

# Nutrition Essentials Nina Lancaster







Nina Lancaster has a Sports Science degree and has been teaching Fitness for over thirty years. Following her hugely successful Body Transformation courses at the award winning Rudding Park Hotel and Spa, she has now taken her courses online and has produced a series of e-books to give both men and women the tools, knowledge and motivation to look and feel their best and achieve their goals.

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## To Nina Lancaster's Nutrition Essentials Guide.

This book will be your bible over the coming weeks! Nutrition will count for approximately 80% of your results! In your 20's and 30's you could probably get away with having a poor or satisfactory diet and still keep the weight off. However, in your 40's and 50's this is definitely not the case and the key to a healthy, lean physique lies in what you eat.

Below I have included the key principles that work nutritionally for health and fat loss. This is a way of eating that will enable you to achieve both fast and permanent results in a way that is 100% sustainable. For this change to be permanent it has to be both straightforward and above all enjoyable. My recipe book will show you how to produce quick, easy and tasty meals, suitable for the whole family.

- 1. Drink at least 3 litres of water daily to naturally detoxify the body and keep it hydrated. Water is the single biggest component of fat loss!
- **2.** Avoid processed food that is laden with salt and sugar. Make your meals (including sauces) from scratch and from fresh ingredients.
- **3.** Eat plenty of protein for growth, repair and maintenance of lean muscle tissue. Eating protein will keep you fuller for longer and satisfies the appetite more than any other macronutrient.
- **4.** Include healthy fats from oily fish, nuts, avocados and coconut oil. They are important for fat loss and will help you absorb vitamins A,D,E and K. You will not be able to burn fat without consuming HEALTHY fats!
- **5.** Eat plenty of vegetables and some fruit (3:1 ratio) as they are rich in antioxidants and micro-nutrients (vitamins and minerals).
- 6. Eat fewer calories than you burn to put yourself in a calorie deficit.
- 7. Try and limit starchy carbohydrates to days that you exercise. Sweet potato and brown rice are the healthiest starchy carbs as they have a low glycemic index so will not cause a quick spike in blood sugar, making you feel fuller for longer.

# Nutrition Essentials



#### **OBJECTIVES**

- To gain an understanding of the role of nutrients
- To learn how to create a diet that is tailored to you as an individual (there isn't a one-size fits all)
- To understand how to track and make changes to your nutrition intake to ensure you keep progressing

What are Macronutrients & Micronutrients?

Macronutrients	Micronutrients
Protein Carbohydrate Fat	Vitamins Minerals

## Let's Look at Macronutrients.

There are 3 macronutrients and they are protein, carbohydrate and fat. Most people have heard of these 3 macronutrients.

### 1. Protein

- Essential for normal growth and repair
- Higher protein diets have many benefits:
- Enhanced fat loss
- Retention of muscle
- Better satiety
- Protein contains 4 calories per gram





# 2. Carbohydrate

- Carbohydrate is used by the body during intense exercise
- Glucose, which is what carbohydrates are converted to, is used by the brain. This is why we might experience "brain fog" if we go on an extremely low carb diet



- Carbohydrate intake should be high enough to allow us to train hard and provide our brain with enough energy to help us function properly
- We don't want to consume more carboyhdrates than we need as this will hinder fat loss
- Optimal carbohydrate intake is an individual thing, some people get better results with a slightly higher carb intake and some people do better with lower carbohydrate
- This comes down to learning how your body responds
- Over time we tend to develop an awareness of which type of diet works best for us, it is somewhat a matter of trial and error
- · Carbohydrate, like protein, also contains 4 calories per gram

#### 3. Fat

- Fat is the most calorie dense macronutrient, with each gram of fat containing 9 calories
- You can see the logic behind reducing fat intake, because gram for gram you can reduce over double the calories when compared to

protein and carbohydrate (both 4 calories per gram)

- Fat provides energy, satiety and omega fatty acids that are essential for our health
- A diet too low in fat can leave us feeling very hungry!





