

Last year the new item in the dietary game was moving towards a paleo approach to food consumption. The overall removal of grains was done to optimize health, and for a lot of people it meant better energy and a vast improvement in body composition. However while this has worked for a host of people the question is often asked of whether there is something else that someone can do after the initial gains made from getting one's overall inflammation markers down by removing the majority of grains from the diet. The other item that was raised that many people were still trying to find a way to put on lean muscle tissue on this diet and having a horrible time getting in enough calories to actually pull it off. A paleo approach to eating is healthy, it removes a lot of the dietary inflammation markers, increases the amount of protein in a diet, and has a whole host of various health benefits which will show up when you do blood testing. The issue however is that the goal is to improve performance, body composition, and health. So a paleo plus was needed, in addition to the rest, I wanted a way to finally once and for all target hard to get rid of fat in the lower ab area for both men and women. So the research started as to what methods, what tips, and what host of games could be played to optimize everything without either living off of shakes, or having to live off of fat burners and steak.

Now the first thing to comment on is this, none of this is mine. What I have done is taken a whole bunch of various methods, looked at the underlying science [or lack thereof] and compiled them into one beast of a protocol. I will happily be giving reference and credit to the various sources as I make note of the portion of the dietary plan that they have contributed, and then I'll explain what is being done differently. Now understand that hard science comes from doing testing on what works, so the goal here is to run a test on about 30 odd people, track the results closely and see whether or not this hodge podge system works.

So what is it?

This is intermittent fasting, enhanced by strength training and steady state cardio, mixed in with some great targeted core work, amped up by BCAAs, and pushed forward by a low carb paleo diet with ample fish oil supplementation. Now to make it simple.

Day 1 - Sunday	Day 2 - Monday	Day 3 - Tuesday	Day 4 - Wednesday	Day 5 - Thursday	Day 6 - Friday	Day 7 - Saturday
Rest	Getup 6:00am 45min: Walk/Strength Workout 11:00 Strength	Getup 6:00am 45min: Walk/Strength Workout 11:00 Strength	Getup 6:00am 45min: Walk/Strength Workout 11:00 Strength	Getup 6:00am 45min: Walk/Strength Workout 11:00 Strength	Getup 6:00am 45min: Walk/Strength Workout 11:00 Strength	Rest No timing
Rest	12:00 Break-fast 60-100g Carb 100g Protein	12:00 Break-fast 60-100g Carb 100g Protein	12:00 Break-fast 60-100g Carb 100g Protein	12:00 Break-fast 60-100g Carb 100g Protein	12:00 Break-fast 60-100g Carb 100g Protein	Rest No timing
12:00- 4:00 Start 20hr Fast	8hr feeding window: Get in 2-4 meals, after the post workout meal. These	8hr feeding window: Get in 2-4 meals, after the post workout meal. These	8hr feeding window: Get in 2-4 meals, after the post workout meal. These	8hr feeding window: Get in 2-4 meals, after the post workout meal. These	No meal timing until Sunday.	Rest No timing

	should be fat/protein	should be fat/protein	should be fat/protein	should be fat/protein		
	8:00pm Start Fast	8:00pm Start Fast	8:00pm Start Fast	8:00pm Start Fast		

So the above is a sample schedule for how this can work. The days and times are not set in stone. Here are the rules.

You do five fasts a week. The first is 20hr long, the following 4 are all 16hrs. In each fast you must do some kind of morning walk/easy strength workout. Optimally you will do some kind of strength training three times a week before the fast is broken. If you are looking to put on more lean mass I would suggest this 5 days a week, where as if you are looking to optimize body composition through fat loss I would suggest two days of intensity cardio and three days of strength training.

Now here is why we do it. This stuff is coming from Lyle McDonald, Brad Piton, and Martin Berkhan. These guys have a lot of cool stuff to say, and I think Martin probably has the best fleshed out system around right now. In many ways I am simply tweaking and enhancing his lean gains program. Props to him for some phenomenal work... and more props to McDonald and Piton for putting some decent science behind this stuff.

