

HOW TO CONTROL  
YOUR BODY  
COMPOSITION

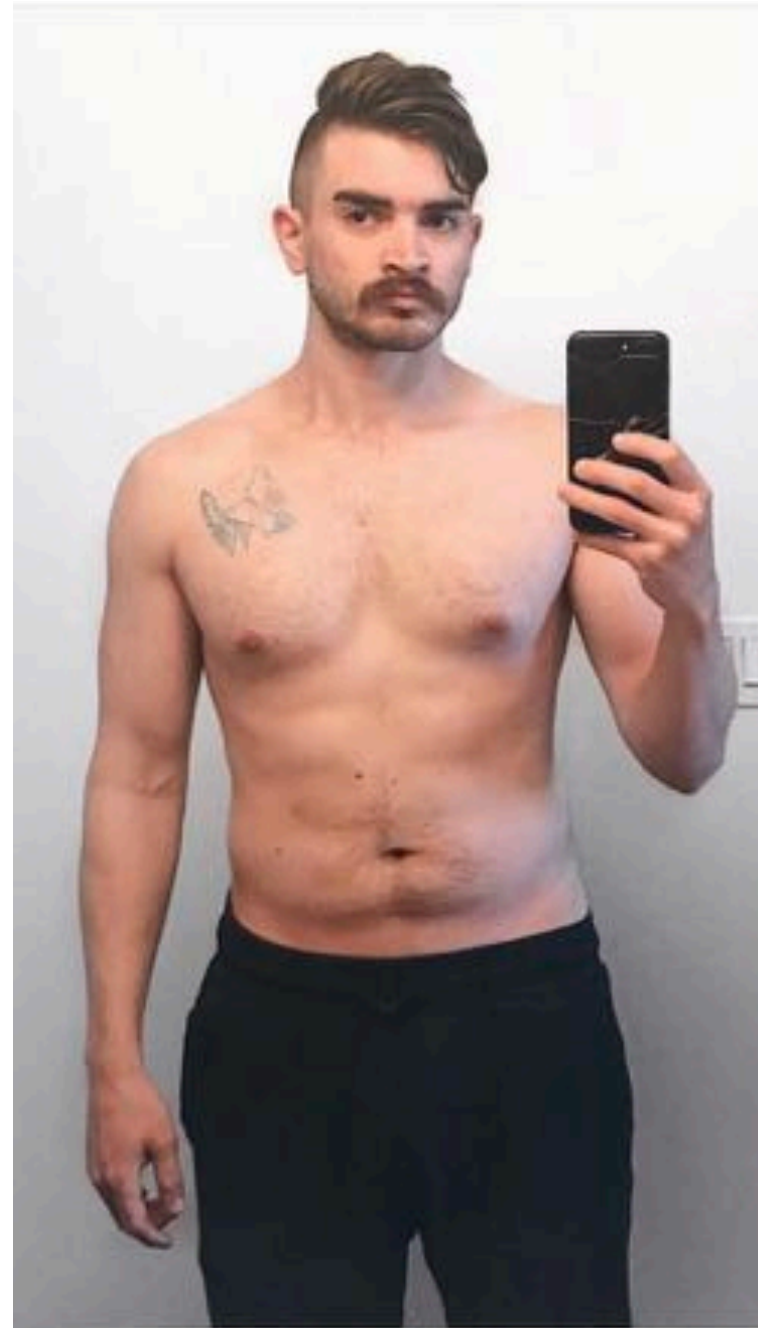
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FOREVER

PART ONE: FAT LOSS

# My Results

- In 4 months I went from 172lbs at 18-19% body fat to 11-12% body fat.
- Exercised around 4-5 hours per week. 3-4 lifting sessions, 1-2 cardio sessions.
- Gained strength on compound lifts.



**March 2018**



**August 2018**

# The First Question We Must Ask Is:

**What is an IDEAL body composition?**

An ideal body composition for women would be a lean body mass of 75 to 81 percent of body weight.

For men, the ideal body composition would be a lean body mass of 83 to 90 percent of body weight.

In other words, 19 to 25 percent body fat for women, and 10-17 percent body fat for men.

Studies show that when your body fat gets higher, insulin sensitivity is decreased.(1) Testosterone also drops and estrogen rises with the more body fat you carry.(2)

This clearly isn't ideal if you desire leanness and muscularity.

