

Intermittent Fasting for Single Digit Body Fat



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What is Intermittent Fasting?

“Intermittent fasting (IF) relates to any diet that cyclically restricts energy intake for a predetermined time period.” – Me, ISSN Dip, 2013

Why use Intermittent Fasting?

There are many proposed benefits of intermittent fasting, however, most of them are based on animal studies therefore may not be truly applicable to humans. Similarly, the benefits may be specific to the exact IF protocol used and therefore cannot be generalised. What must be remembered when using IF to reduce body fat*, as we will focus on here, is that we cannot distinguish easily between the effects of IF and the weight loss that is occurring as a result of kcal restriction.

So why use it? Its quite simple, because for some people it is a much more pleasant way of creating an energy deficit that may also have a few other unique benefits with regards to fat loss and muscle maintenance that will be discussed later.

Can Anyone Use It?

The truth is not everyone should but, contrary to what many ‘gurus’ will tell you, this has nothing to do with your gender, cortisol levels or any other made up endocrinological (hormones and stuff) reason. The two situations where IF may not be suitable are 1) when you are pregnant and 2) when it doesn’t suit you..... and that’s pretty much it.

Obviously the reasons for it ‘not suiting you’ can be wide ranging but could also be as simple as you just don’t like it**. There are many myths surrounding the timing and frequency of meals that may discourage you from using this method but none that I have come across are reason enough not to try it.

* When using IF to diet to low levels of body fat you will need to create an energy deficit and it is highly likely that your kcals will have to be reduced at various intervals. Intermittent Fasting isn’t magic... well, not that magic.

** Many of my clients have liked the idea of IF & it has suited their goals and lifestyle but they did not get on well with ‘missing meals’ initially due to intense hunger. In almost all of these cases however, they persevered and became accustomed to it in a matter of days.

#POINTLESS THINGS NUTRITIONISTS SAY

#1 - SKIPPING MEALS WILL PUT YOUR BODY INTO STARVATION MODE

Do NOT skip meals!
When you skip meals your metabolism slows down, and you are not burning calories like you should. Your body thinks that you are starving so when you eat again, your body stores away more than usual resulting in more fat.



Skipping Meals
↓
Body in Starvation Mode
↓
Over-eating in Next Meal
↓
Weight Gain!

What Does the Research Say?

When studies use “doubly-labelled water to assess total 24 h energy expenditure (they) find no difference between nibbling and gorging.”

Bellisle et al. (1997)

“There is no evidence that weight loss on hypoenergetic regimens is altered by meal frequency”

#2 EATING LITTLE AND OFTEN WILL BOOST YOUR METABOLISM

What Does the Research Say?

Comparing 3 meals vs 6 meals: *“We conclude that increasing meal frequency does not promote greater weight loss”*

Cameron et al. (2010)

#3 BREAKFAST IS THE MOST IMPORTANT MEAL OF THE DAY



What Does the Research Say?

“A recommendation to eat [or skip] breakfast had no discernable effect on weight loss in free-living adults who were attempting to lose weight”

Dhurandhar et al. (2014)

#4 INTERMITTENT FASTING INCREASES CORTISOL



What Does the Research Say?

Comparing 1 meals vs 3 meals: "1 meal per day led to a significant modification in body composition (fat mass decreased) and a significant **decrease** in cortisol concentrations"

Stote et al. (2007)

#5 INTERMITTENT FASTING IS CATABOLIC

What Does the Research Say?

"Less fat free mass was lost in response to intermittent calorie restriction (CR) versus daily CR. These findings suggest that these diets are equally as effective in decreasing body weight and fat mass, although intermittent CR may be more effective for the **retention of lean mass**"

Varady (2011)



Which clients might I use Intermittent Fasting with?

- Those who, for whatever reason (e.g. body size, activity levels etc.), have to eat a **very low calorie diet** to lose weight. In these individuals fewer meals can allow for more socially acceptable sized meals
- Following on from this, those who simply **prefer fewer but larger meals** to smaller more frequent meals
- Those who struggle with a **continual feeling of deprivation**: periods of 'effort' and 'relaxation' seem to suit some people better
- Those who **don't want to eat breakfast/dinner**
- Those who would prefer to prepare/eat less meals
- Those who are **pressured for time**
- Those who need/want to make a big change. Some research shows that those who make the biggest change to their diet get the greatest results
- Those dieting to low levels of body fat that have **struggled with appetite**: The long periods of not eating seem to actually take the focus away from food & therefore makes it easier to maintain a depressed calorie intake
- Those looking to **maintain muscle and training performance** as much as possible through a diet: Intermittent calorie restriction protocols have the benefit of allowing more energy to be consumed before, during and after training which should benefit training performance
- Those who **can't get any good food**: In a situation where a client hasn't prepared adequately and their only option is chocolate and crisps for instance, I would inform them that there is nothing wrong with 'skipping a meal' and therefore simply using IF as a one-off tool

The danger of Intermittent Fasting

IF could conceivably be termed 'Meal Skipping' in many instances. However, the premise of a 'windowed eating' protocol is that you would aim to hit the same number of calories as you would otherwise, just in a shorter space of time. The issue can be that individuals simply remove a meal (and perhaps a snack) and their calories drop too low, too quickly.

