leaf Lettuce	1	oz	28.4	4.3	0.04	1	oz	28.4	4.3	0.04	1	oz	28.4	4.3	0.04			
	Sliced Chicken Breast	4	oz	113.4	196.2	5.10	3	oz	85.1	147	4.00	1.5	oz	42.5	73	2.00			
	Cardini's Lite Caesar Dressing	2	fl oz	56.0	168	14.00	1	fl oz	28.0	84.23	7.00	1	fl oz	28.0	84.2	7.00			
	Shredded Parmesan Cheese	4	tbsp	25.0	107	7.00	3	tbsp	18.8	80	5.00	1	tbsp	6.3	27	2.00			
	Croutons	0.5	oz	14.2	65.9	2.60	0.5	oz	14.2	65.90	2.60	0.25	oz	7.1	32.90	1.30			
	Diced Tomato	1	oz	28.4	5.10	0.06	1	oz	28.4	5.10	0.06	1	oz	28.4	5.1	0.06			
	Grapes	1	Cup	151.0	104.2	0.24	1	cup	151.0	104.2	0.24	0.50	Cup	75.5	52.1	0.12			
	Brownie	killer brownie	127.6	592.0	32.50	old fashion brownie	1	oz	28.4	128.0	8.00	0							
	Bottled Water	16.9	fl oz		0.0	0.00	16.9	fl oz		0.0	0.00	16.9	fl oz		0.0	0.00			
					1563.0	69.44				841.2	32.44				420.8	16.02			
Turkey Provolone on Bun	Bun	1	kaiser bun	70.9	207.6	3.05	1	multigrain big bun	90.7	241.3	3.30	1	turkey bun	68.0	168.1	2.28			
	Roasted Red Pepper	1	oz	28.4	8.8	0.09	1	oz	28.4	8.8	0.09	0.5	oz	14.2	4.4	0.04			

Sandwich	Ingredients	1600 cal						800 cal						400 cal					
		Amount	Unit	Grams	Calories	Fat (g)	Amount	Unit	Grams	Calories	Fat (g)	Amount	Unit	Grams	Calories	Fat (g)			
Ham & Swiss Wrap	Ken's Roasted Red Pepper Sauce	2	tb	30.0	116.6	11.90	1	tb	15	63.18	6.50	0.5	tb	7.5	29.16	2.98			
	Leaf Lettuce	1	oz	28.4	4.3	0.04	1	oz	28.4	4.3	0.04	1	oz	28.4	4.3	0.04			
	Sliced Tomatoes	3	oz	85.1	15.3	0.17	1.5	oz	42.5	7.7	0.09	1	oz	28.4	5.1	0.06			
	Smoked Turkey	5	oz	141.8	198.45	1.70	3	oz	85.1	119.00	1.00	2	oz	56.7	79.40	0.67			
	Sliced Provolone	3	oz	85.1	298.5	22.60	2	oz	56.7	199	15.00	1	oz	28.4	77.7	5.00			
	Baked Lays Potato Chips	1	oz	28.4	115.4	2.00	1	oz	28.4	115.4	2.00	0							
	Pineapple	1	cup	165.0	82.5	0.20	1	cup	165	82.5	0.20	0.5	cup	82.5	41.3	0.10			
	Rice Krispie Bar	4.5	oz	127.6	616.9	12.40	0					0							
	Bottled Water	16.9	fl oz		0.0	0.00	16.9	fl oz		0.0	0.00	16.9	fl oz		0.0	0.00	0.00		
					1664.4	54.15				841.2	28.22				409.5	11.17			
		Kendelson't Pit Ham	4	oz	113.4	164.4	6.30	2	oz	56.7	82.2	3.14	1	oz	28.4	41.0	1.57		
		Swiss cheese reduced fat	3	oz	85.1	147.0	4.34	1	oz	28.4	49.0	1.45	0.5	oz	14.2	24.5	0.72		
		Raw Spinach	1	oz	28.4	6.5	0.11	1	oz	28.4	6.5	0.11	1	oz	28.4	6.5	0.11		
		Craisins	2	oz	56.7	174.6	0.78	1	oz	28.4	87.3	0.39	0.5	oz	14.2	43.7	0.19		
	Mayonnaise, lowfat/light	2	tb	30	97.0	9.93	1	tb	15	48.6	4.97	0.5	tb	7.5	24.3	2.48			