*LEGION*

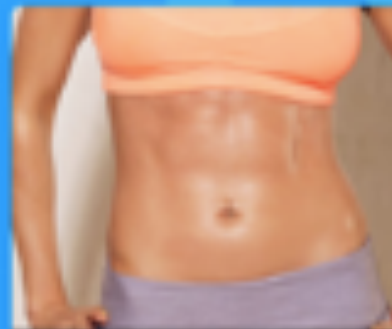
*LEGION*



12 - 14%



15 - 17%



18 - 20%



4 - 5%



6 - 7%



8 - 10%



21 - 23%



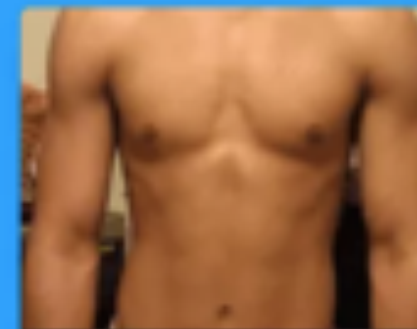
24 - 26%



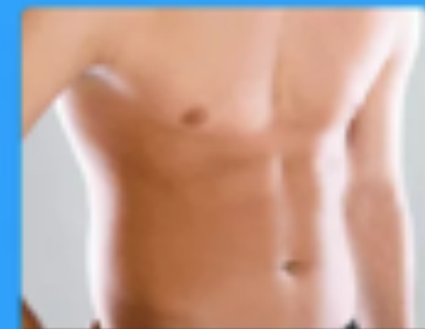
27 - 29%



11 - 12%



13 - 15%



16 - 19%



30 - 35%



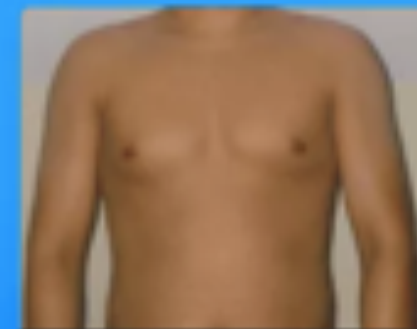
36 - 40%



50%+



20 - 24%



25 - 30%



35 - 40%

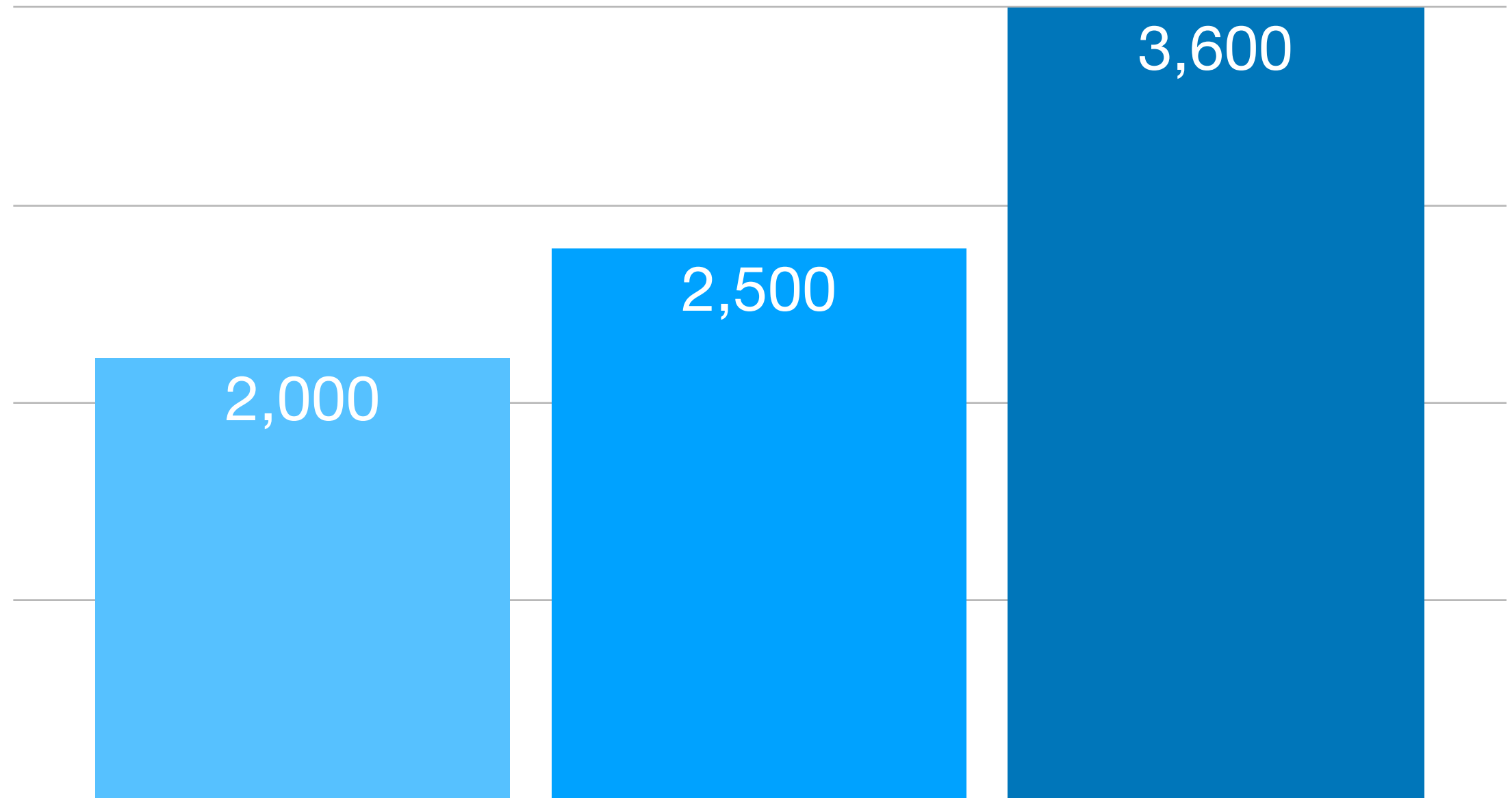
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“The truth that you need is in  
the place that you least want  
to look” - Carl Young