Potential Unique Benefits

- **Constipation:** Many people will tell you that during a diet they get disruption in their bowel movements during a diet regardless of vegetable intake. There seems to be something about the IF protocol that negates this issue. It seems to work with almost all protocols but I have seen it specifically work with my adapted version of the 5:2 type protocol as well as windowed eating protocols. I have many physiology and one endocrinology based hypotheses as to why this occurs but for the sake of time, space and accuracy I won't be including them in this piece of writing.
- **Appetite Regulation:** This may simply be an acute effect that does not require you to follow an IF protocol but certainly its worth mentioning. A period of abstinence from food may retrain habits or even physiological perceptions of hunger that may make a continued calorie reduced diet more sustainable. Many people talk about perceived vs actual hunger and IF may help someone differentiate between the two. Similarly, IF also helps to highlight the undulating and cyclical nature of hunger rather than an ever increasing level of hunger when food is restricted. Often people can simply be afraid of hunger and at the first sign of hunger they reach for a snack when simply abstaining from food would lead to the feeling of hunger passing for a few more hours.
- **Adherence:** This isn't necessarily a unique benefit but IF protocols certainly have strong scientific support for increased adherence when used correctly. However, I would never use alternate day fasting or 1-meal/day protocols as a starting point because these do not fall into this bracket of supporting adherence. IF protocols bring a new lease of life to those who once believed skipping or missing a meal would have detrimental effects on a fat loss diet.
- **Muscle Mass Maintenance and Fat Loss:** This is where the Holy Grail lies and where there is still much to be learned. The benefits of IF on these two factors, if they are there, will likely be very small which is why I titled this resource 'Single Digit Body Fat' and not 'Dieting for the overweight population.' Certainly some researchers (not internet gurus) believe that there is something unique about IF with regards to these two factors and some studies seem to give this inclination. The client and athlete data I have, some of which is presented below, also adds to my hope that there might be something in it. If not, I won't mind, its still a useful tool I will continue to use where appropriate without dogmatic tendencies. My current feeling (and that's what it is) is that any unique benefits come within the first 1 to 30 days and would be maintained even without continuing with an IF protocol.

Frequently Asked Questions

- **Will I lose more fat using an IF protocol than daily calorie restriction (CR)?** No, not noticeably more unless it allows you to adhere to your caloric deficit more successfully. As stated, any benefits in this regard will be minor.
- **What if I can't fast at the appropriate time?** It doesn't matter! Intermittent fasting is not a law like 'low carbs' or 'gluten free'. It is simply a tool in the box. You can simply adjust the protocol to suit your lifestyle and preferences day-by-day. The key factor to bear in mind is that waves of hunger seem to be consistent with your personal eating times therefore having a completely erratic IF schedule may not be ideal.
- **I want to follow a 5:2 type protocol; can I eat what I like on my non-fasting days?** No. Although IF is flexible it still needs to remain in the context of a healthy, balanced, calorie restricted diet. You are simply altering meal size, timing and frequency. Think of your energy intake on a weekly basis, you can easily undo the energy deficit created by 2 low calorie days.
- **What if I get too hungry before my time to eat?** Something to expect when you first try intermittent fasting (especially if you're used to eating a big breakfast as soon as you wake up for instance) is hunger! As mentioned previously, this is usually temporary and will change. These hunger signals will disappear quickly and you will be surprised at how easy it becomes to go for long periods without eating. Having said that, if you have been following IF for a while and find yourself hungrier than you usually would be before your time to eat, there is no issue with shortening your fasting period. Many people report that waking up earlier than usual leads to extreme levels of hunger. Remember, IF should be flexible, and as such is a very sustainable way of dieting.
- **If I'm an athlete, can I use IF?** Yes, windowed eating protocols may be useful to some specific athletes e.g. IF can become an excellent tool to help introduce fasted or low glycogen training sessions to encourage greater fat adaptation in endurance athletes. However, professional care and attention must be taken when setting up an IF protocol in athletic populations to ensure daily energy and carbohydrate requirements remain optimal, and recovery nutrition is still a priority.
- **Do I have to train at certain times of the day for IF to be effective?** Physiologically speaking, for fat loss, no. However, practically speaking, it may be more difficult to follow a windowed eating protocol if you train in the morning or do split sessions. Skipping your evening meal may worsen your sleep quality. Similarly, this is the least 'sociable' for those with families.

Which Protocol Should Be Used?

