**First Name**

**Last Name**

**Areas of Health:**

Nutrition-

Exercise-

Movement-

Sleep-

Stress Management-

Environment-

Habits/Mindset-

**Block 1/Month 1:**

Understand the concepts (EDUCATION)

Know how to implement them

Evaluate as we go along

NEW => FAMILIAR => ROUTINE => UNCONSCIOUS

Assess and Integrate-

Physical/Labs

DEXA- *Scheduled*

BP/Resting HR

**TRACKING (\*We can track any metric you would like to keep tabs on\*)**

Nutrition

*Calories (via app)*

*Protein/Macros (via app)*

Fluids

Exercise-

Fitness Tests/Benchmarks (can select these and be strategic about it)

Movement- Steps per day/miles per day/time spent moving per day

**Energy calculations**

***How much to eat***

***When to eat***

***What to eat***

**Macros**

**Micros**

**Meal strategies**

**Gut microbiome/Immunity**

**Testosterone**

**Supplementation**

**Hormone/Glucose control**

**Hydration + Electrolytes**

**Nutrition**

**Your calculations:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ENERGY EXPENDITURE, how much to eat | |  | | |
|  |  |  | | |
| Age | 49 |  | | |
| Height | 71 |  | | |
| Weight | 220 | 100kg | | |
| Activity Level | 1.55 |  | | |
| RMR | 2000 |  | | |
| Estimated TDEE | 3112 |  | | |
| MACRO BREAKDOWN | | |  |  | |  |

• Month 1 – Get used to working on (in general) 1) What to eat 2) When to eat/frequency 3) How much to eat

• Month 2 – Use data/insights either from the past month or from assessments to continue to individualize recommendations, slight increase in the caloric deficit

• Month 3 – Adjust as needed

**Macro Ranges for Fat Loss**

**CHO- 1-3g/kg**

**PRO- 1.8-2.5g/kg**

**FAT- 0.5-1.0g/kg**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 25% deficit |  |  |  |
| Kcal Goal | 2334 |  | g/kg CHO |  |
|  |  | Grams | kcals |  |
|  | CHO | 200 | 800 | 2g/kg |
|  | PRO | 220 | 880 | 2.2 g/kg |
|  | FAT | 73 | 654 | 0.72g/kg |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | Maintenance |  |  |  |
| Kcal Goal | 3112 |  | g/kg CHO |  |
|  |  | Grams | kcals |  |
|  | CHO | 325 | 1300 |  |
|  | PRO | 220 | 880 |  |
|  | FAT | 95 | 855 |  |

**Metabolism/Total Daily Energy Expenditure**

**TDEE = RMR + [PA + NEAT] + TEF**

**RMR- Resting Metabolic Rate**

* **How many calories your body needs to sustain itself at rest**
* **Contributes the most to TDEE**
* **Generally, accounts for ~60%**
* **There are a few different ways to calculate RMR/BMR**

**Total Activity**

* **Includes Planned Activity/Exercise (PA)**
  + **Lifting/conditioning/sports**
  + **Contributes ~10-20% of TDEE**
* **Also includes Non-Exercise Activity Thermogenesis (NEAT)**
  + **Daily walking/movement**
  + **Contributes ~20% of TDEE**

**Thermic Effect of Food**

* **The energy it takes to digest the food you eat**
  + **Contributes ~10% of TDEE**

**Metabolism 101**

To lose body fat/weight you NEED to be in a caloric deficit (eat less calories than you expend)

Being in a caloric deficit increases muscle protein breakdown

* The way to keep/maintain/gain muscle mass is to eat at least 1.8g/kg of protein per day and to **resistance train** 3-4x/week, there’s no other way, lifting is KEY

Following good chrono-nutrition is what the body likes and thrives on/is most efficient with

* Eating around the same time each day and the same number of meals/feedings is what the body likes (consistency and efficiency)
* Protein has the highest TEF of all the macros, then fiber

**When to eat**

For glucose control improvements and for muscle/strength gain, following more of a time-restricted eating pattern and doing it earlier in the day is ideal/optimal vs just waiting to eat and doing an intermittent fast from noon onward (12-8)

Giving yourself a 10-12 hour feeding window is ideal for health and body composition improvements (aka eat when the sun is up and finish when the sun goes down)

Eating a good amount of protein in the morning window is ideal for muscle/strength gains (there are clock genes active in the body early in the day that

A table with text and numbers

Description automatically generated**How Much To Eat:**

**Example Day (Ideal):**

**8AM**

**Meal 1 Breakfast (825 kcals)**

**CHO- 80g (320 kcals)**

**PRO- 70g (280 kcals)**

**Fat- 25g (225 kcals)**

* Protein- 2 whole eggs + 4 egg whites, + 4-6oz lean ground beef/turkey
* Carb- 1 cup oatmeal + 1 banana + 1 TBSP 100% Raw Natural Honey
* Healthy fat- egg yolks, fat from the meat, 1 TBSP Nut Butter or 1 oz dark chocolate/1 TBSP cacao nibs
* Fluid-
* Other- 1 cup kefir (low fat, unsweetened)
* Supplements- creatine, vitamin d, vitamin k2, magnesium, fish oil

In-between Meals FLUID- 16-32oz

**12PM**

**Meal 2 Lunch (727 kcals)**

**CHO- 60g (240 kcals)**

**PRO- 70g (280 kcals)**

**Fat- 23g (207 kcals)**

* Protein- 6-7oz of lean meat (grilled or baked or air fried) + 1 cup of 0% Greek Yogurt
* Carb-1 cup of rice/quinoa + 1 cup of blueberries
* Veg- (2 servings) leafy greens or multi-colors
* Healthy fat- 1 TBSP EVOO, ¼ avocado
* Fluid- WATER before or after
* Other- 1 serving kimchi/sauerkraut (fermented or pickled veg/food)
* Supplements- multivitamin, magnesium

In-between Meals FLUID- 16-32oz

**­­­­6PM**

**Meal 3 Dinner (745 kcals)**

**CHO- 60g (240 kcals)**

**PRO- 70g (280 kcals)**

**Fat- 25g (225 kcals)**

* Protein- ~9-10oz of lean meat (grilled or baked or air fried)
* Carb-1 large sweet potato
* Veg- (2 servings) multi-colors or leafy greens
* Healthy fat- 1 TBSP EVOO (fat from meat counts too)
* Fluid- WATER before or after (if after limit how much you drink)
* Other- 1 serving kimchi/sauerkraut (fermented or pickled veg/food)

A table with text and numbers

Description automatically generated**How Much To Eat:**

**Example Day (Sufficient):**

**8AM**

**Meal 1 Breakfast (825 kcals)**

**CHO- 80g (320 kcals)**

**PRO- 70g (280 kcals)**

**Fat- 25g (225 kcals)**

* Protein- 3 servings protein
* Carb- 3 servings complex carbs
* Healthy fat- 2 TBSP Nut Butter and/or 1 oz dark chocolate
* Fluid-
* Other- 1 cup kefir
* Supplements- creatine, vitamin d, vitamin k2, magnesium, fish oil

In-between Meals FLUID- 16-32oz

**12PM**

**Meal 2 Lunch (727 kcals)**

**CHO- 60g (240 kcals)**

**PRO- 70g (280 kcals)**

**Fat- 23g (207 kcals)**

* Protein- 3 servings protein
* Carb- 2 servings complex carbs
* Veg- 2 servings vegetables
* Healthy fat- 2 servings healthy fat
* Fluid- WATER before or after
* Other- 1 serving kimchi/sauerkraut (fermented or pickled veg/food)
* Supplements- multivitamin