# The Bank Account Analogy

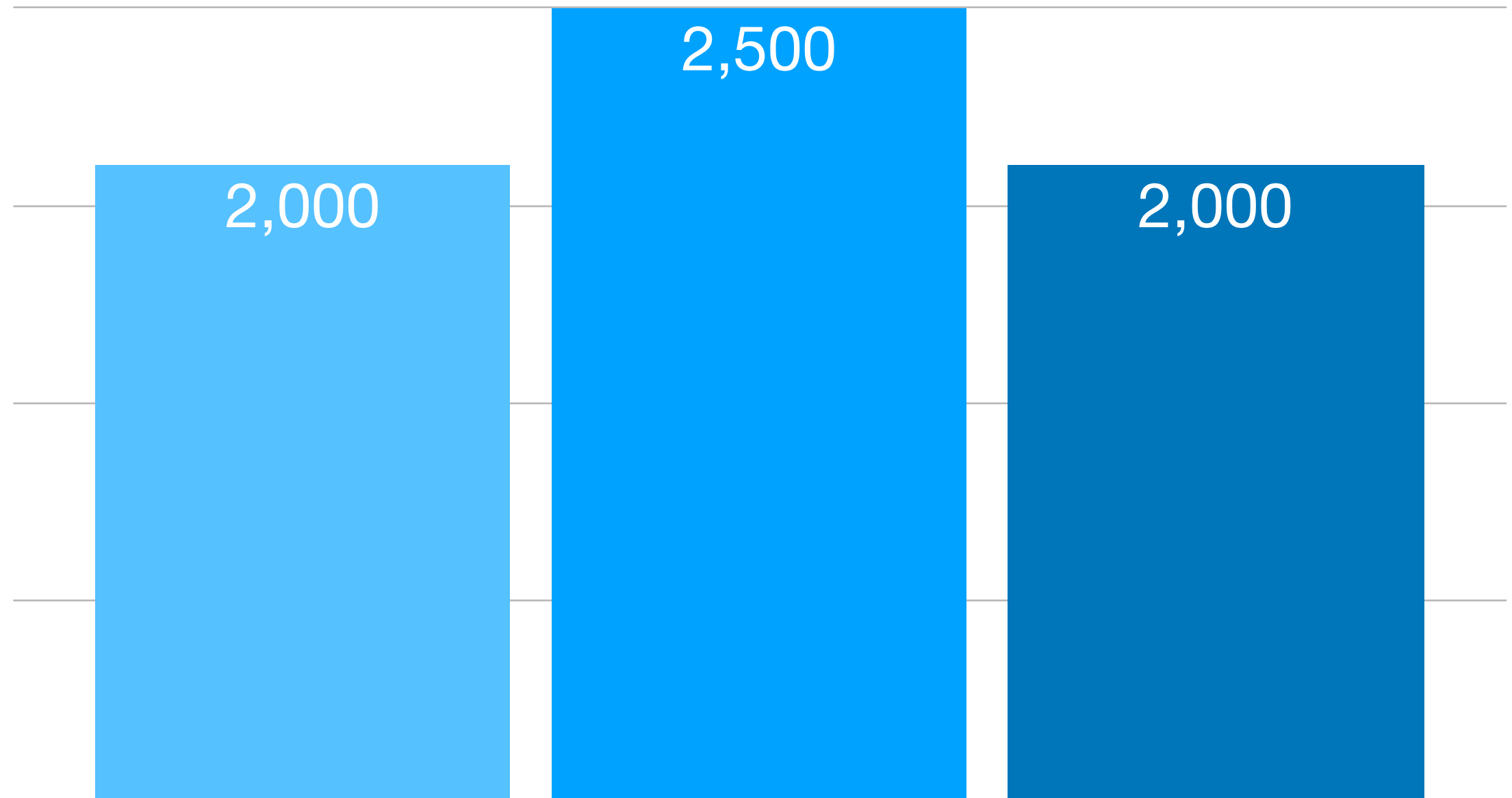
Gain



■ Savings (Stored Fat)   ■ Daily Expenditure   ■ Total Purchases (kcal consumed)

# The Bank Account Analogy

Loss



■ Savings(Stored Fat)   ■ Daily Expenditure   ■ Total Purchases(kcal consumed)

**So what is the BEST diet for healthy fat loss?**



The diet that YOU CAN  
STICK TO, that allows you to  
maintain a caloric deficit over  
time.