## Vitamins and minerals

• Vitamins and minerals are required by the body for many physiological functions including growth, digestion, energy transfer, nervous system function and many other functions of the body



- Deficiencies are fairly common
- A 2006 study of 20 participants (including athletes) who were looking to improve the quality of their micronutrient intake from food showed that food alone did not meet the minimal Recommended Daily Allowances (RDA) micronutrient requirements for preventing nutrient-deficiency diseases
- The researchers also concluded that the more active a person is, the greater need there is to employ a variety of balanced micronutrient-enriched foods including micronutrient supplementation as a preventative protocol for preventing the observed deficiencies.

This is why it is important to eat a wide variety of nutrient dense vegetables and fruits, as well as considering a daily multivitamin supplement.



## **Meal Frequency**

#### How many meals should I eat per day?

- It's different for everybody
- Eating small meals every 2 hours does boost your metabolic rate, but it is pretty inconvenient and therefore unsustainable for most people
- Somewhere between 3 and 6 meals per day is usually about right
- Try not to go longer than 4-5 hours between meals

### **Protein shakes**

#### Do I need protein shakes after training?

 Protein shakes are a convenient way to increase protein intake and are ideal if it's going to be a while between finishing training and your next meal, but they are not essential



• A protein shake is digested quickly and easily by the body so it's ideal to use around training. It's also an easy way to increase your protein intake if you're struggling to eat it through food, although it shouldn't be relied on too heavily.

# Application



# Two nutrition routes are covered in this guide.

- 1 Portion control (no weighing involved)
- 2 Macronutrient tracking (weighing out food)

# Which One Is Right For Me?

- Most people find a **portion control** approach easier to follow than **tracking** their macronutrient intake
- Have a look at both options and see which one you think will suit you best
- You can experiment with both options as they both have their pros and cons
- Stick with your chosen option for 3-4 weeks and assess your results

# **ROUTE 1: Portion Control**

- Although tracking your macronutrient intake is the most accurate way to approach your diet, not everybody wants to weigh out food and if that's you, you may just want to control your portion sizes
- The intention is still the same a caloric deficit that allows us to burn body fat
- Controlling portion sizes will probably work for most people most of the time

On the following pages is a visual guide to give you an idea of how much protein, carbohydrate and fat we should roughly consume...

# Portion Control Guide



# Women: **1 PALM SIZE** = 1 Serving of Protein

# Men: **2 PALM SIZES** = 1 Serving of Protein

# **PROTEIN SOURCES:**

Chicken Turkey Beef Lamb Pork Fish Seafood Eggs Greek yoghurt Cottage cheese

# LIMIT:

Smoked, cured meats or processed meats.

Very fatty cuts of meat e.g. lamb

# NOTE:

If you are consuming high amounts of fat then there is no need to consume extra fats from the fats list.

e.g. oily fish, fattier cuts of meat, whole eggs, full fat Greek yoghurt



# Women: **1 FIST SIZE**

= 1 Serving of Vegetables

# Men: **2 FIST SIZES**

= 1 Serving of Vegetables

# **VEGETABLE SOURCES:**

Cauliflower	Cucumber
Broccoli	Courgettes
Kale	Peppers
Celery	Tomatoes
Onion	Radishes
Spring Onions	Pak Choi
Green Beans	Cabbage
Rocket	Mushrooms
Spinach	Chillies
Lettuce	Carrots



# Women: **1 CUPPED HAND** = 1 Serving of Carbohydrates

# Men: **2 CUPPED HANDS** = 1 Serving of Carbohydrates

# CARBOHYDRATE SOURCES:

Rice Potatoes Bread Pasta Cous Cous Quinoa Lentils Oats LIMIT:

Refined processed carbohydrates.

e.g. sugar, white bread, white pasta



# Women: **1 THUMB SIZE** = 1 Serving of Fat

Men: **2 THUMB SIZES** = 1 Serving of Fat

# FAT SOURCES: | L

LIMIT:

Nuts Seeds Coconut Oil Butter Ghee Olive Oil

## Trans fats found in baked goods and fried foods

e.g. pastries, cookies, cakes, crisps



The above is a general guide. There are a number of factors to take into consideration when deciding how much to eat.

- Your stature
- How many meals you are able to eat per day
- Your activity levels
- If your goal is to lose weight
- If your goal is to gain weight

# Portion Control Quick Meal Guide



On the next few pages are some example portion control meals.

