

THE SILENT ENEMY

Last May, former world junior tri champion Hollie Avil announced her retirement from the sport. She was just 22. Citing an eating disorder that had gradually weakened her strength, she highlighted a wider problem that affects all levels of sport. But just how prevalent is it in triathlon? **Liz Barrett** reports

It's 2006. A young Hollie Avil, having been inspired by watching the Sydney and Athens Olympics, is training towards her ultimate goal – to represent GB at the Beijing Games in two years' time. However, a thoughtless comment from a coach – not even her own coach – sets Avil down an altogether more destructive path.

"I said I was looking forward to getting back to my swimming," she recalls, "and that it would get me fit. He said, 'Swimming is not going to make you quicker, Hollie. If you want to get quicker, you should watch your weight.'"

For the next 12 months, food became Avil's enemy – not a means to a fitter, healthier athlete, but something that could be controlled. "From 2006 to around January 2007, I must have dropped eight or 10kg."

With the help of her coach, Ben Bright (who first detected something was amiss), a nutritionist and her family, Avil recovered, winning world and European junior titles in 2007, as well as being ranked world number one the following year after three top-four finishes at senior World Cup races.

Sadly, a bout of food poisoning would destroy her medal chances in Beijing. Bouncing back, she took the world U23 title at the end of 2009, but by the summer of 2010, the stress of moving to Leeds and to a new coaching set-up triggered a recurrence of the eating disorder. Added to this, Avil suffered

from stress fractures, which she believes was a consequence of reduced bone density caused by her diet. With the London Olympics looming, she was forced to reassess her situation and, at the end of May 2012, she announced her retirement from pro triathlon.

Avil's announcement led to a succession of athlete-weight-related news. In the same month, it was reported that a "high-ranking person" within UK Athletics had said of Jessica Ennis: "She's fat and she's got too much weight." Just a day later, Commonwealth heptathlon champion Louise Hazel revealed that she'd also experienced negative comments about her weight from "people within the organisation that was supposed to be supporting us".

Ennis laughed off the comments directed at her. Hazel didn't, fearing other young female athletes could be severely affected by criticisms of their weight. "Obviously, there are a lot of young girls out there who would take this on board as a real critique of their physical wellness," she said. "That has really detrimental effects."

Comments, whether detrimental or beneficial, about one's weight as an elite athlete are inevitable, but clearly not all elites develop eating disorders. According to the UK Sport publication *Eating Disorders in Sport*, they "usually arise via a complex interaction between vulnerability factors and triggering events. A vulnerable athlete who has been

exposed to some of these risk factors may experience an adverse event that triggers a change in behaviour or feelings. Once into the cycle of disordered eating, maintaining factors such as initial rewards, compliments, improved performance, or a sense of order from weight loss and eating restraint can cause continuation of dieting behaviours and establishment of an eating disorder."

In Avil's case, the building pressure of Beijing was the vulnerability factor and the comment from the coach was the trigger. The maintaining factor was her initial performance gains. To get an idea of the sense of order she clung to, she recalls rereading an excerpt from her food diary. "I'd write things like, 'Ordered a black coffee – I'd be too scared to have milk – 'Biscuit on the side'. But in the margin I'd written, 'Too scared to eat the biscuit'. It's quite sad to look back on them actually."

Avil's story is well documented but, in a sport that requires commitment at all levels, the suppositions are many: are triathletes more or less susceptible than the general public? Is this a problem that permeates through to the age-group community...? We spoke to coaches, athletes and governing bodies to shed some light on the situation...

A WIDER PROBLEM

Statistics about the prevalence of eating disorders in society at large are hard to pin



down. The National Centre for Eating Disorders doesn't publish data as "there are many hidden cases of eating problems. Eating disorders exist on a continuum, from mild to severe cases, and many 'normal' people have issues with food and weight – so it isn't really possible to identify how many 'real' sufferers there are at any point in time."

