

THE LYON PROTOCOL



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Intro

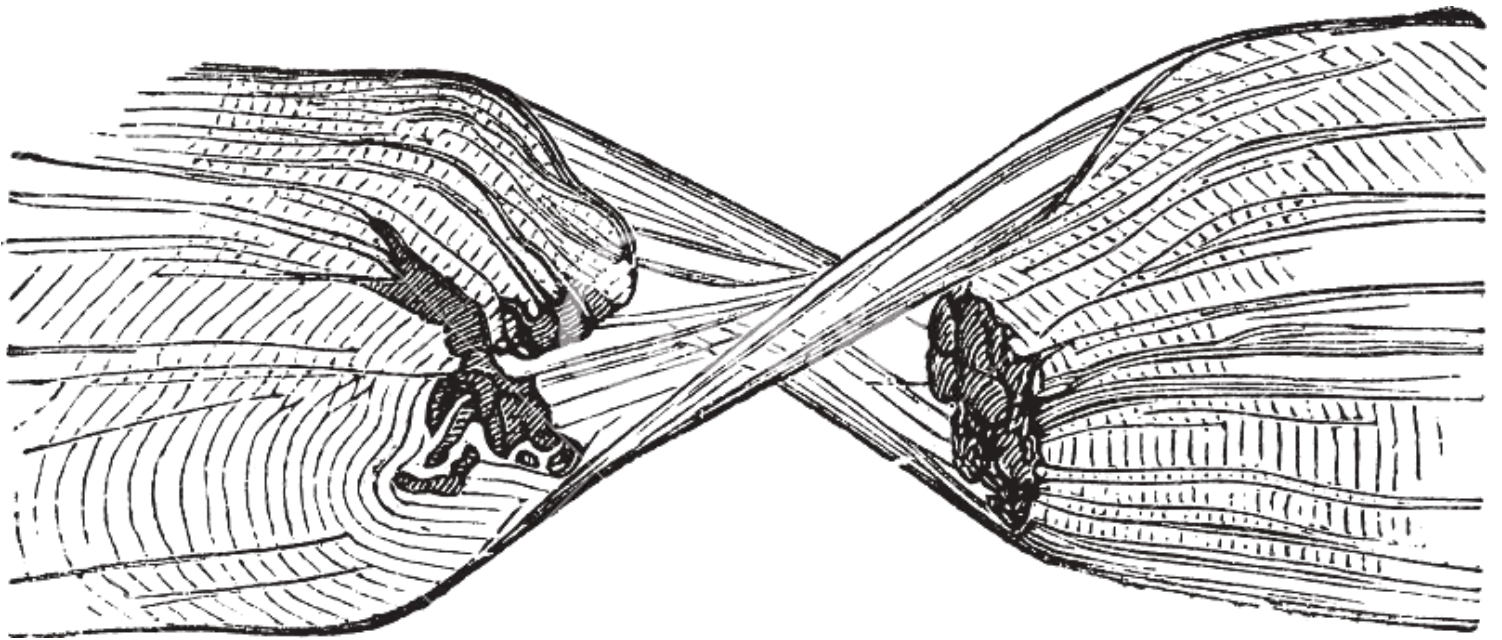
Congratulations on your choice to take part in resetting your metabolism, lowering whole body inflammation and balancing your blood sugar. This is a 4 week core nutrition reset. Within the next 4 weeks, you'll learn how to get the proper balance of: protein, carbohydrates and fats-- you should start to feel remarkably better. This core nutrition reset is structured around high quality protein.

Each person is unique and will require a different balance of macronutrients for optimal health. And this can change throughout one's life. There are general guidelines included here for both men and women which is to be used as a starting place and should be helpful for most people. Always listen to your body, keep track of how you feel in a journal and take it from there. Use this as a learning tool and a template to get started.

Guiding Principles

1. Muscle is the organ of longevity. The stronger and healthier your muscle is, the more carbohydrates and fat your body burns.
2. Protein is responsible for nearly all of the work that is carried out in every cell. It is also needed for the structure, function, and regulation of all tissues and organs - especially muscle.
3. High quality protein split evenly at each meal (3x a day) is the goal to achieve Muscle Protein Synthesis.