# The Twinkie Study:

For 10 weeks, Mark Haub, a professor of human nutrition at Kansas State University, ate one Twinkie every three hours, instead of meals. To add variety, he added Hostess and Little Debbie snacks, Doritos chips, sugary cereals and Oreos to his daily diet.

Hypothesis: In weight loss, pure caloric intake is what matters most -- not the nutritional value of the food.

Haub limited himself to less than 1,800 calories a day. A man of Haub's pre-dieting size needed about 2,600 calories daily.

## **The Results:**

- Haub lost 27 pounds in 10 weeks. From 201 lbs to 174 lbs.
- Dropped his body fat percent from 33.4 to 24.9 percent.
- His BMI dropped from 28.8, considered overweight, to 24.9, which is normal.
- Haub's "bad" cholesterol, or LDL, dropped 20 percent and his "good" cholesterol, or HDL, increased by 20 percent. He reduced the level of triglycerides, which are a form of fat, by 39 percent.

# My interpretation of the Twinkie Study:

- Total calories are what determines body composition, not manipulation or limitations of macronutrients.
- The effects of being overweight are VERY hard on the body.
- “Bad” foods are NOT going to kill you, but can be worked into an overall healthy and whole food based diet.
- Maintaining a healthy weight may be the one of the best overall solutions for long term health.

# The Average American's Diet:

According to calorie intake data released by The Food and Agriculture Organization, Americans eat an average of over 3,600 calories a day.

To put this into perspective, a 5"10' male weighing in at 165 pounds that's exercising four to six hours a week, needs, on average only 2500 calories a day to maintain his weight.

A 5"8' female weighing in at 140 pounds that's exercising four to six hours a week needs, on average, only 2100 calories a day to maintain her weight.



## U.S. FOOD CONSUMPTION AS A % OF CALORIES

### PLANT FOOD:

Vegetables, Fruits, Legumes, Nuts & Seeds, Whole Grains  
**Fiber is only found in plant foods.**

**NOTE:** Up to half of this category may be processed, for example almonds in candy bars, apples in apple pies or spinach in frozen spinach soufflé, and of course these would not be healthy choices. The focus should be on whole unprocessed vegetables, fruits, legumes, nuts and seeds and whole grains.

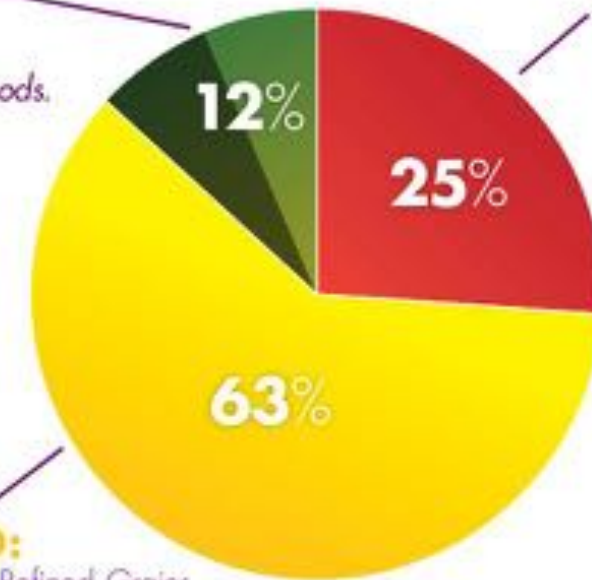
### ANIMAL FOOD:

Meat, Dairy, Eggs, Fish, Seafood  
**Cholesterol is only found in animal foods.** Animal foods are the **PRIMARY** source of saturated fat.

**GUIDE TO HEALTHY EATING:**  
Much easier to understand than the USDA Food Pyramid, with no food industry influence.

Eat **LESS** from the animal and processed food groups and **MORE** whole food from the plant food group.

In general, food from the animal and processed food group contribute to disease, while **WHOLE** foods from the plant group contribute to good health.