The National Institute of Health and Clinical Excellence claims that 1.6 million people in the UK are affected by an eating disorder, of which around 11% are male. However, research from The NHS Information Centre showed that up to 6.4% of adults displayed signs of an eating disorder (Adult Psychiatric Morbidity Survey, 2007). This survey also revealed that a

quarter of those exhibiting signs of an eating disorder were male, a figure much higher than previous studies had suggested. Meanwhile, the charity Mind says that as many as one woman in 20 will have eating habits which give cause for concern; most will be aged 14 to 25.

There has been no published data into eating disorders among the tri community. However, there has been research in a similar field. A study conducted in 2004 (Sundgot-Borgen and Torstveit. *Clin J Sport Med*) took 1,620 elite Norwegian male and female athletes and 1,696 control subjects. All subjects identified as being at risk of an





Hollie Avil in happier triathlon times – victory in the World Junior Championships in 2007

eating disorder were subject to a clinical interview, as were a proportion of those identified as not at risk. Seventy-four percent of those surveyed completed the study. The overall prevalence of eating disorders (anorexia nervosa, bulimia nervosa and eating disorder not otherwise specified [EDNOS], see p41 for definitions) was 13.5% in the elite athlete group and 4.6% in the control group. Male eating disorder cases were 8% in the elite group – 16 times higher than among non-athletic males. Among women, it was 20% – twice that of non-athletes.

UK Sport cites a further study in 2001 that focused on distance runners in the UK. It discovered that of 184 female athletes, 29 (16%) had an eating disorder. Of these, 3.8% had anorexia nervosa, 1.1% had bulimia nervosa while 10% had a sub-clinical disorder or EDNOS.

HIGH-RISK SPORTS

While triathlon isn't identified as one of UK Sport's high-risk sports, both swimming and running are, along with gymnastics, diving, synchronised swimming, wrestling, judo and lightweight rowing.

"Research has grouped sports according to the characteristics that may increase the prevalence in certain types of sport," says UK Sport. "For example, the pursuit of a certain body aesthetic in gymnastics, the need to be in a certain weight categorisation in order to

compete in judo or endurance sports such as running, where weight and performance are closely linked."

A 2011 paper by Schaal et al – entitled *Psychological Balance in High-Level Athletes: Gender-Based Differences and Sport-Specific Patterns* – lends support to this theory, concluding that eating disorders among female athletes is higher in endurance and aesthetic sports. Hollie Avil agrees, suggesting it's specifically the run that can trigger an eating disorder.

"There's the belief that the lighter you are, the quicker you'll run," she says. "When I was a swimmer, I was never conscious of my body. The same for biking."

Avil's significant weight-loss meant she strode past the point of peak power and onto a downward curve. Bright actually showed her statistics demonstrating she was running faster when heavier. "I could also barely swim [when I was thinner]. I had no buoyancy, my times were horrendous and I would get very cold. Ben told me that in triathlon it's about being strong rather than skinny."

It's a point that fellow Brit elite Jodie Swallow recently addressed on her website in a blog entitled 'Elite Females and Eating Disorder Discussion'. Citing her own struggles with bulimia, Swallow also tackles the subject of weight and its connection with performance – how thin is often associated with being fast. "Thin is not fit," she

emphasised. "Strong is fit, lean is fit and healthy is fit."

NOT JUST THE ELITES

Of course, it's not an issue confined to elite triathletes. Age-grouper Victoria Gill, who won the 2011 and 2012 Spring Ballbuster Duathlons, suffered from an eating disorder for five years, triggered while juggling her medicine studies at St Andrews University and running competitively for the university team.

"Running suddenly went from a hobby to a means of escape to get away from it all," admits Gill. "Restricting my food gave me something to focus on and 'be good at', while I was struggling to keep up academically. Images of skinny distance runners reinforced my view that you had to be thin to win."

As with Avil, Gill's maintaining factors were her performance gains. "This provided the positive reinforcement I needed – that if I lost more weight, then I would run faster. I went from winning races at a regional level to being selected to run for Great Britain."

