

## **Food Plan for Reducing Pain and Inflammation, Supporting Structural Health, and Healing Musculoskeletal Conditions**

The purpose of this food plan is to help you achieve and maintain health by decreasing foods that lead to inflammation and pain, decreasing your intake of harmful chemicals, and optimizing your intake of healthy protein, fat, and carbs. It can also aid in weight management and in the prevention of heart attacks, type 2 diabetes, cancer and strokes. The plan may be modified if you have food allergies or are gluten sensitive.

### **Grocery Shopping**

Healthy food is really better for your body; it is not just a fad. It is best to do most of your food shopping at a market that offers a lot of organic and natural food choices. Buy organic fruits, vegetables, milk products, and free-range eggs and meats whenever possible. Non-organic fruits, vegetables, dairy, and meats contain pesticides, and may contain other chemicals or harmful metals. These chemicals can be stored in your body, where they stimulate pain receptors, create inflammation, increase free radical production, and make it more difficult to heal.

### **Proteins**

**Goal: to get sufficient healthy sources of protein to supply the amino acids that help to preserve and build muscle, and heal musculoskeletal tissues.**

Protein is made from amino acids. Adequate protein is needed every day. It helps to maintain your muscles, and amino acids are a building block for many important cell reactions. Everyone needs at least .8 grams of protein per kilogram of body weight (weight in pounds divided by 2.2).

#### Protein needs:

- For sedentary individuals: .8 gms/Kg.
- When doing aerobic training that is moderate to vigorous: 1.2 grams per kg of lean body weight.
- When weight lifting to make body shaping or hypertrophy gains: 1.4-1.6 grams per kg.
- While healing from surgery: 1 – 1.2 g/kg.
- For healing a tendon or ligament from an injury: 1.2 gms per kg of lean weight.
- Based on this scale, your protein needs are \_\_\_\_\_.

#### Protein guidelines:

- Have protein with each meal and snack if possible.
- Limit red meat or eliminate it unless it is free-range, grass-fed beef or lamb.
- Avoid charring/browning proteins/meats.
- Use organic meats or free-range meats and poultry (chicken and turkey) when possible.
- Use free-range eggs for protein but avoid browning the eggs.
- Avoid lunch meats that have sodium nitrate or nitrites. Nitrate-free turkey is a good protein source.
- Use walnuts as a protein source for snacks and for the omega-3 fats.
- Use mixed nuts and seeds (pumpkin, sunflower).
- Consider nut butters (almond, cashew, macadamia) that you add to breakfast cereal, bread, crackers, apples and celery.
- Soy products such as tempeh, miso, and soy milk are good sources of protein.
- If you are going to use milk products try to use organic milk products (milk, cheese, and yogurt).
- For milk substitutes, you can use soy, rice, almond, or oat milk.
- Consider beans and grains as a source of protein and fiber (soy, millet, quinoa, lentils and other beans).
- Get at least 1/3 -1/4 of your daily protein need at breakfast by using a protein powder with whey or rice protein to make protein smoothies. You can blend 2 scoops in 10-12 ounces of a liquid with some organic berries (+ or – a banana).
- Minimize large fish such as tuna and swordfish because of mercury. Avoid farm-raised salmon because of PCBs; river trout is usually OK.

### **Fats**

**Goal: Eat healthy fats and decrease unhealthy fats.**

Your fat intake is directly related to inflammation. Follow these guidelines:

- Use coconut oil, canola, or olive oil (extra virgin is best) for cooking.

- Make your own salad dressing with 2 parts flax oil, 4 parts extra virgin olive oil, and red wine or balsamic vinegar (may add a small amount of toasted sesame for flavor) .
- Use sources of omega-3 fats, including flax seeds and oil (don't heat flax), sardines, ocean salmon, and walnuts.
- Use a daily supplement of 1-4 grams of high EPA/DHA fish oils (capsule or liquid) purified to eliminate mercury, pesticides, etc.
- Use dry-roasted or raw nuts.
- Eliminate deep fried and breaded fried foods (french fries, Chicken MC Nuggets, etc.).
- Avoid all partially hydrogenated oils and trans fats by reading labels (“partially hydrogenated \_\_\_\_\_oil”).
- Decrease saturated fats (e.g., ice cream). Try to limit foods that have more than 6-8 grams of fat per serving. Choose low-fat ice creams, low or nonfat yogurt, and low or healthy fat salad dressings (vinaigrette, oil and vinegar).
- Choose leaner meats.
- Avoid highly heated fats such as crispy bacon and french fries cooked in vats of oil.

