COACHES INTERVIEW Greg Whyte

Greg Whyte OBE is a celebrity sports scientist. An ex-Olympian in modern pentathlon and professor of applied sports and exercise science at Liverpool John Moore's University, he has guided many celebrity figures towards quite amazing feats. His most recent charge was Davina McCall, who he successfully trained to complete the 'Beyond Breaking Point' 506 mile ultra-triathlon. Greg is also director of performance at the Centre for Health and Human Performance in London.

We asked Greg a few questions about his coaching philosophies and nutritional practices.

Q Greg, thanks for talking to us. As an ex-athlete yourself, having been through the hard work and psychological challenges of training and competing, what edge do you feel you have when guiding clients towards their lofty goals?

GW: Being a former elite athlete, I have learnt a host of lessons that have moulded my thinking and practice with clients, which include the following:

• Vision – setting a long-term goal, which is challenging, is key to achieving success. Additionally, I know through experience that long-term goals must be supported by short and medium-term goals.

• Planning – success is not a chance event. You cannot expect to be successful if you have not meticulously planned your journey. Being an elite athlete teaches you the importance of planning.

• Determinant of performance – understanding the component parts of performance is key to optimal training. Profiling the client against a target goal for each determinant, prescribing a bespoke programme and monitoring changes in performance will lead to the fastest improvements in performance.

• Hard Work and perseverance – nothing good comes easy. Making sure the client understands that hard work is a prerequisite for success. Also, dealing with failure is key to success in elite sport, which is an important lesson for clients.

Celebrate – making sure a client enjoys the fruits of their labour and celebrates successful achievement of goals is a lesson I learnt in my sporting career.

Q You are a professor at Liverpool John Moore's University – what type of research have you involved yourself in?

GW: I have been a researcher for over two decades; publishing over 200 peer-reviewed papers, eight books and thousands of press articles. The research has covered a whole range of research related to human performance across the performance spectrum, from elite athletes to cancer sufferers. My original research interest, which remains my main area of research, is the athlete's heart and exercise-related sudden cardiac death. However, as the former director of research at the British Olympic Association and English Institute of Sport, I have published in a variety of areas, including: the environment and performance (i.e. heat, altitude and cold); immune function (i.e. unexplained underperformance, exercise and immunity); and ergogenic aids and performance (i.e. sodium bicarbonate/citrate, caffeine etc); blood markers and performance (i.e. growth hormone, iron etc); sleep and recovery.

Q What have you learnt, that may be of benefit to your athletes?

GW: Research underpins all of my work with all of my clients, including athletes. Evidenced-based practice is the only way to ensure the highest quality of service. One of the most important things I have learnt is that an individualised approach is absolutely critical to ensure optimal performance.

Q Many of your celebrity challenges have involved a long-duration event. How do you monitor rest-recovery ratios to make sure they arrive at the start line well-trained, but not over-trained?

GW: Monitoring training load is the golden chalice of sport science. Understanding how to balance training load and recovery of your client is the key to optimising performance. Having had a couple of PhD students working in this area, it is fair to say that simplicity is often the best policy when it comes to monitoring the client. I have researched expensive tools for monitoring athletes including blood and saliva parameters. However, it is the use of standard sets monitored regularly, combined with face-to-face discussions and simple psychological monitoring tools (i.e. POMS), which provide the most accurate and immediate information on training/recovery balance.

Q Do you analyse nutritional intake of your clients? What parameters do you monitor and adjust based on the type of event they are undertaking?

GW: Nutrition is an important element in performance. The level of interrogation and monitoring is very individualised and dependent on the goal. I will spend a much greater period of time, and call on specialist support, for some weight management clients, athletes that are involved in weight category sports, or who have particular weight management issues i.e. anorexia. In addition, targeting individualised nutrition strategies for athletes is integral to support, including in-competition strategies.

Q For long duration events, what are your opinions on high fat vs. high carb diets during training and competition?

GW: A simple answer is: both are valuable. High fat diets can improve fat metabolism pathways and reduce carbohydrate depletion. However, low carb diets can cause a reduction in training quality, and it is therefore important to include carb fed sessions to maintain quality. There are pros and cons to both methods, and it is therefore important to seek expert advice to optimise the nutrition strategy.