

The truth about  
*how your body works,*  
and how you can  
*gain control over*  
*your weight, energy*  
and *happiness.*

by **John Porten**

# A FEW SIMPLE FACTS

*How many people do you know who have experienced **lasting weight loss** with commercial diets?*

## **Diets work**

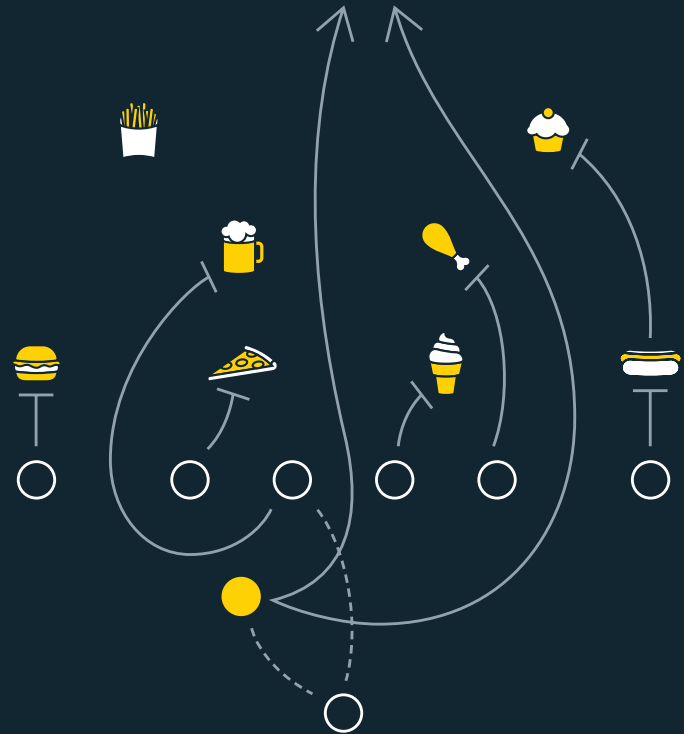
if your goals  
are about hitting  
a target weight,  
clothing size,  
or one-day  
appearance.

## **Diets don't work**

if your goals  
are about  
being healthy  
and enjoying  
lasting change  
in your life.

# The problem *is not* the diets.

The mistake most people make is that they think in terms of **defense**—fighting off a few pounds, battling against bad habits, etc.—instead of thinking about **offense** and how they want to be for *the rest of their lives*.



**Let's be honest.**

*You don't have to lose weight.* Your weight has nothing to do with your worth as a person.

But if you're going to bother losing weight, and risk the heartaches you'll face if you put the weight back on, *you have to face one important fact* that the weight loss industry makes billions of dollars by ignoring...

You **never** get to stop working.

But you can work **smarter**.

*There is no such thing* as hitting a goal and then coasting. People who succeed at managing their weight make a *series of simple choices consistently, over time.*



**suc·cess** (sək ses´) *n.*  
—a favorable result

**Success is about redefining who you are.**

Fit people see themselves as people who eat intentionally and incorporate exercise into their lives. Exercise is not work to them—*it's simply part of who they are.*

The Buddhists have a phrase...

“Right  
thinking  
**follows**  
right  
action.”

What *activities* do you enjoy?

What *activities* would you *like* to enjoy?

What would being someone who rides a *bicycle* mean about you — to you?

What would you think of being someone who likes to *hike and camp*?

Can you see yourself as someone who *takes walks around the neighborhood at sunset*?

Who do you *want to be*?

What does that person *enjoy*?

What actions does that person do as a *reflection of who that person is*?

What sort of *watch* does that person wear?

What kind of *shoes*?

Where does that person *buy their food*?

### **Right thinking follows right action.**

We become who we practice being.  
*Who are you practicing being?*

What *simple steps* can you make to become *the person you want to be*?

Does that sound too mean? Too superficial?  
Does the idea that we choose who we become  
land upon you like shame?

### **Why is that?**

Could it be that you've been taught to think in terms of magic fixes and silver bullets, and that you've trained yourself to launch into the next miracle diet time and again?

Could it be that somewhere along the way the diet industry's "all or nothing" way of thinking has taught you to white-knuckle your diet, to beat yourself up, and then to scrap the whole thing and call yourself a failure when you "blow" the diet?