### **Carbohydrates**

**Goal: limit non-nutritive carbs and use healthy complex carbs as an energy and vitamin source.**

- Have a daily intake of healthy and colorful fruits (berries, pomegranate, apples, pears, and citrus fruits) and veggies for fiber and beneficial phytochemicals to help your body quench free radicals and biotransform (detoxify) toxins.
- Eat healthy vegetables (organic when possible): including Cruciferous vegetables daily (broccoli, cabbage, cauliflower, kale) as they help your body detoxify.
- Eat other vegetables for their nutrients and fiber: chard, spinach, celery, squash, zucchini, cucumber.
- Eat from the onion family daily (onions, leeks, chard, garlic, chives) as it is good for connective tissue and detoxification.
- Consider juicing organic vegetables to improve your intake of phytochemicals: consider celery, apple, carrot, kale, broccoli, spinach, beets, with some lemon or lime and some protein powder.
- Limit cookies, cake, scones, muffins, potatoes, starches, sugars, rice, pasta, and breads unless you are training for a long aerobic event or do not have a weight management problem; in that case, use whole and sprouted grains in bread or boiled.
- Eat beans (kidney, black, pinto, garbanzo, etc.) for soluble fiber and to limit colon inflammation.
- Use a bread that has at least 3-5 grams of protein and fiber per slice. Look for sprouted grain and seed breads. Use whole grain sources for carbs, such as quinoa, millet, etc.
- Use a breakfast cereal that has at least 8 grams of fiber and 4-10 grams of protein per cup.

### **Food Additives**

- Try to avoid artificial colorings and diet beverages with aspartame.
- Minimize and avoid foods containing ingredients that have MSG or hidden MSG. To get a current list of hidden MSG in foods, do a search for MSG, Hidden.

### **Steps for Healthier Food Choices**

Start where you are and proceed step by step toward the goal. Follow these overall guidelines:

- Minimize or eliminate (ideally) partially hydrogenated oils in processed foods (use foods labeled “No Trans Fats”).
- Minimize or avoid eating at fast food restaurants. At restaurants choose butter based toppings on the side, eliminate sour cream and cream based dishes. Choose salads (with oil and vinegar or vinaigrette), vegetables and avoid deep fried entrées.
- Minimize or avoid deep fried and breaded foods.
- Minimize sugars and starches (crackers, potatoes, rice, scones, cookies, etc.).
- Increase healthy fruits such as apples and berries (have 2-3 servings per day).
- Use healthy veggies such as those in the veggie list above (Carbohydrates section). Have a minimum of 3 servings per day.
- Try to choose organic fruits and veggies when your budget and the availability of these items allows.
- Eat protein at every meal.

- Try to purchase free-range poultry and meat (if you are not vegetarian).
- Try to choose low-fat, organic dairy products (milk, cheese, yogurt, ice cream, etc.) if you eat dairy products.
- Use a good multivitamin mineral supplement (taken at meals) that requires at least 2 per day with minerals (calcium 500 mg per day and magnesium 500 mg per day) and antioxidants (A, C, E, selenium).
- Try some green tea daily (other teas such as white and red are also healthy).
- Minimize drinks with fructose and corn syrup.
- Choose veggie juices such as V 8 or an organic version (Knudsen Very Veggie Organic, Lakeview Super Veggie).
- For fruit juice, choose one with a lot of phytonutrients and antioxidant quenching abilities.
- If you are trying to lose weight, limit juices other than veggie juices to 4-6 ounces per day.

**Breakfast Ideas:**

- Get at least ¼ of your protein needs met at breakfast.
- Protein Smoothie (see protein section above to make it). Use enough protein powder to get 20-25 grams.
- Use breakfast cereals that are high in protein and fiber, such as Nature's Path Optimum Slim or Kashi Good Friends. Consider adding mixed nuts and fruit to cereal (blueberries, banana, etc.).
- A 2-3 egg omelet or egg scramble with veggies such as spinach, leeks, broccoli, tomatoes, or chives is a good breakfast choice.

**Lunch Ideas**

- Have a sandwich with high fiber, high protein sprouted grain bread (see carbohydrate section above). In your sandwich have nut butter (such as almond, macadamia, or cashew) or turkey or chicken (with no nitrates) with veggies (lettuce, tomatoes, olives, cucumber, onions) or organic cheese with veggies.
- If you have a salad for lunch, add healthy protein such as beans (kidney, garbanzo, pinto), sliced nitrate-free turkey, ocean salmon, or organic cottage cheese. Use numerous colorful veggies in your salad and try to include cruciferous veggies such as broccoli. Use an oil and vinegar salad dressing or make your own (see fats above).

**Dinner Ideas**

- Try to have 2 servings of healthy veggies and a low-fat protein source.
- Minimize desserts (other than fruit).