In-between Meals FLUID- 16-32oz

**­­6PM**

**Meal 3 Dinner (745 kcals)**

**CHO- 60g (240 kcals)**

**PRO- 70g (280 kcals)**

**Fat- 25g (225 kcals)**

* Protein- 3 servings protein
* Carb- 2 servings complex carbs
* Veg- 2 servings vegetables
* Healthy fat- 2 servings healthy fat
* Fluid- WATER before or after
* Other- 1 serving kimchi/sauerkraut (fermented or pickled veg/food)

**\*\*\*\*\*On non-workout days cut out a serving of carbs from breakfast and dinner\*\*\***

**How Much To Eat: Convenient/TRAVEL DAYS**

**Example day:**

**Meal 1 Breakfast**

* Protein- Whey Protein 75g
* Carb- ¼ - ½ cup quick oats, ½ - 1 serving fruit
* Healthy fat- 1-2 TBSP natural nut butter

**Meal 2 Lunch**

* Protein- Whey Protein 75g
* Carb- 1-2 pieces of fruit or 1-2 cups of fruit (berries)
* Veg- 1-2 servings of raw veggies
* Healthy fat- 2 TBSP natural nut butter or ¼ cup nuts

**­­**

**Meal 3 Dinner**

* Protein- Whey Protein 75g
* Carb- ¼ - ½ cup quick oats, ½ - 1 serving fruit
* Veg- 1-2 servings of raw veggies
* Healthy fat- 1-2 TBSP natural nut butter

**Subs**

Protein

* Greek yogurt/cottage cheese
* Tuna packet
* Roasted edamame
* Jerky meat
* Hard Boiled Eggs

Carbs

* Natural sweeteners
* Fruit bars (That’s It, Larabars)
* White rice packet/other packets

Fats

* Quality cheese
* Guac
* Hummus

Vegetables

* Raw veggies
* Pickles

**When to Eat-**

**3 feedings (3 meals)**

**Last meal will be ~3 hours before bed**

**This will happen within a ~10 hr time frame or less**

1. **Post workout Breakfast**
   1. **Protein**
   2. **Highest Carb**
2. **Mid-day Lunch**
   1. **Protein**
   2. **Vegetables**
   3. **Complex Carb**
3. **Dinner**
   1. **Protein**
   2. **Vegetables**
   3. **Complex Carb**

**\*\*If you’re still hungry at meal times eat more veggies as long as you hit your protein goals/macros\*\***

**Being hungry is OK, there will be times where you will have to just deal with it and power through**

**NO SNACKING**

**There really is NO need to snack**

**Daily goals-**

**Hit around your calorie mark**

**Hit protein mark (low end 180g)**

**Hit fiber mark (~30g/day, 12-15g per 1000 kcals consumed)**

**The rest can be split between carbs and fat**

**Food/Meal Prep Resources-**

**Metabolic Meals:**

**New order discount:**

**https://mymetabolicmeals.com/?rfsn=7868111.67f3da**

**Just Meats:**

**10% off**

**Use code- PPATEL10**

**https://www.justmeats.com/**

**What To Eat (Macros)**

**Proteins (the leaner the better for you), 4kcals/g**

**Diagram

Description automatically generated with medium confidence-Beef/Steak (grass-fed/pasture raised). 1oz cooked meat ~7g protein**

**-Eggs (pasture raised)**

**-Chicken (breast, thighs, all natural)**

**-Game meats**

**-Whey Protein**

**-Seafood (fish/shrimp/shellfish)**

**-Beans/Lentils/Dal**

**-Greek Yogurt/Cottage Cheese**

**Carbohydrates, 4kcals/g**

**-Fruit (apples, blueberries, bananas, oranges, watermelon, berries, pineapple, pomegranates, mango, cherries, kiwi, grapefruit, dates)**

**Diagram

Description automatically generated-Potatoes/sweet potatoes**

**-White rice/brown rice**

**-Beans/lentils, sprouted**

**-Oats**

**-Quinoa/ancient, fermented grains**

**-Buckwheat**

**-Fermented sourdough bread/Ezekiel**

**-Natural raw honey**

***-Vegetables (broccoli, asparagus, peppers, mushrooms, onions, carrots, green beans, cauliflower, cabbage, spinach, kale, Brussels sprouts, beets, zucchini)***