It's completely up to you! The best protocol will be the one that is going to be the easiest to follow and fits into your current lifestyle and training demands. Some protocols will be less optimal, physiologically speaking, for certain goals however it is likely that the plan that promotes the most adherence will achieve the best results regardless. A few examples of IF protocols are as follows:

Alternate Day Fasting: Eat on Monday, Fast on Tuesday, Eat on Wednesday etc. This has been used extensively in the obesity literature; as you can imagine, people get very hungry but they do lose weight if they can stick to it.

Eat, Stop, Eat: Made popular under this name by Brad Pilon, this is a single 24-36 hour fast per week with other days set up as required by your goal. For fat loss for instance, you would need a smaller deficit on other days.

16 Hour Daily Fast: Made popular under the name of 'Lean Gains' by Martin Berkhan. This is a windowed eating protocol whereby you fast for 16 hours (including sleep) and then eat in an 8 hour period, usually bracketing training. Repeat daily.

Warrior Diet (20:4): Another version of windowed eating where the fast lasts for 20 hours, eat in a 4 hour period. Repeat daily. As you can tell, there are clearly countless different 'windows' that could be created.

5:2 Diet: While this diet has gained a particularly bad reputation due to how it has been portrayed in the media, the original 5:2 diet comes from an evidenced based background. It involves completing two very low calorie days per week with calorie-controlled eating (typically maintenance calories) on the other five days. Kcal intake can also be adjusted on the 'fast days' to suit the individual/goals.

Setting up Your IF Protocol

The amount of body fat you have got to lose and the level of body fat you want to end up at will somewhat determine how you can/should set up your protocol in order to get results. For example:

- If you have a significant amount of body fat to lose and you simply want to end up lean but not single digit body fat, there is less need to strictly calorie count. One of the reasons intermittent fasting is so successful for some people is that it provides a relatively easy framework that leads to a reduced calorie intake without having to constantly count calories or fight hunger.
- If you are already lean and want to get to single digit body fat levels, then the need to calorie count (or any other method of measuring food volume/energy content of the diet) is more necessary and requires more preparation and focus. At the crux of it, the use of intermittent fasting simply makes the endeavour of sustaining a prolonged calorie deficit more enjoyable... or at least less hellish.

A Note on Calorie and Macronutrient Counting

Even if you don't want to count your calorie intake for the rest of your life (who does), the majority of people will still benefit from writing down the food they eat in a food diary for 1-2 days to track calories and macros. Using an app to increase your awareness around an approximate number of calories and protein consumed in a day is hugely beneficial before starting any fat loss programme. To estimate how many calories you should be consuming for weight maintenance on a rest day use the following equation:

BASAL METABOLIC RATE x PHYSICAL ACTIVITY LEVEL

Basal Metabolic Rate can be calculated using a number of different methods, none being completely accurate but each having their own positives.

Harris Benedict – Most BMR calculators on the Internet will use this and it works out your BMR based on bodyweight, age, height and gender.

Cunningham – The Cunningham equation may have a slightly more accurate result ONLY if you have an accurate measurement of your lean body mass (your scales at home will not do this!).

Guestimated BMR – While this is not based on research, it is the easiest, and gives the same ballpark figure as the above whilst being much quicker: Body Mass (kg) x 22.

Physical Activity Level (PAL) can be estimated using the following table. This relates to your daily, everyday activity not energy expended during training/exercise. This should be added in separately if applicable.

ACTIVITY	PAL
Sedentary (little to no activity, desk job)	1.1 - 1.2
Lightly Active (some of the day standing/walking)	1.3 - 1.4
Moderately Active (on feet most of day e.g. street sales person)	1.5 - 1.6
Very Active (hard daily activity, manual labour e.g. builder)	1.7+

This equation gives you an estimated number of calories needed to maintain your weight and from here you can make adjustments to bring about weight loss. Initially, if you have never dieted before you could try eating at this 'maintenance' figure initially as a gauge of what this intake does to your bodyweight.

Once you've got a rough idea of how many calories you should be consuming, you can start to design your own intermittent fasting protocol using the following steps...

