

# Nutrition & The Swimmer Diet

Over the past few months at open meets and our half term swim camps I have noticed that some of our swimmers could do with some more information about what they should be eating and how much they should be eating. A little knowledge is a powerful tool to making the right choices.



Diet is not a word that means losing weight, for some people their diet can actually be to help them put weight on. Diet simply means what it is that we eat and nutrition is the breakdown of what that food contains. Macronutrients are your carbohydrates, fats, protein and water, micronutrients include, vitamins and minerals.

Carbohydrates are basically sugars and no that doesn't mean you can just eat a pack of Haribo and get what you need. Carbohydrates come in different forms, simple carbohydrates, which are absorbed quickly into the blood, give a fast release of energy. These are what we find in sugary foods and drinks such as sweets, fizzy drinks, etc. It takes roughly 20 minutes to feel the effect of simple sugars such as these raising our glucose and energy levels however the effects are short lived our energy levels often dipping to lower than our original point before you ate. Many people think they can use this to increase their performance by eating sugar just before they go for their race but we have all been at competitions where a race gets delayed, you spend 30-40 minutes in the whipping area, to many things can go wrong trying to time this correctly and you are more likely to inhibit your swim than boost it. That is not to say we do not need some simple sugars in our life, but consider the source, fruit is high in natural sugar, this is much healthier for you to eat regularly compared to processed sugars such as sweets. However eating too much fruit can be bad, remember moderation is key.

Complex carbohydrates, these are made up of more complex sugars that can take the body longer to digest and therefore are released more slowly into the body, this increased your glucose and energy levels steadily and consistently through the hours to follow your meal. These are things like your rice, pasta, breads, many people do not think of these food as sugars but they are essentially just that. A good experiment to test this is to place a piece of bread in your mouth (white bread works best for this as unfortunately they add a little sugar sometimes to get that colour and taste you all like so much) and rather than chew it just suck, after a while you will notice it starts to turn sweet. This is because we actually have enzymes in our mouths that begin to break down the sugars in food, before other enzymes in the rest of our digestive system continue this process. As with anything you again have healthier options, whole wheat versions of your pasta and bread are often more complex and will provide you a longer energy source. At the end of the day, so long as you make sure to get enough of these types of food, which as an athlete should make up around 60-80% of your diet, varying depending if you are training or competing, you will provide

Complex Carbs	Simple Carbs

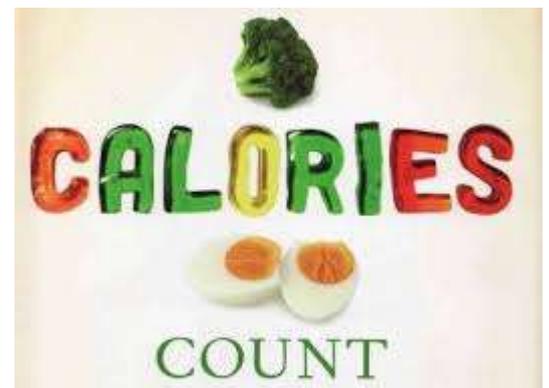
break down the sugars in food, before other enzymes in the rest of our digestive system continue this process. As with anything you again have healthier options, whole wheat versions of your pasta and bread are often more complex and will provide you a longer energy source. At the end of the day, so long as you make sure to get enough of these types of food, which as an athlete should make up around 60-80% of your diet, varying depending if you are training or competing, you will provide

yourself a solid base of energy for your swim. Too much of either type of sugar will convert and be stored as fat around the body.

Fat, now we often hear the saying “not all fats are bad”, but not many of us know what they mean by this and in fact which fats are or are not bad. Body fat is essential, you need it to remain healthy as it acts to protect your vital organs, as well as provide you warmth. So which fats are better than others? Essential fatty acids such as omega 3 or omega 6 are an important part of our diet, which can have effects on our immune function, inflammation and mitosis (cell division which allows growth and repair). Fats are either described as, saturated, unsaturated or as trans fats. Fats are made up of carbon, and hydrogen molecules that bond to glycerol, the structure of these bonds is what determines which kind of fat is actually in the food you are eating. Saturated fats occur naturally in many foods we eat, meats, cheeses and butters. Unsaturated fats are found in things like olive oils. Trans-fats are very rarely found in nature often processed in factories, these are the ones we ideally need to limit. Saturated fats are ok in moderation, look for leaner meats to reduce this fat intake. Unsaturated fats are considered better for us as the bonds between molecules are broken down more easily and can be used as energy, other types are harder to utilize and are stored as fat.