**A picture containing diagram

Description automatically generated**

**Fats (add on to meals, not the main focus), 9kcals/g**

**-Extra virgin olive oil**

**-Avocados**

**-Nuts/seeds**

**-Flax/chia**

**-Grass-fed Butter (use sparingly)**

**Diagram

Description automatically generated-Ghee**

**-Coconut oil (use sparingly)**

**-Egg yolks**

**-Cheese**

**-Dark chocolate (>70%)**

**-Fish oil (supplement)**

**-Black seed oil (supplement)**

**Sauces/Condiments**

**Salt**

**Pepper**

**Garlic Powder**

**Onion Powder**

**Rosemary**

**Thyme**

**Oregano**

**Paprika**

**Chili Powder**

**Smoked Paprika**

**Ginger**

**Cumin**

**Whole Grain Mustard/Stone Ground Mustard/Mustard**

**Buffalo Sauce**

**Marinara**

**Sugar Free Ketchup**

**Low Sugar BBQ Sauce**

**Sriracha**

**Hot Sauce**

**Balsamic Vinegar/Vinaigrette**

**50g of Protein Cheat Sheet**

***-2 scoops of 25g whey protein/protein powder***

***-2.5 scoops of 20g whey protein/protein powder***

***-6oz boneless, skinless chicken breast***

***-7oz boneless, skinless chicken thighs***

***-6oz turkey breast***

**-8 large eggs**

***-14 egg whites***

**-6.25 cups milk (any fat content)**

**-7 part-skim mozzarella string cheeses**

***-2 cups 0% Greek yogurt***

**-2.2 cups 2% Greek yogurt**

**-2.3 cups 0% cottage cheese**

**-2.1 cups 2% cottage cheese**

**-9.5oz 85/15 ground beef**

**-9oz 90/10 ground beef**

***-8.3oz 93/7 ground beef***

***-8oz sirloin steak***

***-8oz flank steak***

**-10oz ribeye**

**-14 slices of deli meat**

***-13 shrimp***

***-9oz tuna***

***-9.5oz salmon***

***-3.5 cups black beans***

**-3.125 cups edamame**

**-9.6oz tempeh**

**-20oz tofu**

**-1.3 cups chickpeas**

**-2.8 cups lentils**

**-6 cups quinoa**

**-14 TBSP peanut butter**

**-8.3oz almonds**

**Fat Content Cheat Sheet**

**1 TBSP Extra Virgin Olive Oil- 14g**

**1 TBSP Avocado Oil- 14g**

**1 TBSP Coconut Oil- 14g**

**1 Large Egg- 6g**

**1 Whole Avocado- 29g**

**1oz Flax Seeds- 12g**

**1oz Chia Seeds- 9g**

**1oz Almonds- 12g (22 pieces)**

**1oz Walnuts- 18g (14 halves)**

**1oz Pecans- 20g (20 halves)**

**1oz Peanuts- 15g (32 nuts)**

**2 TBSP Peanut Butter- 16g**

**2 TBSP Almond Butter- 19g**

**1 TBSP Ghee- 13g**

**1oz Cheddar Cheese- 9g**

**1oz Pepper Jack Cheese- 8g**

**1oz Mozzarella Cheese (Whole)- 7g**

**1oz Mozzarella Cheese (Part Skim)- 5g**

**1 TBSP Butter- 12g**

**1oz Macadamia Nuts- 21g (10-12 kernels)**

**1oz Hazelnuts- 17g (21 whole kernels)**

**1oz Brazil Nuts- 19g (6-8 kernels)**

**1oz Ground Beef (85/15)- 4g**

**1oz Ground Beef (80/20)- 6g**

**1oz Ground Beef (90/10)- 3g**

**1oz Ground Beef (96/4)- 1g**

**2oz Boneless Skinless Chicken Breast- 1g**

**1oz Boneless Skinless Chicken Thigh- 3g**

**1oz Salmon- 2g**

**1oz 86% Dark Chocolate- 19g**

**1oz 72% Dark Chocolate- 15g**

**1 cup Whole Milk- 8g**

**1 cup 2% Milk- 5g**

**1 cup 1% Milk- 1g**

**1 cup 5% (Whole) Greek Yogurt- 12g**

**1 cup 2% Greek Yogurt- 5g**

**1oz Filet Mignon- 2g**

**1oz Ribeye- 6g**

**1oz T-Bone Steak- 4g**

**1oz Flank Steak- 2g**

**1oz Porterhouse Steak- 5g**

**1oz Beef Top Sirloin- 3g**

**1oz Pork Tenderloin- 2g**

**1oz Beef Brisket- 7g**

**1oz Beef Brisket (Lean)- 3g**

**1oz Pulled Pork- 3g**

**2oz Turkey Breast- 1g**

**1oz Turkey Dark Meat- 1g**

**1oz Shrimp- 1g**

**2oz Tuna- 1g**

**1oz Cod- 1g**

**Carbohydrate Content Cheat Sheet**

**1 cup of cooked white rice- 44g**

**1 cup of cooked brown rice- 44g**

**1 cup of dry oats- 51g**

**1 cup of cooked oats- 25g**

**1 slice of whole wheat bread- 12g**

**1 slice of white bread- 13g**

**1 medium banana- 27g**

**1 large banana- 31g**

**1 medium apple- 19g**

**1 large apple- 29g**

**1 cup blueberries- 21g**

**1 cup cooked quinoa- 42g**

**1 cup potato- 25g**

**1 medium potato- 32g**

**1 large potato- 58g**

**1 cup mashed potato- 28g**

**1 medium orange- 15g**

**1 large orange- 22g**

**1 clementine- 9g**

**1 medium tangerine- 11g**

**1 large tangerine- 13g**

**1 cup cooked pasta- 43g**

**1 cup milk- 12g**

**1 cup Greek yogurt- 14g**

**1 TBSP honey- 17g**

**1 TBSP maple syrup- 13g**

**1 cup yams- 42g**

**1 cup sweet potato- 27g**

**1 cup watermelon- 11g**

**1 medium pear- 26g**

**1 large pear- 32g**

**1 cup grapes- 29g**

**1 cup cherries- 19g**

**1 cup cooked black beans- 40g**

**1 cup cooked pinto beans- 36g**

**1 cup refried beans- 48g**

**1 cup cooked lentils- 37g**

**1 cup cooked dal- 26g**

**1 cup pineapple- 20g**

**1 cup mango- 28g**

**1 pomegranate- 26g**

**1 cup buckwheat- 33g**

**1 cup orange juice- 26g**

**1 cup apple juice- 29g**

**1 cup grape juice- 38g**

**Fiber Content Cheat Sheet**

**1 cup of cooked white rice- 1g**

**1 cup of cooked brown rice- 3.5g**

**1 cup of cooked oats- 4g**

**1 slice of whole wheat bread- 1.9g**

**1 slice of white bread- 0.8g**

**1 banana- 3.1g**

**1 medium apple- 4.4g**

**1 cup blueberries- 4g**

**1 cup cooked quinoa- 5g**

**1 potato- 4g**

**1 orange- 4.4g**

**1 clementine- 1.3g**

**1 tangerine- 2g**

**1 cup cooked pasta- 3g**

**1 cup watermelon- 0.6g**

**1 cup strawberries- 3g**

**1 pear- 6g**

**1 cup grapes- 0.8g**

**1 cup cherries- 2.5g**

**1 cup cooked black beans- 15g**

**1 cup cooked pinto beans- 15g**

**1 cup of cooked navy beans- 19g**

**1 cup refried beans- 10g**

**1 cup cooked lentils- 15.6g**

**1 cup cooked chana dal- 11g**

**1 cup cooked toor dal- 24g**

**1 cup cooked yellow moong dal- 12g**

**1 cup cooked green moong dal- 16g**

**1 ounce chia seeds- 10g**

**1 ounce flax seeds- 7.7g**

**1 ounce cacao nibs- 9g**

**1 TBSP psyllium husk powder- 7g**

**1 ounce almonds- 3.5g**

**1 cup pineapple- 2.3g**

**1 cup mango- 2.6g**

**1 cup pomegranate seeds- 7g**

**3 dates- 4g**

**1 cup cooked buckwheat- 4.5g**

**1 cup cooked amaranth- 5.2g**

**1 ounce peanuts- 2.4g**

**1 ounce walnuts- 1.9g**

**1 ounce pecans- 2.7g**

**1 ounce cashews- 0.9g**

**1 ounce macadamia nuts- 2.4g**

**1 ounce pistachios- 2.9g**

**1 ounce pumpkin seeds- 5g**

**1 ounce sunflower seeds- 2g**

**1 ounce Brazil nuts- 2.1g**

**1 cup raspberries- 8g**

**1 cup blackberries- 8g**

**½ avocado- 7g**

**1 cup star fruit- 3.7g**

**1 grapefruit- 5g**

**1 kiwi- 2.1g**

**1 cup cooked broccoli- 5g**

**1 cup cooked cauliflower- 2g**

**1 cup cooked green beans- 4g**

**1 cup cooked brussels sprouts- 4.1g**

**1 cup cooked spinach- 4.3g**

**1 cup cooked kale- 2.6g**

**1 cup cooked carrots- 5g**

**1 bell pepper- 2.5g**

**1 cup cooked mushrooms- 3.4g**

**1 cup cooked cabbage- 2.9g**

**1 cup cooked asparagus- 1.8g**

**1 cup tomatoes- 2g**

**1 cup cooked peas- 7g**

**1 cup cooked chickpeas- 12.8g**

**1 cup beets- 3.8g**

**1 cup popped popcorn- 1.15g**

**1 cup coconut- 7g**

**1 ounce dark chocolate- 3g**

**The aim is to get in 12-15g of fiber per 1000 calories consumed**

**What To Eat (Micros)**

**Vitamin A- leafy greens, carrots, sweet potatoes, cod liver, beef liver**

**Vitamin D- Cod liver oil, mushrooms, supplement**

**Vitamin E- EVOO, nuts/seeds**

**Vitamin K- Eggs, beef liver**

**Vitamin C- Citrus fruits, leafy greens, peppers**

**B Vitamins- Leafy greens, meat/liver, seafood, poultry, eggs, beans, seeds**

**Vitamin B1**

**Vitamin B2**

**Vitamin B3**

**Vitamin B5**

**Vitamin B6**

**Vitamin B9**

**Vitamin B12**

**Sodium- Salt**

**Potassium- Potatoes, citrus fruits, avocados**

**Magnesium- Supplement**

**Calcium- Leafy greens, fortified in nut milk, dairy**

**Iron- Red meat, meat**

**Zinc- Seafood/shellfish, red meat, supplement**

**Copper- Oysters/shellfish, whole grains, beans, nuts, potatoes, and organ meats (kidneys, liver), dark leafy greens, dried fruits**

