

- ▶ All aerobics session should begin with a gentle warm-up and stretching.
- ▶ In novice classes, or where a new technique is involved, a second instructor should be available to move among the participants and correct any faults.
- ▶ Participants with injuries that may be related to poor technique should seek advice from their instructor about how to improve or correct their technique.

If an injury should occur

The right treatment, begun early, is likely to lead to better and more rapid recovery from injury.

- ▶ First aid facilities should be available at all fitness centres.
- ▶ Prompt attention should be sought for all traumatic injuries.
- ▶ Any injury that does not respond quickly to first aid measures should be assessed by a sports medicine professional, preferably a doctor, to ensure that an accurate diagnosis is made, and an appropriate treatment plan instituted.
- ▶ Overuse injuries, especially to the shin, are common in aerobics, and often cause only mild discomfort at first, but frequently worsen. They can be caused by many factors, and an early full assessment is important to recovery. Correction may require cooperative input from several different practitioners.
- ▶ Foot biomechanics play a large part in overuse injuries of the lower limb, and their correction with orthotic devices (specific arch supports) is often very helpful.

For further information contact:

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Reference

Salmon J, Garnham A, Finch C. In step with aerobic dance injury prevention – A review of the literature. Research Report Number 20001. School of Health Sciences, Faculty of Health and Behavioural Sciences, Deakin University, March 2000.

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SMARTPLAY

Facts and
safety tips for
AEROBICS



PREVENTING AEROBICS INJURIES

Facts about aerobics injuries

The sport of aerobics

- ▶ Aerobic dance involves the movement of large muscle groups in continuous rhythmic activity to music.
- ▶ During aerobics, the body is in motion through space and either both feet loose contact with the ground (high impact) or at least one foot is in contact with the ground at all times (low impact).
- ▶ There are more than a dozen aerobic dance hybrids, many of which are extensions or combinations of high and low impact.
- ▶ In 1998, aerobic dance was the third most popular activity participated in by Australians.

Common injuries during aerobics

- ▶ Aerobics is associated with a significant number of medically treated sports injuries.
- ▶ Injuries fall into two major types – traumatic injuries and overuse injuries. Both types are common.

Traumatic injuries arise as a result of a fall, twist or similar accident and most often involve the ankle or knee.

- ▶ Overuse injuries arise gradually, usually as a result of a change in the amount or intensity of aerobics, or some other training error. Shin pain is the most common overuse injury, while foot and knee overuse injuries are also common.
- ▶ Back injuries may be caused or aggravated by aerobic participation, and can arise by a variety of means.

- ▶ Poor preparation in terms of general fitness, selection of classes, and frequency of classes can often lead to injury.
- ▶ Poor footwear can contribute to the risk of injury during aerobics.

Participants at risk of injury

There are four main groups of aerobics participants who are at particular risk of injury:

- ▶ Novices who are unfamiliar with the physical demands and may be poorly prepared. Those aged over 40 may be at higher risk.
- ▶ Participants who have suffered a previous sporting injury, whether related to aerobics or not.
- ▶ Those returning to aerobics after a break of more than four weeks, whether for injury, illness, childbirth or other reasons.
- ▶ High level participants and instructors.

Safety tips for aerobics

Participants, instructors and centre managers adopting appropriate safety practices can prevent many injuries in aerobics.

Preparation for aerobics

- ▶ Participants who want to begin aerobics, or those who are aged over 40 years, should consult their doctor for a heart and lung assessment.
- ▶ Participants who have suffered an injury in the past should have a musculo-skeletal assessment performed by a sports medicine professional before commencing aerobics.

- ▶ Footwear specifically designed for aerobics is recommended. Good fit, stability, secure lacing and good forefoot cushioning are important features of an aerobics shoe.
- ▶ Participants should choose clothing that fits well and has good moisture transfer properties.
- ▶ Sports bras are recommended to improve comfort. Individual fit is very important.
- ▶ Classes should begin at a moderate pace, to allow all participants to warm up adequately.

Ensuring a safe environment

- ▶ Participants should seek out, and only participate in, classes with VICFIT registered instructors.
- ▶ All aerobics areas should be well lit.
- ▶ The temperature in the aerobics area should be maintained at a moderate level, with good ventilation.
- ▶ The floor should be specifically suited to aerobics. Sprung wooden floors or padded carpet over concrete are the most suitable surfaces.
- ▶ All implements and equipment used in classes should be maintained in good condition.
- ▶ Cool, fresh water should be readily available.
- ▶ Music should be clear, and at a comfortable volume for all participants.

Good technique and supervision

- ▶ Instructors should emphasize the importance of good technique.