

FT Weekend

SATURDAY JULY 1 / SUNDAY JULY 2 2006

A bit of breathing space

It's our most basic instinct but, says Nicholas Spencer, respiration can be harnessed to reduce perspiration and provide

How often are we aware of our breathing? It is such a fundamental, unconscious aspect of human existence that it is largely overlooked as an important component of exercise.

Ancient eastern practices such as yoga have long acknowledged the significant role that respiration plays and incorporated it into a holistic approach to wellbeing. Now western sports are learning similar lessons, though they are employing them more as a means of enhancing performance.

Breathing is part of the complex biological process by which energy is released from the food we eat to be used by our muscles. For this reason, when practitioners of yoga are arranging their bodies into particular postures, or *asana*, their movements are often accompanied and fuelled by controlled inspiration or expiration.

However, once they have achieved their pose, the function of their breathing

can change to one of communication, connecting the body with the mind.

"Breathing can be used as a monitor of what's going on," says Richard Agar Ward, who, with his wife Kirsten, runs the Bath Iyengar Yoga Centre and has been teaching the discipline for almost 30 years. Breathing is used to assess the degree of relaxation being achieved.

"The idea yoga has is that the function of an organ can be improved by various means, including relaxing," says Agar Ward.

"If a pose is relaxing you will be able to tell through the breath: it will get slower, softer, perhaps more profound, less interrupted and smoother. The posture will affect the breath. If your posture is poor your breath will not be good. When we do yoga, we take care not to get out of breath."

Relaxing into a pose and allowing respiration to flow effortlessly enables its benefits to spread to every part of

the body, even down to a cellular level.

Mastery of relaxed breathing during yoga can lead to an advanced, specialised discipline known as *pranayama*, which employs respiration techniques that have a greater, more profound, effect on the mind to bring it closer to the soul, as well as to forms of the discipline that employ inspiration and expiration as tools to enhance postures and improve physical outcomes.

In a similar manner, coaches of western forms of exercise are now developing techniques to help sportsmen harness the power of breath to improve their physical capabilities.

"What we see with lots of athletes is that they don't necessarily breathe in the most efficient way," says Alison McConnell, professor of Applied Physiology at Brunel University, London. McConnell has researched breathing during exercise for more than 15 years and has worked with a number of the

UK's national and Olympic sporting bodies.

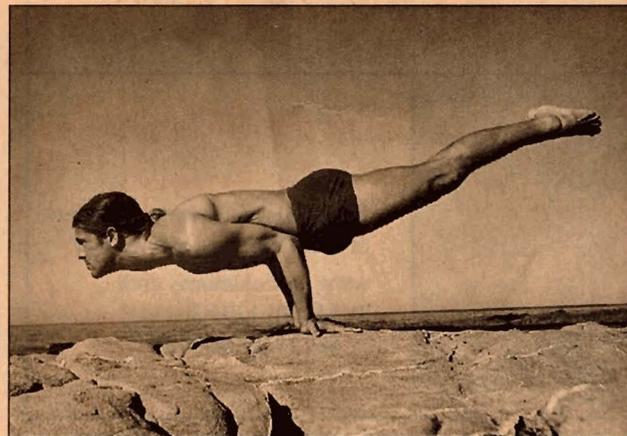
"That's partly because people aren't taught to breathe in the coaching process for most sports. They tend to just develop their own strategies. People think about breathing as they think about the beating of their heart: that there are automatic processes governing that for us and we don't need to think about it.

"However, we do have

voluntary control over our breathing."

This ability to shape our own respiration patterns is one of the keys to making the process more efficient and thus able to improve performance.

"I've worked with a number of athletes who have inappropriate breathlessness during exercise. They tend to rely on increasing their breathing rate in order to increase the total flow of air



Balanced approach: yoga helps to master relaxed breathing

in and out of their lungs when they need to concentrate on taking deeper breaths.”

While this might sound easy, breathing more deeply can cause discomfort because the organs involved need to adapt to the new inspiration and expiration habits over a few weeks.

“People can do this for themselves,” McConnell says. “It isn’t rocket science. If they concentrate on deep breaths co-ordinated with the cadence of the movement of the physical activity they are doing, maintaining a disciplined deep breathing pattern and focusing the effort on using the most substantial inspiratory muscle, the diaphragm, they will gradually find that the activity becomes less challenging and less uncomfortable.”

This process can also be enhanced through the use of a device, The Powerbreathe, that McConnell originally created as research tool but which has since been developed commercially and is

now available on prescription.

“I began to really concentrate on my breathing when I ran,” she says. “And what I found was that I went for a few runs where it was really uncomfortable and I developed stitch-like symptoms — to the point where I had to stop because it was so uncomfortable.

“What I had to do was work through that over a period of a week or so. Now when I go for a run it is totally automatic for me to adopt this very rhythmic breathing pattern. I find it very soothing and it reduces the whole effort that is associated with the activity.

“In the early stages it’s best to concentrate on breathing more deeply during one part of an exercise session. That allows you to experience the contrast between the very controlled rhythmic cadence and just letting it all happen. Gradually you just prefer to be in control.”

For those in need of a boost to help carry them on to the

next stage of their physical and mental development, inspiration, in the most literal sense of the word, might be just the thing.

www.powerbreathe.com

www.iyengaryoga.org.uk

www.bath-iyengar-yoga.com

REFER TO DIAPHRAGM

How do I know if I’m using my diaphragm?

Professor McConnell recommends:

“Stand in front of a mirror and cup your hands around your rib cage with your fingers meeting just below your sternum [breast bone]. Then, using different breathing patterns, play around until you find a pattern of activation of those muscles whereby your rib margins move out, your abdomen moves out and your fingers move apart. Once you feel that and can observe it, that’s diaphragm breathing. If the top of your chest is the only thing that’s moving, you’re just using your rib cage muscles.”