**Manganese- Nuts/seeds**

**Selenium- Nuts/seeds**

**Iodine- Seafood, salt**

**Biotin-**

**Boron-**

**Choline-**

**Recipes**

**Baked Chicken-**

**2 Pounds of boneless skinless chicken breasts**

**1 TBSP EVOO**

**Salt**

**Pepper**

**Garlic Powder**

**Smoked Paprika**

**Directions**

**Preheat oven to 375F**

**Brush chicken with EVOO**

**Season accordingly**

**Bake at 375F for ~20 mins**

**Meatballs-**

**2 pounds of 93/7 ground beef**

**1 white onion or ½ white onion**

**½ packaged mushrooms/sliced mushrooms**

**½ cup quick oats**

**1 egg**

**Salt**

**Pepper**

**Garlic Powder**

**Red Pepper flakes**

**Oregano**

**Sriracha**

**Directions**

**Preheat oven to 425 F**

**Dice the onions and chop them as finely as you would like**

**Do the same with the mushrooms**

**In a large mixing bowl put**

**Onions**

**Mushrooms**

**Oats**

**Eggs**

**Add ground beef**

**Season beef to your liking with the seasoning**

**Add in a splash of sriracha**

**Mix together thoroughly**

**Spray a large hotel sheet with EVOO cooking spray**

**Shape meatballs to 2oz and place on hotel sheet, should make 16 meatballs**

**Bake for 17-18 mins**

**Sauces you can add to-**

**Buffalo**

**Marinara**

**Sriracha**

**Roasted Sweet Potatoes-**

**2 pounds of sweet potatoes**

**EVOO**

**Salt**

**Pepper**

**Garlic Powder**

**Directions-**

**Preheat oven to 425F**

**Wash and peel each sweet potato**

**Dice them into 1” cubes and place in mixing bowl**

**Season with EVOO 1-2 TBSP and seasonings and mix together**

**Spread potatoes out evenly on a baking sheet**

**Bake at 425F for 30 mins, turn 15 mins in**

**Oven Baked Salmon-**

**Salmon filets (skin on) 6-8oz each**

**EVOO**

**Salt**

**Garlic Powder**

**[Italian Seasoning Blend]**

**Medium Lemon**

**Directions**

**Preheat oven to 400F**

**Stir together seasonings and lemon juice and spoon mixture over filets**

**Bake salmon filets at 400F for 12-15 mins**

**Seasoned Ground Beef-**

**Ingredients**

**2 pounds of 93/7 ground beef**

**1 white onion**

**½ packaged mushrooms/sliced mushrooms**

**Salt**

**Pepper**

**Garlic Powder**

**Red Pepper flakes**

**Cumin**

**Smoked Paprika**

**Chili Powder**

**EVOO**

**Directions**

**Dice onion and mushrooms (1/2 package)**

**In a large saucepan heat 1 TBSP of EVOO on medium heat**

**Add onions and mushrooms and sautee until they sweat out**

**Push mixture to the side in the pan**

**Spray open area of pan with cooking spray**

**Add beef**

**Season accordingly with seasonings**

**Let beef brown for 1 minute then mix all ingredients together and continue to break beef apart and stir and cook until beef browns**

**Burgers-**

**Ingredients**

**2 pounds 93/7 ground beef**

**Salt**

**Pepper**

**Garlic Powder**

**EVOO cooking spray**

**Directions**

**Season ground beef and mix together and then shape into 8- 4oz patties**

**Heat a large skillet on medium/high and add EVOO cooking spray**

**Add patties when hot**

**Let cook for 3-4 mins then flip**

**Flatten them out and let them cook for another ~3 mins until desired doneness is achieved**

**Meatloaf-**

**2 pounds 93/7 ground beef**

**1/2 cup quick oats**

**3/4 cup no sugar added ketchup**

**¼ cup sriracha**

**1/2 cup minced onion**

**1 egg**

**1 tablespoon Worcestershire sauce**

**Garlic Powder**

**1 teaspoon oregano**

**3/4 teaspoon pepper**

**1/2 teaspoon salt**

**Directions**

**Preheat oven to 350 F**

**Combine all ingredients in a large mixing bowl (except ¼ cup ketchup and the sriracha)**

**Do not overmix**

**Line a loaf pan with parchment paper (can have paper sticking out of the pan)**

**Shape mixture in the loaf pan**

**Cook for 40 mins**

**Take out and cover top with remaining ketchup and sriracha mixture and bake for 10 mins**

**Take out and let sit for 10 mins before removing parchment paper and slicing**

**Roasted Veggies-**

**Oven Roasted Broccoli-**

**Broccoli florets**

**EVOO**

**Garlic Powder**

**Salt**

**Pepper**

**Paprika**

**Directions-**

**Preheat oven to 450F**

**In a large mixing bowl combine broccoli and EVOO**

**Add in seasonings and stir properly**

**Place on baking sheet**

**Bake for 15 mins, check after 7 mins, stir after 7**

**Oven Roasted Asparagus-**

**Batch of Asparagus**

**EVOO**

**Lemon Juice**

**Salt**

**Pepper**

**Garlic Powder**

**Red Pepper Flake**

**Directions-**

**Chop off ends of asparagus spears**

**Preheat oven to 425F**

**Line baking sheet with parchment paper**

**Place asparagus on the sheet and drizzle with 1-2 TBSP of EVOO and lemon juice**

**Add seasonings and toss until properly coated in oil and seasonings**

**Arrange spears individually on baking sheet**

**Cook for 10 mins (if spears are thin) or 15-20 if they are larger**

**Smoothie/Shake Recipes**

**10oz Milk/Almond Milk/Chocolate Milk**

**2 scoops of Chocolate Protein Powder**

**1 scoop of Collagen**

**1 cup of frozen blueberries**

**1 TBSP raw honey**

**2 TBSP nut butter**

**½ cup of quick oats**

**8-10oz Milk/almond milk**

**2 scoops of Vanilla Protein Powder**

**1 scoop of Collagen**

**1 cup frozen strawberries**

**1 banana**

**1 TBSP raw honey**

**2 TBSP nut butter**

**½ cup quick oats**

**8-10oz OJ**

**2 scoops of Vanilla Protein Powder**

**1 scoop of Collagen**

**1 cup frozen strawberries**

**1 banana**

**1 TBSP raw honey**

**½ avocado or 1-2 TBSP EVOO**

**½ cup quick oats**

**8-10oz OJ**

**2 scoops of Vanilla Protein Powder**

**1 scoop of Collagen**

**1 cup frozen mangoes/pineapple**

**1 banana**

**1 TBSP raw honey**

**½ cup quick oats**

**1 TBSP EVOO**

**Meal Strategies**

**Try not to rush and eat quickly**

**Get in a relaxed state before you start eating**

**Can do this by deep breaths in and out of the nose**

**Chew your food 20-30 times before swallowing**

**Don’t stuff yourself silly or eat too much at once, the goal is to be satisfied and not full**

**Walk after your meals to assist with digestion**

**Save fluids until the end**

**Optimizing Gut Health/Gut Microbiome**

**Sunlight exposure**

**Limiting ultra-processed foods**

**Limiting alcohol**

**Mindful of medications**

**Stress management**

**Regular exercise**

**Proper sleep**

**Limiting blue light exposure (especially at night)**

**What is needed?**

**Probiotics- (populate the gut), opt for 2 servings daily from foods**

**Fermented foods (kimchi, sauerkraut, fermented/pickled vegetables), kefir, apple cider vinegar (diluted), supplements**

