### **Background:**

• Foods are broken down into different food groups based on the nutrients they provide. The nutrients you take in help with body functions including healing and thinking. It is important to fuel your body with the healthy nutrients it needs when healing from mTBI (mild traumatic brain injury) or concussion. A healthy diet includes a combination of foods from the different food groups, so you consume the nutrients needed to feel well. It is best to choose a variety of foods from each of the food groups in proper portion sizes. A balanced diet and adequate hydration are important for maintaining energy, strength, skin integrity, and preventing or reducing chronic diseases such as heart disease and diabetes.

### **Food Groups:**

#### **Proteins**

- The protein group supplies protein, iron, B-vitamins, calories and fat. Protein is important to help heal wounds and maintain muscle mass. This food group includes beef, pork, fish, chicken, turkey, eggs, dried peas/beans, nuts, and soy products. Choose lean/low fat meats instead of fatty meats to avoid unhealthy fats.
- Choose grilled, broiled, or roasted meats instead of those that are breaded or fried.
- Take the skin off poultry or buy it skinless.
- Protein foods should typically take up approximately one quarter of your plate.

#### Grains

- The grain group gives the body fiber, carbohydrates, protein, iron and B-vitamins. Fiber is important to help with bowel regularity, blood sugar control for diabetes, and heart health. This group includes bread, hot and cold cereal, noodles, rice, pasta, cornmeal, flour, and crackers.
- Fiber is found in whole wheat crackers, whole grain breads and cereals, brown rice, oatmeal, and bran cereals.
- Make at least half your grains "whole grains": look for "whole" before grain in the list of ingredients.
- Choose foods with greater than or equal to 3 grams of fiber on the nutrition facts label.
- Monitor the portion sizes. Grains should take up approximately one quarter of your plate.
  - □ It is especially important to check your portion sizes of this group to control your blood sugar if you have diabetes.

#### **Fruits**

- The fruit group gives the body essential nutrients including vitamins, minerals, carbohydrates and fiber.
  It includes fresh, frozen, canned, and dried fruits as well as fruit juice. Fresh fruits are usually the best choices from this group.
- Try a piece of fruit for dessert instead of unhealthy sweets.
- Choose a piece of fresh fruit instead of drinking juice.
- Avoid canned fruit in syrup and choose fresh fruit or canned fruit in juice instead.



# **Vegetables**

- Vegetables are a good source of vitamins, minerals, carbohydrate, and fiber. This group is divided into Non-starchy and starchy vegetables.
  - ☐ Starchy vegetables have a similar carbohydrate and caloric content to the grain group. Examples of starchy vegetables include corn, green peas, and potatoes.
  - □ Non-starchy vegetables are lower in carbohydrates and calories so they can help you feel full without causing weight gain. Examples of non-starchy vegetables are greens/lettuce, broccoli, green beans, onions, carrots, etc.
- Try to include two and a half cups of vegetables per day with at least one non-starchy vegetable at lunch and dinner
- Aim for a variety of different colored vegetables in your daily diet.
- Avoid adding fatty sauces, butter, gravy, full fat salad dressing or salt to your vegetables.
- Choose vegetables that are raw, steamed, roasted, or air-fried instead of fried in oil.
- Fresh or frozen vegetables tend to have less salt than canned vegetables so choose those more often to limit sodium.

### **Dairy**

- The dairy group gives the body protein, carbohydrate, fat, calcium, B-vitamins, vitamin A and vitamin D. This group includes milk, yogurt, and cheeses.
- Choose low-fat or fat-free dairy products to get the good nutrients without the unhealthy fat
  - Check the sugar content on low-fat options. Avoid low-fat options with high amounts of added sugar.
- If you are lactose intolerant or don't tolerate cow's milk, try lactose-free products or alternative milk options.

### Oils/Fats

- A small amount of oils or fats are needed for energy, metabolism, and hormones. Fat is found in oils, animal fats, margarines, avocados, and nuts. There are healthy and unhealthy fats.
  - Healthy fats tend to be liquid at room temperature and are called monounsaturated or polyunsaturated fats.
  - ☐ Unhealthy fats tend to be solid at room temperature and are called saturated or trans fats.
- Choose more healthy fats like oils, fat in fish, nuts, and avocado.
- Limit solid fats like butter, stick margarine, shortening, and lard.
- Choose lean/low fat meats and dairy products and remove the skin and fat from meats.
- Choose foods that have less than 3 grams of saturated fat, no trans-fat, and less than 200 milligrams of cholesterol.
  - ☐ Limit saturated fat to <16 grams per day and limit trans fats to as little as possible
- Avoid products with hydrogenated or partially hydrogenated oils in the ingredients list.
- Remember to watch portion sizes because even healthy fats like oils are high in calories.
- Choose low-fat or reduced-fat condiments.



#### **Fluids**

- Adequate hydration is necessary for preventing dehydration, skin breakdown, kidney stones/urinary tract infections, and constipation.
- Include at least 8 cups of non-caffeinated fluids per day in your daily diet to support adequate hydration unless instructed differently by your doctor.
- Being dehydrated can make people confuse thirst with hunger.
- For some people, limiting caffeine after mTBI or concussion may help decrease headaches and other symptoms. Cutting back on caffeine can also help you get a better night's sleep.
- Limit juice, soda, sweet tea and other sugary drinks.
- Some artificial sweeteners, like aspartame, may cause symptoms that make you feel poorly.

## **Nourishing Your Body After mTBI or Concussion**

- Make sure you are refueling your body with healthy foods to support healing and provide you with energy.
- Stay hydrated with non-caffeinated, low-sugar fluids.
- Limit caffeine intake and avoid supplements or energy drinks containing caffeine.
- Avoid alcohol while you are recovering and speak with your doctor before consuming drinks containing alcohol.
- Speak to your doctor about any vitamins or other supplements you are taking.

# **Key Points for a Healthy Diet**

- Eat a variety of foods in the correct portion sizes.
- Consume a diet low in fat, saturated fat and cholesterol. Choose foods with less than 3 grams of saturated fat, zero trans-fat, and less than 200 milligrams of cholesterol.
- Consume a diet low in sodium and salt. Choose foods with less than 140 milligrams of sodium.
- Consume a diet low in sugar and higher in fiber.
- Consume a diet rich in whole grains, fruits and vegetables.
- Regulate your food intake with physical activity to maintain or achieve your weight goals.
- Adjust your portion sizes to help with weight control.
- Limit fried foods, fast foods, and junk foods.
- Don't drink your calories. Limit high sugar beverages and juice to 8 fluid ounces per day.
- Plan ahead so you have healthy food options available and eat regularly scheduled meals to help fuel your body, maintain your metabolism, and avoid getting overly hungry.

It is important to consume balanced meals to get the right amount of nutrients from all the different food groups. Try using <a href="MyPlate.gov">MyPlate.gov</a> to help with choosing food and portion sizes to keep your meals balanced.

For more detailed tips on healthy eating after mTBI please visit: <u>BrainLine: Nourish Your Noggin: Nutrition and Your Brain</u>