Muscle: The Organ of Longevity

LESSON #1

It's a common misconception that skin is the largest organ in the body, however muscle actually is. The stronger and healthier your muscle is, the more carbohydrates and fat your body burns, keeping your body in balance. For example, if you have high blood sugar or high cholesterol, the more muscle that you have, the more capacity your body has to naturally lower blood sugar and cholesterol.

This does not mean you need to become a bodybuilder! What it means is your body fat percentage to lean muscle mass is something to be mindful of and should be just as important as your waist size or weight (if not more so) when you're keeping track and optimizing your body. Each time you lose weight through crash dieting and over exercise, you lose muscle-- which we know is the most metabolically active tissue. Years of unsustainable yo-yo dieting results in more body fat, less muscle and slower metabolism.

Muscle activation is key, once you meet muscle requirements for amino acids, the rest will follow.



The Power of Protein

LESSON #2

There are 3 macronutrients that make up food that the body can break down into energy or use as building material: Carbohydrates, Proteins and Fats. Proteins are complex structures made up of amino acids. Amino acids can be essential (must be obtained from the diet), nonessential (the body produces these naturally) or conditionally essential (needed in times of stress or illness).

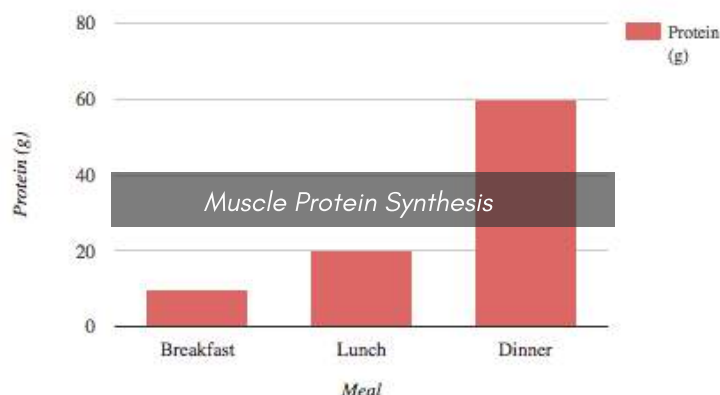
Protein is responsible for nearly all of the work that is carried out in every cell. It is also needed for the structure, function, and regulation of all tissues and organs. Dietary protein influences cell signaling, satiety, thermogenesis, and blood sugar regulation.

Each of these roles is initiated by an increase in blood levels of amino acids. And most importantly, it is the key nutrient to feed and repair your muscle, which is largely responsible for maintaining a healthy metabolism, as well as optimal body composition.

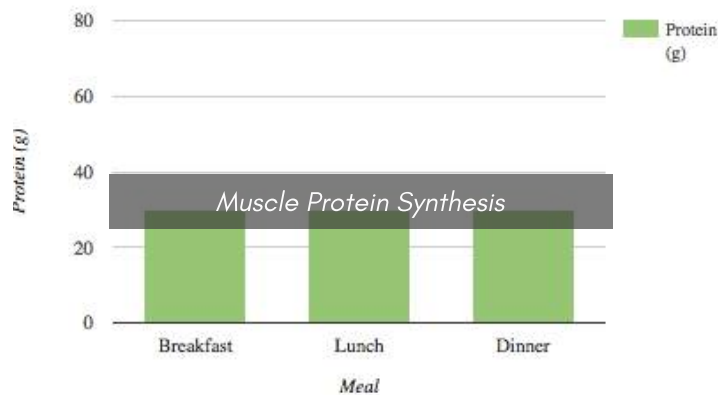
Key Roles Include:

- Immunity: antibodies are made up of specific protein structures which protect against potentially harmful substances, such as viruses and bacteria.
- Enzymes: without enzymes, the body and its cells would be unable to carry out the thousands of crucial reactions involved in vital processes like metabolism and DNA repair.
- Hormones: made up of binding proteins. Examples are thyroid hormone-- vital for blood sugar regulation and growth hormone.
- Repair: amino acids and protein structures work to repair damaged cells and build new ones when the damage is irreversible.
- Detoxification: the body needs adequate amounts of protein to carry out detoxification pathways. When 'detoxing' or 'cleansing', proteins provide critical support and should be included. One of the key detoxifiers, is glutathione which is made from protein.
- Neurotransmitters; Many of the mood affecting neurotransmitters such as tryptophan which is the precursor for serotonin.

