The Top Ten Questions asked by Athletes and Parents

By Wayne Goldsmith,

During a four-year period (1994-1997), I was employed as the Sports Science Co-Ordinator for Australian Swimming Incorporated. My job involved working swimmers and coaches in the areas of sports science, testing, talent identification and athlete education. Often, when travelling around Australia, I would visit swim clubs and work directly with swimmers, coaches and families. The aim of these visits would be to talk to athletes, coaches, administrators and especially parents about important issues in sport. Topics discussed range from strength training to nutrition: sports drinks to drugs in sport and many, many other pertinent and topical sport issues. I was fortunate to visit around 250 sporting clubs around Australia and have speak with many coaches, hundreds of athletes and thousands of parents. In recent years I have been honoured to be asked to speak with swimming families in other countries.

Whether I am talking with clubs in Perth or Melbourne, Zimbabwe or Zaire, Saipan or Sydney, talking with city or country clubs, elite athletes or young athletes, there are several questions that keep popping up during question time.

This article tries to briefly answer the ten questions I am most commonly asked.

Question 1: (Parents) How many training sessions should my son or daughter do each week?

Answer : The short answer is.... as many as the coach recommends. However, there is no one right answer to this question. The basic training principle of individualisation tells us that every athlete is unique. Eight sessions per week for one athlete may be ideal: for another it may not be enough: for yet another it may be excessive. In addition each sport has unique demands. There however are a few guidelines:

I. Most sports are built around skills and techniques. No matter how many sessions are done, how many kilometres are covered, how much weight is lifted the most important aspect of many sports is good technique.

II. The body will respond to the stresses and loads placed upon it, providing it is given enough time and the right conditions to recover and adapt. In other words the more training, the more emphasis on rest and recovery.

III. MORE TRAINING SESSIONS ARE THE LAST OPTION.

This last guideline is perhaps the most important.

Too many coaches when faced with the situation of athletes not improving, add training sessions to solve the problem believing that more work means better athletes.

Before adding extra training sessions to the athletes program, ask yourself these questions:

Is their sport technique as good as it could be?
Are their competition skills as good as they could be?
Is their flexibility as good as it could be?
Is their diet as good as it could be?
Is their attitude to training as good as it could be?
Are they completing the work they are doing now as good as they could be?
Do they get to training on time?
Do they perform all drills and skills 100% correctly?

If the answers to ALL these questions is YES, then consider adding another session to the program. If the answer to any of these questions in NO, correct the problem before adding more work.

Question 2: (Parents) When should my son or daughter start strength training? What type of strength training is best for young athletes?

Answer: As with question 1 the coach is the best judge of appropriate training strategies. As with all training, strength training should start with the basics: good technique, control and safety. When people think about strength training they usually think about big hulks of muscle like Arnie Schwarzenegger. However, strength training is not just throwing huge stacks of weights around. Strength training can be exercises like sit ups, push ups, chins, dips, jumps, hops, skips, climbing ropes, using swim rubbers/bands and throwing medicine balls.

There are several myths about strength training:

I. Strength training turns you into a huge body builder size muscle monster.

II. Strength training is unsuitable for females.

III. Strength training should not be started until late teens.

IV. Strength training decreases flexibility.

V. Strength training slows you down.

Clearly these myths are NOT founded in any scientific truth or logic. Strength training is a great supplement to specific sports training and used in addition to a sound well-structured training program can help athletes achieve their best.

Question 3: (Athletes) What should I eat before, during and after training and competition?

Answer: This question comes up over and over again wherever I go. There are several good books on this subject and I will not attempt to write a long article on nutrition when outstanding authors like Louise Burke, Nancy Clarke and Karen Inge have well and truly covered this in their own writings.
There are a few general guidelines that may be useful:

I. Before training, eat a light meal like fruit, bread or a light cereal. Particularly before morning training, when your body has not been recharged for 8 -10 hours, try to eat something light. If you don't feel like eating try drinking Juice or one of the sports drinks. Many people don't feel like eating early in the morning but it is something you can get used to.

II. During training, rehydration is the number one priority, with water number one as a rehydrator. Sports drinks may also have a role during training. (See below).

III. Recent research tells us that immediately after training, your body is very receptive to the replenishment of energy. Thus, the consumption of a carbohydrate fuel source that is readily broken down and rapidly absorbed is very important. Again, sports drinks may have a role to play in the rapid replenishment of muscle Glycogen. Similarly fruit, fruit based snack packs and fruit puree may also assist in the rapid replenishment of energy.

Another issue is what to eat between events or games or races at a competition. Athletes should make sure that their bag is full of good sources of fuel when going to competitions. Sandwiches, noodles, rice, pasta, fruit, sports drinks, low fat milk based energy drinks all need to be on hand for the athletes to eat during those long days at the competition.

