

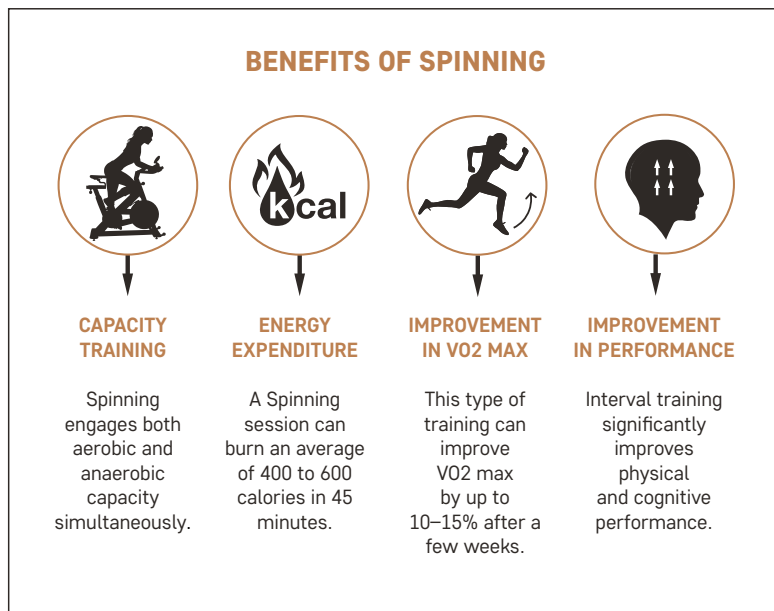
SPINNING: A MODERN APPROACH TO CARDIOVASCULAR FITNESS

by Nawel Zitouni

Spinning, or indoor cycling, is based on an interval training model that simultaneously engages both aerobic and anaerobic capacity. The alternation between periods of intense effort and recovery phases promotes rapid adaptations in the cardiovascular and metabolic systems.

In terms of energy expenditure, a Spinning session can burn an average of 400 to 600 calories in 45 minutes, depending on the intensity and the participant's fitness level. Furthermore, this type of training can improve VO2 max by up to 10–15% after a few weeks of regular practice, which is an important indicator of cardiovascular performance.

A meta-analysis conducted by Liu et al. in 2024 (Nature Scientific Reports), based on more than 20 controlled trials, shows that interval training (such as spinning) significantly improves physical and cognitive performance, particularly endurance capacity and effort management.



PHYSIOLOGICAL ADAPTATION AND TRAINING EFFECTIVENESS

Spinning stands out for its ability to combine intensity with flexibility. Each participant can adjust the bike's resistance, allowing for a personalised workout within a group setting.

This structure also promotes a prolonged metabolic effect after exercise. It is estimated that interval training can increase post-exercise energy expenditure by 6 to 15 per cent, contributing to greater overall efficiency.

MEASURABLE EFFECTS ON THE BRAIN AND COGNITION

Beyond the physical benefits, the effects of Spinning on the brain are now clearly established.

A recent study published in 2026 in Brain Communications showed that 20 minutes of cycling is enough to stimulate activity in the hippocampus, a key region involved in memory and learning. The researchers observed an increase in neural activity linked to memory consolidation following exercise.

Furthermore, a study conducted by Bloomberg et al. at University College London in 2024 demonstrates that the cognitive benefits of exercise can persist into the following day, with a measurable improvement in memory and executive functions.

Another cohort study conducted by Hou and colleagues in 2025, published in JAMA Network Open, involving more than 479,000 participants followed for 13 years, shows that regular cycling is associated with a significant reduction in the risk of cognitive impairment. The results indicate that people who cycle have a reduced risk of dementia of around 19%, and a reduced risk of Alzheimer's disease of up to 22%, compared with those using passive modes of transport.

These findings confirm that cardiovascular activity, particularly in the form of interval training such as Spinning, has both an immediate and long-term effect on cognitive performance.

A GROUP-BASED AND IMMERSIVE EXPERIENCE

Spinning also stands out for its group-based aspect. The guidance provided by an instructor, combined with music and synchronised movements, helps maintain a high intensity whilst making the effort feel more manageable.

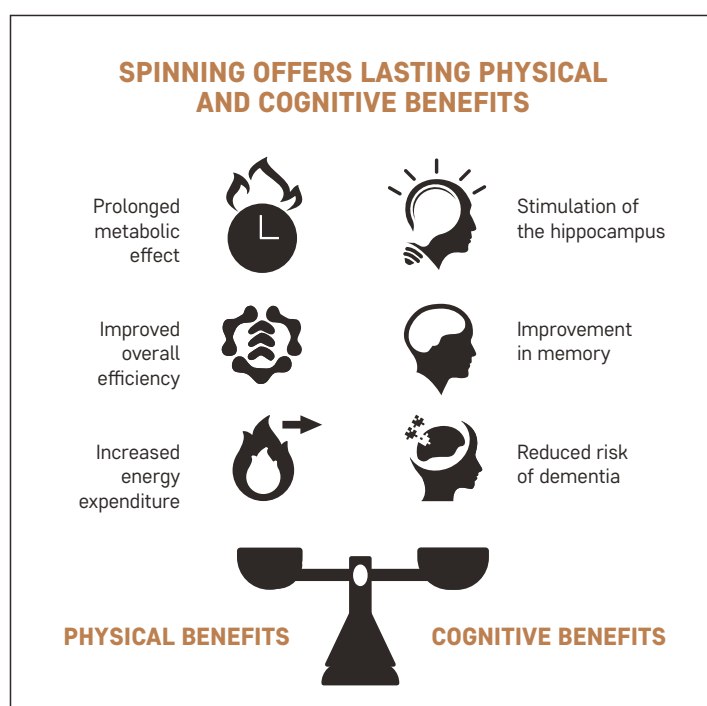
This dynamic encourages motivation and consistency, two key factors in achieving lasting results.

PUTTING IT INTO PRACTICE: VÉLO CITY AT THE MAA

With this in mind, the training environment plays a central role. At the MAA Sports Club, the Vélo City studio offers an immersive space featuring around 50 bikes, including the instructor's, as well as a giant screen, providing a dynamic and engaging experience.

The Club also offers dozens of spinning classes each week, tailored to different levels and goals. This variety helps to keep participants engaged and encourages continuous progress.

Furthermore, events such as the 'Spin & Drink' sessions combine a social aspect with a physical challenge, creating an experience that is both motivating and stimulating.



Recent research confirms that spinning is a comprehensive form of exercise, combining cardiovascular benefits, metabolic optimisation and cognitive stimulation. Thanks to its adaptable format and adjustable intensity, it meets today's demands for performance and well-being.

Set within an immersive environment such as the MAA's Vélo City, it becomes a holistic experience, combining commitment, intensity and lasting results.

"There's no denying that HIIT works. It made my engine more powerful. My FTP went from 190 to 240W (78kg) since the new club opened. Even after the demanding Sunday spinning (and riding outside on Saturday in the wind), today on Monday, I still managed to hold on quite comfortably to the workout and even exceed the red intervals with a 600W sprint at the end. My conformity would easily be 80% if I didn't go over the watts. My average (normalized) power for a 50 minute spin session is now 210-215 W. I find that if you follow the prescription, it is actually very good training, similar to Powerwatts, but in a different setting." (Testimonial by Marc, MAA Member.)