Unbalanced Protein Distribution



Balanced Protein Distribution



Balance

LESSON #3

What the left (red) graph represents is the Standard American Diet (SAD) eating pattern which is low protein at breakfast and lunch, and a large protein dinner. When you eat in this manner, your blood levels of amino acids remain sub-optimal and never reach the threshold necessary to stimulate muscle protein synthesis. In addition, when protein is low, carbs and fats are likely unbalanced, causing your body to store fat and your blood sugar to be negatively affected.

The right (green) graph is the style in which this protocol is designed: for optimal muscle health and metabolism support with even splits throughout the day. Getting at least 30g of protein, 3 times a day at each meal for a total of 90g/day is the minimum amount of protein recommended for muscle protein synthesis.

Putting It All Together



As you've just learned: The key to a healthy metabolism is getting the correct amount of protein at each meal with a proper balance of macronutrients, evenly distributed throughout the day. In order to do this, the body requires a certain amount of protein. This is typically a little bit larger than the palm of your hand. By ensuring you get the quality and quantity right, you maximize your muscle health, thus increasing your longevity and supporting your body's systems. Follow this protocol for 1-month as a reset and transition to a healthier and more vibrant lifestyle.



General Guidelines

- General rule of thumb for total daily macronutrient intake: 40:30:30. 40% Carbs (starch carbs in small amounts), 30% Protein (minimum of 30g 3x/day), and up to 30% Fat. Tweak as needed while monitoring digestion.

- Each meal should be approx. 4-6 oz. protein.
- All meals can have 'smart' carbs. Lunch and dinner have 'smart' and 'starch' carbs listed below.
- Quality is important: grass-fed beef, free-range organic poultry.
- Protein shakes work well for a quick breakfast.
- Use oil and Apple Cider Vinegar on veggies and as a salad dressing.
- Avoid all processed food, hydrogenated oils and fried foods, refined sugar, sauces, alcohol and gluten.

Macronutrient Recommendations

As a base, start with the: **40:30:30 Rule**

40% Carbohydrates
30% Protein
30% Fat

of total daily calories

MACRONUTRIENT CALORIES PER GRAM

Protein = 4 calories per gram
Carbohydrates = 4 calories per gram
Fat = 9 calories per gram

Example: To follow the 40:30:30 template for 2,000 calories per day, the breakout is:

$2,000 \times .40 / 4$ (carbohydrates) = up to 200g carbs per day
 $2,000 \times .30 / 4$ (protein) = up to 150g protein per day
 $2,000 \times .30 / 9$ (fat) = up to 150g fat per day

MEN

Target: approx. 2,100 calories/day

Carbohydrates: 210g
Protein: 157g
Fat: 70g

WOMEN

Target: approx. 1,600 calories/day

Carbohydrates: 160g
Protein: 120g
Fat: 53g

*Examples provided are averages used by gender, confirm the amount of daily calories you need to reach your specific goals and use the 40:30:30 rule accordingly. Remember that starch carbs should be in small amounts, approx. 15% of the 40% carb intake. Stop eating when almost full.

**For easy tracking: Download MyFitnessPal App (iPhone & Android) where you can enter these ratios and track a daily diary.

Food List

PROTEIN

Approx. 30% of total daily calories – at least 30g at each meal

- **Eggs** (pastured + organic is best)
- **Poultry**: Chicken, Turkey, Duck, Quail, Pheasant (pastured + organic is best)
- **Ruminants**: Beef, Buffalo, Lamb, Elk, Venison, etc. (grass-fed + organic is best)
- **Other Meats**: Wild Boar, Ostrich, etc. (wild hunted is best)
- **Fish, Seafood & Shellfish** (wild caught + sustainably finished is best)
- **Pork** (100% pastured + organic is best)

FATS

Approx. 30% of total daily calories

Best: Monounsaturated (MUFA)

Avocado
Avocado Oil (cold-pressed)
Hazelnuts/Filberts
Macadamia Nuts/Butter
Olives
Extra Virgin Olive Oil
(cold-pressed)