In a fasted state the body works differently than when it is in a fed state, and if we are to really simplify this we could argue that the body can either a) be fed and storing energy or b) fasted and burning energy. The big items that concern us about being in a fasted state would be the fact that there is a far higher rate of subcutaneous fat burned during a fast, and secondly far more natural production of human growth hormone [HGH].

What the tests have shown [and admittedly a lot of these are based off of animal studies and not humans... which is often not mentioned]. Is that between the 18-24hr that a person is in a fasted state that the amount of subcutaneous fat being burned is almost double that of what a fed person would be burning. This becomes far more interesting when exercise is introduced to the equation, as it is the introduction of exercise that amplifies this fasted effect and can move that sweet spot for fat burning down to the 12-18hr time range. Now this is really cool because of what happens to the body when we are fasted. First off fasting increases catecholamine levels, while also decreases insulin levels [which by extension inhibit a2 receptors], which if we don't want to get too messy with the science allow us to burn the stubborn areas of body fat all the more easily, especially if we increase the blood flow to the area where the stubborn fat is.*1

Now the second cool item we get into, is the fact that a fasted individual sees far higher levels of growth hormone production over a 24hr fasted period. Where as a fed individual usually has one spike in GH levels about 3/4 into the day, a fasted state will induce 4 large spikes in GH over the course of a 24hr period. Again the science isn't the best in the world, but there are some interesting correlations between an increase in GH production when big muscles are put under a heavy load. So we throw the pink dumbbells out the window, put some weight on a bar, and squat, deadlift, pull, and bench.

So the argument goes that we burn more fat and produce more magic GH while fasted. Both these are good, and they both are better with exercise. So we start the day off with fasted walking amped up with some BCAAs and every ten minutes or so aim to get a bunch of blood flowing towards the core muscles by doing something that targets them. Keep the area nice and warm [forget who was talking about this, it was a t-nation article... will find the guy arguing for it] and do some targeted fat burning. Yay for the myth being realized *grin*. Then just as we are about to come off of that fast, somewhere in the 14-16hr range we make use of one of this giant GH spikes, get our system awash in caffeine and BCAAs, and crank the GH up even higher with some weighted work. What is more, with our liver glycogen supplies already taxed, this low intensity [this is not a crossfit lifting session] high load training hour taxes the last of our muscular glycogen supplies. Leaving us in the most carb friendly state imaginable. Yay.

Now here is what we do with the rest of it.

A lot of people out there argue that the ideal fat burning range of carbs is about 40-80g a day, and almost everyone agrees it just has to stay under 100g. So coming off the fast, when our body is the most able to deal with the insulin spikes, and will make the most use of it, we load up on paleo friendly carbs. Yams, squash, pumpkin, all that good stuff can be loaded on in heaps along with a massive feeding of protein that will be shuttled off to the skeletal system, restocking the muscle glycogen supplies, promoting recovery, and promoting nice healthy full looking muscles.

From then on the rest of the 8hr feeding window is spent eating big satisfying meals to make sure that the caloric load of 2500 [avg person] gets filled up in that 8hr window. That is roughly three meals of around 800 calories a piece. Big satiating meals that don't feel at all like skipping out or calorie counting. In truth the aim is to eat a normal amount every day. During the week we play with the fasting when we are busy with work and life anyways and then come friday afternoon we quit caring about timing, enjoy eating and just chill out until Sunday afternoon when we start a 20hr fast [as opposed to the other 16hrs]. Now here is why we do this. If an average person consumes 2500Kcal a day they are looking at 17500 a week, by removing one day of eating [20hrs] we effectively remove 15% of a persons overall caloric load. While calories in and calories out is a bit of funny dietary science, by reducing calories by the magic number of roughly 250-350 calories a day we see that is where weight loss happens best. However as opposed to decreasing calories daily and feeling more lethargic, and grumpier because of it we do it in a single stint. No low calorie days, no cutting things out, rather on a psychological level it is pretty casual.