All recipes serve one person. Simply double the quantities to serve two.

In some of the following recipes, you can choose quantities of ingredients.

For example '2-3 eggs' in the Colourful Veggie Scramble recipe

Choose the quantity based on your size, gender, goals etc.

Refer to the Customise Section on the previous page if you are unsure of anything.





#### Colourful Veggie Scramble

Serving of spinach, chopped roughly 1 tsp coconut oil or butter a handful of button mushrooms, chopped 1 tbsp sun-dried tomatoes, drained and chopped 1 clove garlic, finely chopped 2-3 eggs 1-2 egg whites salt and pepper to season



Steam the spinach for around 5 minutes until fork tender. Set aside.

In a non-stick frying pan, heat the oil or butter over a medium heat. Add the mushrooms and sauté, stirring for 4 minutes.

Add the steamed spinach, sun-dried tomatoes and garlic. Sauté, stirring for 3 minutes.

Beat the eggs and whites for 30 seconds, then pour evenly over the vegetables.

Allow to cook untouched for around 2 minutes.

Gently stir the mixture together until the eggs are fully cooked, around 2-3 minutes.

Season with salt and pepper and serve.



#### Vegetable Protein Breakfast

½ a serving of broccoli, cut into small florets
½ a serving of courgette, chopped
a handful of finely sliced leeks
2 tbsps coconut milk
2-3 eggs
1-2 egg whites
pinch of oregano
salt and pepper
a small amount of Cheddar cheese (optional), grated (use dairy free if preferred)

Preheat oven to 200°C / 400°F. Grease a 10 inch round ovenproof dish.

Steam the broccoli, leeks and courgette for 4-5 minutes, or until tender.

Place the cooked vegetables in the base of the oven dish.

Whisk the eggs, coconut milk, oregano, salt and pepper together. Stir in the cheese if using.

Pour the egg mixture over the vegetables. Bake for around 20 minutes, or until thoroughly cooked.



#### **Overnight Cocoa Oats**

1 serving oats (use gluten free oats if preferred)

2 scoops chocolate or vanilla flavour whey or rice protein powder

1 tbsp cocoa powder

1 dessert spoon Greek yoghurt

80ml unsweetened almond milk

1 tsp honey (or use sweetener of your choice)

1 serving raspberries



Place all ingredients except the raspberries into a sealable container and mix well.

Seal and refrigerate for at least 2 hours or overnight.

Mix in a little more extra almond milk if the mixture is too dry.

Spoon into a serving bowl and top with fresh raspberries.



#### Breakfast Egg Pizza

 1 tsp ghee or butter
 2-4 eggs
 A sprinkle of Cheddar cheese, grated (use dairy free if preferred)
 1 tsp tomato purée
 pinch of pepper
 pinch of paprika
 pinch of Italian herbs



Prepare a medium grill. Melt the ghee/butter in a frying pan over a medium heat.

Crack the eggs into the frying pan. Cook on a medium heat until the whites are solid but the yolks are still runny. Placing a lid on the frying pan will speed up cooking time by a couple of minutes.

Slide the eggs onto a plate. Squeeze on a tsp of tomato purée.

Add the cheese and seasonings.

Place under the grill for a few minutes until the cheese melts.

Suggestion: Serve with wilted spinach.

# Lunch & Dinner



#### Turkey Satay Spice

 1 tsp organic coconut oil or ghee
 1 small red onion, diced
 120-200g turkey breast steaks, diced
 1 serving closed cup mushrooms, sliced
 1 serving baby plum tomatoes
 2-3 red or green chilli peppers, sliced
 1 yellow bell-pepper, diced
 200ml fresh chicken stock (or use 1 organic stock cube)
 2 tbsps tomato purée
 1 serving fresh spinach leaves
 1 serving crunchy peanut butter
 salt to taste (optional)



Melt the oil / ghee in a large saucepan over a medium heat.

Add the onion and sauté for 3-4 minutes, stirring.

Add the turkey and cook for 3-4 minutes, stirring occasionally.

Add the mushrooms, baby plum tomatoes, chilli peppers and yellow pepper and sauté for 2-3 minutes, stirring, until soft.