Best: Saturated (SFA)

- **Animal Fats**
- **Clarified Butter/Ghee**
- **Coconut Oil**
- **MCT Oil**
- **Coconut Butter**
- **Coconut Flakes**
(unsweetened)
- **Coconut Milk**
(canned)

Occasional: Polyunsaturated (PUFA)

- **Almonds/Almond Butter**
- Brazil Nuts
- Cashews/Cashew Butter
- **Pecans**
- Pistachios

Nuts are best soaked/sprouted

Green = Low FODMAP (remember quantities matter for low FODMAP carbs)

Food List

CARBOHYDRATES – NON STARCH ('SMART')

Approx. 40% of total daily calories

- All Sprouts
- Artichoke
- Asparagus
- Broccoli
- Celery
- Ginger
- All Leafy Greens
- All Lettuce
- Cucumber
- Brussels Sprouts
- Onions
- Garlic
- Red/Yellow/Orange Peppers*
- Mushrooms
- Radish
- Tomatoes*
- Cabbage
- Cauliflower
- Zucchini

CARBOHYDRATES – STARCH

Keep to Lunch & Dinner in small amounts

- Winter Squash
- Beets
- Parsnips
- Potato*
- Sweet Potato
- Turnips
- Carrots
- Beans (Adzuki, Black, Cannellini, Garbanzo, Great Northern, Kidney, Pinto, Lentils)
- Hummus (2 Tbsp)
- Low Sugar Fruit (Honeydew Melon, Cantaloupe, Kiwi, Grapes, Pineapple, Lemon, Lime)
- All Berries
- Brown Rice**
- Quinoa**
- Oats**
- Buckwheat**

*Nightshade

**Gluten-free grains if tolerating - best if sprouted

Green = Low FODMAP (remember quantities matter for low FODMAP carbs)

Serving References

FOOD *	PROTEIN	SERVING SIZE	TOTAL PROTEIN
Chicken Breast	7g	4 oz	30g
Ground Beef	8.25g	4 oz	33g
Ground Turkey	7g	4 oz	30g
Ground Bison/Buffalo	7g	4 oz	29g
Lamb	7g	4 oz	28g
Pork	7g	4 oz	31g
Salmon	5.6g	5.5 oz	30g
Shrimp	6.8g	4.5 oz	31g
Halibut	4g	7 oz	28g
Scallops	5.6g	5 oz	28g

*after cooked**

Your hands are unique to you - use this visual as a tool when building your plate.

1 Palm



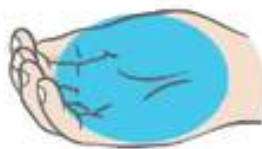
A serving of **Protein**

1 Fist



A serving
of **Vegetables**

1 Cupped Hand



A serving
of all other **Carbs**

1 Thumb



A serving of **Fats**

*Rule of thumb:

Meat is usually around 4-6 oz. to reach the minimum of 30g protein

Fish/Seafood can be up to 7 oz.

**Print this out and place on your refrigerator for easy reference!

Helpful Tools

HOME COOKING & TRACKING

- Buy a Food Scale (to weigh your protein, once you get the hang of this you won't need it as much!); refer to the Serving Size Hand visuals too!
- Tupperware (glass or BPA-free) to pack lunches with and meal prep.
- Slicer/Mandolin (optional but very useful for slicing veggies)
- For easy tracking: Download MyFitnessPal App (iPhone & Android) where you can enter these ratios and track a daily diary.

FOOD SHOPPING

- Whole Foods
- Trader Joe's
- Organic Markets
- Local Farmers Markets
- Online: ThriveMarket.com (Wholesale Prices)
- Online: VitalChoice.com (Wild Seafood)
- Online: Amazon.com

MEAL SERVICES (NYC AREA)

Home cooking is always preferred so you can control the ingredients and portions. If cooking isn't possible, there are a number of meal services that may be helpful. Specify you are looking for Paleo options with high protein and provide them with the details of your plate composition.

