Nutrition Handout 2021

Topic of Nutrition is vast & varied. We're going to cover a narrow section of it, based on what is required for our program. We hope you will find this useful. If you have questions, please email us at run@striders.vibha.org

IMPORTANT: *If you are following a diet prescribed by a doctor, nutritionist, dietitian, or some other health professional, please consult them to make necessary adjustments to your diet to account for this marathon training program related activities.*

A healthy lifestyle not only changes your body, it changes your mind, attitude and mood.

We are a sum of our experiences. Of many experiences, many days, many moods, many phases. You can't alter your health in one moment or one meal. But you can start NOW. It's about knowledge (& mindfulness), learning, and growth.

- Emphasis on clean eating
- Whole foods as much as possible
- Balanced diet
- Approximately 25% of your nutrition should be protein, 25% fat, and the rest (complex) carbs
- Spread out your meals to avoid sugar spikes & dips
- Nourish your body & mind

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Macronutrients

Nutrients are environmental substances used for energy, growth, and bodily functions. Depending on the nutrient, these substances are needed in small or large amounts. Those needed in large amounts are called macronutrients. There are **three** major classes of macronutrients: **carbohydrates**, **fats,** and **proteins**.

Your body uses **protein** to build and repair tissues. It also uses **protein** to make enzymes, hormones, and other body chemicals. **Protein** is an **important** building block of bones, muscles, cartilage, skin, and blood.

Dietary **fats** are essential to give your body energy and to support cell growth. They also help protect your organs and help keep your body warm. **Fats** help your body absorb some nutrients and produce important hormones.

Carbohydrates are sugars, starches and fibers found in fruits, grains, vegetables and milk products.

There are 2 types of carbs. Simple and complex.

1. Simple carbohydrates are sugars, which consist of just one or two molecules.They provide a rapid source of energy, but we feel hungry very soon after. Examples include white bread/ pasta/ rice, sugar.

2. Complex carbohydrates consist of long chains of sugar molecules. Whole Grains and foods that still have their fiber in are complex carbs. They tend to fill you up for longer, and they are considered more healthful, as they contain more vitamins, minerals, and fiber. Examples include fruits, vegetables, pulses, and wholewheat rice & grains (and some bread/ pasta).

Carbs are the principal source of energy, supplying 50-65% of our body’s caloric requirement. Carbohydrates serve several key functions in our body. They provide energy for daily tasks and are the primary fuel source for your brain's high energy demands. Carbs are easily metabolized or broken down to be used as our body’s main fuel source. Which means the body can use this energy to process, absorb, & utilize other nutrients (micro & macro) for jobs like daily functioning, tissue growth and repair.

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Fiber is an indigestible form of carb that helps promote good digestive & intestinal health. Since humans can't digest them, they pass through the digestive system & take waste products with them. Diets high in fiber have shown decreased risk for high cholesterol, heart disease and diabetes.

- Soluble fiber: This type of fiber dissolves in water to form a gel-like material. It can help lower blood cholesterol and glucose levels. Soluble fiber is found in oats, peas, beans, apples, citrus fruits, carrots, barley and psyllium.
- Insoluble fiber: This type of fiber promotes the movement of material through your digestive system and increases stool bulk. Whole-wheat flour, wheat bran, nuts, beans, all vegetables, and most fruits are good sources of insoluble fiber.

If you aren't getting enough fiber each day, you may need to boost your intake. Good choices include:

- Whole-grain products
- Fruits
- Vegetables
- Beans, peas and other legumes
- Nuts and seeds

Refined or processed foods — such as canned fruits and vegetables, pulp-free juices, white breads and pastas, and non-whole-grain cereals — are lower in fiber. The grain-refining process removes the outer coat (bran) from the grain, which lowers its fiber content. Enriched foods have some of the B vitamins and iron added back after processing, but not the fiber.

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Now that we've covered the basics, let's talk about workout needs. We're going to talk about nutrition during a workout. Eating the right nutrients before, during, and after exercise is just as important to attain your goals, as your training & consistency in training.

Digestion

- blood is at work doing other chores. So, timing of what you eat is just as important as the nutrition you consume.

Hydration = water + electrolytes (during a run/ workout, we **drink to thirst**. Usually a sip here & there is sufficient)

- Ironically, absorption of water through the stomach & intestinal walls will slow if you are dehydrated—just when you need water the most, you can't get it. So be mindful of water intake throughout the week.
- Alcohol & caffeine are diuretics. Diuretics cause your body to remove fluids from your blood at a much quicker rate than other liquids.
- Alcohol can also dehydrate you. If you don't drink enough water with alcohol, you can become dehydrated quickly.

Electrolytes are minerals in your body that have an electric charge. They are in your blood, sweat, & tears, urine, tissues, and other body fluids. Sodium, calcium, potassium, chloride, phosphate, and magnesium are six of the major electrolytes needed by us. Electrolytes are important because they help

- Balance the amount of water in your body
- Balance your body's acid/base (pH) level
- Move nutrients into your cells
- Move wastes out of your cells
- Make sure that your nerves, muscles, the heart, and the brain work the way they should

We get enough electrolytes from a healthy, balanced diet (i.e foods and the fluids we consume).

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Pre Workout

- To maximize your performance and recovery, it's important to fuel your body with the right nutrients before a workout.
- Carbs help maximize your body's ability to use glycogen to fuel short and high-intensity exercises, while fat helps fuel your body for longer exercise sessions.
- Eating small amounts of protein helps improve muscle protein synthesis, prevent muscle damage and promote recovery.
- Good hydration is also key to enhanced performance.
- Pre-workout meals can be eaten three hours to 30 minutes before a workout. However, choose foods that are easy to digest, especially if your workout starts in an hour or less. This will help you avoid stomach irritation.
- We don’t want undigested food sitting in our stomach, causing discomfort during a workout - high intensity or otherwise.