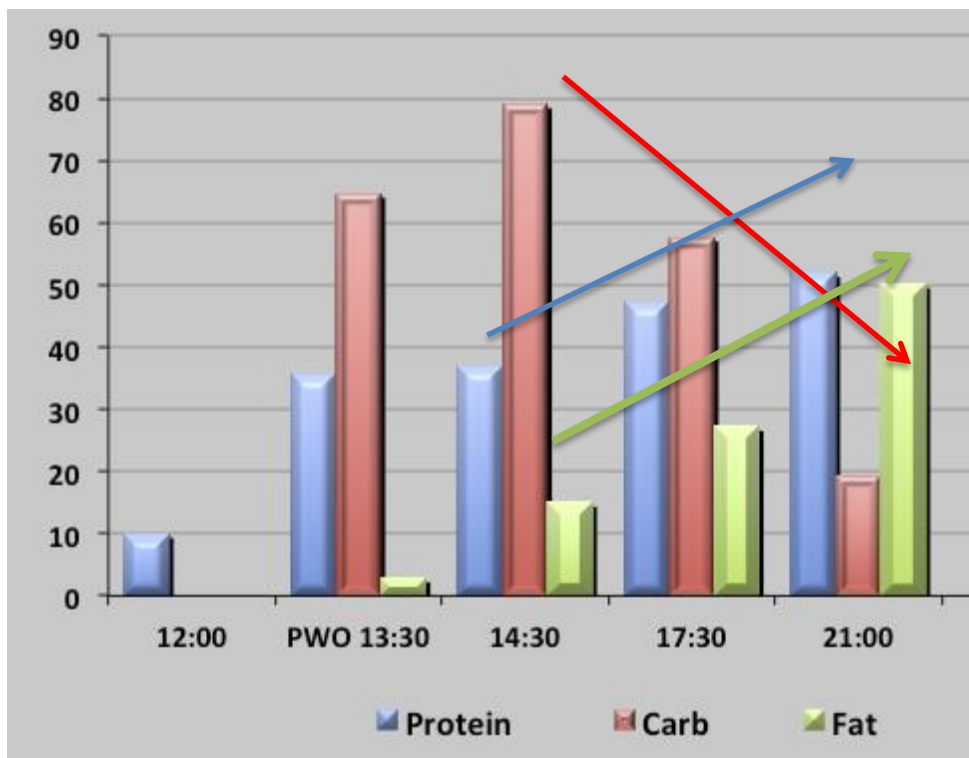
- 1) Decide which protocol you/your **current lifestyle is most suited to** e.g. if you tend to skip breakfast, a protocol similar to the 16:8 diet where you start eating around midday and finish eating at 8pm may work well.
- 2) Remember, IF should be **flexible**. Adopt this attitude from the outset. It means you can never 'fail' if you simply adapt the protocol to suit that particular day.
- 3) **Calculate your calorie and macronutrient requirements** as you would during conventional dieting (remember, IF is not magically more effective than a sensible, sustained calorie deficit). This isn't a necessity for those who have significant body fat to lose but as mentioned, could be useful as a tool to gauge portion sizes or food choices.
- 4) For fat loss to occur, you must ensure you are eating in a calorie deficit.
- 5) Keep **protein intakes high** (1.8-2.5g/kg) to ensure muscle mass retention, promote satiety & for a small boost in metabolism.
- 6) Natural trainers should ensure a decent intake of **dietary fat**. This ensures adequate micronutrient intake, helps to maintain immune function and likely plays some role in aiding hormonal status. The exact intake will depend on your dietary preferences as well as how different levels of fat make you 'feel' but a good intake to start with for getting to low levels of body fat is between 0.8 - 1.5g/kg.

IF FOR SINGLE DIGIT BODY FAT

- 7) Cycle your carbohydrates, and therefore calories, with your training. Ensure you are fuelling particularly important or long training sessions but don't be afraid to do less intense sessions fasted.
- 8) Opt for **whole, unprocessed foods** for the majority of your food intake. For a list of foods that would fit well into any fat loss or intermittent fasting protocol, click [here](#).
- 9) As a generalised 'rule', schedule your **largest meal** carbohydrate and calorie wise to be eaten immediately post-training.
- 10) Your final meal should ideally be your largest bolus of protein. Make this meal high in protein, vegetables and fat to maximise anti-catabolism.
- 11) Progress: Like any method of calorie reduction, in order to continue losing weight, calories must be reduced when a plateau is reached.

Example Windowed Eating Protocol

IF FOR FAT LOSS (Training at 12:00)



Timing	12:00 Pre-WO	13:30 Post-WO Shake	14:30 Post-WO Meal	17:30 Meal 2	21:00 Meal 3
Macro Distribution	PRO Only	PRO & CHO	LARGE PRO, CHO & FAT	↑PRO ↑FAT	↑↑PRO, ↑↑FAT, ↓CHO
Example	BCAAs	Whey & Carb Powder	Beef Mince, Rice & Veg	Sweet Potato Omelette with Yoghurt & Veg	Salmon, Prawn & Chorizo Salad

Note: Eating carbohydrates late at night will not negatively impact body composition. This is another *pointless thing nutritionists say!* The only reason carbohydrates should potentially come down before a prolonged period of eating is to allow for greater intakes of protein and fat whilst manipulating portion sizes.