Add the stock and tomato purée and bring to the boil, then reduce to a gentle simmer.

Cover and cook for 10-15 minutes, stirring occasionally.

Add the spinach leaves and stir well. Cook for 1 minute or until wilted.

Add the peanut butter and salt (if using), stir well and cook for 1 minute. Serve.



#### Balsamic Beef Salad

1 serving beef frying steaks, cut into strips 1 tsp coconut oil or butter

#### for the marinade:

- 1 tbsp balsamic vinegar
- 1 tsp garlic, finely chopped
- 1 tbsp Worcester sauce

#### for the salad:

- 1 serving mixed lettuce leaves
- 1 serving avocado or boiled egg, sliced (or half a serving of each)
- 1 serving plum tomatoes / celery / peppers / cucumber

Place the beef in a large bowl. Add the other marinade ingredients and mix well. Cover and refrigerate for 4 hours or more.

Melt the oil or butter in a non-stick frying pan over a medium / high heat. Add the beef and fry gently on both sides for around 3-4 minutes or until cooked to your liking.

Assemble the salad ingredients in a bowl and add the beef strips.





#### Minted Lamb Kebabs

- 3 tbsps plain yoghurt
- 1 tsp finely grated unwaxed lemon zest
- 1 tsp fresh lemon juice
- 1 garlic clove, crushed
- 1∕₂ tsp English mustard
- 1 tbsp tomato purée
- 1 serving lean lamb leg steaks, diced
- 1 serving cherry / plum tomatoes
- small sprig fresh mint, finely chopped

#### for the salad:

- 1 serving mixed lettuce leaves
- 1 serving plum tomatoes / celery / peppers / cucumber
- small handful fresh coriander, finely chopped (optional)

Mix the yoghurt, lemon zest, lemon juice, garlic, mustard and tomato purée in a shallow bowl.

Add the lamb and coat well in the sauce.

Cover and refrigerate for at least one hour.

Soak 2 bamboo skewers in cold water for 30 minutes or more.

Prepare a medium grill.

Thread the lamb pieces and cherry tomatoes (alternating) onto the skewers.

Brush with the marinade and grill for 5 minutes each side or until cooked to your liking.

Sprinkle over the chopped mint.

Assemble the salad ingredients in a bowl and serve.





#### Salmon & Dill Omelette

a pinch of dried dill
1 tsp ghee or butter
½ a fresh salmon fillet
¼ of a small white onion, finely chopped
1 serving button mushrooms, chopped
¼ of a medium sized tomato, diced
2-3 eggs plus 1 egg white
a pinch of sea salt and black pepper
A sprinkle of Cheddar cheese grated (use data)



- A sprinkle of Cheddar cheese, grated (use dairy free cheese if preferred)
- 1 serving fresh spinach leaves

Season the salmon with dill.

Melt the ghee / butter in a large frying pan over a medium / high heat.

Add the salmon and cook for around 10-12 minutes, turning halfway. When cooked, the flesh should be a pale pink colour throughout. Remove from pan and set aside.

Reduce the heat to medium. Add the onion and mushrooms to the pan and sauté gently until soft for 2-3 minutes, stirring frequently. Add the tomatoes and cook for 2-3 minutes, until soft. Remove the vegetables from pan and set aside. Remove any bits from the pan.

Whisk the eggs and whites in a jug and season with salt and pepper. Pour the eggs into the pan. Cook gently for 3-4 minutes until the edges of the mixture start to crisp.

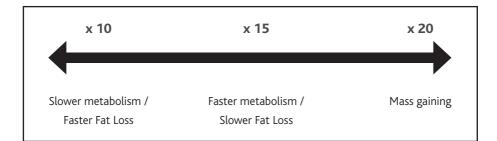
Add the cheese and spinach leaves and cook until the leaves have wilted.

Using a slice, carefully fold the omelette in half. Remove from the pan and serve.

### **ROUTE 2: Tracking Macronutrients**



Step 1: Select Kcal intake per lb of bodyweight



#### For example...

a 180lb person consuming 12 x their body weight in calories = 180 x 12 = 2160 Kcal

#### Setting protein intake

- A protein intake of 1-1.3g/lb of body weight is recommended
- For example, for our 180 lb person consuming 1g per lb of body weight, this would amount to 180g of protein per day
- If this person prefers to eat more protein they could increase to 1.3g per lb of body weight.