Choosing who  
we become,  
and being able  
to admit we want  
to improve, is not  
shame — it is  
freedom. Shame  
is what you've  
encountered  
with dieting.

**Healthy people don't interact with their food the way dieters do.**

Instead, they bat for average. They know that there will always be the next Friday night cocktail party or Saturday afternoon cookout, and that they will likely consume more calories than they should at those events. So healthy people *eat fewer calories in the meals before or after the events*. Or they *exercise a bit more*.

What healthy people understand, and dieters get talked out of over and over again, is the simple concept of **“energy balance.”**



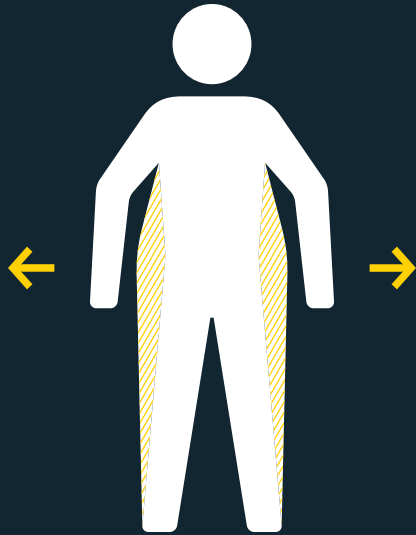
WEIGHT MANAGEMENT comes down to one thing:

# ENERGY BALANCE

IF CALORIES **CONSUMED** = CALORIES **BURNED**...

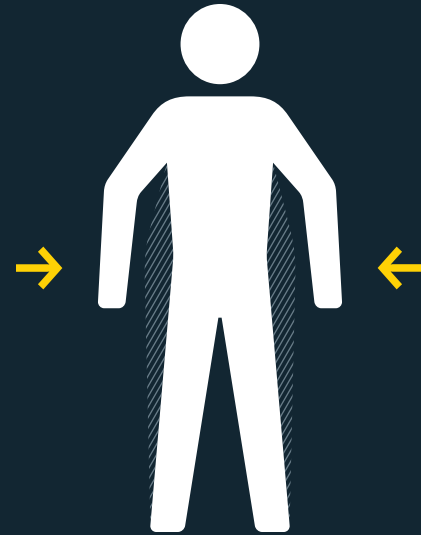
...THEN YOU HAVE ACHIEVED **ENERGY** BALANCE.

**+ POSITIVE**  
ENERGY BALANCE



If you *eat more calories* than you use,  
your body *stores* those calories as *fat*  
and you **gain weight**.

**- NEGATIVE**  
ENERGY BALANCE



If you *eat fewer calories* than you use,  
your body *burns* stored *fat* calories  
and you **lose weight**.

The key to achieving and maintaining your goals is *learning how your body operates*, and balancing the amount of energy you take in with the amount you use up.

You will lose weight with any diet that causes you to consume fewer calories than you burn.

Life has its  
**ebbs and flows.**

Some days you will eat more, and some days less. *The key is what happens consistently over time.*

Life—  
healthy life—  
**is flexible.**

Diets, and dieters,  
**are not.**

Let's face it, people only read this sort of stuff when their enthusiasm is high and they're ready to adopt some changes.

*Your enthusiasm will fade, too. It happens to everyone.*

You don't have long before the enthusiasm fades.

**Now is the time to do the truly hard work.**

The hardest work you'll do in learning to manage your body and your weight *doesn't have anything to do with what you eat or how much you sweat...*

If your work is  
going to last, you  
need to learn to  
see food **the way**  
**your body sees it.**




To your **heart**, it's Mom's apple pie, baked with *love* and full of *comfort*.





To your **mind**, it's something you know you probably *shouldn't eat*, but will probably find some way of talking yourself into eating anyway.



To your **body**, it's nearly six hours' worth of *energy*.

Your  is actually *more interested in the love* than the pie.

And your , with its tricks and compromises, *can be retrained*.