	Shaved Red Onion	0.25	oz	7.1	2.8	0.01	0.25	oz	7.1	2.8	0.01	0.25	oz	7.1	2.8	0.01			
	Flour Tortilla	1	12"	102.7	320.3	7.96	1	10"	71.3	222.4	5.53	1	8"	45.6	142.4	3.54			
	Lays Kettle Chips	2	oz	56.7	287.0	16.05	1	oz	28.4	143.5	8.00	0							
	Lemon bar	3	oz	85.1	384.8	18.20	1.5	oz	42.5	192.4	9.10	1	oz	28.4	128.3	6.08			
	Bottled Water	16.9	fl oz	0	0.0	0.00	16.9	fl oz		0.0	0.00	16.9	fl oz		0.0	0.00			
					1584.4	63.68				834.7	32.70			413.5	14.70				
Ham & Swiss on Bun	Bun	1	kaiser bun	70.9	207.66	3.05	1	multigrain big bun	90.7	241.3	3.30	1	turkey bun	68	168.06	2.28			
	Kendelson't Pit Ham	5	oz	141.8	205.5	7.84	3	oz	85.1	123.3	4.70	1	oz	28.4	41.1	1.57			
	Sliced Swiss Cheese, reduced fat	2	oz	56.7	98.1	2.90	1	oz	28.4	49.0	1.45	0.5	oz	14.2	24.5	0.72			
	Leaf Lettuce	1	oz	28.4	4.25	0.04	1	oz	28.4	4.25	0.04	0.5	oz	14.2	2.13	0.02			
	Sliced Tomatoes	3	oz	85.1	15.31	0.17	2	oz	56.7	10.2	0.11	1	oz	28.4	5.1	0.06			
	Dijon mustard	2	ts	10	10.7	0.61	1	ts	5	5.37	0.30	0.5	tb	7.5	8.05	0.46			

Sandwich	Ingredients	1600 cal						800 cal						400 cal					
		Amount	Unit	Grams	Calories	Fat (g)		Amount	Unit	Grams	Calories	Fat (g)		Amount	Unit	Grams	Calories	Fat (g)	
	Mayonnaise, low fat	2	tb	30	97.2	9.90		1	tb	15	48.6	4.96		1	tb	15	48.60	4.96	
	Pretzels	2	oz	56.7	215.5	1.50		0		0				0		0			
	Baby Carrots	4	oz	113.4	46.5	0.27		2	oz	56.7	23.3	0.14		2	oz	56.7	23.3	0.14	
	Ranch dressing, low fat	2	tb	30.6	60	3.80		1	tb	15.3	30.0	1.90		1	tb	15.3	30.0	1.90	
	Dessert	killer brownie	5 oz	141.8	633.2	34.30		M & M cookie	1 each	56.7	277.5	13.59		mini sugar cookie	1 each	15	68.3	3.09	
	Bottled water	16.9	fl oz		0.0	0.00		16.9	fl oz		0.0	0.00		16.9	fl oz		0.0	0.00	
					1593.9	64.38					812.82	30.49				419.16		15.20	
	Greek Turkey Focaccia	5	oz	141.8	425.0	14.10		4	oz	113.4	340.1	11.26		2	oz	56.7	170	5.63	
	Smoked Turkey	4	oz	113.4	158.80	1.34		2	oz	56.7	79.40	0.67		1	oz	28.4	39.70	0.34	
	Hummus	2	oz	56.7	108.5	4.79		1	oz	28.4	54.3	2.40		0.5	oz	14.2	27.1	1.20	
	Sliced Tomatoes	1	oz	28.4	5.1	0.06		1	oz	28.4	5.1	0.06		1	oz	28.4	5.1	0.06	
	Feta Cheese	1.5	oz	42.5	112.3	9.05		1	oz	28.4	74.8	6.03		0.5	oz	14.2	37.4	3.00	
	Mixed Greens	1	oz	28.4	4.3	0.04		1	oz	28.4	4.3	0.04		1	oz	28.4	4.3	0.04	
	Kettle Chips	1	oz	28.4	143.5	8.00		1	oz	28.4	143.5	8.00		0					
	Cantaloupe Melon	1	cup	160	54.0	0.30		1	cup	160	54.0	0.30		1	cup	160.0	54.4	0.30	