#### Setting carb & fat intake

- Carbs and fats will make up the remaining calories
- This is a matter of preference and what works for us as individuals e.g. people do better with more or less carbs
- It's either higher carbs and less fat or lower carbs and more fat



#### Setting carb intake

- Recommended carbohydrate intake varies between 25% and 40% of total calories
- In the 180 lb example let's assume a carbohydrate intake of 30%
- 2160 Kcal x 0.30 = 648 (Kcal)
- Divide 648 by 4 (kcal per gram) to workout the grams
- 648/4 = 162 grams

#### Setting fat intake

- Fat will make up the rest of the calories
- Add up the protein and carb intake in grams
- 180 + 162 = 342
- Multiply this by 4 (Kcal per gram)
- 342 x 4 = 1368 Kcal
- Subtract this from our Kcal intake total
- 2160 1368 = 792 Kcal
- Divide this by 9 to give us fat intake in grams
- 792 / 9 = 88g fat

Here are the resulting target macronutrient intakes:

- Protein 180g
- Carbohydrate 162g
- Fat 88g



Let's take the same person and work through an example with a higher protein intake So just to recap...

a 180lb person consuming 12 x their body weight in calories (180 x 12) = 2160 Kcal

- Protein intake 1.3g / lb body weight
- 1.3 x 180 = **234g protein**
- Carbohydrate intake <u>30%</u>
- 2160 x 0.30 = 648 Kcal
- Divide by 4 to get the grams
- 648 / 4 = 162g carbohydrates
- Add up the protein and carb intake in grams
- 234 + 162 = 396
- Multiply by 4 (Kcal per gram) to get the Kcal
- 396 x 4 = 1584 Kcal
- 2160 1584 = 576 Kcal
- Divide by 9 (Kcal per gram)
- 576 / 9 = 64g fat

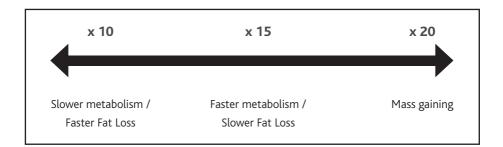
Target macronutrient intakes...

- Protein = 234g
- Carbohydrate = 162g
- Fat = 64g



### It's Your Turn

Step 1: Select your Kcal intake per lb of bodyweight



NOTE: 10 is the lowest you should go as anything below this isn't sustainable and you'll probably find yourself hungry and lacking energy.

If you are unsure, 12 is a good place to start for fat loss

#### Now set your protein intake

- Body weight in lbs x 1-1.3
- To decide where to set your protein consider if you enjoy eating more protein, just remember the higher the protein, the less space there will be for carbs and fats
- If in doubt set at 1g / lb to start with, this is still a high protein intake

# Now set your carbohydrate intake, again there is no one size fits all so this is determined by preference and perhaps if you already know how well your body responds to carbohydrate

- Choose between 25% and 40%
- If you are unsure then try 30% to start with, again you can always adjust this up or down with some on going feedback
- Multiply your target Kcal intake by this number expressed as a decimal e.g. 30% = 0.30



#### This gives you your carb intake in Kcal

- Divide this number by 4 to give you the grams
- Add this number to your protein intake in grams
- Multiply this total by 4 to give you Kcal from protein and carbs
- Subtract this number from your target total kcal

#### This gives you the kcal remaining for your fat intake

• Divide this number by 9 to give you your fat intake in grams

## **Unsure**?

If you are unsure, let's look at the table on the next page showing calorie, protein, carbohydrate and fat intakes based on body weight. This can help you get going.



