Nutrition & Recovery

A quick guide and breakdown into nutrition and general information





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Introduction

This is a nutritional and recovery guidance to support your needs through day to day living, when your training, when your NOT training and how to eat prior to an event. This is not "individualised" for individual sports, how ever, you can adapt to your individual requirements and therefore adapt to how you see fit.

When it comes to nutrition, everyone is an individual, personally, I perform better when I'm fasted, first thing in the morning, or in the afternoon before my evening meal. But, again, this is individual.

Nutrition isn't a one size fits all. Everybody's body is different.

This booklet will also help on recovery. Recovery is vital to keep you exercising well.

Please feel free to utilise this information how you see beneficial for yourselves. The information given is from evidence that has been read and you can have a look (if you would like) at the evidence and have a read.

The Carbs, Proteins and Fats have been calculated using the "Carbs and Calorie Counter" book that is used to help people with diabetes. It is a good resource if you want to see whats in the food you eat. It also shows you portion sizes. Which is great when you see it on a plate.

The meals have been taken from Joe Wicks Lean in 15 "The Shift Plan" but the method has been made shorter and sweeter. His books are good, but just be aware of the macronutrients in them. From what I have seen, they are low carbs, easily adjusted.

The information has been broken down into segments. Nutrition, what are good sources of said nutrition, recovery strategies and other information that you will hopefully find useful.

At the end of the booklet there is a table for you to see what **YOU** may consider needing to consume and when. The main things to look at is daily requirements and adjust the carbohydrates to suit the training load. The higher the intensity, the higher the carbohydrates.

Enjoy

Chapter Number 01 **Protein** What are the benefits of Protein?

Protein is the building blocks of everything that you utilise in your body. Your hair, nails and obviously muscular tissue is formed from proteins. Proteins help with the function of your immune system and helps with the production of hormones and enzymes. This should be 10-15% of total energy intake.

Although it is suggested and advised to consume protein post match and or training, it is not essential. As long as you consume your daily amount of protein required then this will be adequate. The benefits of taking it post event is that it adds structure to when you consume. See it as an opportunity to get the protein in at a set time. Then work the rest of your protein intake around this. Ideally, you wan to consume your protein around every 3-4 hours.

How much do I need?

It is suggested that, as athletes, you require to consume **1.4 - 2.0 grams** per kg of body mass. For example. An athlete who weighs 70Kg would need to consume 98- 140 grams per day:-

To calculate:- Athlete Weight (Kg) x protein requirement (1.4-2.0)= Required Daily Protein

Post training and game it is suggested to consume 0.25-0.55g per kg or 20-40 grams. So, if you want to be more specific in your protein intake:-

An athlete who weighs 70Kg would need to consume 17.5- 38.5 grams. Typically a protein shake will give you the required amount of post work out protein.

What are good sources of Protein?

With meats- good sources of protein include chicken, fish. As you can appreciate the way you cook your food can alter the content. For example, frying or grilling your food with change the amount of fat content.

There are other sources of proteins in beans and pulses. Please refer to the table below to see the content.

The list is not exhaustive, but examples of what you will find in each common meat. It is designed to show you examples of what you may or may not typically eat.

Table 01

Tables look best when you create them in Pages, rather than add them as images. Your readers will be able to enlarge the content and get definitions even in table cells.

Source of Protein	Protein	Carbs	Fats
200g BBQ Chicken Wings	55g	8g	33g
200g Chicken Breast no skin	64g	0g	4g
200g Turkey Breast no Skin	70g	0g	3g
100g King Prawns Boiled	16g	0g	0g
140g Tinned Tuna in Brine	35g	0g	1g
125g Cod/ Haddock baked	30g	0g	1g
130g Salmon Steak grilled	34g	0g	15g
100g red lentils (Dried)	24g	54g	1g
100g Green Lentils (Dried)	23g	50g	2g
100g Quorn Chicken Pieces	14g	6g	3g
80g Tofu Fried	19g	2g	14g
150ml Semi Skimmed Milk	5g	7g	3g
30g Almond nuts	6g	2g	17g
30g Macadamia Nuts	2g	1g	23g
60g Boiled Egg	8g	0g	5g

Chapter Number 02 Carbohydrates What are the benefits of Carbs?