For Gill, having been diagnosed with five stress fractures – all at once – and receiving, and accepting, the help she needed, she overcame her disorders before moving into multisport.

"I have a different outlook as a triathlete," she says. "I see the fun side of tri and try not to take myself too seriously. Food is fuel and something to be enjoyed. There's no way



"Thin is not fit," declares Jodie Swallow. "Strong is fit, lean is fit and healthy is fit"



Cricketer Andrew Flintoff (above) has admitted to being a bulimia sufferer in his youth. But eating disorders aren't confined to the elites – 2011 and 2012 Ballbuster winner Victoria Gill (below) has suffered in the past



"I GOT ADDICTED TO DIET TIPS IN TRASHY MAGAZINES – 'DON'T EAT PROTEIN', 'DON'T EAT CARBOHYDRATES'. THEY WERE RUBBISH BUT I'D FOLLOW THEM" HOLLIE AVIL

I could get through a long bike ride without keeping my energy levels topped up."

Like many athletes, Gill's discovered a sort of salvation in triathlon; a physical outlet to the stresses of life in the 21st-century. "I've actually heard about a lot of people turning to triathlon to get over their problems," says Avil. "Chrissie [Wellington], for example, never had a problem in sport, but suffered from anorexia and bulimia during her late teens. And triathlon helped her because you can't be extremely light – otherwise you'd have no power for the swim and bike."

SOCIETAL PRESSURES

Eating disorders in sport is a relatively new 'discovery', being less well documented than in society at large, but the idea that you have to be 'thin to win' has been a commonly held belief for years. But are today's athletes more vulnerable to developing an eating disorder? Socio-cultural factors – peer pressure, media influence, bullying – have been found to play a key role. And in today's social-media/celebrity-led world, these factors have been heightened ten-fold.

"I remember reading women's magazines with their latest 'fad diets,'" says Avil. "Things along the lines of 'don't eat carbohydrates' and 'don't eat protein'. And I would follow them! I just got addicted to trashy magazines and diet tips. For one, they were rubbish. But for an athlete, I shouldn't have been reading them at all."

This was something that Swallow also highlighted in her blog. "We live in such times that instant gratification and seemingly 'short' health cuts seem to add up to success and happiness," she wrote.

While most known cases among athletes involve women, men are also susceptible. In the six responses to Swallow's blog, two were from men, both admitting to having suffered from such disorders. In one case, 'Chris' admits that he still suffers. "It's really hard, especially at races when you see all these incredible athletes with incredible bodies around you.

"Moreover, magazines run almost monthly articles on how to get to your 'ideal racing weight', reinforcing the idea that 'thin is fast'. While the focus of eating disorders is largely

on women, a lot of guys struggle with eating and body image, too, definitely among age-groupers."

Avil, Swallow and Wellington are three high-profile triathletes to have spoken out about having suffered from the condition. But our research discovered nothing on the male elite side; in fact, it's a similar theme across the broad spectrum of sport, save for the occasional disclosure. Cricketer Freddie Flintoff, for example, who recently admitted to suffering from bulimia early in his career.

This is despite performance-related weight control being at the heart of many male-dominated sports. The world of horse racing is awash with stories of jockeys using diuretics to keep their weight down. And in his book, *The Secret Race*, pro cyclist Tyler →

Tyler Hamilton's wife said he was so thin that she could see the outline of his internal organs. He thought he was close to the perfect weight



“IF AN ATHLETE HURTS A LIGAMENT, THERE’S A WHOLE TEAM ON HAND TO HELP. BUT IF THEY HAVE AN EATING DISORDER, THEY CAN BE ON THEIR OWN” DR ALAN CURRIE

Hamilton writes with alarming detail about the physiological repercussions of training for optimum performance. “In mid-June, I started to get the signs. The first was when my arms got so skinny that my jersey sleeves started to flap in the breeze; I’d feel them vibrating against my triceps. The next sign was when it began to hurt when I sat on our wooden dining-table chairs. I had zero fat on my ass; my bones dug into the wood and they ached; I had to sit on a towel to be comfortable.