	Cookie	Jumbo Choc Chip	1 each	141.8	621.0	22.15		mini sugar cookie	1 each	15	68.3	3.09		mini sugar cookie	1 each	15.0	68.3	3.09	
	Bottled Water	16.9	fl oz		0.0	0.00		16.9	fl oz		0.0	0.00		16.9	fl oz		0.0	0.00	
					1632.5	59.83					823.8	31.85				406.30		13.66	
	Roast Beef Focaccia	5	oz	141.8	425.1	14.07		4	oz	113.4	340.1	11.26		3	oz	85.1	255.1	8.40	
	Kendelson's Roast Beef	5	oz	141.8	164.7	3.90		3	oz	85.1	98.8	2.34		2	oz	56.7	65.9	1.56	
	Cheddar Cheese, reduced fat	2	oz	56.7	98.1	3.97		1	oz	28.4	49.1	1.98		0.5	oz	14.2	24.5	0.99	
	Horseradish spread	4	TB	60	194.0	20.00		2	TB	30	87.0	10.00		0.5	tbs	7.5	24.30	2.48	
	Sliced Tomatoes	2	oz	56.7	10.2	0.11		2	oz	56.7	10.2	0.11		1	oz	28.4	5.1	0.06	
	Leaf Lettuce	2	oz	56.7	8.5	0.09		2	oz	56.7	8.5	0.09		1	oz	28.4	4.30	0.04	
	Lay's Kettle Cooked Chips	1	oz	28.4	143.5	8.02		1	oz	28.4	143.5	8.02		0					
	Diced Pineapple	5	oz	141.8	70.9	0.17		5	oz	141.8	70.8	0.17		3	oz	85.1	42.5	0.10	
	Oatmeal Raisin Cookie	2	each	113.4	537.1	20.02		0		0				0					
	Bottled Water	16.9	fl oz		0.0	0.00		16.9	fl oz		0.0	0.00		16.9	fl oz		0.0	0.00	

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Sandwich	Ingredients	1600 cal						800 cal						400 cal					
		Amount	Unit	Grams	Calories	Fat (g)		Amount	Unit	Grams	Calories	Fat (g)		Amount	Unit	Grams	Calories	Fat (g)	
Italian Focaccia	Focaccia	5	oz	141.8	425	14.00	70.35	4.00	oz	113.4	340	11.30	33.97	2.00	oz	56.7	170.1	5.63	
	Baked, Sliced Ham	2	oz	56.7	82.2	3.14		0						0					
	Fresh Mozzarella, part skim	2	oz	56.7	171.2	11.40		0.75	oz	21.3	64.2	4.28		0.50	oz	14.2	42.8	2.84	
	Genoa Salami	1	oz	28.4	109.1	8.50		1.00	oz	28.4	109	8.52		0.50	oz	14.2	54.6	4.30	
	Shaved Prosciutto	2	oz	56.7	101.0	5.11		1.00	oz	28.4	50.5	2.56		0.50	oz	14.2	25.2	1.30	
	Roasted Red Pepper	1	oz	28.4	8.8	0.09		1.00	oz	28.4	8.8	0.09		1.00	oz	28.4	8.80	0.09	
	Roasted Red Pepper Dip	1.5	tb	22.5	97.0	9.90		1.00	tb	15	63.0	6.50		0.50	tb	7.5	31.6	3.23	
	Mixed Greens	1	oz	28.4	4.3	0.04		1.00	oz	28.4	4.3	0.04		0.50	oz	14.2	2.1	0.02	
	Light Ranch Dressing	3	tb	46.0	90.0	5.70		0.00						0					
	Pretzels	2	oz	56.7	215.5	1.50		1.00	oz	28.4	107.7	0.75		0					
	Carrots/Grapes	carrots	5 oz	141.8	58.1	0.34		grapes	.75 cup	113.3	78.0	0.18		grapes	.75 cup	113.3	78.0	0.18	
	M&M Cookie	1	each	56.7	277.5	13.60		0						0					
	Bottled Water	16.9	fl oz		0.0	0.00		16.90	fl oz		0.0	0.00		16.90	fl oz		0	0.00	
				1639.7	73.32					825.5	34.22					413.2	17.59		