Carbohydrates is a source of energy. When you consume carbohydrates the body breaks it down into glycogen to be stored in the liver and or muscles. When you need to utilise the energy, it is broken down again into glycogen. This is transported through the blood to the muscle that require then energy. If you consume to much, insulin helps convert into fat to be stored as an energy supply later.

It is being reported and studied that players are under consuming carbohydrates. Try to use the calculations below and use them for the varying days that we have. For example, the lower grams per kg of body weight on the "less intense" days. Use the higher values for before games, during recovery and post games or training.

How much do I need?

It is suggested that, as athletes, you require to consume on a typical day between **5-10g per kg** of body mass. This is a varied amount between the team environment. It is suggested, on low intensity days, moderate training loads that a **5-7g** per Kg is efficient. On higher demanding days, double sessions or the build up to a match day **7-10g** per kg is recommended.

Post game. This is different to protein. It is essential for recovery to get the carbohydrates in within the hour post game. Especially if there is another training session the next day. It is essential to replenish your energy source after such an intense bout of exercise. It is recommended that you consume **1.0-1.2g per kg** of body weight every **15-30 minutes** for the first few hours post event. Consuming High Glycemic Index carbohydrates aid in the recovery (see below table for sources of carbohydrates).

For example; if you weigh 70 kg you need to consume:-

Daily: 350g to 700g of carbohydrates.

Post Game: 70g- 84g of carbohydrates.

To calculate:- Athlete Weight (Kg) x carbohydrate requirement (5-10)= Required Daily Carbohydrate

What are good sources of Carbohydrates?

Carbohydrates are measured by an index known as the "Glycemic Index" or GI. The GI is based on the effect the carbohydrate has on the blood. The lower the GI the least the spike in blood sugar levels. These are your whole grains, pasta and oat based food. The higher the GI the bigger the spike in glucose in the blood. These are the white rices and sweets. The high GI are the ones we use for fuelling during prolonged activities, match days. These are also the ones we require for recovery. In the diagram below, the high GI is shown in red, the low in green.



Table 02

Table to show what source of carbohydrate and how many grams of carbohydrate are contained.

Source of Carbohydrate	Carbs	Protein	Fats
205g Pasta Shells	50g	8g	1g
203g Pasta Twists	70g	11g	2g
208g Pasta Penne	70g	11g	2g
220g Spagetti	70g	12g	2g
240g Wholegrain Spagetti	70g	13g	2g
240g Gnocchi	77g	9g	1g
220g Jacket Potato baked	47g	5g	0g
195g New Potatoes	29g	4g	0g
160g Sweet Potato baked	45g	Зg	1g
96g Basmati Rice	30g	Зg	1g
95g Wholegrain Rice	28g	3g	1g
95g White Rice	30g	3g	0g
100g Bulgar Wheat	16g	3g	1g
85g Quinoa	16g	4g	2g
44g Thick Slice White Bread	20g	3g	1g
44g Thick Slice Granary Bread	20g	4g	1g
65g Tortilla Wrap	35g	5g	1g
25g 4 Jelly Babies	20g	1g	0g

Chapter Number 03

Fats *What are the benefits of Fats?*

Fats are an essential part of a healthy diet. The role of fat is to help protect the internal organs, monitor thermoregulation (subcutaneous fat provides insulation), provides an insulation sheath (myelin sheath) for nerves and helps with growth, development and repair of body tissues. It should also equate to 20-35% of your energy intake.

There are 4 types of fat:-

Saturated fat- These are fats from animal sources such as meat, milk, cheese and butter. These fats raise cholesterol levels and increase the risk of heart attack.

Monounsaturated Fat- These fats are found in Olive oil and rapeseed oil. They are also found in nuts, seeds and avocados. These are the healthy fats. They help lower LDL cholesterol, and therefore decreases the chances of heart attack.

Polyunsaturated Fat- These fats include, sunflower oil, oily fish, nuts and seeds. These lower the unhealthy LDL cholesterol levels, but may also decrease the healthy HDL levels. Omega-3 is found in the oily fish in this section

Trans Fats (Hydrogenated)- This is the BAD fat. It is in products such as cakes, biscuits and fast foods. These will increase the LDL cholesterol levels increasing the chances of heart attack.

How much do I need?