CASE STUDY 1 – FEMALE FITNESS COMPETITOR

- Small Female Fitness Competitor (54.4kg)
- Relatively Inactive
- Former sports person
- Reported very low previous food intake (~1200kcal) yet struggling to lose fat
- Estimated BMR: 1280kcal
- Started with a 're-set' period building up to of 1900-2000kcal to attempt to increase metabolic capacity
- Then reduced back down to a 'normal' deficit value

Example Snapshot of Nutrition & Exercise Protocol

Date	16-Jul	17-Jul	18-Jul	19-Jul	20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul
Fasted CV			45		30				45		45
Training	upper body volume	pm CV	OFF	lower body volume	upper body strength	OFF	lower body strength	pm CV	upper body volume	lower body volume	OFF
pm and PWO cv	20mins PWO CV	30mins (pm)	CHEAT MEAL (pm)					30mins (pm)		20mins PWO CV	
Kcals	1650.0	1490.0	1400.0	1650.0	1650.0	1400.0	1650.0	1490.0	1650.0	1650.0	1400.0
Protein	115.0	115.0	92.5	115.0	115.0	92.5	115.0	115.0	115.0	115.0	92.5
Carbohydrates	140.0	100.0	100.0	140.0	140.0	100.0	140.0	100.0	140.0	140.0	100.0
Fats	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
Mac Ω 3 (g)	3	3	3	3	3	3	3	3	3	3	3
Creatine	4x4g	3x4g	4x4g	3x4g	4x4g	4x4g	4x4g	5g PWO	4x4g	3x4g	4x4g
Beta Alanine	4 x 1g	4 x 1g	4 x 1g	4 x 1g	4 x 1g	4 x 1g	4 x 1g	4 x 1g	4 x 1g	4 x 1g	4 x 1g
Vitamin D3 (IU)	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500
MultiVitamin/Mineral	1		1		1		1		1		1
Dinner Option											
Body Weight	51.3	51.3						51.4	51.4	51.4	51.7

Dietary Setup

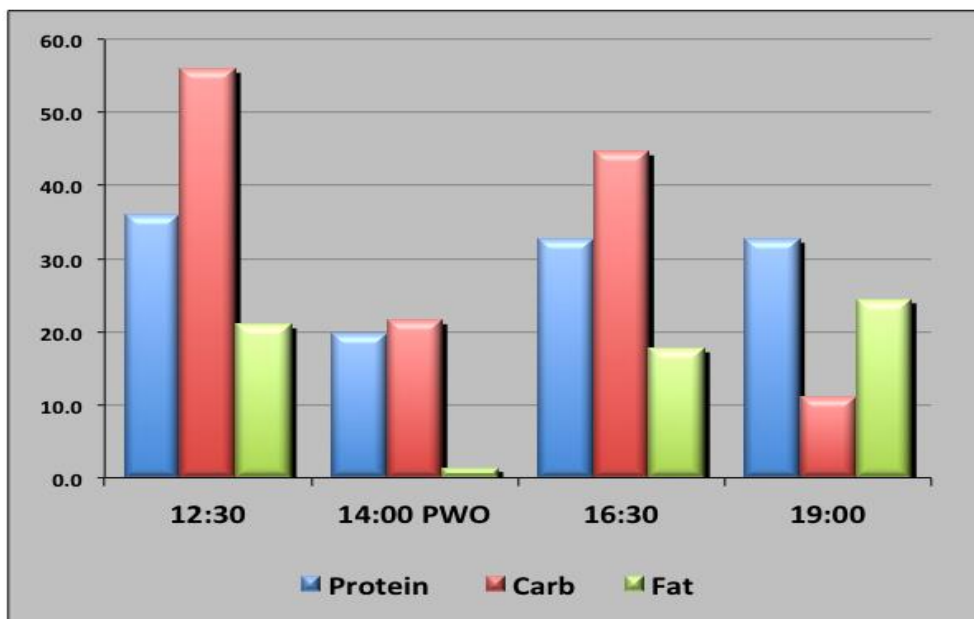
KCALS ~ 1650kcal

PRO ~ 2.5g/kg

CHO ~ 2.7g/kg

FAT ~ 1.4g/kg

- Daily fast between 20:00-12:30 (~16.5 hours)
- Largest meal post-training
- Regular protein feedings during feeding period
- Room for 1 meal per week outside of the usual routine (not calorie controlled but using some simple eating out guidelines)
- Supplements: Multivit, Vitamin D3, Omega 3 Fish Oils, Creatine, Beta Alanine



WHAT DID THIS LOOK LIKE?

Food	Amount	kCals	Protein	Carb	Fat
Oats	50	180	5.5	30.2	4.1
Blueberries	50	28	0.5	7.0	0.0
Whey	25	97	18.5	2.0	1.7
Cashew Nuts	20	115	4.1	5.8	8.7
Milk, whole	220	132	7.5	11.0	6.6

Whey	20	78	14.8	1.6	1.3
Glucose	20	75	0.0	20.0	0.0
Leucine	5	20	5.0	0.0	0.0

Tuna	100	101	23.8	0.0	0.6
Sweet Potato	200	204	3.6	42.0	0.6
Olive Oil	5	44	0.0	0.0	4.9
White Wine Vinegar	15	3	0.0	0.1	0.0
Mustard, wholegrain	10	17	0.8	1.1	1.0
Almonds	20	119	4.4	1.5	10.6
Salad	100	0	0.0	0.0	0.0