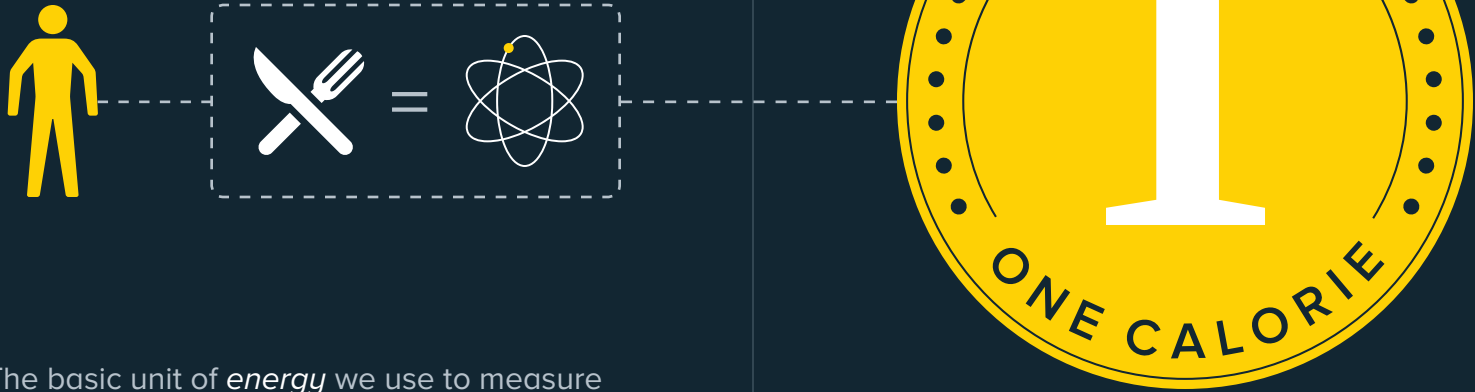
Your  is *less flexible*.

**TRUTH** is not a matter of **WILLPOWER**.

**TRUTH** WON'T  
FAIL YOU.  
**WILLPOWER**  
RUNS OUT.

## The truth according to your body:

Your *body* sees *food* as *energy*. To your body, life is a matter of thermo-chemical interactions, and the transfer of *energy*.



The basic unit of *energy* we use to measure *food energy* is the *calorie*.

*Calories* are not just how we happen to measure the nutritional value of the food we eat. A *calorie* is a unit of *heat energy*.



A nutritional *calorie* is a unit of heat equal to the amount of heat required to raise the temperature of one kilogram (2.2 lbs) of water by one degree centigrade (1.8 degrees Fahrenheit) at one atmosphere pressure.

Or...

A nutritional *calorie* is equivalent to .001163 kilowatt hour (a kilowatt hour is a unit of *energy* equal to the work done by a power of 1,000 watts operating for one hour).



**.001163** kWh



**1000W**

×



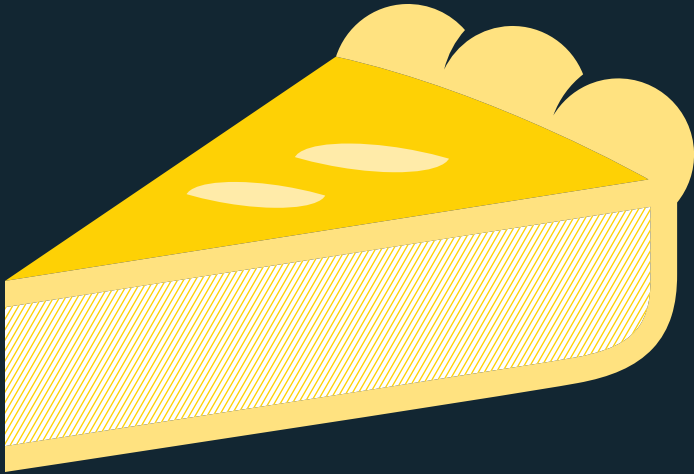
**1 hour**

What does that *look like*?

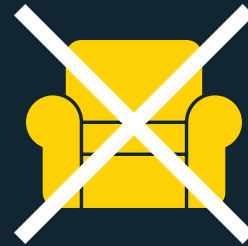
A person who consumes **2,000 calories** per day, and maintains their weight, is using energy at roughly the same rate as a **100 watt light bulb.**



Your *body* doesn't see the apple pie as Mom's *love* or *comfort*.



All your *body* cares about is *energy* to help you *live* and *move*.



So, how much *energy* does *your body* need?

Your Basal Metabolic Rate (BMR) is the number of *calories* your *body* requires for *energy* if you lay in bed all day.