### PROCESSED FOOD:

Added Fats & Oils, Sugars, Refined Grains

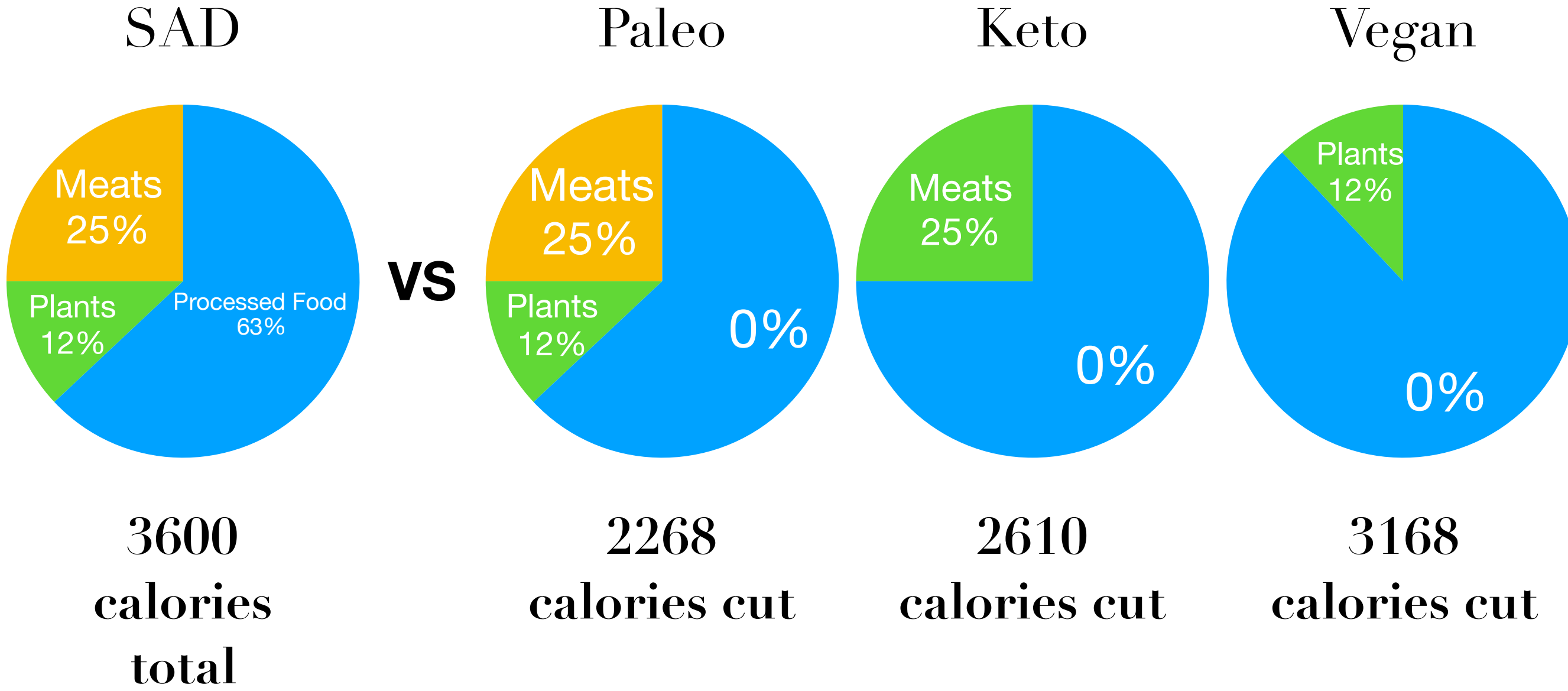
Source: USDA Economic Research Service, 2009. [www.ers.usda.gov/publications/EIB33](http://www.ers.usda.gov/publications/EIB33), [www.ers.usda.gov/Data/FoodConsumption/FoodGuideIndex.html#calories](http://www.ers.usda.gov/Data/FoodConsumption/FoodGuideIndex.html#calories)  
New York Coalition for Healthy School Food \* [www.healthychoolfood.org](http://www.healthychoolfood.org)  
Special thanks to Joel Fuhrman, MD, author of *Disease Proof Your Child Feeding Kids Right* \* Graphics by MichelleBanda.com  
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3600 calories a day  
900 calories a day from “meats/proteins”  
432 calories a day from “plants”  
2268 calories a day from “processed” foods

That's over 1000+ extra calories a day that Americans are consuming.

And since 3500 calories equals 1 pound of fat. A surplus of 1000 calories a day is going to help you gain weight, to the tune of 2lbs a week, or 8 pounds a month, and possibly more in a year if such habits are sustained.

# So what happens when the average American goes on one of the three, currently most popular diets?



# So how do we build a sustainable diet, that induces a caloric deficit over time?

1. Determine the amount of calories you need to eat per day to lose a target amount of fat per week.
2. Determine the amount of protein, carbs and fat to eat.
3. Determine how you'll distribute those calories.
4. Build a meal plan based on eating foods that you **actually like.**

# How Many Calories Should I Eat?

This depends on how much you want to lose. Be warned, more is not always better. The more you restrict, the harder it can be to follow, and stay consistent. So remember **CONSISTENCY IS KEY**.

Aim to lose .05 to 1% of your bodyweight a week. This generally works out to be about 3/4 of a pound to 1.5 pounds a week, and about 20-25% of your maintenance calories.

So if you need 2500 calories a day to maintain your weight, by eating 1875 to 2000 calories a day, you'll lose 1-1.5 lbs a week.

**A good place to start is 20% of your maintenance, or 1 pound a week.** This is a very easy, and maintainable deficit, that doesn't leave you feeling overly hungry.

If you're not sure what your maintenance calories are, a very quick and easy estimation is as follows:

Assuming you workout a few times per week and are lightly active during your day your bodyweight multiplied by 15 = maintenance calories. i.e.  $165 \times 15 = 2475$  calories a day.



# How Many Grams of Protein Should I Eat?

The research is abundantly clear that a high protein diet will maximize muscle gain, and minimize muscle loss during bouts of decreased caloric intake.