It is suggested that for a healthy diet that 20-35% of your energy intake should come from fats. There is not a guide for how many grams/ Kg that I have found, so I calculated a figure to work with the rest of the macronutrients. From my calculations, you should be consuming between **4g/Kg/day to 7g/kg/day**. So;

An athlete who weighs 70Kg would need to consume 280-490 grams per day:-

To calculate:- Athlete Weight (Kg) x fat requirement (4-7)= Required Daily Fat

What are good sources of Fats? Nuts, fish

Table 03

Table to show what source of fat and how many grams of fat are contained.

Source of Fats	Fats	Protein	Carbs
140g Whole Avocado	27g	3g	3g
150ml Semi Skimmed Milk	3g	5g	7g
30g Almond nuts	17g	6g	2g
30g Macadamia Nuts	23g	2g	1g
60g Boiled Egg	5g	8g	0g
125g Natural Yoghurt	4g	7g	10g
140g Tuna in oil	9g	36g	0g
125g Cod/ Haddock baked	1g	30g	0g
130g Salmon Steak Grilled	15g	34g	0g

Chapter Number 04

Vitamins and Minerals What are they?

Vitamins and Minerals are chemicals that help perform specific functions within the body. They are need in small quantities, but are needed none the less. Vitamins and minerals are found naturally in food except vitamin D. Vitamin D is manufactured through the sunlight on skin. Vitamin supplementation by athletes who have a varied and balanced diet do not increase performance.

Types of Vitamins:-

Water Solubles Vitamins- C and B group- These are essential to help enzymes functioning properly. They control the chemical process of energy extraction from food and the growth of new body tissues.

Fat Soluble Vitamins- A- Needed for vision

D- Bone growth and development. Regulates calcium levels in

the body.

- **E-** Protects the body's tissues against chemical damage
- K- Important for blood clotting

Types of Minerals

Macro elements- Sodium (Salt) Typically, people eat to much of this. It regulates water balance. Too much salt will change the blood concentration and changes the amount of blood the heart pumps and in turn, increase blood pressure.

- **Potassium** Essential for water and electrolyte balance and function of cells including nerve cells. Found mainly in bananas, dried fruit and berries.

- **Calcium** Needed for a variety of functions, but the main ones were concerned about is muscle contraction, secretion of hormones and nerve transmission. Found in mainly dairy products such as milk, yoghurt and cheese. Although plant based diets do contain calcium, the calcium from plants is not as easily absorbed.

How much do I need?

It is suggested that a minimum of 2-4 portions of fruit and 3-5 portions of vegetables are eaten daily. It is recommended that you eat a varied source of fruit and vegetables. Try to eat each colour of the rainbow as a guide.

When cooking fruit and veg, it is best to cook them for as short as possible and in as little water as possible. This will retain their nutritional value. Frozen fruit and vegetables often retain a higher nutrient content because of the speed in which they are frozen and packed away.

Tables

Table to show sources of vitamins and minerals and the role in which it has in your body.

Source of Vitamin or Mineral	Source	Role		
A	Dairy Products Dark Green Vegetables Orange coloured fruit and Veg Fish Oil	Growth and Repair of body tissue Normal structure and function of cell membranes Normal Vision		
B6	Beef, Fish, Poultry Eggs, Whole grains Some vegetables	Maintain normal homocysteine levels- a chemical that the body uses to make proteins.		
B12	Animal Sources- milk, meat and eggs	Normal cell division and blood formation and function		
	Produced in some algae and bacteria	Normal structure and function of nerves		
С	Plant sources- Fruit and vegetables	Normal structure and function of connective tissue.		
D	Fish oils Dairy Products	Healthy bones and teeth Absorption of Calcium		
E	Dairy Products Dark Green Vegetables Nuts	Anti oxidant Protects fat soluble vitamins and red blood cells		
К	Dark Green Vegetables Fish Liver Fruit	Aids blood clotting		
Sodium	Salt (usually already in foods)	Regulating water balance		
Potassium	Bananas	Regulates water and electrolyte balance.		
Calcium	Dairy products	Muscle contraction, hormone secretion and nerve transmission.		