4.35

×



WEIGHT  
in pounds

+

4.7

×



HEIGHT  
in inches

-

4.7

×



AGE  
in years

+

655

=

**BMR**

(women)



If you get out of bed, you'll have to figure in how that motion impacts the amount of *energy* your *body* uses during the day.

6.23

×



WEIGHT  
in pounds

+

12.7

×



HEIGHT  
in inches

-

6.8

×



AGE  
in years

+

66

=

**BMR**

(men)



## HARRIS BENEDICT EQUATION

The **Harris-Benedict equation** (also called the *Harris-Benedict principle*) is a general method used to estimate the *daily calorie requirements* of an individual using their *basal metabolic rate* or *BMR*. The estimated value is then multiplied by a number that corresponds to the person's activity level. The resulting number is the recommended daily calorie intake to *maintain your current weight*.

Description Source: Wikipedia

### SEDENTARY



(little or no exercise)

$$\text{CALORIC REQUIREMENT} = \text{BMR} \times 1.2$$

### LIGHTLY ACTIVE



(light exercise/sports 1–3 days per week)

$$\text{CALORIC REQUIREMENT} = \text{BMR} \times 1.375$$

### MODERATELY ACTIVE



(moderate exercise/sports 3–5 days per week)

$$\text{CALORIC REQUIREMENT} = \text{BMR} \times 1.55$$

### VERY ACTIVE



(hard exercise/sports 6–7 days per week)

$$\text{CALORIC REQUIREMENT} = \text{BMR} \times 1.725$$

### EXTRA ACTIVE



(very hard exercise/sports & physical job or 2x training)

$$\text{CALORIC REQUIREMENT} = \text{BMR} \times 1.9$$

## It's not as difficult as it looks.

While these formulas may seem complicated at first glance, *in reality they're actually very simple*. To demonstrate this we'll calculate the **BMR** and **Daily Caloric Requirement** for a moderately active 35-year-old male, who is 5'10" tall (70") and weighs 190lbs.



**190** lbs



**70**"



**35** yrs

MON

TUE

WED

THU

FRI

SAT

SUN



MODERATELY ACTIVE (moderate exercise/sports 3–5 days per week)

To calculate his *Basal Metabolic Rate (BMR)*:

$$6.23 \times 190 = 1183.7$$

+

$$12.7 \times 70 = 889$$

-

$$6.8 \times 35 = 238$$

+

**66**

=

$$\text{BMR} = \mathbf{1901}^*$$

To calculate his *Daily Caloric Requirement*:

$$\text{BMR}_{(1901)} \times 1.55 = \mathbf{2947}^*$$

calories per day

\*Final values have been rounded up to nearest integer (whole number).

That slice of Mom's apple pie contains *500 calories*.

If your *body* burns *2,000 calories* of *energy* per day, *500 calories* represents a *fourth* of your *body's* total *caloric requirement*.

That means *500 calories* will meet your *body's* needs for *six hours*.



If your **body** can use the **energy**, the pie may be a good idea. If your body doesn't need the **energy**, a hug from Mom may be the better option.



Has your **ENERGY BALANCE** put you where you want to be?