It is important that good food is available for athletes at meets at all times. Despite lots of education to athletes and coaches, the foods that sell best at most competitions are usually Meat Pies, Sausage Rolls, Hot Dogs, Hot Chips, Chocolate Bars and Ice Cream: all great sources of fat and not the sort of fuel needed to produce fast times and winning performances.

Question 4: (Parents) What can I do to help my son or daughter achieve their best in sport?

Answer: In three words, Be supportive, encouraging and positive. As a guide:

I. Be patient with progress.

II. Be tolerant of mistakes and poor performances.

III. Be calm and dignified at sporting events.

IV. Learn to accept wins or losses graciously.

V. Allow (the athletes) plenty of breathing space.

VI. Offer praise with success.

VII. Encourage involvement in other pursuits.

VIII. Encourage independence and self-sufficiency
IX. Above all, keep sport in perspective.

X. Be supportive rather than intrusive.

Question 5: (Parents and Athletes) Are there any characteristics common among champion athletes?

Answer: There have been many books written on this topic and every coach has an idea of what makes a champion. To some it is an attitude, to some a physical capacity like height, VO2 Max or muscular strength, to others it is an indefinable quality that encompasses determination, character, drive and guts.

We have had champion athletes who were tall, others short, some were lean and wiry, others strong and muscular, some very young and others mature: swimming has produced champions of all shapes and sizes.

What the coach needs to know is how to recognize the gifted athlete and how best to nurture the talented athlete towards his or her potential. This can come in many forms.

Some years ago I was lucky enough to spend an hour with John Carew, Coach of Dual Olympic Gold Medallist Kieren Perkins at a swimming camp. I told him that I often travel around and speak to athletes and coaches about sport and as the Coach of Kieren Perkins was there something he wanted me to say to these groups around Australia.

He said: " Tell them this: No athlete will ever reach their full potential without good technique and good skills."

The coach cannot influence the genetic makeup of the athlete. The coach has limited control over many of the athlete's lifestyle choices. However, the coach has a major influence over the technique development of the athlete in this area has the opportunity to develop the potential champion into the Gold Medal winner.

Question 6: (Parents and Athletes) What about Sport Drinks? What's in them? Do they work? What is the best brand?

Answer: Sports Drinks have hit the market with a bang over the past year. Their sweet sugary taste plus the association between the drinks and sporting champions like Michael Jordan have seen them compete directly with some of the soft drink manufacturers for a share of the drinks market.

Recent research tells us a few things about Sports Drinks:

I. Regardless of the brand name they all contain approximately the same ingredients, contain about the same concentration of sugar (approx. 8% - 12%), and no one brand appears to have an advantage over the others. In other words, THEY ARE BASICALLY ALL THE SAME!

II. The concentration of sugar at around 8% - 12% means that they are a little too concentrated to be effectively utilized as a fuel replacement during intense exercise. The best idea is to buy the powdered or concentrated form of the product and make it up to a lower concentration than the ready made stuff, (i.e. to about 1/2 strength or even lower).

III. The sugar content makes them likely candidates for promoting dental decay.

Water is still the best for rehydration and no amount of sports drink will turn your athletes into Jenny Thompson or Ian Thorpe.

The important thing with rehydration is to ensure that the athletes all have plastic drink bottles at training at every session, that they DRINK the fluid in the bottles and that they don't waste it all by squirting it on other training partners.

A good general guide for effective rehydration is that athletes should weigh roughly the same at night as they did in the morning. Athletes should weigh themselves first thing in them morning, (after they go to the toilet but before eating), and again just before bedtime. Weight losses over the day will be mainly attributable to fluid losses. Athletes should make sure that before they go to bed that they have drunk enough fluid to replace these losses.

Sports drinks may have a role in providing a means for the rapid replenishment of energy stores immediately following training and racing, (Remember to keep the concentration low).

A final note on sports drinks: if you intend using them at a competition, try them first during training. Experiment with the concentration and quantity of the drink that is you feel is of benefit to you and try them over the weeks leading up to the competition.

Question 7: (Parents) If my son or daughter is sick or injured, how do I know if they medications they take are safe? (ie do not contain banned substances)

Answer: There is no evidence to suggest that steroid abuse is rampant in junior swimming. The most likely " doping " issue that athletes are likely to come across is that of " inadvertent doping ", i.e. unknowingly taking of products that contain banned substances. Several popular brand name products for colds and flu contain substances that are banned and problems arise when athletes take these products to provide relief from symptoms such as runny nose and sore throat.

Make 100% certain that any medications you take have been cleared by a qualified medical practitioner as safe for athletes to take. Get in the habit of asking your doctor if any of the medications being prescribed contain substances that are banned for athletes. Keep up to date with drugs in sport regulations and guidelines as determined by FINA, your national and regional swimming association and your club.

If you are taking any medications, inform your coach and team manager immediately – particularly if you are taking medications and competing. Never take any medications, even seemingly harmless ones or herbal medications unless they were prescribed specifically for you AND you know exactly what's in them!