The last item of the puzzle I am borrowing from Charles Polequine who argues that optimal body comp changes happen with a super high dosage of fish oil every day. So in those meals after our carb rich meal we are going to supplement about 20-30g of omega3 fatty oil. The best method to get this would be in the form of some kind of liquid option as opposed to the gel tabs as you just get a far higher dosage with the liquid. The only other supplement would be a Vitamin D3 to promote healthy hormonal levels as the amount of sunlight drops daily.

Now as to foods to eat during the fun, I would suggest a happy paleo diet. Jump over and look at the stuff Robb Wolf is putting out there, or just get some of the meal templates from me/recipe ideas and you are good to go.

Proteins:

Chicken

Beef

Pork

Fish

Eggs

[if you can handle dairy well, full fat greek yogurt is a nice touch]

Shakes make a nice way to amp up the overall protein load.

Veg:

I almost count this as a non carb... and figure it should be with every meal.

Brocoli

Spinach

Peppers

Cucumber

Fresh Herbs

Spices

Carbs:

Yams

Sweet Potatoes

Squash

Pumpkin

[if you are looking for mass gains over getting leaner a rice, quinoa, and potentially even an oat could be used if your body can handle them]

Fat:

Coconut

Palm

Almond flour

Olive oil

Now the fun thing with this whole thing is the timing can be played with. You could start fasting at 6:00pm, and then start eating by 10:00am the next day. This would let you eat meals between 10-6... which is actually pretty normal. Though given my schedule it is just easier to skip breakfast and train before I start eating. Plus the whole schedule can get moved. If you wanted to start the 20hr fast on Monday as opposed to Sunday go for it, just push everything back a day.

*1

After you eat, insulin and fatty acids are elevated. You are in the fed state and there's zero fat burning going on. Your body is relying completely on glucose oxidation during the hours following the meal.

One way of measuring this is via the respiratory quotient (RQ). An RQ of 1.0 denotes pure carbohydrate metabolism ("storage mode"), while 0.7 denotes pure fat metabolism. To put this into perspective, consider that RQ is 0.95-1.0 for about 1.5-2 hours after a meal, 0.82-0.85 after overnight fasting and 0.72-0.8 after 16 hours of fasting.

As the hours go by and the nutrients from the meal are done being absorbed, RQ drops in conjunction with insulin. There's a shift towards fat burning and mobilization of stored fat. This process is mediated by insulin and blood-borne fatty acids; when levels drop, an energy deficit is "sensed" and catecholamines (adrenaline and norepinephrine) increase.

The catecholamines travel through the blood and bind to receptors on fat cells. A receptor can be thought of as a "lock." Hormones and neurotransmitters are keys that fit into that lock and make something happen. In this case catecholamines trigger fat mobilization by activating hormone sensitive lipase (HSL), which then shuttles the fat out of the cell to be burned off.

Now here's the critical difference between regular fat and stubborn fat: regular fat have a lot of beta-2 receptors in proportion to alpha-2 receptors.

In [The Stubborn Fat Solution](#) Lyle McDonald used the analogy of b2-receptors being "accelerators" for fat loss and a2-receptors acting as "brakes" for fat loss. That's the easiest way to think of them without getting too deep into the physiology.

The ratio between b2-receptors and a2-receptors determines how easy it is to facilitate fat loss from one region of the body. "Easy" fat has a high ratio of b2-receptors to a2-receptors, while stubborn fat has a high ratio of a2-receptors to b2-receptors.

One notorious example that Lyle brings up in his book is that women have up to nine times (!) as many a2-receptors as b2-receptors in their hip and thigh fat. Though I can't recall if similar numbers are available for lower ab and lower back fat for men, you can be sure that the a2-receptors outnumber the b2-receptors in these areas as well.