Name J. Sample Date 1/16/13





Fitness Testing Lab

Your Resting Energy Expenditure (REE)

1570 Calories

REE is the sum of your Resting Metabolic Rate (RMR) and your specific reaction to foods (SDA).

This represents the number of calories your body requires in a 24 hour period at complete rest.

RMR = The number of calories burned by your body in a 24 hour period, at rest without consuming food.

SDA = The number of calories required to process and utilize consumed foods.

Calories burned through Active Daily Living (ADL)

The number of calories burned by daily (non-exercise) activity at the various intensity zones. This is sometimes referred to as NEAT (Non-Exercise Activity Thermo-genesis).

| Activity Zones | REE | 1620 | Calories/day Range | |
|----------------------|-----|------|--------------------|--------------|
| Light Daily Activity | | | 324 | 648 |
| Moderate Activity | | | 72 9 | 972 |
| Vigorous Activity | | | 1053 | 129 6 |

Total Daily Energy Expenditure (TDEE)

The number of calories you need to sustain regular activity* in the various exercise intensity zones

| | Max HR | 169 | REE | 1620 | Cals. |
|-------------------------------|------------|--------|-----------------|------|-------|
| Exercise Zones | HR | Zone | Kcals/day Range | | |
| Zone 1 Light Activity (ADL) | Resting HR | 68 | 2025 | 2268 | |
| Zone 2 Moderate Activity | 85 | 108 | 2349 | 2592 | |
| Zone 3 Vigorous Activity | 110 | 142 | 2673 | 2916 | |
| Zone 4 Very Vigorous Activity | 144 | Max HR | 2997 | 3240 | |

^{*}Based on Harris-Benedict Standard Activity Factor Scores

Weight Control Program

The caloric deficit required* to achieve weight loss of approximately 1lbs. per week. -500 Calories Ideally this should be a combination of nutrition and exercise.

| | | REE | 1620 | Cals. |
|-----------------|------|--------------------------|------|-------|
| Kcals/day Range | | Recommended Calorie inta | | |
| 1944 | 2268 | 1444 | 1768 | |
| 2349 | 2592 | 1849 | 2092 | |
| 2673 | 2916 | 2173 | 2416 | |
| 2997 | 3240 | 2497 | 2740 | |

^{*}It is never recommended to reduce calorie intake below your REE.

Key Points Regarding weight Loss

- 1. The biggest impact on daily energy expenditure is from calories oxidized during & after exercise, not necessarily from changes in RMR. This suggests that chronic exercise (activity) is the key to fat control.
- 2. Lower intensity exercise (40-60% Zone 2) relies primarily on fat as fuel. Higher intensity exercise (Zone 3-4) will rely more on carbohydrates as fuel. However, higher intensities will create a higher absolute caloric expenditure and higher tolerance to greater workloads. These adaptations increase the capacity to burn more fat at moderate levels and also during recovery periods.
- 3. Switching around cardiovascular exercises (cross training) will help keep the intensity up and burn greater amounts of calories in a shorter time.
- 4. Weight training will help to increase lean mass which contributes both to a higher metabolism and greater potential for tolerating higher workloads safely.

Christopher Melby. Dr. P.H. Dr. James O. Hill, Ph.D, Exercise Macronutients and Body Weight regulation, Sports Science Exchange, Vol. 12 (1999)