# BMI =

Body Mass Index (BMI) Formula



WEIGHT  
in pounds



HEIGHT  
in inches



HEIGHT  
in inches



# 703

Weight in Pounds

	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250
4'	30.5	33.6	36.6	39.7	42.7	45.8	48.8	51.9	54.9	58.0	61.0	64.1	67.1	70.2	73.2	76.3
4' 2"	28.1	30.9	33.7	36.6	39.4	42.2	45.0	47.8	50.6	53.4	56.2	59.1	61.9	64.7	67.5	70.3
4' 4"	26.0	28.6	31.2	33.8	36.2	38.6	41.0	43.4	45.8	49.4	52.0	54.6	57.2	59.8	62.4	65.0
4' 6"	24.1	26.5	28.9	31.3	33.8	36.2	38.6	41.0	43.4	45.8	48.2	50.6	53.0	55.4	57.9	60.3
4' 8"	22.4	24.7	26.9	29.1	31.4	33.6	35.9	38.1	40.4	42.6	44.8	47.1	49.3	51.6	53.8	56.0
4' 10"	20.9	23.0	25.1	27.2	29.3	31.3	33.4	35.5	37.6	39.7	41.8	43.9	46.0	48.1	50.2	52.2
5'	19.5	21.5	23.4	25.4	27.3	29.3	31.2	33.2	35.2	37.1	39.1	41.0	43.0	44.9	46.9	48.8
5' 2"	18.3	20.1	21.9	23.8	25.6	27.4	29.3	31.1	32.9	34.7	36.6	38.4	40.2	42.1	43.9	45.7
5' 4"	17.2	18.9	20.6	22.3	24.0	25.7	27.5	29.2	30.9	32.6	34.3	36.0	37.8	39.5	41.2	42.9
5' 6"	16.1	17.8	19.4	21.0	22.6	24.2	25.8	27.4	29.0	30.7	32.3	33.9	35.5	37.1	38.7	40.3
5' 8"	15.2	16.7	18.2	19.8	21.3	22.8	24.3	25.8	27.4	28.9	30.4	31.9	33.4	35.0	36.5	38.0
5' 10"	14.3	15.8	17.2	18.7	20.1	21.5	23.0	24.4	25.8	27.3	28.7	30.1	31.6	33.0	34.4	35.9
6'	13.6	14.9	16.3	17.6	19.0	20.3	21.7	23.1	24.4	25.8	27.1	28.5	29.8	31.2	32.5	33.9
6' 2"	12.8	14.1	15.4	16.7	18.0	19.3	20.5	21.8	23.1	24.4	25.7	27.0	28.2	29.5	30.8	32.1
6' 4"	12.2	13.4	14.6	15.8	17.0	18.3	19.5	20.7	21.9	23.1	24.3	25.6	26.8	28.0	29.2	30.4
6' 6"	11.6	12.7	13.9	15.0	16.2	17.3	18.5	19.6	20.8	22.0	23.1	24.3	25.4	26.6	27.7	28.9
6' 8"	11.0	12.1	13.2	14.3	15.4	16.5	17.6	18.7	19.8	20.9	22.0	23.1	24.2	25.3	26.4	27.5
6' 10"	10.5	11.5	12.5	13.6	14.6	15.7	16.7	17.8	18.8	19.9	20.9	22.0	23.0	24.0	25.1	26.1
7'	10.0	11.0	12.0	13.0	13.9	14.9	15.9	16.9	17.9	18.9	19.9	20.9	21.9	22.9	23.9	24.9

Height in Feet and Inches

Underweight
  Normal
  Overweight
  Obesity

## ENERGY BALANCE AND WEIGHT LOSS

One pound of *fat* equals **3,500 calories** of stored *energy*.

To lose one pound of *fat*, your *body* needs to burn **3,500** more *calories* than it consumes.

If a person burns **500 calories** more than they consume every day for one week, they will lose one pound of *fat*.

MON	TUE	WED	THU	FRI	SAT	SUN
-500 CALCALS	-500 CALCALS	-500 CALCALS	-500 CALCALS	-500 CALCALS	-500 CALCALS	-500 CALCALS

**-500** CALS × **7** DAYS

= **-3,500** CALS/  
WEEK



For most people, it is safe to lose up to **2 pounds** of *fat* per week, which would mean tipping the **Energy Balance** so that a person burns **7,000 calories** (**3,500 calories** × **2 lbs**) more than they consumed in the week.



You can do it by consuming fewer *calories*, but for most people the best option is to reduce *calories* and... **you knew it was coming...**

# EXERCISE.

**The National Weight Control Registry** tracks 4000+ people who have lost 30 lbs or more and kept it off for more than a year. *89% of that group engages in physical activity on a regular basis and the majority exercise for 1 hour per day or more.* The most common activity is walking.

# It's not **exercise**; it's creating **demand for** **energy.**

The more *calories* your *body* burns, the more it must find from *fat* or from *food*.

For many people, "exercise" conjures images of sweaty guys grunting and groaning in a hot gym. **You can do things differently.** Your goal is "Moderate Physical Activities" like walking, bike riding. Get friends involved. Do a Saturday morning walk/bike club. Find ways to build moderate physical activity into your life. Make it fun. Get a trainer if you can. Most of all, be persistent. Five days per week minimum. Be flexible. See yourself as an exerciser. Get good at it. Build competency. **Do it because you like it, not because you have to.**

## CALORIES USED DURING EXERCISE

Calories burned during exercise or activity is affected by body weight, intensity of activity, conditioning level and metabolism. **Calories burned per hour** are listed below for the example body weights of 130, 155 and 190 pounds.