Chapter Number 05 **Packed Lunch Recommendations** *Cheesy Chorizo Chicken and Spinach*

Ingredients:-

Method:-

1/2 tbsp Coconut oil
75g Chorizo diced
Carbs: 1.4g Protein: 12.5g Fat:25g
1/2 Red onion diced
Carbs: 12g Protein: 2g Fat:0g
1 x 240g chicken breast, cut into slices
Carbs: og Protein: 76.8g Fat:4.8g
Optional Salt and Pepper
4 Cheery Tomatoes
Carbs: 3g Protein: 1g Fat:0g
3 Big handfuls of baby spinach leaves
Carbs: 1g Protein: 3g Fat:1g
1 Ball of mozzarella- torn into chunks
Carbs: 0g Protein: 9g Fat:10g

1) Heat oil for a minute, add onion and chorizo and cook for another minute

2) Increase heat to max and add the chicken, salt and pepper for approx 3 minutes, chicken should almost be cooked through

3) Put in the cherry tomatoes, cook until they start to "fall apart" then put in the spinach.

4) When the spinach has wilted, make little "pockets" to put in the mozzarella.

5) Turn of the heat and let the cheese melt.

6) Let it cool and pack it up.



Carbs:- 17.4g **Protein:-** 104.3g **Fats:-** 40.8g

To bulk out the carbs, if you add this to pasta or rice you would need to add (for our 70kg athlete) 153-194g of twisted pasta or 167-212 of white rice. Or 202-238g of baked sweet potato. This takes the carbs to 53-67g

Fresh Tuna Niçoise

Ingredients:-

1 Egg

Carbs: og Protein: 8g Fat:5g

75g Green beans

Carbs: 3g Protein: 2g Fat:0g

1/2 tbsp Coconut oil

1 x 300g Tuna fillet

Carbs: og Protein: 84g Fat:2g

2 tbsp pre cooked puy lentils

Carbs: 5.8g Protein: 76.8g Fat:4.8g

Optional Salt and Pepper

1 tbsp sundries tomatoes (about 6)

Carbs: 4g Protein: 2g Fat:6g

1 Big handfuls of baby spinach leaves

Carbs: og Protein: 1g Fat:og

1 tbsp Olive Oil

Carbs: og Protein: og Fat:12g

20g walnuts, roughly chopped

Carbs: og Protein: 2g Fat:14g

Method:-

1) Bring a medium sized pan of water to the boil, place egg in water and cook for 8 minutes. Add green beans for another minute,

2) During this, heat coconut oil in a frying pan, fry tuna for a minute on each side- cook to taste.

3) Take the tuna out and let it rest.

4)Drain the egg and beans, then run under cold water until cold enough to handle.

5) Put beans, lentils, spinach, sundries tomatoes, walnuts, olive oil and vinegar into a bowl with salt and pepper to taste and mix.

6) Transfer the salad to a plate and top with tuna and egg.



Carbs:- 25.6g **Protein:-** 101.4g

Fats:- 41g

To bulk out the carbs, if you add this to pasta or rice you would need to add (for our 70kg athlete) 88-133g of basmati rice. Or 171-259g of new potatoes. This takes the carbs to 53-67g.

Creamy Steak and Spinach

Ingredients:-

1 tbsp Olive Oil
Carbs: og Protein: og Fat:12g
1 x 250-300g sirloin steak
Carbs: og Protein: 84g Fat:2g
Optional Salt and Pepper
4 Mushrooms chopped
Carbs: og Protein: 1g Fat:0g
2 Big handfuls of baby spinach leaves
Carbs: og Protein: 2g Fat:0g
40ml double cream
Carbs: og Protein: 0g Fat:22g

Method:-

1) Take the steak out of the fridge and let it come to room temperature first. Drizzle oil over the steak and salt and pepper to taste.

2) Cook to taste, 3 minutes is about medium rare (thickness depending). Once cooked to liking, put to the side and let it rest.

3) Place pan over a medium heat, cook off the mushrooms (I like to put onions and garlic in at this stage, unbelievable!)

4)Add the spinach and cook until nearly wilted then add the cream. Check seasoning and add if necessary.

5) If using ciabatta, lightly toast the bread in the pan.

6) Enjoy!



Carbs:- og **Protein:-** 87g **Fats:-** 36g

To bulk out the carbs, if you take out the cream and put it into a Ciabatta 100g that takes the carbs to 52g of carbs or spread across 2 Tortilla Flour wraps 60g will take you to 70g of carbs.