- KettlebellKitchen.com (Delivery Service)
- TerrasKitchen.com (Ingredients delivered with recipe cards)
- FoodMattersNYC.com (Delivery Service)
- EliteLifestyleCuisine.com (New Jersey)
- GetEpicured.com (Delivery service including Low FODMAP options)

Tips & Advice

- **Commitment:** Physical change is the last to show. We must first lay the foundation in your mind, set up a winning mentality. It is time to build mental muscle. Discipline, determination and program execution are the key to your success. When your human biology entices you to stray, which it will, consistency and grit are required. This is a protocol based program, it will give you skills to navigate your life for long term success. Listen to your body, but do not be distracted by external issues leading you to stray. Nutrition, labs, supplements and exercise are all key components of this book, but by far the most important organ we need to target first is the one between your ears. The brain.
- **Set your intentions daily:** What is your "why" for doing this? Are you sick of being a victim of every fad diet, do you want to thrive in a healthy body? Do you have an eating disorder that you don't have a handle on, are you sick, have poor recovery or have you watched your loved ones become demented? Really become invested in your reasons and convictions. Every day you remind and recommit to this purpose. The knowledge you will gain here will be far more valuable than nutrition, you will learn how to commit for the long run in yourself.
- **Stay active by walking, stretching, doing yoga, etc.** If you're strapped for time, get creative and get off a stop early on the subway to walk extra... or set-up walking meetings throughout the day. We were not meant to live sedentary lives or to sit at a desk all day long, we were meant to move, so move! This will keep your digestion flowing, your mind running and your body functioning optimally.
- **Exercise regularly, mixing stretching/yoga with resistance training.** Do not burn out with excessive cardio as that will make you hungrier and your body stressed.
- **Meditate as often as you are comfortable with.** Taking just 5-10 minutes a day, repeating positive affirmations to yourself and breathing helps you to have less external over-stimulation and instead focus inward to listen to yourself and to positively uplift yourself to keep going. Try a visualization of how you want to feel and be seen with your new lifestyle. How do you look? Who are you with? What are you doing? Visualize it and it can happen.

Tips & Advice

- Try not to time this protocol right before a major event in an attempt to drop a ton of weight only to binge and crash later... I know it can be tempting. If it so happens to fall that way, that's one thing - but do yourself a favor and view this as a milestone along the journey of adopting/deepening a healthier lifestyle. While it's temporary in the sense of it being a 4-week reset, it's going to open new doors for you on the road of health and wellness.
- Have breakfast within 90 minutes of waking to normalize blood sugar, support healthy adrenals and set yourself up for success each day.
- Only snack if you need it and only after drinking water. Safe snacks are listed with the meal plan, and remember to start by drinking water first to ensure you're not just thirsty! Snacking can sometimes impede our digestion as you need 4 hours between meals to fully digest and for those with leaky gut or slow digestion, you'll need the time to recover.
- Give your body at least 12 hours to digest overnight and stop eating at least 3 hours before bed in order to fully process everything, this rest is crucial for your liver.
- STOP eating when you're almost full.
- NO Alcohol during the rest, and greatly minimize or remove caffeine. These are both taxing on the liver and disrupt digestion and hormones. You may re-introduce at a later time, but give your body the break it deserves. If you find it a struggle to remove caffeine completely, try a decaf coffee (Swiss method), Matcha tea, or green tea (which both have more focused energy boosts as opposed to jittery and do not disrupt digestion the way coffee does). There are also great herbal teas you can use instead which have no caffeine at all.



Recipes

HIGH PROTEIN BREAKFASTS

Wild Smoked Salmon & Bacon Salad

- 1 serving Wild Smoked Salmon (lox)
- 2 slices bacon (no sugar or nitrates)
- Handful mixed greens/lettuce
- Slices of cucumber
- Apple cider vinegar & extra virgin olive oil
- Sea salt & pepper to taste

Cook bacon in oven (400f degrees for approx. 15-20 mins until crispy). Blot excess oil from bacon and crush into bits, set aside. Mix salad with thin slices of cucumber and a serving of olive oil mixed with 1/2-1 tsp of ACV. Sprinkle sea salt and pepper to taste. Top with slices of wild salmon. Lastly, top with bacon bits and mix - serve immediately.

