

The words “Nutrition” and “diet” can be a minefield especially with teenagers, there are more outside influences (social media/traditional media & advertising, clothing etc.) to be a certain size/look and the very word “diet” now having the wrong meaning.

I’ll attempt to navigate this and share some common-sense food (nutrition & Diet) facts.



Teenagers can famously eat their parents out of house and home, and teenage athletes generally need more calories than regular teens. However, this should not mean an excuse to eat rubbish food or just upping the calorie content “it’s ok I’ll burn it off” is just not the case.

**The phrase, you are what you eat, is totally true in pre-teens and teenagers.**

Unlike adults’ teenagers are in a state of constant growth which literally comes from the ingredients they put into their bodies, if diet is important at any point in their lives, it is now.

There are conflicting surveys but a rough guideline for active teen girls ages 14 to 18 are 2,400 calories (the same as a non-active fully grown male), while active teen boys in the same age range need 2,800 to 3,200 calories per day. However, some teenage male athletes might need 3,000 to 4,000 calories per day and female teen athletes need 2,200 to 3,000 calories per day, dependent on physical size and volume of training.

**But crucially everyone has different needs.**

For teenagers training 6-7 times a week or more, the one way to make sure you are maintaining a healthy balance is the one parents, and coaches are (rightly) concerned with – regularly weighing yourself. You must **never** be worried about how much you weigh- ironically as a training athlete you are probably going to be heavier than inactive teenagers (due to extra muscle), this doesn't mean anything other than that! Monitoring whether you are gaining weight or more worryingly losing weight should just be a regular part of training just like you monitor yourself in a time trial. This is one of the most important phases of your physical growth and to do this you need to fuel your body with good ingredients, if you are losing weight you are using more calories than you are putting in. this isn't good. Weigh yourself at the same time of day (First thing in the morning is good to avoid fluctuations) maybe on the same day, once a week and take into account dehydration.

**Remember this is for teens and young adults training more than 6 times a week.**

Also, weight gain might be because you are physically getting bigger, taller and putting on more muscle so **DO NOT** restrict your calorie intake.

**Carbohydrates** are an athlete's most important source of energy; teenagers should consume 45-65% of their daily calorie intake from carbs, but only **good** carbs.

**Examples of good carbs food: whole-grain cereals, oatmeal, whole-grain breads, brown rice, quinoa, whole-grain pasta, whole-wheat bagels, fruits, vegetables, legumes, milk and yogurt Potatoes (boiled-jacket).**

Examples of Bad carbs are (simple sugars):

- Sweets
- Soft drinks
- Cakes/biscuits

**Protein** is essential to help build, repair and maintain muscle mass in teenage athletes. Young athletes usually need 1-1.5 grams of protein per kilogram of body weight each day.

**Athletes can get all the protein they need from high-protein foods, such as lean meats, seafood, poultry, eggs, low-fat dairy products (milk, yoghurt), soy products, legumes, nuts, seeds and peanut butter.**

**NOT PROTIEIN SHAKES**

**Healthy fats.** Many people believe athletes should avoid fats (and to some extent that is true) however healthy fats—especially omega-3 fatty acids—are important for cognitive development (your brains!) in children and teens. Fats are also an important source of energy for teen athletes. Teenagers should consume 25 to 35 percent of their daily calories from **HEALTHY** fats.

**Examples of healthy fats include vegetable oils (not food fried in vegetable oils!), other plant-based oils—such as flaxseed oil--purified fish oils, hummus, avocados, olives, nuts, seeds and peanut butter. Oily fish is great for brain development.**

**Vitamins and Minerals:** (all KS3 students are taught about healthy diets and the eat well plate).

Eating a well-balanced diet should be enough to help teen athletes meet their daily requirements for vitamins and minerals, such as calcium, iron, zinc and B vitamins, and you only ever need take a

Multivitamin supplement if you are run down or not getting your normal healthy diet, they are never a substitute for food. You should never overdose on expensive multi vitamins as your body cannot process them in such quantities and will just pass them out. Fruit-juice is also another source of vitamins too but is high in simple sugars even if they are natural. Dark green vegetables are a good source of Vitamins and Minerals, and dark green leafy veg are especially good for Iron.

Iron-rich foods include watercress and curly kale, iron-fortified cereals (with no added sugar), boiled brown rice, pulses and beans, nuts (not salted or chocolate/yoghurt covered) and seeds. Lastly white and red meat, fish and tofu.

An example of a day's eating could be:

**Breakfast:** high-carb breakfast, Bananas, brown toast/bagels, or porridge are good choices. Yoghurt with fruit, homemade granola i.e. no added sugar. Iron rich cereals (with no added sugars) Water/Milk, maybe some fruit juice. **Not** high sugar cereals (coco pops or anything chocolate is out).

**Mid-morning snacks:** Fruit – cereal bars – fresh juice (small amounts) Flap jacks, toasted wholemeal bread – avoid sugary cake or white carbs.

**Lunch:** 2/3<sup>rd</sup> carbs – 1/3<sup>rd</sup> protein and a small amount of healthy fats. Tuna/Jacket potatoes & Cheese. Rice/chicken and stir-fried Veg. Bagels/chicken and creamed cheese (with salad). Tuna pasta (brown is better)

**Not** Deep Fried – high volume processed white carbs, sugar and fat e.g. Pizza.

**Evening meal:** 2/3<sup>rd</sup> carbs – 1/3<sup>rd</sup> protein and a small amount of healthy fats.

Iron rich vegetables (dark green leafy type), skinless chicken/fish and potatoes/rice etc. Plenty of fluids

However, everything in moderation as you do need balance and variety and to **enjoy** your food. Microwave meals are a no, crisps, chocolate and biscuits from the corner shop again, NO!