**Prebiotics- (feed the gut bacteria)**

**Fruit (bananas, apples, dark colors), fiber (beans/legumes), vegetables (broccoli, cauliflower, onions), resistant starches (cold potatoes/rice/green bananas/cold black beans)**

**SCFAs/Butyrate- Almonds, chickpeas, apples, garlic, kiwi,**

**The following types of fiber are best for the production of short-chain fatty acids in the colon:**

**Inulin- artichokes, garlic, leeks, onions, wheat, rye, and asparagus**

**Fructooligosaccharides (FOS)- various fruits and vegetables, including bananas, onions, garlic, and asparagus.**

**Resistant starch- you can get resistant starch from grains, barley, rice, beans, green bananas, legumes, and potatoes that have been cooked and then cooled**

**Pectin- apples, apricots, carrots, oranges, and others.**

**Arabinoxylan- found in cereal grains**

**Guar gum- legumes**

**To encourage the growth of Akkermansia, you can eat foods rich in polyphenols, including apples, beans, berries, grapes, flaxseed, green tea, nuts, olives, asparagus, onions, oats**

**Immunity**

**Sleep**

**Stress Management/Nervous System Control**

**Sunlight**

**Environment**

**Proper Nutrition**

**Adequate Micronutrients**

**Hot/Cold Modalities**

**Regular Exercise**

**Decreasing Inflammation**

**Increasing Omega 3 Intake (food/supplements)**

**Optimizing Omega 6:3 ratio (more healthy fats)**

**Appropriate fruit/vegetable intake daily (multiple colors)**

**Supplementation as needed (Mg, Fish Oil, Glycine, Turmeric, NAC, BSO)**

**Spices (ginger, garlic, turmeric)**

**Control/limit intake of ultra-processed food**

**Limiting alcohol consumption too**

**Lab Values/Results**

**Testosterone- 266, goal to get above 600**

**-Protocol/info below**

**A1c- 5.5%, goal to get closer to 5%**

**-Glucose control protocol/info below**

**Targeted Supplementation Plan-**

1. **Vitamin D- Thorne Vit D 5000 IU**
2. **Magnesium- Thorne Magnesium Bisglycinate**
3. **Fish Oil- Thorne Super EPA**
4. **Multivitamin- Thorne Basic Nutrients**

***Collagen***

1. **Creatine- Thorne Creatine**
2. **Protein Powder- Can discuss**
3. **Zinc- Thorne Zinc Bisglycinate 15mg**

***Glycine***

***Probiotic***

***Black Seed Oil***

**Targeted Supplementation Plan-**

* **Vitamin D- daily with breakfast or lunch (5000 IU)**
* **Fish Oil- after workouts/with Breakfast (3 pills)**
* **Multivitamin- daily with breakfast or lunch (2 pills)**
* **Magnesium- pre/post workout, before bed (200mg 1-2x earlier in the day, 400-500mg before bed of glycinate)**
  + **Collagen- 15g before workouts**
* **Creatine- 5g after workouts**
* **Protein powder- as needed**
* **Zinc- 1 pill with dinner**
  + **Glycine- 3-5g before bed**
  + **Probiotic- before breakfast**
  + **Black Seed Oil- start with 1tsp per day with 1 meal**

**Hydration Guidelines**

**What to drink (limit/eliminate liquid calories)**

**Water**

**Protein shakes**

**Milk/milk substitute**

**Kefir**

**Coffee**

**Tea**

**Green tea**

**Zero calorie drinks (sodas/sparkling water)**

**Bone Broth**

**How much to drink**

**\*Aim for ½ body weight in oz to start of water\***

**-80 oz**

**\*During workouts drink (Bodyweight/30 in oz every 15 mins)\***

**-6oz every ~15-20 mins (~16-24oz during workouts)**

**When to drink**

**Upon waking- 12oz + electrolytes**

**Drink before your meals (~10-16oz), and some right after, and in-between your meals, not during**

**General Tips**

**Limit fluid after dinner so you’re not having to wake up in the middle of the night to go to the bathroom**

**Drink from glass/stainless steel cups**

**Filtered water is ideal**

**\*Season your food\***

**What to LIMIT**

**ALCOHOL**

**Juice**

**Sodas (full sugar)**

**Energy drinks**

**Smoothies with no protein**

**Improving Cardiovascular Lipid Profile**

**Healthy Fats**

**Increasing Fiber**

**Blunting Inflammation**

**Aerobic Exercise + Daily Movement**

**Optimizing Testosterone**

**Sleep**

**Sunshine**

**Vit D**

**Creatine**

**Fish Oil**

**Magnesium**

**Zinc**

**Boron**

**Selenium**

**Protein-Animal Sources (saturated fat)**

**Lifting Weights**

**Limiting Blue Light (blue light blocking glasses in the evening)**

**Limiting Alcohol**

**Daily Movement**

**Proper Caloric Deficit**

**Stress Management**

**Fat loss**

**Red light exposure**

**(other- Maca, Shilajit, Tongkat Ali)**

**Reducing environmental exposures (xenoestrogens/microplastics)**

**Glucose Control**

**Magnesium supplementation**

**Protein at each feeding**

**Increase fiber intake**

**Move/walk after eating for 10-15 mins**

**Move regularly throughout the day (see movement section)**

**Proper and restful sleep (see sleep section)**

**Strategic use of ACV**

**NEVER eat carbohydrates by themselves**

**Proper meal composition and eating selection**

**Regular exercise (lifting + conditioning)**

**Sunlight exposure**

**Blood Pressure Improvement**

**Regular exercise (lifting + conditioning) + isos**

**Magnesium supplementation**

**Proper potassium intake (4:2:1 ratio of K:Na:Mg)**

**Stress management/adaptation (see stress management section)**

**Whole blood donation**

**Sunlight exposure**

**Grounding**

**Nitrate supplementation (Resync or 2Before)**

**Consumption of these foods regularly:**

* **Beets**
* **Blueberries**
* **Carrots**
* **Citrus fruits**
* **Leafy greens**
* **Beans/lentils/dal**
* **Flax/chia**
* **Salmon/Omega 3s**
* **Dairy**
* **Tomatoes**
* **Garlic/aged garlic**
* **Dark chocolate (Ghirardelli 86% Cacao Intense Dark)**

**Nutrition Rules**

**Exercise**

**Strength training- build muscle, increase strength, improve ROM/flexibility, strengthen bone/tendons/ligaments/joints**

**Aerobic training- improve cardiovascular health, enhance recovery, increase mitochondrial density/#**

**Zone 2 work- easy aerobic training to lay the foundation to make everything better (HR aim 120-130 bpm for 30-45 mins, steady)**