ACTIVITY	LEVEL	130 lbs	155 lbs	190 lbs
<b>Aerobics</b>	General	<b>354</b>	<b>422</b>	<b>518</b>
	High impact	<b>295</b>	<b>352</b>	<b>431</b>
	High impact	<b>413</b>	<b>493</b>	<b>604</b>
<b>Badminton</b>	Social, general	<b>266</b>	<b>317</b>	<b>388</b>
	Competitive	<b>413</b>	<b>493</b>	<b>604</b>
<b>Basketball</b>	Non-game, general	<b>354</b>	<b>422</b>	<b>518</b>
	Game	<b>472</b>	<b>563</b>	<b>690</b>
	Shooting baskets	<b>266</b>	<b>317</b>	<b>388</b>
<b>Bicycling</b>	Stationary, light	<b>325</b>	<b>387</b>	<b>474</b>
	Stationary, moderate	<b>413</b>	<b>493</b>	<b>604</b>
	Stationary, vigorous	<b>620</b>	<b>739</b>	<b>906</b>
	< 10mph, leisure	<b>236</b>	<b>281</b>	<b>345</b>
	12-13.9 mph, moderate	<b>472</b>	<b>563</b>	<b>690</b>
	BMX or mountain	<b>502</b>	<b>598</b>	<b>733</b>

ACTIVITY	LEVEL	130 lbs	155 lbs	190 lbs
<b>Calisthenics</b>	Home, light, moderate	<b>266</b>	<b>317</b>	<b>388</b>
	Home, vigorous	<b>472</b>	<b>563</b>	<b>690</b>
<b>Child Care</b>	Sitting/kneeling-dressing	<b>177</b>	<b>211</b>	<b>259</b>
	Standing-dressing, feeding	<b>207</b>	<b>246</b>	<b>302</b>
<b>Cleaning</b>	Light, moderate	<b>148</b>	<b>176</b>	<b>216</b>
	House, general	<b>207</b>	<b>246</b>	<b>302</b>
	Heavy, vigorous	<b>266</b>	<b>317</b>	<b>388</b>
<b>Fishing</b>	General	<b>236</b>	<b>281</b>	<b>345</b>
	From river bank, standing	<b>207</b>	<b>246</b>	<b>302</b>
	In stream, in waders	<b>354</b>	<b>422</b>	<b>518</b>
<b>Football</b>	Playing catch	<b>148</b>	<b>176</b>	<b>216</b>
	Competitive	<b>531</b>	<b>633</b>	<b>776</b>
	Touch, flag, general	<b>472</b>	<b>563</b>	<b>690</b>
<b>Gardening</b>	General	<b>295</b>	<b>352</b>	<b>431</b>
<b>Golf</b>	General	<b>236</b>	<b>281</b>	<b>345</b>
	Carrying clubs	<b>325</b>	<b>387</b>	<b>474</b>
	Miniature or driving range	<b>177</b>	<b>211</b>	<b>259</b>
<b>Hiking</b>	Cross country	<b>354</b>	<b>422</b>	<b>518</b>
<b>Jogging</b>	General	<b>413</b>	<b>493</b>	<b>604</b>

