Nutrition Bites

By
Paula Mee
Dietitian
And Eimear Walsh
Dietitian

For further information see www.paulamee.com or www.indi.ie

Congratulations! Signing up to run, walk or crawl the Hope and Dream 10 Mile is a great physical challenge, and one that will hopefully, leave you elated as you cross over that finish line. This race is for a fantastic cause. Participating will really help two separate charities, Hope; a cancer support organisation in Enniscorthy and Share a Dream Foundation; a charity that makes the dreams of sick and terminally ill children come true. The goal is to raise over €100,000 so you can see how important your participation really is!

In your preparation for the weeks of training ahead, we thought you might like some simple nutrition tips on fuelling and refuelling to help you along the way. Of the anticipated 1000 or so participants, a very small number will be serious runners. Most of us, will be gentle joggers or speed walkers. There may be others who want to shed those extra pounds that Santa gave them for Christmas through training for the big day! The tips are designed to be fairly universal and not too specific, and I will cover a different topic every week.

Energy

Improving our daily diet is the initial step to good health. A healthy diet is an essential ingredient to improving our ability to train and participate on race day. But pre-race nutrition does not start in the days or hours before the race. A healthy diet over the weeks and months beforehand will lead to an improved performance on the day so now is the time to start making a few healthy changes to your diet!

It is not just what we eat, but when we eat in relation to our exercise or training that makes a big difference to our energy, our performance and how much body fat we burn.

There are certain nutrients that deserve our close attention when we want to get the best out of ourselves and our training, and in order to get the edge over the competition.

But first, a closer look at calories.

'Energy is the ability to do work'. Many of you will remember this definition from your school biology. We want to run or walk the '10 mile' so we will need plenty of energy to train and complete the 10 miles on the day. This energy will come from another form of energy, found in the food and beverages we eat and drink. Energy is now measured in kilo joules, not kilo calories. Rightly or wrongly we tend to stick to the old lingo, and use the term 'calories', or 'kcals' as it is written on food labels, when we discuss energy in food.

Calories

Calories come from the three main nutrients in our foods

- 1 g of any type of Carbohydrate gives us approximately 4 Calories.
- 1g of any type of Fat gives us 9 Calories
- 1g of either plant or animal Protein gives us 4 Calories.

Tip – If you are trying to lose weight, cutting back on foods containing a lot of fat, as opposed to a lot of protein or carbohydrate, will give you an effective reduction in calories quickly. Also 1g alcohol gives you 7 calories and these are completely empty calories which can dehydrate you.

For best performance, whether you are walking or running, your intake should be roughly -

- 55% Carbohydrates (high fibre cereals, breads, brown rice, pasta, potatoes with skins, vegetables and fruits etc)
- 30% Fats (healthy oils such as olive or rapeseed, low fat dairy foods etc)
- 15% Protein (poultry, fish and shellfish, lean meat, eggs, nuts, beans etc)

Tip - Carbohydrate is a critical fuel for our working muscles. However we don't always focus on the right type of carbohydrate when we train. Most of us need to cut down on the highly processed carbohydrates and the 'carbs' that also contain fat such as cakes, biscuits, pastry, sweets, chocolate, bakery products etc. We will devote next week to carbohydrate so you can read more information then.

Do you need to count calories?

While there's no need to count calories, you may be interested in knowing roughly how many calories your body needs. That way, if you pick up a confectionary snack or a ready meal in the supermarket, you can judge if it's a good idea or not to include it as part of your meal plan. Grab yourself a calculator and off you go. It's not as complicated as it looks.

Your Total Calorie Requirement = Basic Energy Requirements (BER) + Extra Energy Requirements (EER)

Step 1:

BER is estimated as follows:

For every Kg of body weight 1.3 Calories is required every hour.

If you weigh 60Kg your BER = 1.3 × 60Kg x 24hrs => 1872 Calories/day

Calculation ....1.3 x your weight in kg x 24 = ?

Step 2:

EER is estimated as follows:

For each hours vigorous training you require an extra 8.5 Calories for each Kg of body weight.

If you complete an hour of vigorous training you need 8.5 × 60Kg x 1 hr = 510 Calories)

Calculation.....8.5 x your weight in kg x number of hours training in a day = ?

Step 3:

Total calories required = BER + EER = 1872 + 510 = 2382.

Your total calories = BER + EER = ?

Therefore if you weighed 60Kg and you trained for one hour, you would need an intake of approximately 2382 calories that day.

Do you want to lose weight?

If you want to lose weight, it is best to aim for a realistic and steady weight loss of between half and one kilo (1 – 2 lbs) per week. A loss of more than one kilo (2 lbs) per week means you could be losing muscle and this will affect your ability to train and perform.

The only way to lose body fat is to take in fewer calories than your body needs for basic living and everyday activities and increase your amount of exercise. Half a kilo (1 lb) of fat contains roughly 3500 calories. If you want to lose ½ kg a week, then you have to lose 500 calories a day. The best way to cut 500 calories a day is to reduce your calorie intake from food by 250 calories, and burn an extra 250 calories through exercising. You can cut 250 calories by foregoing a bag of crisps and the butter on two slices of bread. So a few small simple changes are enough to make the difference!

How do you know if you are overweight?

Look collectively at the following results.

1. Your **Body Mass Index** (BMI) = kg/m2

Interpretation	Category	Health Risks
< 18.5	Underweight	Osteoporosis, infertility.
18.5-24.9	Desirable body weight for your height	Lower risk of disease
25-29.9	Overweight	Increased risk of type 2 diabetes, high blood pressure, heart disease, high cholesterol, stroke, and certain types of cancer
>30	Obese	Higher risk of all the above diseases

2. The BMI alone is not an accurate predictor of overweight in very fit people.
 It must be interpreted alongside your **body fat composition** results (Assessment with a bioelectric impedance scales is one way to estimate how much of your body is muscle and how much is fat).
If you are interested in working out your BMI your pharmacist can help you do this.

3. **Distribution of body fat** is also important. Central obesity is a recognised risk factor for cardiovascular disease, independent of BMI. Central obesity or fat around the middle poses a greater risk than peripheral obesity. **Waist circumference is therefore useful to measure.**

An increased risk of certain health conditions occurs for:
Men with a waist circumference ≥ 102cm (40 inches)
Women with a waist circumference ≥ 88cm (35 inches)

Health conditions include
- Premature death
- Type 2 diabetes
- High blood pressure

- Altered blood fats
- Heart disease and stroke
- Osteoarthritis
- Certain types of cancer
- Breathing difficulties
- Psychosocial disorders