**Sprinting- hormonal effect, great for body composition (bike/rower/climber)**

**Your Training Plan**

**4 lift days/week- 2 upper, 2 lower**

* **A Block- Heavier lifts (RIR)**
  + **Do not go to failure here**
* **B and C Blocks- Accessory/complementary lifts**
  + **You can hit at or around failure, push yourself**

**All planes/angles**

**Unilaterally/bilaterally/stability**

**2 days- strategic aerobic conditioning (1 max HR day, 1 interval/steady day)**

**Movement**

**Daily Movement-**

**Goal is ~10+k steps per day for the first few weeks (this is a weekly average, some days might be higher, others lower)**

**AM Walk (fasted, preferably outside) for as long as you can get it in mins (drink water + electrolytes prior)**

**-Do this on days you don’t have a training session scheduled**

**Walk for 10-15mins after eating**

**The goal is to try to move every 60/90/120 mins as your schedule allows**

**\*Exercise/movement snacks throughout the day\***

**During the work day aim to get up and move around if you’ve been sitting for an extended period of time (foam roll/stretch, sit in a deep squat)**

**Evening Walk- as the sun goes down if you can (15-30 mins) to anchor your circadian rhythm**

**Movement Plan**

**1st month ~10k steps/day 1**

**Stress**

**Management/ Nervous System Control/**

**Self-Care**

**Regular Stress Management**

**-Helps regulate/improve BG levels**

**-Activates the parasympathetic nervous system (rest/digest)**

**-Decreases HR**

**-Decreases BP**

**-Better sleep**

**-Improves mood**

**-Can assist w/weight management**

**-Less tension**

**-Helps enhance immunity**

**-Proper digestion**

**GROWTH = STRESS + RECOVERY**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Bad Good**

**Stress:**

**Physical**

**Mental**

**Emotional**

**Spiritual**

**Environmental**

**Monitoring HRV**

**HRV = Heart Rate Variability**

**The variance in time between the beats of your heart (determined by the time between heart beats)**

**Your nervous system (which controls the involuntary aspects of your physiology) has two branches:**

1. **Parasympathetic nervous system (deactivating, rest and digest), causes a decrease in heart rate and increase in HRV**
2. **Sympathetic nervous system (activating, fight or flight), causes an increase in heart rate and decrease in HRV in response to things like stress and exercise (BP goes up too)**

**Heart rate variability comes from these two competing branches simultaneously sending signals to your heart.**

**If your nervous system is balanced, your heart is constantly being told to beat slower by your parasympathetic system, and beat faster by your sympathetic system. This causes a fluctuation in your heart rate: HRV.**

**There is nothing wrong with being in a sympathetic state (working out, waking up, having to actually fight or run away). The issue is that when people are constantly stressed all the time they stay in a sympathetic state and that causes and wreaks havoc on the body internally.**

**The goal is to increase HRV over time to be able to handle and adapt to even more stress without it negatively affecting your body. This means implementing strategies that help the body not only increase your HRV ceiling (aerobic training), but also to become more parasympathetic and relaxed.**

**HRV**

**Your vagus nerve controls your parasympathetic nervous system**

**When it isn’t healthy you stay in a sympathetic state**

**This affecting your vagus nerve:**

**Stress/Anxiety**

**Overworking**

**No exercise**

**Toxic Food**

**Poor sleep**

**Smoking**

**Alcohol**

**Ways to keep your vagus nerve healthy:**

**Cold exposure/showers**

**Massage**

**Humming/singing/changing/gargling**

**Breathwork**

**Probiotic intake**

**Minerals/micronutrients**

**Walks in nature/outdoors**

**Sleep on your right side**

**Stress Management:**

**Nasal breathing/Breathwork**

**Filter out foreign particles**

**Humidify and warm inhaled air**

**Produce nitric oxide**

**More oxygen to the brain**

**Reduce exposure to foreign substances**

**Increase air flow to arteries, veins, and nerves**

**Increase oxygen uptake and circulation**

**Slow down breathing/HR**

**Improve lung capacity**

**Strengthen the diaphragm**

**Lower your risk of allergies and hay fever**

**Reduce your risk of coughing**

**Aid your immune system**

**Lower your risk of snoring and sleep apnea**

**Support the correct formation of teeth and mouth**

**Issues w/Mouth Breathing**

**Inhaling unfiltered air**

**Allergic reactions to allergens**

**Asthma**

**Bad breath**

**Tooth decay**

**Gum inflammation (gingivitis)**

**Snoring**

**Sleep apnea**

**Teeth or jaw abnormalities**

**Increased HR/BP**

**Increased stress response**

**Change in substrate preference (fat to carb) at rest**

**Breathwork Practices**

**1. Alternate nostril breathing**

**In this technique, you inhale through one nostril and exhale through the other, while using your finger to close the opposite nostril.**

**The exercise requires focus, so it’s great for increasing mindfulness. It may also help enhance your lung function and decrease stress.**

**To try alternate nostril breathing, follow these steps:**

**-Sit up tall and relax your shoulders.**

**-Lay your left hand on your left knee.**

**-Place your right thumb on your right nostril. Inhale through your left nostril.**

**-Place your right ring finger on your left nostril. Exhale through your right nostril.**

**-Inhale through your right nostril.**

**-Return your right thumb to your right nostril. Exhale through your left nostril. This completes one set.**

**Repeat for 5 minutes.**

**2. \*Belly breathing\***

**Belly breathing is also known as diaphragmatic breathing or abdominal breathing. It involves taking slow, deep breaths in through your nose.**

**The goal is to breathe deep enough to fill your belly with air. This increases how much oxygen you take in, and may help slow down your breathing and heart rate.**

**Belly breathing also increases mindfulness and reduces stress. Here’s how to do it:**

**-Sit up tall and relax your shoulders. You can also lay down on your bed.**

**-Close your mouth. Place one hand on your belly and one on your chest.**

**-Inhale slowly through your nose, letting your belly rise and fill with air. Your chest should stay still.**

**-Purse your lips and exhale slowly.**

**Repeat for 5 to 10 minutes.**

**3. Box Breathing 4-4-4-4**

**Here’s how to do Box Breathing**

**-Inhale for 4 seconds**

**-Hold for 4 seconds**

**-Exhale for 4 seconds**

**-Hold for 4 seconds**

**-Repeat for 5 mins**

**4. 4-7-8**

**Here’s how to do 4-7-8**

**-Inhale for 4 seconds**

**-Hold for 7 seconds**

**-Exhale for 8 seconds**

**-Repeat for 5+ mins**

**Mindfulness**

**While sitting in a quiet room assess and address all 5 of your senses which allows you to be present in the moment**

**What do you see, smell, taste, hear, and feel?**

**Gratitude**

**Think of 3-5 things that you are grateful for (upon waking, before bed, write it down, say it out loud, think it)**

**Meditation**

**Practice for 10-15 mins, can use an app such as Calm or brain.fm**

**Ziva Method- Emily Fletcher, Stress Less Accomplish More**

**Listening to music**

**Listen to music you enjoy that puts you in a good mood (20-30 mins)**

**Going for a walk (outside/in nature)**

**20-30 min walk (can listen to music, work on nasal breathing)**

**Foam roll/stretch**

**Do this after workouts and before bed to help you feel more relaxed before sleep**

**Massages**

**Aim for 1/week or 1 every other week, great for relaxation and the development of new muscle tissue**

**Sauna**

**Infrared or regular, benefits happen the more you do it so if you can aim for 3-5x/week (can be after your workout) then that is ideal for ~30-45mins.**