Broccoli, Asparagus and Eggs

Ingredients:-

1 tbsp Olive Oil

Carbs: og Protein: og Fat:12g

4 x Asparagus (woody parts removed)

Carbs: 1g Protein: 3g Fat:1g

4 x Stemmed Broccoli

Carbs: 2g Protein: 3g Fat:0g

1 x Rashers of Bacon

Carbs: og Protein: 2g Fat:2g

Optional Salt and Pepper

75g pre cooked puy lentils

Carbs: 43.5g Protein: 18g Fat:1.5g

2 x Eggs

Carbs: og Protein: 16g Fat:10g

2 tbsp toasted and chopped hazelnuts

Carbs: 2g Protein: 2g Fat:12g

Method:-

1) Boil the kettle and pour boiling water into a frying pan, add a little white wine vinegar (this will help keep the eggs together) and bring to the boil.

2) Heat a frying pan (or griddle pan) and when hot add the veg and bacon. Cook for 3-4 minutes.

3)Cook the lentils as it suggest on the packet (microwave).

4) If the water is ready, crack the eggs into the pan (as if you were frying them) and cook for about 3-4 minutes (the top just goes a little white over the yolk)

5) Once the veg and bacon are cooked, cut the bacon and place into a bowl, add the lentils and olive oil and mix

6) Place onto a plate and top with the eggs



Carbs:- 48.5g Protein:- 44g Fats:- 38.5g

This isn't to bad for carbs for post training, for a light training day. If your wanting to bring it to the training ground, just bring boiled eggs to have instead. Chop them up and mix it with the bacon in the bowl (stage 5).

Chilli Con Avocado

Ingredients:-

1/2 tbsp Coconut Oil

Carbs: g Protein: g Fat:g

1 Small Red Onion

Carbs: 12g Protein: 2g Fat:0g

1 x Green Chilli (no seeds if don't like it hot)

Carbs: g Protein: g Fat:g

1 x Red or yellow pepper (80g)

Carbs: 2g Protein: 1g Fat:0g

Optional Salt and Pepper

1/2 Courgette (80g)

Carbs: 2g Protein: 2g Fat:0g

300g 5% fat beef mince

Carbs: og Protein: 60g Fat:15g

1 tsp Smoked Paprika

2 tsp Ground Cumin

1 tbsp Full Fat Greek Yoghurt

Carbs: 2g Protein: 2g Fat:4g



Method:-

1) Heat the coconut oil in a large frying pan. Add the onion, chilli, pepper and courgette, stir fry until they soften.

2) Add the beef and stir for about 3 minutes. Or until the beef is cooked through.

3)Add the paprika, cumin and salt and pepper. Cook for a further 30 seconds

4) Tip onto a plate or into your box, add the avocado and yoghurt.

Carbs:- 18g **Protein:-** 67g

Fats:- 19g

For our 70 kg athlete, if you add 43 (34g)-60 (47g)g of couscous to this meal, it will take you to 53-67g of carbs for post high intensity training or game.

Steak Burrito

Ingredients:-

1/2 tbsp Coconut Oil

Carbs: g Protein: g Fat:g

1 x 250-300g sirloin steak cut into slices

Carbs: og Protein: 84g Fat:2g

1/2 Small Red Onion chopped

Carbs: 6g Protein: 1g Fat:0g

1/2 x Red pepper (40g) sliced

Carbs: 1g Protein: 0.5g Fat:0g

Optional Salt and Pepper

1/2 tsp dried Oregano

1 Garlic Clove finely chopped

Carbs: 1.6g Protein: 1g Fat:0g

4 Cheery Tomatoes chopped

Carbs: 3g Protein: 1g Fat:0g

1/2 Tin Kidney Beans drained and rinsed (80g)

Carbs: 13g Protein: 6g Fat:0g

1 x tsp Paprika

1 Tortilla Wrap

Carbs: 35g Protein: 5g Fat:1g

Method:-

1) Take the steak out of the fridge and let it come to room temperature first. Drizzle oil over the steak and salt and pepper to taste.

2) Cook to taste, 3 minutes is about medium rare (thickness depending).

3)Add the onion, red pepper, and garlic, stir fry for a minute.

4)Add the paprika, oregano and tomatoes, season with salt and pepper. Cook for another minute.

5) Put in the kidney beans and cook for another minute.

6) Put mixture into wrap and roll up.

Carbs:- 59.6g

Protein:- 93.5g

Fats:- 3g

For our 70 kg athlete, there is an adequate amount of carbs.