A study conducted by [McMaster University](#) determined that protein intake of 1.3 – 1.8 grams per kilogram of body weight (.6 – .8 grams per pound of body weight) is adequate for stimulating maximal [protein synthesis](#). They note, however, that more protein might be needed in the case of frequent and/or high-intensity training, and in the case of dieting to lose fat (restricting calories).<sup>(7)</sup>

Another study conducted by [The University of Western Ontario](#) concluded the same: 1.6 – 1.8 grams per kilogram of body weight might be enough for athletes.

Studies show people who eat more protein:

- [Lose fat faster](#)
- [Gain more muscle](#)
- [Burn more calories](#)
- [Experience less hunger](#)
- [Have stronger bones](#)
- [Generally enjoy better moods](#)

# How Many Grams of Protein Should I Eat?

If you're looking to optimize your body composition, I'd recommend consuming around .6g/lb/Bw and maybe even up to 1g/lb/bw for those particularly athletic.

That works out to be 100 - 165 grams of protein a day for a 165 pound man, and 78 to 130 grams for a 130 pound women.

My personal preference is .8g/lb/bw, which is in the middle of these recommendations.

Great sources of animal based protein are eggs, meats, seafood, dairy,

Great sources of plant based protein are legumes, peas, rice, oats, nuts.

# How Many Grams of Carbs & Fat Should I Eat?

The truth is this largely comes down to personal preference. Higher carb vs. lower carb, etc.

It's important to note however that higher carbs has been repeatedly shown to be superior for athletic performance.

Despite what you've heard low carb diets ARE NOT better for fat loss.

A study conducted Stellenbosch University found that when caloric intake and protein needs are matched, there's no difference or advantage in fat loss. Individuals following these protocols saw identical rates of fat loss.(8)

Further holding weight to personal preference.

Generally, a good amount of fat should be anywhere from 20%-30% of the total calories of your diet. This is enough for health, satiety, and proper hormone function.

Fill the rest of the calories with carbs.

**Also, don't neglect fiber! Aim to get 2-3 servings of fruits and vegetables A DAY like it's your religion.**

# Putting the diet together:

## Fat Loss Diet

<b>Bodyweight:</b>	<b>130</b>	<b>Bodyweight:</b>	<b>170</b>
<b>Total Calories</b>	1560		2040
<b>Protein</b>	104		136
<b>Carbs</b>	189		247
<b>Fat</b>	43		57

# Meal Distribution:

A 2000 calorie diet can be distributed many ways, and ultimately this, like many things, comes down to personal preference.

1 Meal	2000			
2 Meals	500	1500		
3 Meals	666	666	666	
4 Meals	500	500	500	500
5 Meals	400	400	400	400

# Meal Planning/Prepping:

You can meal plan/prep a variety of different ways, but I've found the most effective to be planning a single days meal plan, and following it daily.

When I grow bored of a certain food, I sub it out for another. i.e. Steak for pork, or berries for a banana.

I also find prepping ingredients vs. meals to be very effective, as it allows for flexibility, and ease of mind, not having to plan out specific meals to prepare like "stuffed peppers" for example.

Using a spreadsheet, MyFitnessPal, or your tool of choice, figure out your numbers, decide how many meals you want to eat, and distribute those calories accordingly. Follow the plan.