Also, how we eat can be almost as important as what we eat: High protein meals (or shakes) take longer to digest and so can repeat on you if consumed within an hour before training. Rushing your food or eating on the go isn't good for digestion – take your time and enjoy it.

**Hydration:** The simplest performance enhancer is being hydrated, the easiest way to underperform is training or worse still, racing whilst dehydrated.

You are mainly made up of water (approximately 75%) and use a vast amount each day, most non athletes are permanently dehydrated, which can lead to a weakened immune system. We need water to help the body expel toxins and waste materials, being dehydrated makes this a difficult task. Not being able to remove this waste, makes you more susceptible to infection. Not staying hydrated can also lower energy levels, leading to a weakened immune system.

Drinking a pint of water immediately after training and plenty of water before you sleep will equip your body with enough fluid for you to rehydrate, but **Not** energy drinks! Sports drinks have a high sugar content which are meant to deliver quick energy, but these drinks will end up causing you to be even more thirsty and cause a spike in blood sugar which means your resting body has to work hard to balance the system.

**Sports drinks:** Some sports drinks claim to supply sodium, potassium and electrolytes that we lose during training but most of us don't begin to lose these minerals and electrolytes until we've been exercising at a very high level of intensity for more than 60 continuous minutes. Sports drinks **won't improve performance** or keep off dehydration any better than water.

Semi skimmed milk is better than a sugary sports drink. Training performance is dramatically affected by hydration levels as is recovery and the ability to repair yourself after training.

**How can I tell if I'm dehydrated?** Feeling thirsty means, you are already dehydrated, feeling hungry can also actually be thirst. Headaches, weight loss and looking leaner in the mirror than yesterday are signs of dehydration. Also, without being too explicit smelly and dark urine are a sure sign, your urine should be light (straw) coloured to clear.

**Caffeine in your diet (energy drinks – Red Bull, Monster etc.):** I would never recommend excessive caffeine consumption in anybody, as a stimulant it effects people in different ways and impacts sleep (which is hugely important to the growing body of a teen athlete). Caffeine is contained in chocolate, tea & coffee but also in certain supplements and even sweets, but also medicines to make you feel more awake when you should really be sleeping.

Some sports drink contains 50-100mg of caffeine, this is going to negatively affect decision making and behaviour and is a bad idea in pre-adult athletes (or any athlete). Energy drinks are **not** for athletes and definitely not for teens (whatever the adverts say!).

Energy drinks/caffeine over stimulate your adrenal glands, and then the body must balance the system. All this extra work for your adrenal glands can lead to “*adrenal fatigue*”. The repeated up and down cycles overwork your adrenal glands which can make you resistant to insulin. Similar effects happen from highs and lows of refined sugar consumption (sweets/Coke etc.), again with the body working hard to maintain a balance. Excessive sugar can make your body slightly acidic and the only place the body can get the required minerals to balance this out is in your bones.

**Supplements:** Supplements are no substitute for a good diet, they are expensive, and lots are a waste of your time as your body can not absorb a lot of the vitamins and minerals within them. Also, as an athlete you do not know what is in them, people have been found guilty of performance enhancing drug violations from taking shop bought supplements. This is especially true of Protein shakes and powders. These can contain any food safe ingredient but one which could earn you a ban.

**In summary:** eating well won't suddenly make you faster but it does allow you to train well which does make you faster in the long run. You don't need to buy special foods or supplements to go fast or to be able to train harder, just eat a healthy and balanced diet, you **don't** want high sugar content foods and drinking (remaining hydrated) is key to not only performance but recovery. The first 30 minutes after training you should be drinking and eating for maximum effect (if you live further away from the club than that bring a snack). The same is true after a marathon race hence the competitor's food, but it's harder to achieve in a sprint regatta!

You should also have a healthy relationship with food, it should be enjoyed and not just viewed as fuel. Try to have a wide variety of tastes because when you are racing abroad, they may have foods you aren't used to, but you still have to eat.

Lastly a little something naughty every so often is ok, just maybe not before your race.

#### **Common sense food facts-**

If you can't tell what's in it, should you be eating it?

Be aware of good food but not ruled by it.

Enjoy your food.

Manufactured foods can hide all sorts within their ingredients. They hide the sugar in the ingredients list, as it has to be listed in highest volume first, so to make it look healthier they call it different names. Here are some common names of added sugars and sweeteners.

Beet sugar, Blackstrap molasses, Brown sugar, Buttered syrup, Cane juice crystals, Cane sugar, Caramel, Carob syrup, Castor sugar, Coconut sugar, Confectioner's sugar (powdered sugar), Date sugar, Demerara sugar, Evaporated cane juice, Florida crystals, Fruit juice, Fruit juice concentrate, Golden sugar, Golden syrup, Grape sugar, Honey, Icing sugar, Invert sugar, Maple syrup, Molasses, Muscovado sugar, Panela sugar, Raw sugar, Refiner's syrup, Sorghum syrup, Sucanat, Treacle sugar, Turbinado sugar and finally Yellow sugar.

**Sugars with Glucose** These sweeteners contain glucose, either pure or combined with sugars other than fructose: Barley malt, Brown rice syrup, Corn syrup, Corn syrup solids, Dextrin, Dextrose, Diastatic malt, Ethyl maltol, Glucose, Glucose solids, Lactose, Malt syrup, Maltodextrin, Maltose and Rice syrup.

**Sugars with Fructose Only:** fructose and Crystalline fructose

Artificial sweeteners are just as bad for the body so Diet drinks (Coke, Pepsi Max) are still not a good idea. Food with artificial sweeteners (to lower the sugar content) are also best avoided.

