CARBOHYDRATES FOR IMPROVED ATHLETIC PERFORMANCE
Eating the right carbohydrates at the right time is key to improved athletic performance for three reasons:

1. To fuel your performance (training sessions and/or events);

2. Improved - faster and more complete - recovery for consistent training and progress; and

3. Better immunity, health and general well-being (again for consistent training and progress).

This is applicable to all athletes, even those where improved body composition is a goal. Let me explain how…

**Carbohydrate timing**

**TIP #1:** consume carbohydrates post-workout for enhanced recovery and growth including lean muscle gains.

Carbohydrates (carbs) are the body’s preferred source of energy. This is because the body can easily and quickly break carbs down into glucose for energy - via ‘blood sugars’ - and/or store as glycogen in muscle cells for future energy. This means they are best consumed post-workout as this is when the body has depleted blood sugars and/or glycogen, even if you train in the evening. In fact when consumed in the evening they will help with better sleep quality for improved recovery as well (depending on choice, see later section). We’ve just busted the ‘no carbs after 5pm myth! Because training places additional stresses on the body – such as mental, physical, neural, immune related - the body needs to ‘top up’ depleted glycogen levels immediately post-workout, and a bit more to enable the ongoing recovery and growth processes that continue for up to 48 hours afterwards (even longer depending on your training session/event). In other words, the body requires carbohydrates post-workout for completing two phases of recovery:

1. Refuel i.e. To immediately replenish depleted levels; then
2. Recovery and growth i.e. To facilitate physical recovery and growth through providing extra for the slower, ongoing recovery/regenerative processes. This means that depending on intensity and duration of your training session/event, you will need 1-2 post-workout meals that include carbs.

Also, that in terms of body composition, the more muscle you have the more carbs your body will require for full recovery.

**Carbohydrate choice**

**TIP #2:** Eat fast digesting carbs (high GI) immediately after training followed by 1-2 meals (dependent on session intensity and duration) including slower digesting carbs (low GI).

It is important to eat the right type of carbs for the right phase of recovery: the body needs an easily accessible carb source to replenish depleted glycogen levels immediately; then a bit more for ongoing recovery/adaptation.

**High GI foods**

Firstly, consider the glycemic index (GI) rating of a food; this indicates its rate of breakdown (digestion) and release into the blood stream as blood sugars i.e. Digestibility and speed of availability. Immediately post-workout ‘high GI’ foods – also known as ‘simple carbohydrates’ – as are easier to digest due to their lower fibre content. Think sugary and starchy foods such as fruit, dried fruit, fruit yoghurt’s, natural ice creams, cereals and cereal bars, juices, sports/carb drinks (such as Lucozade), rice cakes, chocolate milk, smoothies, honey, white bread etc. The best choices are ‘real food’ ones as they also provide nutrients key to recovery (most nutrients are stripped out via the manufacturing processes of processed foods).
100% RAW
100% NATURAL
100% VEGAN

Lean & Green® combines the power of several rich protein sources into one smooth, great-tasting formula that is amazingly versatile and tastes great too! The unique, raw, plant-based protein has a complete amino acid profile, necessary for energy and wellbeing. Free from soya and hemp, delivering over 20g protein per serving. Lean & Green® is super versatile, and can be used in juices, smoothie, shakes or even added to your favourite recipes.
e.g. fruit (especially exotic and berries), natural fruit yoghurt’s, rice cakes, popcorn, fast digesting oats, white/basmati rice, protein shakes that include carbs or carb powders (I use Bio-Synergy’s ‘creatine boost’ powder or ‘essential sports fuel’ protein powder). However, if you are going to indulge in a treat, after an intense workout is the best time in terms of a reduced chance it will be stored as body fat …but that’s another article!

Low GI foods

‘Low GI’ foods are also known as ‘complex carbohydrates’; the high fibre content makes them harder to break down and hence slower to release energy. This is why they are better for the slower, second phase of recovery. Examples of good choices are brown rice, lentils, oats, beans, wholegrain pasta, quinoa, potatoes, yams, peas, and rye/wholegrain breads, and bananas.

The Glycemic Load of carbs

The glycemic load (GL) of carbs is an even better indicator than the GI because it also takes into account the amount of carbohydrate in a food. That is to say, a foods GL rating indicates the total carbohydrate release and the speed of it (GI). I have factored this into the carb choice examples given above.

TIP #3 – Keep post-workout meals low-fat

Fats are the body’s second preferred source of energy (to carbs) as they are harder to digest and slower to release energy. Hence, consuming with carbs in the post-workout window will offset the benefits. Ideally, you should aim to consume a majority of your total daily carb intake in the post-workout window and consume fats for energy outside of this window.

I hope that by following these three tips you can experience the benefits of improved performance, energy levels, health and well-being, without worrying about your body composition goals. I structure the nutrition plans write for athletes around these same carbohydrate tips and I have practiced with success myself across multiple disciplines: football, body-building, strongwoman and powerlifting.

Got a question? Tweet me on @weaselulu.
TO UPGRADE YOUR NUTRITION TODAY VISIT BIO-SYNERGY.UK

‘97 BIO-SYNERGY WAS FOUNDED OUT OF A PASSION FOR HEALTH AND FITNESS AND A DESIRE TO CREATE THE FIRST CLEAN, EFFECTIVE AND HIGH QUALITY RANGE OF SPORTS NUTRITION, TO THE SUPPORT THE GOALS OF ATHLETES AND FITNESS ENTHUSIASTS TO FUEL THEIR PERFORMANCE. BIO-SYNERGY SPORTS SUPPLEMENTS HAVE BEEN USED BY MANY OF THE WORLD’S MOST RESPECTED ATHLETES AND TEAMS.