

# NUTRITION AND HYDRATION RECOMMENDATIONS

## BASIC DAILY NUTRITIONAL REQUIREMENTS

The best way to give your body all the energy and nutrients it needs to function optimally is to eat a well-balanced and varied diet. This should include the following:



Carbohydrates provide the primary source of energy and should make up 45-60% of your total daily caloric intake. Foods such as rice, cereal, breads, and pasta are good sources of carbohydrates.



Fats are another important source of fuel and are necessary to absorb vitamins. Fat should make up 20-35% of your total daily caloric intake. Dairy products, oils, nuts, and avocados are good sources of fats.



Proteins aid in muscle synthesis and repair. Adults should eat approximately 0.6-0.8 grams of protein per kilogram of body weight daily. Seafood, meats, eggs, nuts, dairy, soy products and legumes are good sources of protein.



Vitamins and minerals are micronutrients that are needed in many processes throughout the body. They are found in different amounts in a wide variety of foods and beverages.

Proper nutrition and hydration are essential to achieving your highest level of athletic performance. Implementing a targeted nutrition strategy will give you the best chance of achieving your full potential at the Wings for Life World Run. The following guidelines are designed to help athletes create a nutrition and hydration plan for before, during, and after the race. Run fast and run far as you run for those who can't.

## TRAINING FOR THE WINGS FOR LIFE WORLD RUN

The recommended diet for an athlete in daily training is similar to the recommended diet for any healthy individual. Adjust your caloric intake based on the intensity, duration, and frequency of your training. Athletes should practice their race day nutrition program during training before the event. This will help you tailor your plan to your individual needs.

#### **RACE DAY NUTRITION**

A targeted nutrition strategy can help your performance in the Wings for Life World Run. Consider the following recommendations when preparing your race day nutrition strategy:

#### **BEFORE THE RACE**

The amount and type of food athletes should consume prior to the event is highly individualized and depends on a number of factors including how far you aim to run before the Catcher Car passes you.

### EXAMPLE MEALS / TIMES TO EAT BEFORE RACE

Snack — 1 hour before race

- Sports drink
- Energy drink
- Energy bar
- Banana

#### Last meal — 3-4 hours before race

- Toast with eggs, yogurt, and a glass of juice
- A turkey sandwich, granola bar, and piece of fruit
- · Pasta with sauce and salad
- Rice bowl with steamed vegetables and protein

The day before — < 24 hours before race Increase your carbohydrate intake the day before the event by choosing meals high in complex carbohydrates; including whole grain pasta, brown rice and potatoes.

#### **DURING THE RACE**

Sports drinks, energy drinks, and small snacks can provide extra energy to help fuel your muscles during the race. Sports drinks contain optimal amounts of carbohydrates and electrolytes to help with hydration. Drinking or eating small quantities at regular intervals (15-30 minutes) will make digestion easier.

#### **RECOVERY**

Athletes who evade the Catcher Car for over 90 minutes should consume a meal high in carbohydrates and protein to aid recovery following the race. A good option might be a whole grain bagel with peanut butter, plus fruit with yogurt.

#### **HYDRATION**

Staying hydrated by consuming an appropriate amount of water and electrolytes helps maintain proper body temperature, blood volume, and muscle function. The most practical way to monitor your hydration status is to assess the color of your urine.

### COLOR OF URINE EQUALS LEVEL OF HYDRATION

No Color; Transparent
Overhydrated: cut back on your fluid
intake

Pale transparent yellow
Well-hydrated and healthy

Dark Yellow
Normal: drink some water soon

Amber or Honey
Dehydrated: drink water now

Syrup or Brown Ale
Severe dehydration: drink water now
and seek medical advice if color persists

#### RACE DAY HYDRATION

Staying hydrated throughout the Wings for Life World Run is essential for optimum performance. Consider the following recommendations when preparing your race day hydration strategy:

#### **BEFORE THE RACE**

To ensure a well-balanced and healthy hydration status at the start line, athletes should begin hydrating at least 4 hours before the race. Drink 350-600 ml of water or sports drink depending on your initial level of hydration.

#### **DURING THE RACE**

The amount and rate you should drink during the race depends on how much you sweat. Sweating rates vary widely between individuals and depend on environmental conditions such as temperature during the race. Drinking 180-350 ml of water or sports drink every 15-30 minutes can help maintain optimal hydration.

#### **RECOVERY**

Beverages with electrolytes or a salty snack with water can help athletes quickly and effectively rehydrate if needed. Athletes experiencing nausea, vomiting, or diarrhea should seek immediate medical attention.

#### **OVER-HYDRATION**

Although staying hydrated is important, be careful not to over-hydrate. Consuming too much water can result in dangerously low sodium levels; a condition known as hyponatremia. This can occur if an athlete drinks too much water prior to, during or after an endurance event.

#### **CAFFEINE AND ENERGY DRINKS**

Caffeine is a mild stimulant that can improve athletic performance. Sources include energy drinks, coffee, tea, and soft drinks. Most energy drinks contain approximately 80 mg of caffeine per 250 ml / 8.4 fl oz serving, while a single espresso or cup of coffee contains around 65 to 95 mg of caffeine, respectively. Be mindful that energy drinks are not designed to replace traditional methods of hydration. While caffeine sensitivity may vary per person, 400 mg per day from all sources is considered safe for healthy adults in the general population, except pregnant women. Single doses of caffeine up to 200 mg from all sources are safe for the general healthy adult population, even when consumed less than two hours prior to intense physical exercise under normal environmental conditions. In general, avoid excessive caffeine consumption, as this may result in adverse effects.

# ATHLETES WITH SPINAL CORD IN HIRY

If you are an athlete with a spinal cord injury (SCI) you may need to make adjustments to the recommendations above, which should be in alignment with your physician's advice.

#### **ENVIRONMENTAL CONDITIONS**

### COMPENSATION STRATEGIES FOR ENVIRONMENTAL VARIABLES



#### **Heat and Humidity**

Exercising in hot and humid conditions increases the chances of heat-related illness, including muscle cramping, heat exhaustion, and heat stroke. Athletes with low physical fitness, acute illness or

dehydration are particularly vulnerable. If you are racing in hot or humid conditions take extra care to monitor your hydration level and increase fluid intake before, during, and after the race to compensate for increases in sweating.



#### Cold

Dehydration can still occur during exercise in cold temperatures, even if you do not feel like you are sweating as much. Athletes should follow the regular hydration and nutrition guidelines.



#### High Altitude

Appetite suppression can occur at high altitudes, even though energy requirements may be increased, particularly above 2500 meters (8200 feet). Athletes should maintain their usual diet when moving to areas of high altitude, and increase complex carbohydrate intake leading up to the race.

Always consult your physician before starting any exercise or nutritional program to determine if it is right for your needs. This general information is not intended to replace the advice of a health care professional or to diagnose or treat any medical condition.

Best of luck in your training. We'll see you at the start line!

#### **INFORMATION PROVIDED BY:**



# Mt. Sinai Department of Rehabilitation Medicine

Mount Sinai Per Mount Sinai Rehabilitation Center has repeatedly distinguished

itself through excellent service to people in need. Our commitment to excellence has resulted in the Mount Sinai Rehabilitation Center as a top rehabilitation facilities holding CARF-accreditation for many of our programs.

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