ACTIVITY	LEVEL	130 lbs	155 lbs	190 lbs
<b>Moving</b>	Furniture, household	<b>354</b>	<b>422</b>	<b>518</b>
<b>Mowing</b>	Lawn, general	<b>325</b>	<b>387</b>	<b>474</b>
<b>Rowing</b>	Stationary, light	<b>413</b>	<b>493</b>	<b>604</b>
	Stationary, moderate	<b>502</b>	<b>598</b>	<b>733</b>
	Stationary, vigorous	<b>561</b>	<b>669</b>	<b>819</b>
<b>Running</b>	5 mph (11.5 min mile)	<b>472</b>	<b>563</b>	<b>690</b>
	7.5 mph (8 min mile)	<b>738</b>	<b>880</b>	<b>1078</b>
	10 mph (6 min mile)	<b>944</b>	<b>1126</b>	<b>1380</b>
<b>Soccer</b>	Casual, general	<b>413</b>	<b>493</b>	<b>604</b>
	Competitive	<b>590</b>	<b>704</b>	<b>863</b>
<b>Swimming</b>	Leisurely, general	<b>354</b>	<b>422</b>	<b>518</b>
	Breaststroke, general	<b>590</b>	<b>704</b>	<b>863</b>
	Laps, freestyle, light	<b>472</b>	<b>563</b>	<b>690</b>
	Laps, fast, vigorous	<b>590</b>	<b>704</b>	<b>863</b>
<b>Walking</b>	2.0 mph, slow pace	<b>148</b>	<b>176</b>	<b>216</b>
	3.0 mph, moderate pace	<b>207</b>	<b>246</b>	<b>302</b>
	4.0 mph, very brisk pace	<b>236</b>	<b>281</b>	<b>345</b>
<b>Weight Lifting</b>	Light or moderate	<b>177</b>	<b>211</b>	<b>259</b>
	Body building, vigorous	<b>354</b>	<b>422</b>	<b>518</b>

## The Power of Tracking **ENERGY BALANCE**

According to the **2008 Kaiser Permanente Center for Health Research** study—the largest study of weight loss ever conducted in North America—the number one predictor of weight loss success is *whether or not people track their energy balance*.

Recording what you consume and what you burn is a great way to learn about what your body needs, and to gain perspective and flexibility about your energy balance.

But the real value of recording the **calories** you consume and the **calories** you burn has to do with training yourself to see the **energy balance** the way **your body** sees it.

If you don't record *calories consumed* and *calories burned*, your habits, your heart, your hurts, and a dozen other voices will jump in and tell you about your food and about your exercise.

Recording *calories consumed* and *calories burned* is simply part of the work of weight management. Your *body* is inflexible—**you must learn to see some things the way it sees those things.**

But it's smart work because it's far less costly than the consequences you'll face when you fall prey to your temptations.

And with **tools** like the ones we've developed for the **Graphite** site, there's enough **cool stuff** to make the work **rewarding** and at least **a little fun.**

## CLIMBING BACK ONTO THE HORSE

**Energy Balance** isn't rocket science. In fact, *it's remarkably simple math*, and food labels and exercise charts are everywhere for people who want to know what they're consuming and what they're burning (not to mention what we've built into the **Graphite** site).

But if knowledge was enough, we'd live in a world with no war, no weight problems, and far fewer movies made by former Saturday Night Live cast members. *The fact is, we're irrational creatures and we have a tendency to make choices that aren't good for us.*

We consume extra *calories* for a variety of reasons, or we stop exercising, or we stop recording our behaviors, and the weight comes back on.

That's how we are,  
and if we don't  
admit that we can  
**never quit working**,  
that's likely how  
we'll always be.

What's more, we live in a vain society that has taught us to **be motivated by shame and fear rather than desire**. We've heard too much information, too much conflicting information, and we've come to believe that all healing and all fixes need to happen over the course of a single 30-minute extreme makeover show. We're exhausted from the hype, and sometimes it takes us a long time before we're ready to quit sprinting for the next fad solution, and simply begin *the long walk to health*.

It's okay if you fall off the horse.  
In fact, the odds are extremely good  
that you will.  
**Repeatedly.**

*The good news is that the same simple truths will be here when you're ready to try again.*

And while sometimes the numbers may feel daunting, they don't have to be. Numbers are simply the reflection of reality, and it's up to us to decide how we will interact with the reality in which we live.

If you've fallen off your horse, there's a bit of secret information that may sound very good to you right now: **Reality is quite different from diets.**

With a diet, you're either on it or you're off it, and when the **diet fails**, **you fail**. And when **you fail**, the **weight returns**.

**Reality is bigger than that.** Reality patiently says, "Here are the facts. Here is **Energy Balance**. Your confusion and chronic pursuit of quick fixes (followed by quick relapses) will come to an end when you're ready to *quit working harder*, turn to the facts, and choose to *start working smarter*."

Whether that's with the **Graphite** tools, or something else, please make the choice to *begin the long walk to health.*

**YOU ARE  
WORTH THE  
EFFORT.**

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