*can also be made in bulk, simply multiply the meat, lemon and thyme ratios)

Lemon-Thyme Breakfast Sausages* & Kale

- 1 serving ground turkey
- Zest from 1 lemon
- Few sprigs of fresh thyme
- 1 tsp coconut oil
- Handful chopped kale
- 1 tsp extra virgin olive oil
- Sea salt & pepper to taste

To a mixing bowl, add ground meat, zest, thyme and salt & pepper. Mix well until well-combined. Form into small round patties. Heat a skillet with 1 tsp coconut oil and add patties, cook on both sides for 3-5 mins. each until brown. Next, add chopped kale to the pan and sauté lightly until bright green and slightly wilted. Plate the kale, squeeze a bit of lemon juice over top and serve with sausages.

HIGH PROTEIN LUNCHES & DINNERS

Grilled Cod w/ Spinach Stuffed Baby Sweet Potato

Makes 1 Serving

Ingredients:

- Serving of Cod (approx. 7 oz.)
- Handful baby spinach
- 1 baby (or small-sized) sweet potato
- 1 tsp extra virgin olive oil
- 1 garlic clove, minced
- 3 tsp coconut oil
- seasonings: salt, pepper, dried or fresh thyme

Directions:

- Pre-heat the oven to 450f degrees.
- Season the cod liberally and lightly rub the fish, set aside.
- Scrub the potato and poke a hole in it, place potato in a small casserole dish and add to the oven once heated - this should bake for approx. 30 minutes. Stick the potato to confirm when done.
- Heat a cast iron skillet with the coconut oil over medium-high, add your cod to the skillet so that it sizzles and press down with a metal spatula (especially if there is skin) so it cooks flat evenly. Cook for approx. 3-4 minutes on the first side and then add your pan to your hot oven to finish off for the last few minutes. The fish will be done with fully white and firm.
- In the meantime, sauté spinach over light heat with the olive oil for a few minutes until spinach wilts - add the minced garlic and mix in. When everything is melded together, sprinkle with sea salt and set aside to top the potato with.
- Assemble the plate by plating the fish and then your sweet potato. Slice the sweet potato and add your garlic spinach to the top. Serve and enjoy.

HIGH PROTEIN LUNCHES & DINNERS

Pesto Zoodles w/ Shrimp

Makes 2 Servings

Ingredients:

- 10-14 oz. fresh or frozen (and thawed) wild-caught shrimp
- handful of fresh organic basil leaves (stems removed)
- 2 cups fresh organic baby spinach
- 1 garlic clove, minced
- juice from ½ lemon
- lemon zest from 1 lemon
- ¼ cup extra virgin olive oil
- 2 medium-large zucchinis (or 2-3 cups pre-bought "zoodles")
- 2 tsp coconut oil or spritzes of coconut oil spray (may also use avocado oil)
- seasonings: sea salt, pepper, paprika
- (optional): nutritional yeast (in place of parmesan for pesto)
- garnish with the remaining lemon half and extra baby spinach

Directions:

1. Peel and de-vein the shrimp, add to a bowl with a sprinkle of: sea salt, pepper, paprika and the lemon zest. Mix well so shrimp is well-covered and set aside.
2. Using a spiralizer, chop both ends of zucchinis and spiral into spaghetti shape. Set aside into a mixing bowl.
3. Make the pesto by combining: spinach, basil, salt, pepper, lemon juice, minced garlic, nutritional yeast if using – in a food processor. Slowly add the extra virgin olive oil until desired consistency is reached (it should be loose enough to toss your zoodles with), taste and adjust seasonings to your liking.
4. Add 2 Tbsp of your pesto to the mixing bowl of zoodles and toss well, covering with the pesto. Add more pesto if needed and save the leftovers for use during the week!
5. Now, grill your shrimp: heat a cast iron skillet/grill pan over medium-high and add coconut oil if needed just enough to coat so the shrimp doesn't stick.
6. Once pan is heated after a few minutes, throw all the shrimp on there – allow it to cook for 2 minutes on each side until you like the color on each side (do not overcook or they'll become chewy!)
7. Plate the zoodles with any extra spinach and lemon slices and lastly top off with your shrimp. Serve 1 plate and save the other for leftovers.