# My Current Meal Plan:

5:35	5:36	5:36	5:36
<p><b>Nutrients Remaining</b></p> <p>-9 Carbs (g)   4 Fat (g)   6 Protein (g)   117 Calories</p>	<p><b>Nutrients Remaining</b></p> <p>-9 Carbs (g)   4 Fat (g)   6 Protein (g)   117 Calories</p>	<p><b>Nutrients Remaining</b></p> <p>-9 Carbs (g)   4 Fat (g)   6 Protein (g)   117 Calories</p>	<p><b>Nutrients Remaining</b></p> <p>-9 Carbs (g)   4 Fat (g)   6 Protein (g)   117 Calories</p>
<p><b>Meal 1</b>   220 of 402</p> <p>Carbs 29g · Fat 3g · Protein 25g</p>	<p><b>Meal 2</b>   326 of 402</p> <p>Carbs 60g · Fat 6g · Protein 22g</p>	<p><b>Meal 3</b>   574 of 402</p> <p>Carbs 69.9g · Fat 15g · Protein 41.5g</p>	<p><b>Meal 4</b>   641 of 402</p> <p>Carbs 81.5g · Fat 15.6g · Protein 43.5g</p>
<p>Real Salt Redmond, 0.5 tsp   0</p>	<p>Choc Peanutbutter Protein Bar Legion, 1 bar   240</p>	<p>Green Peas 365, 0.7 cup   70</p>	<p>Sauteed Snap Peas Homemade, 0.2 cup   34</p>
<p>Harmless Coconut Water (60 Cal / Serving) Harmless Harvest, 8 oz   60</p>	<p>Sumo Orange Generic, 1 Large Sumo   86</p>	<p>Fire Roasted Corn 365 Organic, 0.7 Cup (90g)   100</p>	<p>White Mushrooms, Sauteed Veggie, 1 ounce   8</p>
<p>Thrive Vegan Protein Powder Legion Athletics, 49.5 g   160</p>	<p>Recharge Legion Supplements, 8.6 Grams   0</p>	<p>Rellow potatoes Cal organic, 150 grams   111</p>	<p>White Rice (Cooked) White Jasmine Rice (Cooked, 1.5 cup (158g))   308</p>
<p>Pure Lemon Juice Lakewood Organic, 6 tsp (5 mL)   0</p>	<p>+ Add Food   ...</p>	<p>Flat Iron Steak Butcher Box, 6 oz.   255</p>	<p>Pork Tenderloin Pork, 6 oz.   180</p>
<p>+ Add Food   ...</p>	<p><b>Meal 3</b>   574 of 402</p> <p>Carbs 69.9g · Fat 15g · Protein 41.5g</p>	<p>Cranberry Juice Lakewood, 4 oz   38</p>	<p>Avocados, raw, all commercial varieties 70 g(s)   112</p>
<p><b>Meal 2</b>   326 of 402</p> <p>Carbs 60g · Fat 6g · Protein 22g</p>	<p>Green Peas 365, 0.7 cup   70</p>	<p>+ Add Food   ...</p>	<p>+ Add Food   ...</p>
<p>Choc Peanutbutter Protein Bar Legion, 1 bar   240</p>	<p>Fire Roasted Corn 365 Organic, 0.7 Cup (90g)   100</p>	<p><b>Meal 4</b>   641 of 402</p> <p>Carbs 81.5g · Fat 15.6g · Protein 43.5g</p>	<p><b>Meal 5</b>   131 of 402</p> <p>Carbs 18.2g · Fat 6.4g · Protein 1.8g</p>
<p>Sumo Orange Generic, 1 Large Sumo   86</p>	<p>Rellow potatoes Cal organic, 150 grams   111</p>	<p>Sauteed Snap Peas Homemade, 0.2 cup   34</p>	<p>Banana Bread 0.5 serving(s)   131</p>
<p>Home   Diary   +   Progress   More</p>	<p>Home   Diary   +   Progress   More</p>	<p>Home   Diary   +   Progress   More</p>	<p>Home   Diary   +   Progress   More</p>

