

Training tips

Strength training for endurance running

Resistance training can aid in the prevention of injuries by building strength in muscles, tendons and ligaments. Resistance training can also balance the muscles, thereby leading to improvements in the mechanics of movement.

PERIODIZATION: Use different training programs for different periods of the year and a series of progressions, or steps, in which athletes move from one level of fitness to another. Vern Gambetta (of Gambetta Sports Training Systems) says, "If you can build your strength by putting in some 30-minute days in the weight room three or four days a week during what distance runners might call the off- or building season, then you can maintain your strength with somewhat less work at other times of the year." "Never work the same muscle groups on consecutive days." A weight session can easily be added to the end of a shorter run.

TECHNIQUE & FORM: Through proper technique and form, you isolate the target muscles, optimally increase your muscular strength and endurance, and reduce the potential for injury. It is not only the quantity of the resistance that produces results but also the quality with which you move the weight. Your breath becomes a powerful tool in your strength-training workout routine. The breathing pattern is a full exhalation during the exertion phase of the movement and a full inhalation when you move the resistance in the opposing direction. This deep abdominal breathing will itself energize you.

WORKOUTS: The philosophy of sequence in a strength-building program works a particular set of muscles, and then follows with the opposing set of muscles. This ensures muscular balance, symmetry, improved postural alignment, and minimal rest periods. The sequence allows you to realize maximum results in a minimum amount of time. Move from one exercise to the next after one set, then return for the second rotation. This extends each exercise's endurance component and cuts down on your waiting time. Repetitions represent an individual movement within an exercise. The lifting and lowering phase of a movement equals one repetition. The number of repetitions usually ranges from 8 to 12. This range allows you to blend power, endurance, strength, and definition. The goal is to find resistance in each exercise that you can move for 8 to 12 repetitions without compromising technique and form. When your form breaks, end the movement at that point and move on to the next exercise. The number of repetitions for an exercise equals a set. Begin a program with weights lighter than what you can lift until you have the sense of how your body responds to the entire program, then increase the weights in small (1-5 lb) increments. Anaerobic weight training builds larger, thicker, and more explosive muscles through heavier weights and fewer repetitions. Aerobic weight training creates leaner, more toned muscles with great stamina by relying on a higher number of repetitions and the use of lighter weights. Each style of training accentuates a different muscle fibre.

FLEXIBILITY & BALANCE: You cannot divorce strength from flexibility. "A good strength program promotes dynamic flexibility." The most effective time to stretch is after each run and after each strength session to restore muscles to their resting length. The areas that need particular attention are the quadriceps, hamstrings, shins, calves, and iliotibial band.

Injury tips

Hallux rigidus

What is Hallux Rigidus?

The 'Hallux' is the Latin word for the big toe and 'rigidus' literally means rigid or stiff. The big toe is important in walking and running as it dorsiflexes (bends back) during the push-off phase of the gait cycle.

In Hallux Rigidus, the movement in the joint at the base of the big toe (the metatarso-phalangeal or MTP joint) gradually decreases. Initially the term Hallux Limitus is often used and the term rigidus is used in the later stages as movement becomes considerably reduced. It is a form of degenerative arthritis although is often initially confused with a bunion.

The condition can cause lots of further problems, especially with walking, as we require at least 60 degrees of dorsiflexion at the MTP joint for a 'normal' walking pattern. If this is not available, compensations are made elsewhere, for example the ankle, knee and pelvis.

What are the Symptoms?

- Pain at the base of the big toe during walking.

- Stiffness in the MTP joint.

- Swelling and inflammation may be present.

As the condition progresses the patient may experience:

- A considerable loss of motion in the MTP joint.

- Pain even when resting.

- Pain on touching the top of the joint.

- Additional growths of bone may be felt here.

- A limp.

- Pains in the lower back, hips, or knees due to changes to walking patterns.

What Causes Hallux Rigidus?

Hallux rigidus can be caused by either a traumatic injury, or through overuse.

- Overpronation - increases the stress on the joint.

- Repetitive weight bearing in a dorsiflexed position.

- Traumatic injury such as stubbing the big toe which can cause chondral (cartilage) damage.

- Hypermobility 1st metatarsal.

- Rheumatoid arthritis

- Gout

Treatment

- X-rays may display degeneration and excess bone growth at the MTP joint.

- Treatment is usually conservative, starting with a period of relative rest.

- Anti-inflammatory medications may be prescribed, or a Corticosteroid injection may be administered.

- Any contributing biomechanical factors such as overpronation should be corrected.