**Red Light Therapy**

**Beds/panels, exposing your body to red light is a great way to improve blood flow, increase testosterone, enhance collagen synthesis, increase mitochondrial density, and help with recovery**

**Grounding**

**If you can get your bare feet out to touch grass/sand/nature for 10-15 mins upwards of 30 min/day as often as you can there are numerous health benefits to it. Reduced stress and inflammation are some of the biggest benefits. There are also grounding mats and grounding pads that can be placed upon your bed so you can sleep grounded as well.**

**Self-Care Plan**

**Environment**

**Environment**

**Air Quality- air filters**

**Water Quality- drink filtered water**

**Structural- no mold/mycotoxins in the house**

**Nature- access to grass/sand/yards**

**Grounding- feet touching the bare earth**

**Natural light- windows in the house, plenty of natural light coming in**

**Plants- real plants around the house can provide health benefits**

**Food Storage- store food in glass containers, use glass cups to drink from**

**Barefoot in the house**

**WiFi/radiation exposure/phone use/electronics use**

**Phone/Social Media Use- be mindful of how much time you’re spending here and what you are consuming/following**

**Inner circle- the people closest to you (family, friends, co-workers, etc.), make sure you have positive and supportive people around you**

**Community- where you live and spend the most of your time, is it positive, supportive, and enjoyable?**

**Social- are the thing you are doing socially adding value to your life or does it stress you our/burden you?**

**General Guidelines-**

* **Get outside and expose yourself to sunshine as much as possible**
* **Cold shower to start the day**
* **If there are areas around you for grounding take advantage of them**
* **Open windows when you’re in the house/inside if you can**
* **Filtered water**
* **Cotton/linen clothing as much as possible**
* **Watch out for endocrine disruptors**
* **Sauna at least 1x/week (more if possible is better)**

**Endocrine Disruptors**

Specific agents/chemicals added to a variety of different household products, cosmetics, and goods that are commonly sold and used regularly. EDCs are chemicals or mixtures of chemicals that interfere with the way the body’s hormones work.

Excessive consumption and use over a long period of time can cause health issues. Raising awareness is key and recognizing common endocrine disruptors is important as there are plenty of substitutes to turn to.

Water (opt for filtered, glass containers/bottles as much as possible)

Plastics (watch out for BPA)

Soaps

Detergents

Lotions

Fragrances

Shampoo

Cleaning Supplies

Deodorant (non-aluminum, Native brand)

Toothpaste (go for fluoride free)

Clothing

**Look out for triclosan, phthalates, dioxin, atrazine, perchlorate, polybrominated diphenyl ethers (PDEs), perfluorinated chemicals (PFCs), glycol ethers, phytoestrogens, aluminum in antiperspirants, perfluoroalkyl and polyfluoroalkyl substances (PFAS), polychlorinated biphenyls (PCBs), diethylstilbestrol (DES)**

**Recommended Products**

**Deodorant- Native**

[**https://www.nativecos.com/**](https://www.nativecos.com/)

**Laundry Detergent- Clean People Fresh & Clean Laundry Detergent Sheets**

[**https://www.amazon.com/People-Concentrated-Laundry-Detergent-Strips/dp/B095J2SZWV/ref=sr\_1\_1\_sspa?keywords=clean%2Bpeople%2Blaundry%2Bdetergent%2Bsheets&qid=1692291630&rdc=1&sprefix=clean%2Bpeople%2Caps%2C192&sr=8-1-spons&sp\_csd=d2lkZ2V0TmFtZT1zcF9hdGY&th=1**](https://www.amazon.com/People-Concentrated-Laundry-Detergent-Strips/dp/B095J2SZWV/ref=sr_1_1_sspa?keywords=clean%2Bpeople%2Blaundry%2Bdetergent%2Bsheets&qid=1692291630&rdc=1&sprefix=clean%2Bpeople%2Caps%2C192&sr=8-1-spons&sp_csd=d2lkZ2V0TmFtZT1zcF9hdGY&th=1)

**Molly’s Suds**

[**https://www.amazon.com/Mollys-Suds-Chemicals-Sensitive-Peppermint/dp/B00F8LE2TQ/ref=sr\_1\_1\_sspa?crid=24WZLRSYXSY54&keywords=molly%27s%2Bsuds&qid=1692291728&sprefix=mollys%2Bsuds%2Caps%2C292&sr=8-1-spons&sp\_csd=d2lkZ2V0TmFtZT1zcF9hdGY&th=1**](https://www.amazon.com/Mollys-Suds-Chemicals-Sensitive-Peppermint/dp/B00F8LE2TQ/ref=sr_1_1_sspa?crid=24WZLRSYXSY54&keywords=molly%27s%2Bsuds&qid=1692291728&sprefix=mollys%2Bsuds%2Caps%2C292&sr=8-1-spons&sp_csd=d2lkZ2V0TmFtZT1zcF9hdGY&th=1)

**Toothpaste- NOBS**

[**https://betterbiom.com/products/nobs-toothpaste-tablets**](https://betterbiom.com/products/nobs-toothpaste-tablets)

**Electric Toothbrush- BURST**

**Lotion- Organic Jojoba Oil, Tree to Tub, Everyone**

**Hand Soap- Method, Puracy, Seventh Generation**

**Dish Soap- Method, Puracy, Seventh Generation**

**Body Wash- Castille Soap**

**Clothing- Anything 100% cotton/organic cotton, linen, or wool**

**Cookware- Stainless Steel/Xtrema/Cast Iron**

**Air Fresheners- Essential Oils**

**Cologne/Body Spray- Essential Oils**

**Household Cleaners- Branch Basics, Method**

**Others:**

**Floss/Flossers**

**Environment Plan**

**Product Swaps**

**Sleep**

**Circadian Rhythms**

* **Light**
* **Exercise**
* **Food timing/intake**
* **Medications/supplements**
* **Temperature**

**Chrono-nutrition**

* **Food intake in coordination w/body’s daily rhythms**
* **Quality and Quantity**
* **Meal timing**

**How much?**

* **Ideally you would get 35+ sleep cycles in per week**
* **This equates to ~5 per night**
* **A full sleep cycle is around 90 mins**
* **5 x 90 = 7.5 hrs, this should ideally be the minimum sought after by most people**

**Sleep consistency > erratic sleep duration**

**Sleep the same number of hours each night on average is better than sleeping erratically**

* **Consistent wake time**
* **Consistent sleep time**
* **+/- 30 mins is ideal**

**Sleep stages**

* **Slow wave, non-REM deep sleep**
  + **Happens earlier during sleep**
  + **This is where all the cell/tissue repair happens**
  + **Growth hormone pulses during this time (10pm-3am)**
  + **Glymphatic flush**
* **REM**
  + **Happens later during sleep**
  + **This is where all the memories and learning gets consolidated**
  + **Hormonal changes/improvements happen here**

**Goal is to aim for 50% of your night spent in Deep + REM combined**

**Can track consistency, latency, and disturbances with Oura ring or WHOOP 4.0**

**Cortisol-Melatonin relationship**

* **Antagonistic to each other**
* **When one is high the other is suppressed**
  + **In the AM- Cortisol high, melatonin low**
  + **At night- Melatonin high, cortisol low**
* **When you are stressed, cortisol stays elevated and melatonin release is delayed**
* **For every 30 mi - 1 hr of blue light exposure after sundown melatonin is delayed ~30 mins**