Bodyweight (lbs)	Kcal (x12)	Protein (1g/lb)	Carbs (30%)	Fat	
130-	1560	130	117	64	
135	1620	135	122	66	
140	1680	140	126	68	
145	1740	145	131	71	
150	1800	150	135	73	
155	1860	155	140	76	
160	1920	160	144	78	
165	1980	165	149	81	
170	2040	170	153	83	
175	2100	175	158	86	
180	2160	180	162	88	
185	2220	185	167	90	
190	2280	190	171	93	
195	2340	195	176	95	
200	2400	200	180	97	
205	2460	205	185	100	
210	2520	210	189	103	
215	2580	215	194	105	
220	2640	220	198	108	
225	2700	225	203	110	
230	2760	230	207	112	
235	2820	235	212	115	
240+	2880	240	216	117	



## How To Tailor Your Intake

- There is no magic number, each person is different, the most important factor in fat loss is a calorie deficit
- If you are not dropping body fat then you will need to reduce your Kcal intake until you start dropping
- If you are dropping body fat faster than 2 lbs per week then you should increase your Kcal intake slightly because the faster weight is lost, the more likely it is that muscle is being lost as well we don't want to lose muscle!
- It is fairly normal to lose more than 2lbs in the first week, this is often water, so if you do drop more than 2lbs in the first week, wait to see your week 2 results before you adjust your intake
- 10Kcal/lb bodyweight is the lowest recommended intake

### How To Track

- Set up an account at www.myfitnesspal.com
- Ignore the default target settings
- You can set up your own targets but it will only let you set them by 5% increments unless you upgrade to the paid app
- So just pay attention to your daily total



Breakfast	Calories	Carbs	Fat	Protein	Fiber	Calcium	
Egg, whole, cooked, poached, 3 large	215	1	14	19	0	8	•
Aldi Eggs - Egg Whites Scrambled, 3 egg white	51	1	0	11	0	0	c
Spinach, raw, 80 g	18	3	0	2	2	8	c
Biona - Rye Bread, 71 g per slice	134	25	1	3	7	0	c
Add Food   Quick Tools	418	30	16	35	9	16	
Lunch							
Usda - Chicken Breast, Raw, 150 gram	180	0	4	34	0	0	•
Salad Waitrose - Mixed Salad of Leaves, 100 g	15	2	1	1	1	0	¢
Nature - Quinoa (Dry), 40 g	150	28	2	5	2	0	•
Tesco Cherry Tomatoes, 80 g (7 Tomatoes)	16	3	0	1	1	1	c
Tesco Organic - Almonds, 15 g	89	1	7	3	3	0	•
Add Food   Quick Tools	450	33	14	44	8	1	
Dinner							
Tesco - Salmon, 140 g	280	0	18	27	0	0	•
Tesco - New Potatoes, 250 g	185	40	1	4	6	0	c
Tesco - Asparagus Tips, 100 g	29	2	1	3	2	0	¢
Add Food   Quick Tools	494	42	20	34	8	0	
Post Workout Snack							
Banacol - Banana, 1 medium banana	110	29	0	1	4	0	•
Reflex Nutrition - 100% Native Whey, 40 gram	150	4	0	32	0	0	•
Add Food   Quick Tools	260	33	0	33	4	0	
Other Snacks							
Skyr - Plain Fat Free Yoghurt, 200 g container	131	8	0	22	0	0	¢
Tesco - Frozen Raspberries, 80 g	72	12	0	1	7	0	c
Reflex Nutrition - 100% Native Whey, 15 gram	56	2	0	12	0	0	¢
Add Food   Quick Tools	259	22	1	35	7	0	



# Accuracy

- Hitting your targets with a 5% margin for error is excellent
- Hitting your targets with a 10% margin for error is good
- Aim to be within 5-10% of your targets each day
- Food labels can be 5-20% inaccurate anyway so don't sweat the small stuff

## **Action Steps**

- Decide on either the macro tracking or portion control approach
- If using the macro tracking approach, work out your target intakes, if you are unsure then start by using the table with Kcals set at x 12 bodyweight, protein at 1g/lb bodyweight and carbs at 30%. If you are losing weight too quickly, you can always increase the multiplier



This nutrition book is one of a number of e-books published by Nina Lancaster – Director of Busy Living Fitness and Busy Women Fitness. Nina is an expert in Fat and Weight Loss Body Transformations for Women.

#### Other E-books available:

28 Day Body Transformation Recipes 100 Recipes For Fat Loss Forever Living Cleanse 9 Recipes Mindset Guide Your Guide to Hormones 7 Day Vegan Plan

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