Smokey Spanish Chicken Rice

Ingredients:-

1/2 Chicken Stock Cube Carbs: g Protein: g Fat:g 1 x 240g chicken breast, diced Carbs: og Protein: 76.8g Fat:4.8g 1/2 Lemon Carbs: og Protein: og Fat:og **Optional Salt and Pepper** 1 tsp Smoked Paprika 1 Garlic Clove finely chopped Carbs: 1.6g Protein: 1g Fat:0g 15 ml Mayonnaise Carbs: og Protein: og Fat:11g 125g Basmati Rice Carbs: 45g Protein: 4.5g Fat:1.5g 40g Trimmed Fine Green Beans Carbs: 2g Protein: 1g Fat:0g

Method:-

1) Boil half a kettle, heat a large pan with a little olive oil.

2) Chop the beans in half- then when the pans hot, add the chicken, garlic and beans, for around 2 minutes.

3)Cook the rice (ideally the microwaveable packets)

4)Dissolve the chicken stock in the boiled water from the kettle.

5) Add the smoked paprika, chicken stock and rice to then pan (Spanish Rice)

6)If you wanted to add the mayonnaise garnish, squeeze half the lemon juice in with the mayonnaise.

7) Place the mayo on top. Done



Carbs:- 48.6 **Protein:-** 83.3

Fats:- 17.3

This isn't to bad for carbs for post training, for a light training day. If you wanted, you could add more rice to the meal.

Chapter Number 06

Recovery Strategies *Foam Rolling*

The benefits of foam rolling are:-

Physiologically It helps to promote blood flow to the areas that you foam roll. Aiding circulation which in turn helps get the nutrients to the worked muscle and also gets rid of any waste from the muscles.

Neurologically- It can be beneficial for pain relief. It helps to decrease receptor sensitivity and therefore can help decrease pain perception.

Psychological- Can help with an endorphin release and decrease the arousal state. This is linked more with placebo effect, however, if it helps to keep you focused and decrease arousal state, maybe something to consider post evening match to help you sleep.

How much do I need?

Ideally you need to spend around 2-3 minutes on each muscle group. I try to do as if it was a massage. Work from the distal part of the body first, i.e the feet, and move up towards the centre of the body. Also, when you roll, apply more pressure when rolling up the leg. This will help facilitate the lymphatic system. This will mimic what we do when we massage.

What muscles to Foam Roll?













Compression Garments

The suggested benefits of compression garments is that the outside pressure prevents swelling as there isn't the room to do so. It is suggested that it enhances blood flow that, similar to foam rolling, aids in the delivery of nutrients and aids removing waste products. It is suggested that the use of compression garments helps for strength and power, and helps ready an athlete for a next bout of exercise.

There doesn't seem to be products with "amount of compression" and there is difference in the literature to what pressures are "optimal". How ever, there is no evidence (currently) suggesting that compression is negative to performance.

Advice, buy what you can as comfortable as you can. This will vary between player and the sizing available.

Particular brands to look for would include; Skins, 2XU, Under Armour but there are others. I would recommend at least calfs and hamstrings, but get what you can. The full trousers would be more beneficial, as you may end up loosing 1 leg.

Here are a few examples and prices from sports <u>shoes.com</u> (07/05/2020)



Sleep

As an athlete, if you have less than 8 hours sleep, you are 1.8 times more likely to get injured. In the general population, 40% of 40,000 participants in a particular study had less than 6 hours sleep a night! What does this mean? Well, the less sleep you have the more likely you are going to become ill or injured. If you have less than 4 hours sleep you are 4 times more likely to catch a common cold. In this current climate, it is something we can not risk.

It is recommended that adults over the age of 50 have between 7-8 hours a night. Believe it or not, our youngsters at school should be aiming for at least 10 hours a night! For more recommendations I urge you to look at the National Sleep Foundation.

There are two measurements to your sleep. The quality- How well you slept, moving, twitching, deep sleep etc and Quantity- How many hours you managed.

Day	Quantity	Quality	Sleep Value	
Monday		9	4	36
Tuesday		8	6	48
Wednesday		4	6	24
Thursday		7	5	35
Friday		9	3	27
Saturday		8	8	64
Sunday		7	3	21

Here is a fictional "sleep diary"

Points to note:- Sunday- the least amount of "sleep value". This could be for a number of reasons. Anxious about going to work on the Monday or not managing to put the phone down until late. Compare that to Wednesday, half the amount of sleep but twice the quality. These figures are fictional, but they serve the purpose of my point. We have all had that "Power nap" where you feel you have been asleep for days but its only been half an hour.