HIGH PROTEIN LUNCHES & DINNERS

Spiced Salmon w/ Roasted Broccoli

Makes 1 Serving

Ingredients:

- 1 serving of wild salmon fillet with skin (approx. 7 oz.)
- 2 tsp + 1tsp coconut oil, divided
- 1 cup of fresh broccoli florets
- 2 tsp apple cider vinegar
- 1 tsp extra virgin olive oil
- 1 carrot, grated
- seasonings: salt, pepper, garlic powder, yellow curry powder, ground cinnamon

Directions:

- Pre-heat oven to 400f degrees. Line a lipped baking sheet with parchment paper.
- Use 1 tsp coconut oil to toss broccoli florets with and coat. Spread broccoli across baking sheet in a single layer and sprinkle salt and pepper.
- Bake for approx. 20-30 minutes until cooked.
- Meanwhile, make your salmon: use all seasonings by sprinkling each over your salmon and rub in with your fingers.
- To a heated cast iron skillet, add 2 tsp coconut oil just to coat. When hot, add the salmon fillet skin side down and press down slightly so it's flat on the pan. Depending on the thickness of the fillet, you'll want to cook it on the stove top for approx. 5-6 minutes or so. Then add your skillet carefully to the oven to finish off cooking for another 4 minutes or so until cooked to desired amount.
- When broccoli is finished, add to a mixing bowl. Pour apple cider vinegar, olive oil, grated carrot and sea salt over top. Mix well and serve with salmon.

HIGH PROTEIN LUNCHES & DINNERS

Turkey Burger w/ Lettuce Wrap & Simple Guacamole

Makes 2 Servings

Ingredients:

- 2 servings of ground turkey (approx. 10oz), divided into burgers
- 1 garlic clove, minced
- 4 leaves of Boston lettuce (or similar)
- 1 avocado, diced
- 1 tomato, diced
- 1 red onion, diced small
- handful of fresh cilantro leaves, finely chopped
- juice from 1/2 lime
- 2 tsp coconut oil
- seasonings: salt, pepper, dried oregano

Directions:

- Mix ground turkey well with minced garlic and all seasonings. Apply the oregano liberally as you'll want the meat to be more flavorful! Divide into burgers for 2 servings and set aside.
- Prepare your plate with the lettuce to act as wraps or buns for the burgers.
- Make your guac by combining: diced avocado, tomato, red onion, cilantro and lime juice. Mash with a fork and spoon or leave chunky and set aside.
- Heat a cast iron skillet with coconut oil over medium heat and add the burgers when hot. Cook on the first side (and you might lightly cover with a lid half-way if splattering), for 5 minutes or so depending on the thickness of your burgers.
- Flip and finish cooking for approx. 3-4mins. A lid will help to ensure the middle of the burger is fully cooked since this is poultry. You can cut one open to be sure, make sure nothing the meat is white in the middle.
- Top the lettuce wraps with burger(s) and add your guacamole on top. Add any other veggie garnishes like cucumbers or radishes and serve! Save your 2nd serving for lunch.

HIGH PROTEIN LUNCHES & DINNERS

Grilled Chicken Breast w/ Baked Carrot Fries & Salad

Makes 2 Servings

Ingredients:

- 2 chicken breasts (butterflied preferred for a quicker cooking time)
- 2 tsp ghee or coconut oil
- 2 large carrots, sliced matchstick size
- 2 handfulls lettuce, roughly chopped
- handful of sliced and peeled cucumbers
- 1-2 radishes, sliced
- 1-2 tsp coconut oil (liquid for roasting carrots)
- 1-2 tsp extra virgin olive oil
- 1 tsp apple cider vinegar
- sea salt and pepper to taste

Directions:

- Pre-heat oven to 400f degrees.
- Season cleaned chicken breasts with salt and pepper, set aside.
- Toss chopped carrots with coconut oil, salt and pepper and lay over a parchment lined baking sheet in a single layer. Bake for approx. 30 minutes until cooked.
- Heat a skillet with ghee or coconut oil, add chicken breasts. Cook on each side for a few minutes until golden brown and cooked thoroughly (can use a cover to quicken the process, especially if breast is thick and not butterflied).
- Assemble your salad with the lettuce, radishes, olive oil, vinegar and cucumbers. Toss well to combine.
- Plate your dish with chicken, carrot fries and salad when all ready! Serve the 2nd plate or save for leftovers.

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