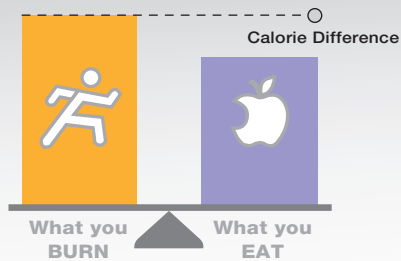




## Introduction - Energy Balance

One thing holds true in weight management and that is Energy Balance. Simply put, if you burn more energy than your body absorbs, you will lose weight. When food is absorbed into your body it must either be burned as energy or stored as fat. Knowing your metabolic rate helps you to know how to balance what you eat with what you burn.



### Energy in the Body

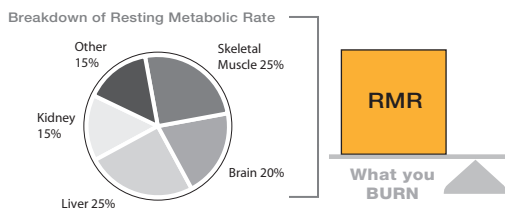
Calories is how we measure the energy in the food we eat and the energy our body uses. Your metabolic rate is how many Calories your body burns in a day. It is how fast your body burns energy. The trick is to balance the Calories you eat with the energy needs of your Metabolism. Measuring your metabolic rate is how we determine what is the right number of Calories for your body - for your metabolism.



## What you Burn

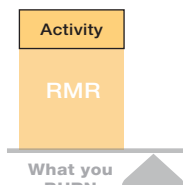
### Resting Metabolic Rate (RMR):

Today we measured your unique resting metabolic rate. This is the number of Calories your body would burn if you did nothing more than sit in a chair all day. This is similar to what is known as your *Basal Metabolic Rate (BMR)*. Your resting metabolic rate is related to your lean body mass or the fat-free part of your body. Your lean body mass is made up of muscle and internal organs.



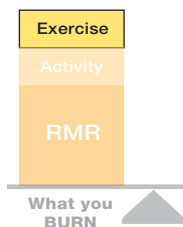
### Activity & Lifestyle:

When you move your body burns energy. The more you move the more energy you burn. Your activity during the day is the biggest part of your body's energy output that you have control over. Daily Activity will generally account for burning more Calories than will exercise. Even the simplest activities can double the rate at which your body burns energy. Whether doing household chores, playing with your kids, or taking the stairs instead of the elevator, simple activities are the key to tipping the scales of energy balance in your favor.



### Exercise:

Many people are surprised by how few calories are burned when they exercise. Don't make the mistake of rewarding yourself with food when you exercise - the calories you burn may only add up to 1/2 of a candy bar. However, exercise is important to increase your lean body mass (i.e. muscles - the *Calorie burning part of your body*). Proper exercise will provide your body with signals to help you lose weight and will even help control your appetite.



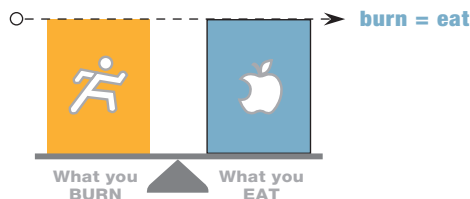
## What you Eat

The number of calories you eat in a day determines whether you will maintain, gain, or lose weight. To help you understand how your own metabolism affects this, we have developed Target Zones.

These Zones are calculated using your individual Metabolic Rate Test. They pinpoint the precise number of calories your body needs each day to lose or maintain weight effectively.

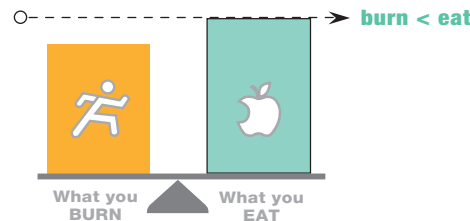


### Maintenance Zone:



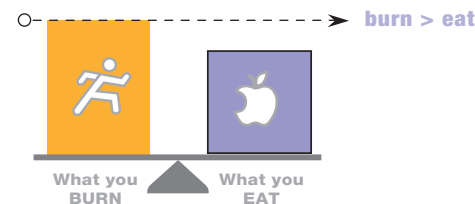
Eating within your Maintenance Zone teaches you what it feels like to "eat to your metabolism." This should become a very comfortable, satisfying way of life because you have learned to feed your body precisely what it needs.