- Physical therapy may be employed to try to increase the range of motion at the joint using mobilisations.

- In extreme cases surgery may be required to remove the bony growth on top of the joint, or even a total arthroplasty (joint replacement) may be used.

Who's hot, and who's not

Who's hot.....

Several BUAC runners participated in the Run Melbourne half marathon, but their times did not make the July edition of "Running on Empty" due to our shoddy research. A big sorry to Jacqui Tremayne (1.47), Matt Constable (1.57), Brian Watson (1.27), Laura Reynolds (1.48), Biljana Ansted (2.11) and Stacey Hunter (1.50) on their runs. Hopefully we haven't forgotten anyone else!

Well done to those who headed out to Woodvale for the South Bendigo Invitation. Uni was well represented with a number of runners featuring in the placings. In the 6.5km, Rebecca Tweed and Andy Buchanan were first across the line in the Open category and Fraser Walsh first in the Under 20. Georgie Lanyon and Russell Jenkins took out second place in each of their respective categories with Ingrid Douglass and Jim Russell taking out third placings. In the 1km, Callum Tucker was first home in the U12's.

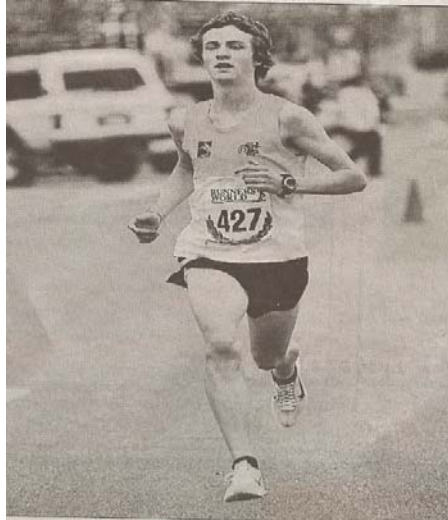
Sydney's iconic City to Surf was run recently with a few BUAC runners making the trip to Sin City to tackle Heartbreak Hill and the large crowds including Andy Buchanan (47.13), Lee McCullagh (51.19) and Alan East (1.27.52). Well done lads.

Lisa McDermid ran in the Sandy Point 10km as part of her Melbourne half marathon preparation in 52.11.

Several BUAC runners tackled the nasty head wind to compete in the Glen Allan Memorial 11km and associated shorter races. Rebecca Tweed continued her excellent year by winning the female section, while Andy Buchanan finished in second in the male section. Other BUAC runners to perform well included Gary Crouch, Dave Tarrant, Richard Gleisner, Ingrid Douglas, Leon Hamond, Gavin Fiedler, Matthew Heislars and Ryan Brook.

A big congratulations to Andy Buchanan who was awarded the "2012 Winter Season Outstanding Athlete Award" by Athletics Bendigo. Just reward for a great winter season and plenty of dedication.

Media watch



BUAC speedster Andy Buchanan putting the foot down. An intimidating figure for runners.



BUAC speedster Andy Buchanan hassling Strathdale IGA customers dressed as Sam Toucan. An intimidating figure for shoppers.



Running on Empty stalwart Michael Hogan about to slide down the stair banister at St John of God, a right reserved only for the CEO. Seriously though, Running on Empty wishes Michael all the best for his new role in Geelong, and hopes he will send us cut outs from the Geelong Advertiser to continue his long standing relationship with the newsletter.

Training groups

Join the long distance "Buchanan-McGrath Training Super Group" at The John Bomford Centre car park next to the Kennington Reservoir on a Thursday morning at 6.00am or a Sunday morning at 7.00am. For a bit of speed work, join the "Need for Speed" training group who meet at Lake Weerona on a Wednesday evening at 6.00pm. For those new to running, check out Jac Tremayne's Triathlon Coaching Bendigo at www.tricoachbendigo.com.au.

Internet stuff

Visit "www.bendigouni.com" for all of your BUAC news, and join "Bendigo University Athletics Club - Uni Pride!" if you are a Facebook user. It's better than listening to the wireless!

Race day contacts

Club president:	Brad Russell	5443 9378
Vice president:	David Heislars	0439 654 066
Secretary:	Janet Hodnett	0409 380 328
Treasurer:	Harry Terry	0437 844 169
Handicapper:	Shayne Rushan	5442 7343

Feel free to make suggestions, or to submit information and pictures, to help fill these pages. Contact the editor, Pat Kenny by email on mpken1@bigpond.com with any information (preferably true).