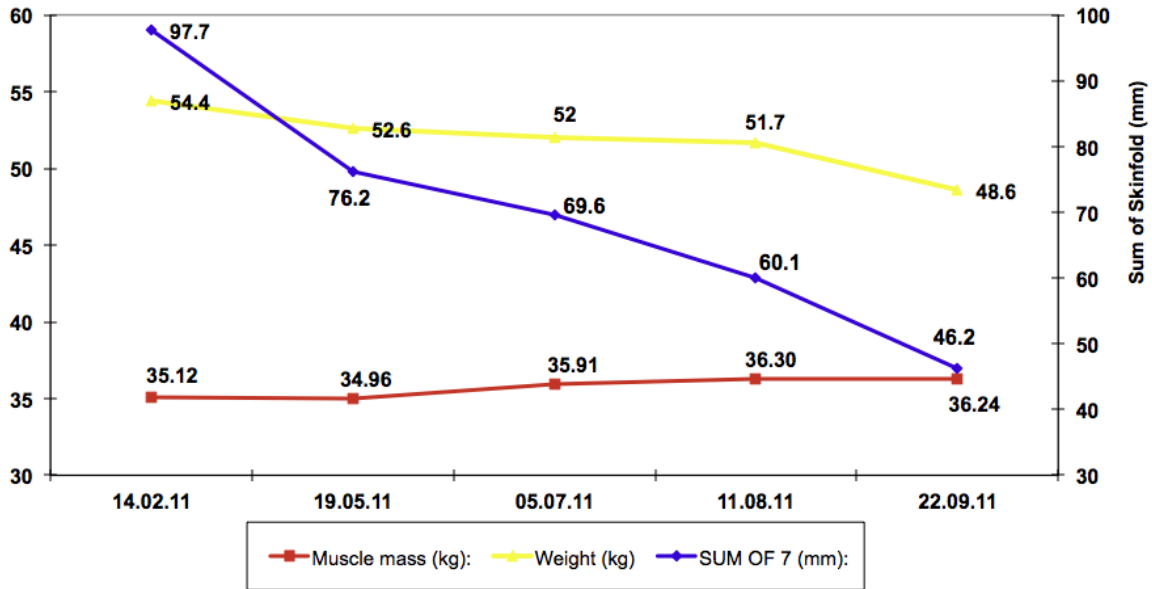
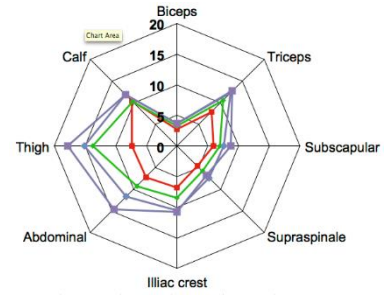
Salmon	150	249	28.4	0.0	15.0
Sweet Potato	30	31	0.5	6.3	0.1
Crème Fraiche	30	92	0.8	0.8	9.3
Spices	0	0	0.0	0.0	0.0
Spinach	100	23	3.0	4.0	0.0

TOTAL			
Kcal	Protein	Carb	Fat
1607	121.3	133.4	64.4
% Kcals	30	33	36

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RESULTS

- Maintained Strength
- Gained Small Amount of Muscle Mass
- Lost Significant Amount of Body Fat



CASE STUDY 2: 45 YEAR OLD 'WEIGHT LOSS RESISTANT' FEMALE

- Weight Loss-Resistance Female i.e. struggled to lose weight despite reported kcal deficits via a number of different protocols
- History of 'failed dieting' and high exercise volume
- Inactive lifestyle when not exercising
- Estimated BMR: 1442 kcals

NUTRITION & EXERCISE PROTOCOL

Date	18-Nov	19-Nov	20-Nov	21-Nov	22-Nov	23-Nov	24-Nov	25-Nov	26-Nov
Training	Weights and HIIT 09:00 - 10:00 done with Sarah		Weights and HIIT 09:00 - 10:00 DONE			Gym 90mins Weights and CV DONE 60 MIN		Gym 09:00 - 10:00 DONE	
CV				Martial Arts MISSED :(due to hb being away)			Martial Arts DONE		
Notes			did not have the fruit, had 3 more nuts. dinner felt huge. did not feel hungry.	muscles ache big time	all went good, got dinner really late as I was out till 9 pm	Did 60 min in gym. Had treat day, cooked red thai curry, no rice but little Quinoa	Some muscle pain but not as bad as after session1.		feeling
Kcals	1510.0	900.0	1350.0	1510.0	900.0	1510.0	2040.0	1510.0	900.0
Protein	125.0	115.0	125.0	125.0	115.0	125.0	125.0	125.0	115.0
Carbohydrates	140.0	20.0	55.0	140.0	20.0	140.0	250.0	140.0	20.0
Fats	50.0	40.0	70.0	50.0	40.0	50.0	60.0	50.0	40.0

Dietary Setup

<u>Fasting Days</u>	<u>Non-Fasting Days</u>
KCALS ~ 900kcals	KCALS ~ 1510kcals
PRO ~ 1.7g/kg	PRO ~ 1.8g/kg
CHO ~ 0.3g/kg	CHO ~ 2g/kg
FAT ~ 0.6g/kg	FAT ~ 0.7g/kg

- Calories Cycled
- 2 x VLC days per week ~900kcals (protein sparing modified fast)
- 5 x Kcal-controlled days including 1 x low CHO day ~0.8g/kg on non-training day
- 1 meal outside of usual routine
- Supplements: Multivitamin, Vitamin D3, Omega 3 Fish Oils

WHAT DID THIS LOOK LIKE?