Pre-workout Options

Keep in mind that you don't need to eat much before a workout. Just choose one of the following. For best results, experiment with different timings and nutrient compositions.

2–3 Hours before workout

- Sandwich on whole-grain bread, lean protein and a side salad
- Egg omelet and whole-grain toast topped with avocado spread and a cup of fruit
- Lean protein, brown rice and roasted vegetables

Within 2 Hours before workout

- Protein smoothie made with milk, protein powder, banana and mixed berries
- Whole-grain cereal and milk
- A cup of oatmeal topped with banana and sliced almonds
- Natural almond butter and fruit preserve sandwich on whole-grain bread

An Hour or Less before workout

- Greek yogurt and fruit
- Nutrition bar with protein and wholesome ingredients
- A piece of fruit, such as a banana, orange or apple

During Workout

"Desire and a quarter will buy you a cup of coffee, though, not when you've got no gas in the tank" - unknown

- **Calories.** In the form of **simple sugars.** Examples: Energy Gel, fruit, etc
- **Hydration** = water + electrolytes
  - **Water**: **drink to thirst** (usually a sip here & there is sufficient)
  - **Electrolytes** Don't worry about supplementing these unless you're performing for more than an hour of workout/ run.

Post Workout

Protein + Carbs + Water

What to Eat: A **combination** of both carbohydrates and protein (4:1 ratio) is essential for post workout. Protein to repair muscles, Carbohydrates to replete the glycogen stores (the fuel your muscles use). This helps recovery and ensures new muscle growth.

The window of opportunity: This refers to the time when your muscles are "primed" in accepting all the nutrients it requires for muscle building, muscle repair and growth. This anabolic window opens right after workout and closes gradually soon after. Thus, it is advised to grab a high protein & carb snack immediately post workout. As soon as possible! Of course this is not always feasible. **Within 30 to 60 minutes is a good number to remember**

"If you have one eight-ounce serving of chocolate milk with 30 grams of carbs and 10 grams of protein, that's good enough

Other whey options include 1.5 cups of low-fat yogurt or 2.5 cups of skim milk, both of which can be added to smoothies. If you feel like cooking, grill up some chicken or salmon. To get the recommended 20 grams, the serving size should be about the measurements of a deck of cards.

Post-workout Options

- Chocolate Milk
  - Ease - no prep
  - Easy to transport
  - Pay attention to added sugars

- High Protein Food
  - Eggs, tofu scramble, cooked chickpeas, cottage cheese/ yogurt w/ fruit or granola, banana, banana oatmeal, ½ cup blueberries + ½ cup walnuts, nuts & seeds, peanut butter w/ apple or toast, spinach/ greens in a smoothie, avocado toast (because, … California!)

- (Naked) Protein Powder
  - 20-28g protein/ serving
  - Vegan / plant based protein available
  - Tastes quite bland
  - Cleanest of all protein powders
  - PAY ATTENTION to ingredients

- Protein Shakes/ Bars (premade)
  - ~20-30g protein
  - No prep required
  - Easy to transport
  - PAY ATTENTION to ingredients

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Some of our Coaches' Faves <sings "These are a few of our favorite things ...">

- Breakfast. Egg Omelet + toast for morning workouts
- Regular Lunch (usually Roti + veg curry + salad)
- Fresh fruit smoothie with half scoop of protein powder
- Nuts, raw veggies, fresh fruits for snacks
- Whey protein shake
- Multi grain toast with peanut butter & banana
- Classic avocado toast with protein topping of your choice (smoked salmon!)
- Fruit smoothie with added protein powder
- Steel Cut Oatmeal with raisins, walnuts, almonds, and whole milk
- 1 cup cooked Garbanzo beans!!!!! Plain or with lemon + salt (or any other seasoning I'm in the mood for)
- Tofu scramble + turmeric powder + onion + tomato; cooking in ½ tbsp clarified butter or olive oil
- ½ to 1 Bagel + Naked Pea protein powder
- 1 med boiled Potato (plain or salt, depending on my mood) + Naked Pea protein powder
- Banana + Naked Pea protein powder
- Previous night's leftover dinner (if it's yummy)
- Cake. Just kidding!

Additional points to consider

- WATER. Half oz for every pound of body weight daily. Example: if you weigh 140 lbs, try to drink at least 70 oz of water. If you can, aim for 0.75 times your weight. So, if you weigh 140, your goal will be 105 oz of water/ day. 140 x 0.75 = 105.
- Watch for additives.
- Gut health is very important! Probiotics.
- Avoid alcohol intake the night before.
- Eat 5 small meals, instead of 3 large meals.
- Try eating a combination of carbs and protein of a ratio of 4:1 within 2 hours after your workout; though within 30-40 minutes of finishing your exercise is ideal. Our bodies are most receptive to using that nutrition during this time.
- We are an experiment of one so please pay attention to what works for you.
- Eat slowly. It takes the brain around 10-20 minutes to register that we are full.
- Choose fruit over dessert when you can.
- Decisions from data! Try using an app (our favorite is MyFitnessPal) to monitor and track what and how much you eat. Please do not use this for weight loss at this time. We encourage you to begin a food journal as well as an "events, beliefs and thoughts" journal. This will help you see the connection between what thoughts and beliefs support healthy eating vs unhealthy eating.
- Mind and body being connected it is crucial to eat with joy and gratitude and to also savor what you eat so you feel a sense of fulfillment. Psychological overeating is the most common reason for weight gain and guilt spurs it on!
- Last but not least, eat without guilt. Our body will not secrete the right enzymes if we are telling it that what we have eaten is wrong.

