



PERFORMANCE NUTRITION

Power to the people

Elite nutritionist **James Collins** is going to challenge everything you know about food

The fuel you use in your body makes as big a difference to your results as the work you put in at the gym, on the track, or out on the training field. The problem is that the world of nutrition is a big and scary one. There's a lot of

information out there, tons of jargon, and bucketloads of contradiction.

That's why we've teamed up with Arsenal Football Club's head of nutrition, James Collins. A leader in the field of performance nutrition, James will be cutting through the noise

over the next six issues to explain how elite-level nutrition can be applied to your day-to-day life.

In his first piece for us, we'll start with the fundamentals. What is performance nutrition, and how is it applied to elite-level competition? ►

DEVELOPING PERFORMANCE NUTRITION

“Athlete X is a bit overweight, they could do with seeing the nutritionist.” That was seen as the main role of the nutritionist a decade ago in elite sport. I’ve been fortunate enough to work with some great athletes and teams to date, and have seen a lot change over the last decade.

Firstly, the science has moved on leaps and bounds. We understand more about how to fuel the body for different types of training, how the muscles recover, and all the key elements in which nutrition can improve performance.

This has seen the emergence of ‘performance nutrition’, a name that reflects its importance within elite sport. Performance nutritionists such as myself work closely together with a support team of conditioning coaches, physios, doctors and other specialists to provide the best support for athletes from the top down.

I’m regularly asked what the key areas are that have developed most rapidly within elite sport, so here’s a quick run-down for you...

Monitoring

We take a very scientific approach to monitoring our athletes’ nutrition. We monitor muscle mass, body fat and bloods to understand nutrient status, and every part of training and recovery. From there, I then work with athletes closely to personalise their ‘training diet’, so they respond and adapt in the best way to training, and are primed to deliver their best on competition day.

Ten years ago, this would have taken a more ‘one size fits all’ approach, likely as a higher carbohydrate diet. As the science of nutrition and training has progressed, recommendations have become very specific. Now the diet is carefully ‘periodised’ (just like training), depending on the physical demands of different training sessions, and the athletes’ individual goals.

High-performance kitchen

I work with a team of chefs to implement my nutritional strategies. We have a head chef at our training facilities, and an executive travel chef who travels everywhere with us. They’ll work with the staff in hotels and on the team bus when needed. It becomes a collaborative effort for all involved.

We meet each morning to discuss ideas, and to challenge each other. I’ll always question my team of chefs, trying to find ways to create specific dishes or drinks to fit the needs of players. For example, if a player requires a focus on protein, omega 3 or a boost in iron, we’ll be tailoring their meals to boost their intake of each, all the while catering for any deficiencies.

Today, teams can have more than 15 different nationalities in the squad, so that provides a real challenge to create a range of delicious dishes that players enjoy, that they’re familiar with, but that can also meet their nutritional requirements. Gone are they days of bland food; innovative chefs help to bring meal times to life.



James works with a team of chefs on and off the road, to prepare highly nutritious meals that cater for individual athlete’s needs



As well as being head of nutrition at Arsenal, James has worked with the England squad and with different British athletes at the past three Olympic Games

Travelling

We travel a lot, so the detail needs to be spot on. We look into travel in micro-detail, and carefully control take-off times, and food and fluid options served on the flights to minimise travel fatigue. This was a particular focus when I went to the 2014 World Cup in Brazil, as well as the long-haul travels of events like the Olympic Games and the athletics World Championships.

WHERE ARE WE NOW?

We are in the middle of an extremely challenging time: nutrition has become fashionable, and the industry is in the middle of a real boom. There has, however, never been so much noise and confusion, caused by unqualified ‘gurus’ and mixed messages from an over-zealous media looking to find the next big thing.

Over the last five years, column inches related to nutrition and fitness have increased dramatically, but these often lack any continuity – a series of recipes, some supplement adverts, and some research shoehorned in. One week vitamin C is good, the next week it’s the devil!

I feel the challenge here isn’t to pump out more content – we’re swimming in it – but to refine it and create continuity instead. This will help clients – and you, the reader – to cut through that noise.

LET’S CLARIFY

The science we apply in sport really applies to other environments. I’ve started working with more actors and musicians wanting to apply these principles and structure to their lives. Most want to know how to look good (stay lean), but also how to fuel their bodies to maintain energy during gruelling schedules. The key principles of performance nutrition can help athletes, performers and those with a demanding lifestyle to look better, feel healthier, and achieve their own personal best. It’s built around these four key principles:

- 1 The Individual:** We all have individual needs from our nutrition. These depend on how active and demanding your lifestyle is, as well as understanding your body’s individual physiology.
- 2 The Goal:** Your personal goals – whether that’s getting fitter and leaner, improving energy levels, or simply living a healthier and more productive lifestyle – all require a bespoke nutrition plan. Value your body and health in the same way athletes or celebrities do, and invest the necessary time and attention in it.
- 3 The Activity:** Food provides the fuel for your daily activity. Your body requires different types of fuel depending on the physical demands of different workouts. Altering your diet to suit your levels of activity is crucial.
- 4 The Mind & Body:** Both the mind and the body need to be in tune with your nutrition. Performance nutrition will give you the support to creating winning habits, and the tools to stay on track for lasting change. 🍽️



THE BIG EAT
Tickling your fancy

MEAL OF THE MONTH

Quinoa & spice porridge

The perfect breakfast for elite athletes and ordinary Joes alike

Starting your day off needn’t be complicated, even if you’re an elite athlete. James has devised the perfect start to your day with this quinoa and spice porridge. It delivers a super dose of Omega 3, which supports proper brain, muscle and cardiovascular function, and is a high-protein alternative to your standard oatmeal.

METHOD

1 Rinse the quinoa thoroughly, removing any grit and place it into a pan with the milk and cinnamon.

2 Bring the quinoa to the boil and turn down to a gentle simmer. Allow to cook gently for 15 minutes or until the milk has been absorbed and is cooked through.

3 Squeeze in the juice of the lemon and grate the zest over, then stir it in. Sprinkle over the toppings to flavour.

INGREDIENTS

(One serving)

- 60g quinoa
- 225ml semi-skimmed milk
- 1 tsp pumpkin seeds
- 1 pinch cinnamon
- Juice & zest of ½ lemon
- 1 tsp chia seeds
- 1 tsp sesame seeds
- 1 tiny pinch ground cinnamon
- 1 tiny pinch ground nutmeg
- Handful berries (optional)

NUTRITIONAL INFO PER SERVING

466 CALORIES	23g PROTEIN	16g FAT	67g CARBS
-----------------	----------------	------------	--------------