Napping

If you would feel fresher, more productive and feel a little recharged, and as long as you don't nap for too long or too close to bed time you will be fine. Think of it as a snack before evening dinner. You will ruin your appetite.

"Napicchino"

This is where you have a shot of an espresso before your nap. The idea is that the caffeine is flowing through your system just as you wake from your nap.

How long should we nap for?

Anything between 30-60 minutes have been researched to be beneficial. The more common time has been 20-30 minutes, but as with nutrition, its individual. Experiment and play with it, do what is best for yourself.

Sleep Hygiene tips:-

- 1) **Regular sleep patterns-** Helps with waking up and going to bed. Seems simple, but practice it. As the sun goes down our body secretes melatonin, the sleep hormone, so when we are on our devices, we prevent this from happening.
- 2) **Put the devices down!** As mentioned above, get the melatonin flowing. It doesn't need to be long before, only 1 hour will help improve your sleep. Ideally 2, but thats asking a lot.
- 3) **Bedtime Routine-** Develop a routine that helps ease anxiety. Personally, taking a note pad and pen helps me, as when I have a light bulb moment I can jot it down and continue it in the morning. Read a book too- helps you to relax and then sleep.
- 4) **Good Sleep Environment-** An ideal temperature is anything between 17-21 degrees celsius. Keep the room clean and tidy.
- 5) **Sex or Sleep-** Use the bed for these reasons and your in for a win. If you are struggling to sleep then maybe go downstairs and read. Then when you feel tired go back up and try again.

Nutrition and Sleep

Casein Protein is a slow release protein. If you supplement this before bed it prevents becoming "catabolic" (which means breakdown) in the night and helps provide the body with the nutrients you need to repair and recover in the evening.

The Casein protein has a variety of slow release proteins ranging between 8-12 hours. If you sleep for more than 8 hours, I recommend a higher slower rate of protein. If you sleep for 8, 8 will be enough.

If you use this with "bed time" it will help with the routine of bed time too.

Chapter Number 07 Other Information NEAT- Non Exercise Activity Thermogenesis

This is just an awareness piece.

As you are aware being limited to going outside and not being able to be as active as previously, there is a chance of decreasing of activity and also consuming more calories through boredom and there for putting on weight.

NEAT is the daily activities that you typically do when not in lock down. Although you are still training, you may not be as active as you usually are, for example, walking around town or taking the kids out somewhere. There fore just be mindful of what you are consuming on a daily scale.

Why is it important? What you do on a daily basis determines your calorie deficit. A recent study performed on 34 postmenopausal women found that, when a structured exercise programme was in place, some participants daily calorie expenditure had actually DECREASED. Sometimes this was found on the days of exercise or the day after exercise.



The take home from this is to sustain your daily activities (or increase them a little) even though you redoing your sessions. Its about the deficit over a 24 hour period and eventually the course of a week.

Just something to consider.

Chapter Number 08 What Do I Need to Consume?

Weight	Protein Daily		Protein Post Match/ Training		Carbs Daily		Carbs Post Match/ High Intensity		Fa	ıts
	Min (1.4g/kg/ Day)	Max (2.0g/ Kg/Day)	Min (0.25/ Kg/Day)	Max (0.55/ Kg/Day)	Min (5g/Kg/ Day)	Max (10g/ Kg/Day)	Min	Мах	Min	Max
65	91	130	16.25	35.75	325	650	65	78	260	455
70	98	140	17.5	38.5	350	700	70	84	280	490
75	105	150	18.75	41.25	375	750	75	90	300	525
80	112	160	20	44	400	800	80	96	320	560
85	119	170	21.25	46.75	425	850	85	102	340	595
90	126	180	22.5	49.5	450	900	90	108	360	630
95	133	190	23.75	52.25	475	950	95	114	380	665
100	140	200	25	55	500	1000	100	120	400	700
105	147	210	26.25	57.75	525	1050	105	126	420	735
110	154	220	27.5	60.5	550	1100	110	132	440	770
115	161	230	28.75	63.25	575	1150	115	138	460	805
120	168	240	30	66	600	1200	120	144	480	840

Weight and Intake Values