### Weight Gain Zone:



The Weight Gain Zone can be deceiving. As you eat too much, your metabolism works extra hard to burn off those extra calories. The result is that weight comes on very slowly, creeping up on you. You may even maintain this excess weight by eating far more than you should. When you attempt to lose weight, you may need to make an unusually large reduction in calories to cross through your Maintenance Zone to reach your Weight Loss Zone.

### Weight Loss Zone:



The Weight Loss Zone indicates the maximum number of calories you can eat and still lose weight. In this Zone, your body will be healthy, happy, and satisfied. Imagine the success you will have when dieting feels this good! Discuss your Target Calories with your caregiver.



## Comparison:

### Are you Fast or Slow?



Many studies have been done to determine what is an "average" or "normal" metabolism. Your metabolic rate has been compared to what is "normal" for your age, height, weight, and sex. We often hear people blame their "slow metabolism" for their weight gain. But really most people do not have a slow metabolic rate.

Your measured metabolic rate is shown compared to average. If you have a "FAST" metabolic rate your body burns MORE calories than average - which is good. If you have a "SLOW" metabolic rate your body burns FEWER calories than average.



## What to Do

### Listen to Your Physician / Caregiver

MR testing and Metabolic Zones are all about individualizing your weight loss plan. Your caregiver knows you well and can further customize your plan to help you succeed.

Target Daily Calories:

### Manage Your Energy Balance

Remember it is all about balance - energy balance. The key to successful weight management is to balance the Calories you eat with the Calories you burn.



### Manage your Calorie Intake

Follow the nutritional guidelines and Target Daily Calories recommended by your caregiver. Your metabolic rate test provides information about what is right for you! Use this to your advantage.



### Increase Your Activity

This is the best way to affect what you burn. Simple things add up. As we get older our decrease in activity is the largest loss in what we burn.

Light & simple exercise gets oxygen to your muscles and gives your body signals that help you burn fat. There is a simple rule of thumb to know if your exercise will be effective for weight loss - You should feel like you are working hard but can keep going for a long while. Be sure you can carry on a conversation comfortably throughout your workout.



### Maintain Your Lean Body Mass

Follow carefully the nutrition guidelines of your caregiver. Insufficient protein in your diet will cause a decrease in lean body mass. As you lose weight, you do not want to lose the part that helps you burn energy.

Exercise that helps build muscle will increase your lean body mass. Any activity helps - walking is a good start. Eventually add exercises that build muscle strength. Discuss with your caregiver ways you can increase your muscle strength.

# Cardio Coach Test Results

## Patient Information

Name:	Kate Adams	Date Time:	June 25, 2007 3:08 pm
Gender:	Female	Trainer:	Freddie Wolner
Age:	34	Test Type:	RMR
Height:	70 in 178 cm	Test ID:	9
Weight:	169 lbs 76.7 kg	SN:	12108
BMI:	24.2	File Name:	Kate Adams 2RMR 9 2007 05 22 09 10.cc3

## Test Results

Exercise:	+ 223 Cals	Maintenance Zone:	1786 to 2320
Lifestyle & Activity:	+ 534 Cals	Weight Loss Zone:	1430 to 1786
Resting Energy Expenditure:	1786 Cals	Medically Supervised Zone:	0 to 1430
Total Energy Output:	2543 Cals*		

\*Total = RMR + Lifestyle + Exercise

## Time To Goal

Time to reach your goal weight	5 weeks
If you add exercise	4 weeks

## Metabolic Data

VO2:	259 ml/min	%Kcal from CHO:	47.2 %
VCO2:	217 ml/min	%Kcal from Fat:	52.8 %
RQ:	0.84	CHO grams per Day:	200 grams
		Fat grams per Day:	105 grams