**Optimizing circadian rhythms**

* **Sunlight exposure prior to 9am (20-30 mins)**
* **Viewing the sun at dusk (red light)**
* **Limiting caffeine/alcohol from the afternoon on**
* **Last LARGE meal 3-4 hours before bed**
* **Block blue light after sundown**

**Sleep Hygiene/Routine**

* **Last LARGE meal 3-4 hours before bed**
* **Block blue light**
* **All work/heavy brain use stopped 2 hours before bed**
* **Warm shower 90 mins before bed**
* **60 mins prior- choose your way of relaxing (parasympathetic activities)**
* **Foam roll/stretch**
* **Breathwork**
* **Journal**
* **Read (non-stimulating material)**
* **Gratitude**
* **Scents (lavender)**

**Sleep Environment**

* **Blacked out room**
* **Proper mattress/pillows**
* **Temps cool (65-68 degrees)**
* **Phone on DND or Airplane mode (can set alarm) or put in another room**
* **Check for noises (internal/external)**
* **Can use a white noise machine to drown it out**

**During travel**

* **Can take favorite pillow/scent/use eye mask/white noise app/etc.**
* **Test out home hotel beds in advance along with pillows/sheets provided**

**Napping**

* **Ideally between 1-4pm**
* **Duration 30 mins or less, or up to 90 min**
* **Full ultradian cycle/sleep cycle duration is 90 min**
* **If longer nap is desired complete closer to 1/2pm**
* **Consistent need for napping is an indicator of sleep deprivation**
* **Naps influence and shift circadian rhythms**
* **Naps can assist with learning**

**Nutrition to Support Sleep**

**Foods**

* **Kiwi (2 pieces)**
* **Tart cherry juice**
* **Collagen/bone broth (glycine content)**
* **Decaf teas (chamomile)**
* **High carb/high GI last meals**
* **Tryptophan rich protein**

**Limit**

* **Alcohol**
* **Caffeine**
* **Spicy foods**
* **Supplementation of specific items**
* **Eating too much too late**
* **Overhydrating**

**Supplements for Sleep**

* **Magnesium**
  + **400-500mg (bisglycinate/glycinate)**
* **Glycine**
  + **3-5g**
* **L-Theanine** 
  + **100-400mg**
* **Inositol/myoinositol**
  + **1-2g**
* **Apigenin**

**Correct micronutrient deficiencies**

* **\*Zinc- decreased Zn and very short sleep, low serum Zn levels associated w/shorter sleep duration/sleep insufficiency**
* **Iron- decreased Fe intake and very short sleep, deficiency associated w/altered characteristics of sleep stages**
* **Vit D- inverse correlations of serum Vit D with sleep latency, duration, and daytime sleepiness, positive correlation w/ Vit D levels and sleep duration**
* **B12- inverse relationship between serum B12 concentrations and sleep duration**
* **\*Magnesium- Mg supplementation may increase SWS, lower intake correlated with short sleep duration**
* **Vit A/\*C/E- short sleep associated with inadequate Vit C intake**
* **Vit K- reduced sleep duration, wakefulness, and later bedtime after K supplementation**
* **\*Calcium- significant association between low calcium intake and poor sleep/short sleep**
* **Potassium- reduced sleep duration and wakefulness after sleep onset w/K supplements, negative association w/midpoint of sleep and dietary K intake**

**A diagram of a sleep cycle

Description automatically generated**

**Quality Sleep**

**-Helps regulate/improve BG levels**

**-Increases cognitive function**

**-Helps support health bodyweight/body composition changes**

**-Helps build muscle/burn fat**

**-Increases energy**

**-Decreases stress**

**-Improves mood**

**-Enhances immune function**

**Circadian Rhythms (Reset circadian rhythm daily)**

**Light**

**-Sunlight exposure in the morning prior to 9AM (20-30 mins, 5-10mins)**

**-Limit blue light once sun goes down (wear blue light blocking glasses, use settings on phone/screen/tv)**

**-** [**https://raoptics.com/collections/glasses**](https://raoptics.com/collections/glasses) **(daytime and nighttime glasses)**

**-No screens 1 hr before bed**

**Temperature**

**-Warm shower 90 mins before bed**

**-Temp in room should be 65-68 degrees**

**When you eat/what you eat**

**-Last large meal 3-4 hours before bed**

**-Limit fluids after dinner**

**-Limit caffeine after 12pm**

**-Limit alcohol in the evening**

**Exercise**

**-Don’t exercise too late (4 hours prior to bedtime is the latest)**

**Medications/supplements**

**-Magnesium + glycine + theanine + inositol 1hr before bed**

**What impacts Sleep**

* **Feeling stressed during the day**
* **Late meals or eating too much close to sleep time**
* **Screen device usage in bed**
* **Exercising later on in the day**
* **Overstimulation (music, movies, people, noise)**
* **Dehydration**
* **Room temperature**
* **Sleeping in a new place or a bed that’s not your own**
* **Alcohol consumption before going to sleep**
* **Excessive caffeine, especially in the afternoon**
* **Micronutrient deficiencies**

**What can help**

* **Same sleep/wake cycle**
* **Hydrating properly over the course of the day (not before bed, which can disrupt sleep for trips to the bathroom)**
* **Massage therapy or a steam room that day**
* **Blue-light blocking glasses before bedtime**
* **Limiting screen time in the evening**
* **Reading in bed prior to falling asleep**
* **Journaling prior to bed**
* **Sleep mask and/or ear plugs while sleeping**
* **Sound machine/white noise machine during sleep**
* **Sleep on your side (left) with legs up or on your back**

**Create a sleep routine for you to follow:**

1. **What do you need to do/get done**
2. **What do you want to do**
3. **What will help you relax**

**3-2-1 Rule**

**3 hrs out- last large meal**

**2 hrs out- do fun things, work, finish up mentally stimulating tasks**

**1 hr out- warm shower, supplements, block blue light, set alarm, put away phone, RELAX**

**Morning Routine (4 parts)**

**-Hydration**

**-Focus/planning**

**-Sunlight exposure**

**-Movement/exercise**

**Evening Routine**

**Habits/**

**Mindset**

**Habits**

**-Identifying what you can/should be doing to help you reach your goals**

**-Identifying things that are holding you back from reaching your goals**

**-Developing the discipline to do these things daily/weekly**

**-Holding yourself accountable**

**-Evaluating days/weeks and overcoming obstacles**

**-Planning your days/week in advance**

**-Productive and healthy morning/evening routines**

**Mindset**

**-Figuring out who it is you want to be and identifying the things that that person does which makes them successful**

**-Understanding that reaching your goals is possible, but it will take time, this is not a quick fix**

**-Using affirmations**

**-Developing associations of who you are and what you do**

**-Being able to do the things you know you should do, even when you don’t want to**

**-Remaining consistent on the tough days**

**CONSISTENCY > PERFECTION**

**CONSISTENCY > EVERYTHING**

**Answer these questions:**

**Who do you want to be?**

**What do you want to be known for?**

**What makes you feel worthy?**

**What do you value?**

**What’s important to you?**

**What’s your responsibility?**

**What’s your purpose?**

**What is different/special about you?**

**Motivation does not cause behavior change**

**Behavior change shifts motivation**

**People who succeed are the ones who made changes without waiting to be motivated**

**Take the leap**