“Another sign: my skin got thin and transparent-looking; Haven [Hamilton’s ex-wife] said she could start to see the outline of my internal organs. The final sign was when friends would start to tell me how shitty I looked – that I was just skin and bones. To my ears, it sounded like a compliment. I knew I was getting close.”

A well-known British triathlon coach, who wishes to remain anonymous, recalls his dealings with a male athlete who he eventually suspected of having an eating disorder.

“He was an age-group athlete who initially got into triathlon with aspirations to be internationally competitive. But, from early conversations, he also seemed keen on

using training to help with weight management, which isn’t unusual. The first signs that made me suspicious were when he started asking a lot of questions about how to lose body fat – even though at the time he was down to below 10% – and was very keen on training in a fasted state all of the time.

“If we ever met up to discuss training over coffee, he wouldn’t eat and would talk increasingly about how he felt that getting to ‘race weight’ was his main priority. Despite being an otherwise intelligent human being, he seemed to ignore advice about fuelling up appropriately for training and races, and continued to lose weight until he became very skinny indeed. During the time I was coaching him, his race results initially improved a lot. But they then plateaued out, before becoming more hit and miss when weight loss went beyond a certain level.

“Eventually the coaching relationship ended – on good terms – and I made the suggestion that he see a professional sports nutritionist that I knew, just to get ‘general advice’. Despite saying he would, he never made an appointment.

“In hindsight, I feel I should have been more open with him and steered him towards

someone who could have had some impact. Knowing how to go about this is difficult.”

Another potential ‘trigger’ among men that researchers say needs further investigation is the drive for muscularity. In a 2012 *European Journal of Sport Science* paper, ‘Eating Disorders in Athletes: Overview of Prevalence, Risk Factors and Recommendations for Prevention and Treatment’, the authors note that “while it’s believed that women’s focus on ‘thinness’ in a pursuit for athletic improvement is a risk factor for the development of eating disorders, muscularity is thought to be a driving factor for men. This can also lead to muscle dysmorphia (a preoccupation with being muscular and lean, resulting in extreme dieting and exercise behaviour), which has mostly been explored in weightlifting and body-building, but it’s possibly prevalent in other sports where muscle mass and strength are important factors for performance.”

PERSONALITY TYPE

A Google search using the terms ‘eating disorders triathlon’ elicits few results that don’t focus on Avil’s announcement. But one hit from America echoes the previous example. This time, the age-group athlete was female and training for Kona under the tutelage of the author Jesse Kropelnicki, an American USAT level-3 triathlon coach. ‘Jane’ (a pseudonym) enjoyed great success in her first year in the sport, but before the second year, her thought process changed.

"As we got closer to the first race of the year, she began asking questions like 'How much weight do you think I can lose in the next six weeks?' and 'How much faster would I go if I were 'xx' pounds lighter?' When checking her menus, I'd find that she was always undercutting planned protein, carbohydrate and fat needs.

"Race day came and went with a disappointing finish time; slower than the previous season... She finished out the season and then decided Ironman racing just wasn't for her."

Both these case studies represent the 'competers' of our sport, rather than the 'completers'. So is it fair to say that the committed amateur athlete is potentially at greater risk than, say, a newcomer into the sport who's only doing it for charity?

The authors of 'Eating Disorders in Athletes...' cite the following: "Traits desired by coaches in their athletes are similar to traits found in individuals with eating disorders, such as excessive exercise, perfectionism and (over-) compliance. These athletes also may have evidence of psychological traits such as high achievement orientation and obsessive-compulsive tendencies commonly associated with eating disorders, but also essential for successful competition. Furthermore, a recent review suggested perfectionism as a central confounding factor in the relationship between athletes and eating disorders."