## Test Data

Time sec	HR bpm	VO2 ml/min	VO2 ml/kg/min	VCO2 ml/min	VCO2 ml/kg/min	Ve/VO2	Ve/VCO2	FeO2 %	FeCO2 %	Mode
0:15	0	246	3.2	244	3.2	34.30	34.59	17.15	3.24	Testing
0:30	0	261	3.4	245	3.2	31.87	33.95	17.03	3.28	Testing
0:45	0	262	3.4	244	3.2	31.45	33.77	16.98	3.30	Testing
1:00	0	292	3.8	263	3.4	30.54	33.91	16.91	3.30	Testing
1:15	0	262	3.4	238	3.1	30.68	33.78	16.89	3.31	Testing
1:30	0	238	3.1	215	2.8	30.58	33.86	16.89	3.30	Testing
1:45	0	280	3.7	251	3.3	30.71	34.26	16.92	3.27	Testing
2:00	0	240	3.1	213	2.8	30.66	34.55	16.91	3.24	Testing
2:15	0	268	3.5	242	3.2	31.19	34.54	16.97	3.23	Testing
2:30	0	260	3.4	231	3.0	31.23	35.15	16.97	3.18	Testing
2:45	0	236	3.1	210	2.7	31.18	35.04	16.96	3.20	Testing
3:00	0	266	3.5	235	3.1	30.22	34.21	16.84	3.26	Testing
3:15	0	232	3.0	199	2.6	29.48	34.37	16.78	3.27	Testing
3:30	0	367	4.8	310	4.0	28.88	34.19	16.71	3.27	Testing
3:45	0	310	4.0	264	3.4	28.64	33.63	16.67	3.32	Testing
4:00	0	265	3.5	227	3.0	28.07	32.77	16.60	3.40	Testing
4:15	0	335	4.4	287	3.7	27.46	32.05	16.52	3.48	Testing
4:30	0	288	3.8	248	3.2	27.36	31.77	16.51	3.51	Testing
4:45	0	269	3.5	233	3.0	27.36	31.58	16.50	3.52	Testing

5:00	0	262	3.4	228	3.0	27.32	31.40	16.48	3.55	Testing
5:15	0	279	3.6	246	3.2	27.81	31.54	16.55	3.53	Testing
5:30	0	260	3.4	231	3.0	28.46	32.03	16.64	3.48	Testing
5:45	0	295	3.8	259	3.4	28.33	32.27	16.64	3.45	Testing
6:00	0	237	3.1	206	2.7	28.52	32.81	16.64	3.41	Testing
6:15	0	238	3.1	210	2.7	28.73	32.57	16.68	3.43	Testing
6:30	0	293	3.8	256	3.3	28.25	32.34	16.63	3.45	Testing
6:45	0	195	2.5	176	2.3	28.92	32.04	16.70	3.49	Testing
7:00	0	237	3.1	207	2.7	28.35	32.46	16.62	3.45	Testing
7:15	0	235	3.1	202	2.6	28.08	32.67	16.58	3.43	Testing
7:30	0	205	2.7	178	2.3	28.29	32.58	16.61	3.43	Testing
7:45	0	295	3.8	250	3.3	27.79	32.80	16.56	3.41	Testing
8:00	0	296	3.9	249	3.2	27.56	32.77	16.52	3.41	Testing
8:15	0	325	4.2	272	3.5	27.07	32.35	16.44	3.44	Testing
8:30	0	261	3.4	218	2.8	26.81	32.11	16.40	3.48	Testing
8:45	0	272	3.5	228	3.0	26.91	32.10	16.44	3.47	Testing
9:00	0	254	3.3	213	2.8	27.08	32.30	16.46	3.46	Testing
9:15	0	214	2.8	185	2.4	27.85	32.21	16.54	3.45	Testing
9:30	0	215	2.8	186	2.4	27.90	32.25	16.56	3.45	Testing
9:45	0	216	2.8	186	2.4	27.96	32.47	16.56	3.42	Testing
10:00	0	270	3.5	228	3.0	27.70	32.80	16.52	3.41	Testing
10:15	0	186	2.4	157	2.0	27.95	33.12	16.53	3.39	Testing
10:30	0	216	2.8	178	2.3	27.22	33.03	16.45	3.39	Testing
10:45	0	283	3.7	230	3.0	26.57	32.69	16.36	3.42	Testing
11:00	0	248	3.2	200	2.6	26.12	32.40	16.31	3.46	Testing
11:15	0	234	3.1	188	2.5	25.81	32.12	16.25	3.47	Testing
11:30	0	235	3.1	188	2.5	25.53	31.91	16.20	3.50	Testing
11:45	0	218	2.8	173	2.3	25.32	31.90	16.18	3.49	Testing
12:00	0	530	6.9	412	5.4	24.90	32.03	16.12	3.48	Testing