Low Calorie Day

	Food	Notes	Amount	Kcals	Protein	Carb	Fat
Snack 1	Whey		25 g	97	18.5	2.0	1.7
Meal 1	Tin of Tuna	100 = 1 x Tin	100	128	30.4	0.0	0.8
	Cheese, Mozzarella		50 g	128	9.0	0.3	11.2
	Balsamic vinegar		10 g	14	0.1	2.7	0.0
	Salad	Large Mixed	100 g	30	3.0	4.0	0.4
Meal 2	Beef Mince (10% fat)		150 g	264	30.0	0.0	15.0
	Mixed Veg	Maximise Variety	150 g	62	5.4	7.2	1.2
Pre Bed	Yoghurt, Total Greek 5%		170 g	163	15.3	6.5	8.5
	Whey		10 g	39	7.4	0.8	0.7

TOTAL			
Kcal	Protein	Carb	Fat
924	119.1	23.4	39.4

Lower Carb Day

	Food	Notes	Amount	Kcals	Protein	Carb	Fat
Snack 1	Whey		30 g	116	22.2	2.3	2.0
Meal 1	Egg, medium, FR	100 = 1 x Egg	300	240	21.0	0.0	16.8
	Cheese, Mozzarella		75 g	191	13.5	0.5	16.8
	Balsamic vinegar		10 g	14	0.1	2.7	0.0
	Salad	Mixed	150 g	45	4.5	6.0	0.6
Snack 2	Nuts, Mixed		40 g	258	7.2	3.9	23.7
Meal 2	Chicken		150 g	165	34.5	0.0	1.8
	Sweet Potato		150 g	129	3.0	30.0	0.2
	Mixed Veg		150 g	62	5.4	7.2	1.2
	Oil, Olive		7 g	62	0.0	0.0	7.0
	Spices		g	0	0.0	0.0	0.0
Pre Bed	Yoghurt, Total Greek		170 g	163	15.3	6.5	8.5
	Whey		10 g	39	7.4	0.8	0.7