Now too much fatty foods, as well as too much of any food in general from any of these food groups, is stored on the body and it is said to lead to putting on weight and cause problems in life such as obesity and as you get older cardiovascular issues including heart disease. Because of this some swimmers may be put off eating enough food, please remember you are likely to do far more exercise than several of your school friends, you need to eat to compensate for this. If you do not you will begin to feel tired more often, struggle with your focus and attention, not only may your swimming be affected but also your school work. You will need to eat 1.5 -2 times as much as your friends. This means they may eat 1500-2000 calories depending on age and gender, sorry girls boys can generally eat a little more than us unfortunately by around 200 calories. Whereas you will need between 3000-4000 calories, depending on how many sessions a week you train, if you have a competition over the weekend and your age, younger children are still growing through to about 16 years for girls and 18 years for boys, although can be longer and you need the energy to both grow and fuel your swimming.

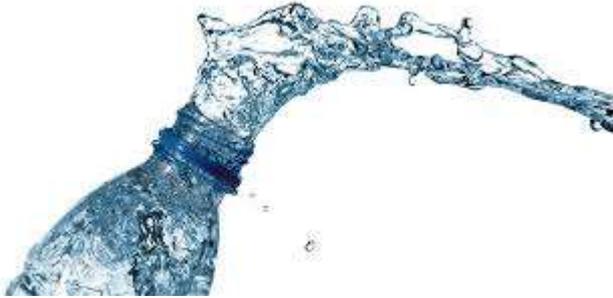


Protein, the latest trends are to eat lots of protein and many people use it right after a race for recovery, but do you know why? Will this actually help? Our body naturally produces some amino acids which make up proteins they make up everything in our bodies. Some amino acids we cannot make and must consume through diet. Proteins are used for cell growth and repair, it helps young people to develop healthily. When you train hard your muscles often ache, yes we hear you complain about it, this is because as you push yourself your muscles tear slightly causing micro traumas, when they repair they grow back bigger and stronger and including protein in your diet will allow your body to repair your muscles. We all know protein is in meat but what about vegetarians, cheese and nuts are a couple of good examples of protein just watch the fat levels. So why do we see people eating protein bars and milkshakes after races, some people have shown that eating 20g of protein after exercise will improve recovery and muscle development. Please remember



before you go out buying loads of fancy products that you should be getting all the nutrition you need from your diet. Often these products are jam packed with more nutrients than our bodies can process in one go and most of it therefore passes through our system before we can grab hold of it.

Vitamins come with the same warning, while your growing you don't need supplements to your diet you just need to make sure your diet is well balanced. So nice and simply, eat lots of vegetable and don't forget fruit is grate but can be sugary.



Finally hydration! You need to make sure you are drinking plenty when you are swimming. So many times towards the end of sessions and in the final half days at open meets do we see swimmers starting to flake? Is this because they are tired, as so many will assume, or because we have not kept ourselves hydrated properly. It is often said a 2% decrease in

hydration levels can lead to a 20% decrease in performance. Swimmers should note that we don't tend to feel thirsty until we are already becoming dehydrates. You need to stay ahead of this by drinking consistently throughout sessions and at competitions.

Parents and swimmers remember with our Golden Eagle Meet this weekend, it is not just about quantity and quality of food but also the timing of eating certain foods. Swimmers should take responsibility food their own food, keep it poolside, you need access to it throughout the day. Parents remember your dietary requirements are different to your young athlete, if you are trying to be healthier or lose weight, bare in mind how your swimmer may view this and make sure to explain the differences to them so they do not begin to pick up habits that may affect their swimming. Treats are ok once in a while, but ask yourself if there are more natural foods you can get the same nutritional value from in a healthier way.

Oh yeah and don't forget..... WATER WATER WATER!!!!!!!!!!!!

Louise