Question 8: (Parents) My son / daughter loves take away food. Are there Take Aways that are better than others?

Answer: Whilst I cannot say for certain, I would think that most great athletes have the occasional indulgence with junk food. Pizza's, Hamburgers, fried chicken, soft drinks, chocolate and other tasties are marketed through the papers, on t.v. and radio and have had a big impact on the eating habits of the nation over the past 10 years.

Leading nutritionists will advise is that if kids want to have junk occasionally it's probably not going to hurt them too much. For example, if they have eaten well all week, rehydrated at every opportunity, eaten lots of fresh fruit, grains, cereals, vegetables, lean protein etc then a few slices of pizza on Fri night may be O.K.

Where we have to careful is when kids are eating some rubbish everyday believing it doesn't effect them because they train so hard. This is a real worry!

My Mum used to say, **" What you eat today, walks and talks tomorrow. "** That is, everything you eat is used in some way by your body. If you want your body to be strong and grow and keep healthy then eat the right foods. It is even more important with athletes where the demands of energy production and muscle development are very high.

I have heard legendary swimming coach Bill Sweetenham say on more than one occasion:

" Don't put low performance fuel in a high performance engine".

As for what junk food is the best, I can't say for sure. However, we should teach the kids to try and take the low fat option every time:

If they must have a hamburger, get one at a milk bar (instead of one of the big chains), ask for no butter on the bun and extra salad.

If they must have take away chicken, get charcoal grilled and remove the skin.

If they must have pizza, get vegetarian with extra vegetables and ask for 1/2 the cheese.

If they must have chips, buy wedges instead of French fried as the reduced surface area means less fat (or better still make home made oven baked wedges at home).

Also, try to get away from the idea as food as a reward. Sports parents keep the chocolate bar people in business by offering them as rewards for P.B.'s. This develops a mentality that reinforces junk food as a good option and associates junk food with the positive experience of sport well.

Question 9: (Parents) When should my son or daughter specialize in a particular sport? When should they specialize in a swimming stroke or swimming event?

Answer: It is easy to place kids in a category based on success in a particular sport. Often parents will assume that a nine year old who wins junior breaststroke events, will be an international breaststroke star in senior swimming. Senior, experienced coaches often comment that this is rarely the case.

Differences in limb lengths, muscle size and shape, range of motion around joints, training background and genetics all have a role in this issue.

General guidelines:

I. Changes in the size and shape of an athlete during adolescence and growth mean that today's football star may be tomorrow's swimmer and vice versa. This season's freestyler may be next season's butterfly star. Try not to label athletes as one thing or the other until fully matured.

II. Train all athletes in the basics of flexibility, body awareness, core body strength and self-monitoring.

III. Stress technique development and skill refinement at all times.

IV. Work on improving flexibility in all muscle groups and around all joints.

V. Swimmers (pre-puberty) should be encouraged to train as middle distance freestylers and medley swimmers. This approach gives them the endurance base that will be important for all swimming distances and the medley swimming gives them the swimming skills in all strokes.

Question 10: (Parents) Are Vitamin and Mineral supplements necessary? If so, what should my son / daughter take?

Answer: In an ideal world, where kids eat three balanced meals per day, with lots of fresh fruit and vegetables and grains etc and get lots of rest there is probably no need to worry about vitamin and mineral supplementation. As this is the exception rather than the rule, the need for some form of supplementation may arise from time to time. During periods of high training stress for example, vitamin and mineral supplements may be of some use to boost the immune system. In cases of dietary deficiency they may also be of some use. However, in many cases, taking MEGA doses of vitamins means that you just making very expensive urine!

Before spending a lot of money on supplements consider the following:

I. Consult an expert in the area such as a qualified sports dietitian or nutritionist to determine what supplements may be necessary and in what dosages.

II. Doubling the dosage does not mean doubling the benefits.

III. Have a good look at your current diet and see how you can improve it.

As a visiting Russian biochemist told me earlier this year:

“ With vitamins and minerals there are two major considerations: Firstly, we do not know if 1 + 1 = 3. In other words whilst we may be confident that vitamin C my play a role in boosting the immune system, we do not know what Vitamin C taken with Zinc, magnesium and B Complex does. We can not be certain of the effects of Vitamins taken in combination. They may cancel out each other, increase the effects of each other or even decrease the effects of each individual vitamin.
Further, people are under the impression that vitamins and mineral supplementation INCREASES their abilities or capacities. That is by taking the supplements they get increased power or strength etc. This is clearly NOT the case. Supplements should be used to maintain NORMAL body function during times of physiological, emotional and psychological stress and not as a kind of SUPER BOOSTER to turn normal people into super humans or normal athletes into champions. “

The bottom line is.....CONSULT A QUALIFIED AND EXPERIENCED SPORTS NUTRITION EXPERT BEFORE EXPERIMENTING WITH VITAMIN AND MINERAL SUPPLEMENTATION.

These are few short answers to some long questions.