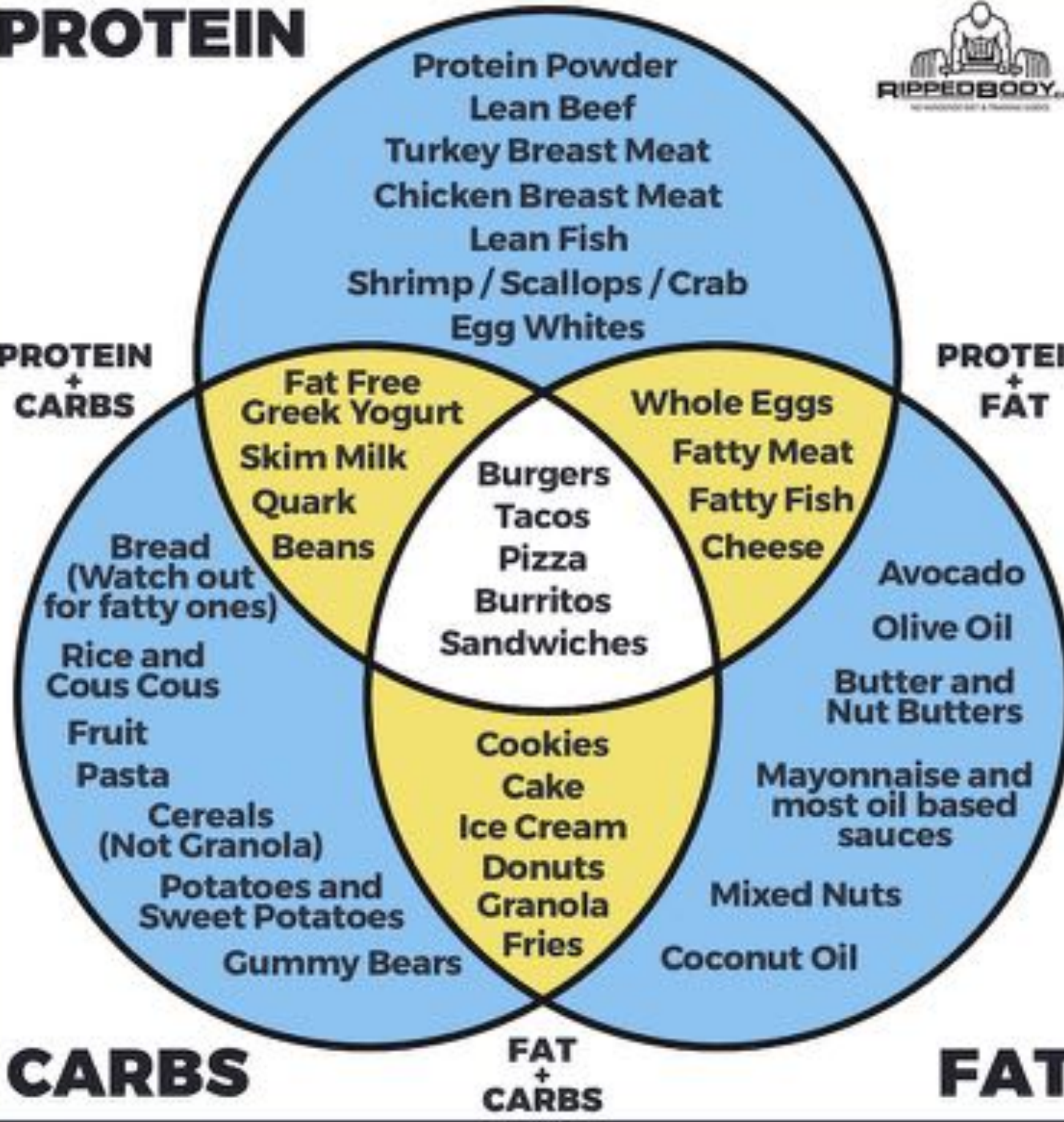


# PROTEIN



**PROTEIN  
+  
CARBS**

**PROTEIN  
+  
FAT**



**CARBS**

**FAT  
+  
CARBS**

**FAT**



# Tools for accessing progress:

## 1. The Scale.

While the scale is a very useful tool, it **IS NOT** the end all be all of measuring progress. I highly recommend you ditch weekly weigh-ins in favor of daily weigh-ins, and track the average weight over a 7 day period of time. Our bodies fluctuate in weight depending on **MANY** things such as food volume, salt intake, a good poop, exercise. This is why a weekly weigh-in is inferior, as it doesn't give you the whole picture.

## 2. Taking Pictures.

I recommend taking a pictures of yourself every 2-3 weeks. Full frontal, side, or biceps pose is good.

## 3. Measurements.

At minimum, take your waist measurement. The waist measurement is very accurate for accessing fat loss or gains. It's also helpful to take chest, arm, legs, calves and neck measurements for a broader spectrum of your progress.

## 4. How are your clothes fitting?

Are your clothes feeling looser? Can you fit into jeans you haven't been able to wear for a while?

# Practical Starting Points:

Are you ready to track calories?

**YES**

Go to [puicalculator.weebly.com](http://puicalculator.weebly.com) and download the Google Sheet and enter your bodyweight into the calculator for generic starting numbers.

**NO**

Track what you **CURRENTLY** consume daily for three to seven days. This helps you figure out where you're starting from. You can use apps like MyFitnessPal, Notes, or just pen & paper. Adjust your calories accordingly.

1. Familiarize yourself with which foods are protein rich, carbohydrate rich, fat rich.
2. Calculate your numbers at this website and use the tier system below:

Good	Hit your calorie goal by +/- 200 calories
Better	Hit your protein and calorie goal by +/- a certain range
Best	Hit your protein, carbs, and fat goals by +/- a certain range.

Inspired by Eric Helms PHD.

# The Best Exercise for Fat Loss:

The best exercise for fat loss IS NOT CARDIO! It is STRENGTH TRAINING.

Strength training in the the form of weightlifting or calisthenics is HIGHLY recommended. This will help to maintain, and possibly build a small amount of muscle during cutting.

It's important that you're focusing on compound exercises like Squats, Bench Press, Pullups, Rows, Pushups, deadlifts and their variations 80% of the time.

You should be aiming to get stronger on these exercises at week over week, always trying to add reps to the set, or weight to the bar. i.e. if you can do a bench press with 135 lbs for 5 reps today, you should try to do either 140 lbs for 5 reps next week, or 135 lbs for 6 reps next week.

AIM TO PROGRESS, AIM TO PROGRESS, FOR THE LOVE OF PHYSICAL IMMORTALITY AIM TO PROGRESS.

3-4 days a week is a good place to start or work up to.

# The Best Exercise for Fat Loss:

There are two forms of cardio that are best for fat loss, that's HIIT or LISS. i.e. sprinting or walking.

Moderate intensity cardio like long distance running is aerobic training, which runs on a different energy system and is a contradictory stimulus to muscle building. If you love this type of exercise, great, do it, but if your goal is more muscle and fat loss, don't do this often.

Stick to HIIT or low impact activity like walking or hiking.

I never did more than 2 formal cardio sessions a week in the 4 months of my transformation.

Cardio should be used as sparingly as possible; as a way to induce progress without having to cut calories further.

# In Summary:

- The best diet is the one you can stick to.
- Strength train 3-4 days a week, use cardio as needed.
- Use [puidietcalculator.weebly.com](http://puidietcalculator.weebly.com) to find your numbers. Create a daily meal plan and track your calories using your tool of choice.
- Track your progress with daily weigh-ins and weekly averages, pictures, clothes.
- Be patient and trust in the process.

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Health Advisor

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