TOTAL			
Kcal	Protein	Carb	Fat
1484	134.1	59.8	79.2

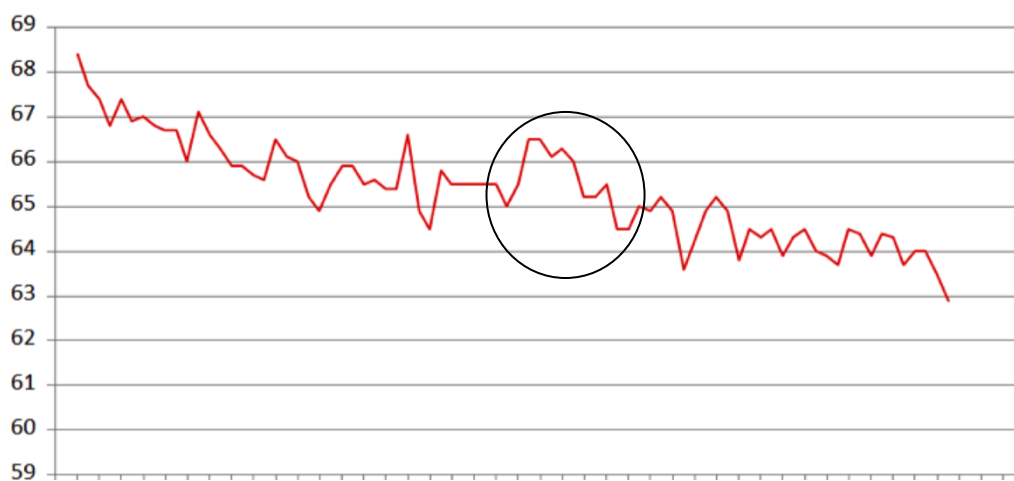
Training Day

	Food	Notes	Amount	Kcals	Protein	Carb	Fat
Snack 1	Whey		25 g	97	18.5	2.0	1.7
	Fruit	100 = 1 x Piece	200	122	0.8	28.8	0.0
	Water	As needed	ml	0	0.0	0.0	0.0
Meal 1	Tin of Tuna	100 = 1 x Tin	100	128	30.4	0.0	0.8
	Quinoa		50 g	194	6.9	27.9	2.5
	Cheese, Mozzarella		50 g	128	9.0	0.3	11.2
	Balsamic vinegar		10 g	14	0.1	2.7	0.0
	Salad	Mixed	100 g	30	3.0	4.0	0.4
Snack 2	Nuts, Mixed		20 g	129	3.6	2.0	11.8
Meal 2	Chicken		125 g	138	28.8	0.0	1.5
	Sweet Potato		200 g	172	4.0	40.0	0.2
	Mixed Veg		150 g	62	5.4	7.2	1.2
	Oil, Olive		7 g	62	0.0	0.0	7.0
	Spices		g	0	0.0	0.0	0.0
Pre Bed	Yoghurt, Total Greek		170 g	163	15.3	6.5	8.5
	Berries		100 g	57	1.0	14.0	0.0

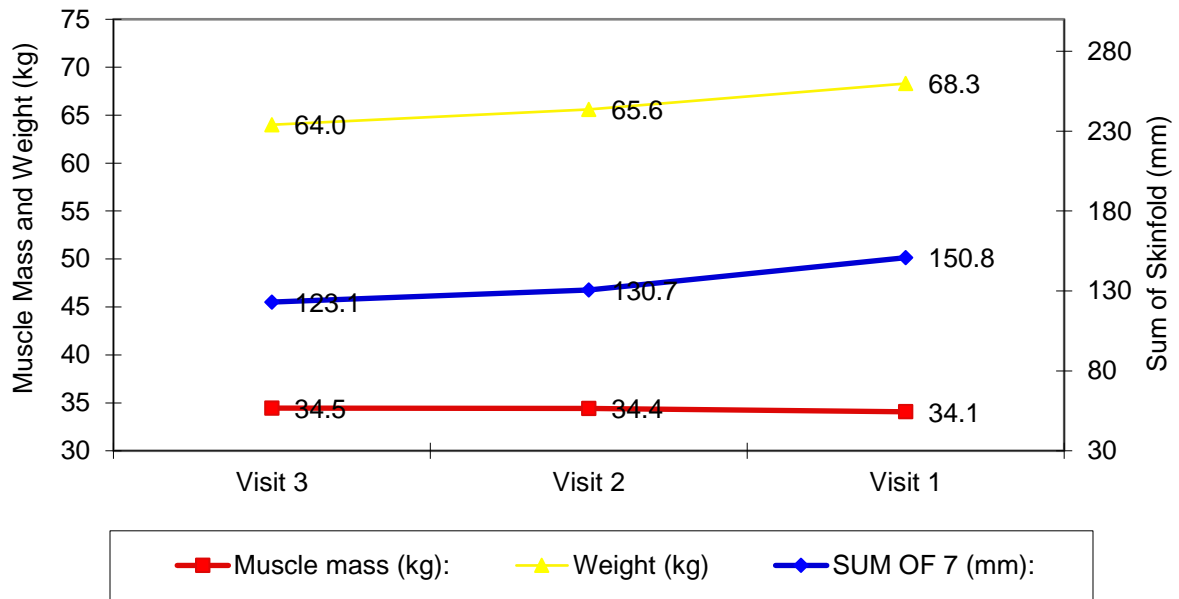
TOTAL			
Kcal	Protein	Carb	Fat
1494	126.8	135.2	46.8

RESULTS

- Steady weight loss
- Planned diet break (circled below) but was able to continue losing fat following this break



Body Mass & Body Composition Changes



Objective & Subjective Changes

- Estimated increase in muscle mass (0.4kg)
- Consistently losing body fat
- Sustainable way of eating



Summary & Take-Home Messages

- IF is worth trialing in yourself and/or willing clients
- It possibly/probably has unique benefits... you can see I'm really putting my neck on the line there!
- The 'optimal' protocol does not exist but will simply vary with goal
- Is it necessary to get amazing results? Certainly not.
- IF needs adjustments for the hypothetical model of muscle gain

Key References

- Bellisle et al. (1997) - [Meal frequency and energy balance](#)
- Cameron et al. (2010) - [Increased meal frequency does not promote greater weight loss in subjects who were prescribed an 8-week equi-energetic energy-restricted diet](#)
- Dhurandhar et al. (2014) - [The effectiveness of breakfast recommendations on weight loss: a randomized controlled trial](#)
- Harvie et al. (2013) - [The effect of intermittent energy and carbohydrate restriction v. daily energy restriction on weight loss and metabolic disease risk markers in overweight women](#)
- Sofer et al. (2011) - [Greater weight loss and hormonal changes after 6 months diet with carbohydrates eaten mostly at dinner](#)
- Stote et al. (2007) - [A controlled trial of reduced meal frequency without caloric restriction in healthy, normal weight, middle-aged adults](#)
- Varady (2011) - [Intermittent versus daily calorie restriction: which diet regimen is more effective for weight loss?](#)