In the triathlon amphitheatre, this can manifest itself in an obsession with weight-related numbers, specifically counting calories and calculating body fat percentage. But as leading sports scientist and Ironman athlete Asker Jeukendrup explains, identifying warning signs is highly subjective and therefore highly problematic. "It's impossible to pinpoint," says Jeukendrup. "For example, some girls see their menstrual cycle disturbed when they drop under 15% [body fat], whereas some girls have a normal cycle at 7%." It's a similar tale when it comes to calorie intake. When does simply failing to replenish burnt calories transcend to an eating disorder? "Let's take the example of a 70kg, 8hr-a-week athlete," says Jeukendrup. "They'd expend an additional 6,500kcal per week,

increasing expenditure by almost 1,000kcal per day, elevating it from a basal 1,500-2,000 a day to 2,500-3,000kcal/day." For many athletes with busy lives, they may simply fail to consume enough and live in a perpetual state of calorie deficiency.

TACKLING THE PROBLEM

The revelations of Avil, Swallow and Wellington have undoubtedly raised awareness of the dangers of eating disorders among athletes. But for coaches, the problems lie in being able to recognise the risks and trigger factors, identifying the symptoms and knowing what to do next.

"From a coaching point of view, that's our biggest challenge," explains our anonymous coach. "If you suspect one of your athletes has an eating problem, how do you tackle it without either offending them, scaring them off or causing them upset? It also feels like you're stepping into an area in which you don't have the required qualifications, so that makes you consider how hard you push it."

Dr Alan Currie, a consultant psychiatrist and triathlete, fears that eating disorders among athletes are being overlooked. "If an athlete hurts a ligament, there's a team of people on hand to help. But if they have a mental-health problem, like an eating disorder, they can be on their own. If we understand how the sports environment can

contribute to putting athletes at risk of eating disorders,

then we can manage those risks more effectively and let them know there are people to help them."

At present, the British Triathlon Federation (BTF) advises coaches to ask for advice from professionals or make a referral if they suspect or know an athlete of theirs is suffering from an eating disorder. The BTF is also looking to include more information on the subject in their coach development programmes.

The legacy of the 2012 Olympics was to "inspire a generation". And inspire it has and will. But the true test will be how to prevent that inspiration from turning into a dangerous obsession for the future stars of all sports.

"If coaches look beyond performance and at the athlete as a whole, then it will bring out the best in them long term," believes Vicky Gill. "As is often said, a happy athlete is a successful one." **220**



Prior to her world-conquering triathlon career, Chrissie Wellington suffered from anorexia and bulimia

EATING DISORDERS AND THEIR SYMPTOMS

ANOREXIA NERVOSA

Symptoms Weight is 85% or less of expected weight; intense fear of fatness/weight gain (even though underweight); body image disturbance; amenorrhoea (reduced or absent menstrual periods).

BULIMIA NERVOSA

Symptoms Recurrent binge eating (excessive amounts and loss of control); compensatory purging (fasting/over exercising) at least twice a week for three months; self-evaluation and self-esteem are over-influenced by weight/shape.

EDNOS (eating disorder not otherwise specified)

In the following three conditions, according to UK Sport "there are clearly problems, but not sufficient to meet the full diagnostic criteria for anorexia or bulimia nervosa ... While these conditions may not show the same degree or extent of physical, psychological or behavioural signs they can be just as serious and should not be ignored."

DISORDERED EATING

Symptoms The use of potentially harmful weight control measures, including excessive exercise, extreme, restrictive or faddy diets, self-induced vomiting, the use of laxatives, diuretics, enemas, diet pills and stimulants.

ANOREXIA ATHLETICA

Symptoms Fear of weight gain although lean; weight is 95% or less of expected (muscular development maintains weight above usual anorexic threshold of 85%); distorted body image; restricted calorie intake – often broken by planned binges; excessive or compulsive exercise – often with other pathological weight-control measures; menstrual dysfunction – may include delayed puberty; gastrointestinal complaints.

THE FEMALE ATHLETE TRIAD

Symptoms Disordered eating, oligomenorrhoea or amenorrhoea and osteoporosis (or osteopenia, severely weakened bones due to the lack of nutrient intake and the lack of oestrogen).

EATING DISORDERS IN SPORT, UK SPORT

