## THE

## MASTER

## COPY

Newsletter of Wellington Masters Athletics Inc.


Wellington Masters President Michael Wray with Mike Powell - long jump world record holder and the most recent new member of Wellington Masters Athletics at the NZ track and field champs at Newtown Park.

- Photo Sharon Wray


## WELLINGTON MASTERS ATHLETICS INC.

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## EDITORIAL

The number of Masters attending this year's combined Centre and Masters track and field championships held at Newtown on Saturday $14^{\text {th }}$ and Sunday $15^{\text {th }}$ February was again disappointing. It appears to be the same athletes each year that take part in these championships and the committee is keen to try and do something to increase participation at these championships.

A few years back Wellington Masters held our track and field championships over two separate Sundays in February with only Masters taking part - not as a combined meeting with the open athletes as has been the case over the past years. If my memory serves me well, the committee decided to combine with the Centre championships as a way to increase the size of the fields as the Centre Open Championships seemed to be lacking in numbers as well. It was also combined to give our officials the opportunity to have a day off instead of having to officiate on two weekends on both the Saturday and the Sunday.

Back when we decided to combine the championships, there were some Masters members who were not keen on combining with the open grade athletes and decided not to take part in the championships. Evidently, this is again the case, as it was pointed out at our recent committee meeting.

The committee are keen to get feed-back from members on whether we should proceed with the combined championships (as it has been over the past few years) or revert back to holding our own Championships over two Sundays in February (as it was in the past).

The committee would like members to email or write to the committee, care of the Secretary with your feeling on this matter or any other suggestions that members may have with a way to increasing participation in the Wellington Masters track and field championships.

The Secretary's address is on the inside of the front cover and his email is albertvv@gmail.com.

The next Masters event is the Classic Relay at Trentham Memorial Park on Sunday $24^{\text {th }}$ May followed by the Johnsonville 8 km Road Race and Walk on Sunday $12^{\text {th }}$ July. Entry forms for the Classic Relay will be with Club Coordinators shortly.

## John Palmer

## Edítor

# TRAINING 

# Simple Drills to Improve Running Economy 

By Matt Russ

Run economy is an often overlooked aspect of a proper training program, mainly due to lack of technical knowledge. Along with VO2 max and lactate threshold, economy is one of the three pillars of running.
Utilizing your energy in the most efficient manner possible is the key part of speed progression. Simply put; the more fluid and graceful you are, the less oxygen you'll be using as you run.
As fitness improves and speed increases an inefficient run stride will become a major limiter. You may reach a point where progress plateaus until your form issues are addressed. Economy isn't something that can be perfected in a single workout. It takes time and thousands of proper strides before the form will become automatic. You should work on your form every time you run, or at least be aware of it to ensure you're not going back to old (bad) habits.
If you're a novice runner, the sooner you work on your form the better. It's much more difficult to change form that has been reinforced by years of bad habit.
Having good form doesn't just improve speed, it can help prevent injury. When you run, you land with a force three times your body weight. By reducing vertical oscillation and braking forces, you lessen the stress and impact on your body.

## Stride rate

Improving stride rate is a good place to begin. If you have a low stride rate, you're probably producing more vertical oscillation. This means you're projecting energy and motion upwards instead of forward, which produces greater impact. Running should be akin to flying with your feet briefly touching the ground.
An elite runner's feet touch the ground for as little as one tenth of a second per stride. The more time your feet spend on the ground, the more energy you're wasting. You want to aspire to a stride rate of 180-190 strides per minute.
If you're a beginner, in all likelihood your stride rate is closer to 170 strides per minute, or lower. Don't worry about your stride length; your stride will naturally lengthen as your stride rate increases. Count your left or right foot strides for 20 seconds. You should be in the 30-32 strides per minute range. Increasing stride rate will initially feel awkward, and may seem like you are taking "baby steps" while running, but this is a good sign. Plan on taking several months and a lot of practice before increasing your stride rate. Be patient.

## Stride rate drills

Turn overs: Turn overs train your neuromuscular system to move your legs faster than they're used to. You will use a short
stride and fast stride rate. This may feel a bit awkward initially. Visualize a sandpiper running on the beach and move your legs as quickly as you can while keeping a short stride. Be sure to lengthen your stride at the end of the drill and don't stop abruptly as it will be hard on your body. You can do four to six turn overs of 50 metres after your run strides.
Walk/run progression: Start by walking with a fast turn over and proceed to your walk/run threshold. Move your feet as fast as you can while maintaining a walk. Now slowly and seamlessly progress into a slow run with a fast turn over. Your stride rate should be about the same. You'll find that your stride is smooth and that there's little vertical movement.
Metronome running: A metronome is a timing device used by musicians. It can be purchased at your local music store for around $\$ 25$. Be sure to get a small, portable, battery operated unit. Dial in 180 beats per minute on your metronome and match your footfalls to the beat. Once you get your rhythm down get on a treadmill and practice maintaining 180 s.p.m. at a variety of speeds and grades. You can also download a digital metronome and save it to your MP3 or CD player. Go to http://www.milsoftware.com/crystalmetronome/ for details.

## Foot strike

Your foot should strike forcefully directly under your center of gravity or hip. Visualize a line from your belly button to the ball of your foot. If your foot lands before or after this point, there are braking forces that will decelerate you.

I recommend a mid-foot strike just aft of the ball of the foot. A mid-foot strike limits the amount of time your foot spends "rolling" along the ground when compared to a heal strike. The less contact time your foot has with the ground the better. Use a quick contraction of the muscles in your lower legs during push off, or a "pawing" motion.

## Foot strike drills

Barefoot Running: Running in thickly padded shoes on even surfaces does not make the muscles of the foot and lower leg work very hard. You also transfer more of your energy to your shoes and less to the ground. When you run barefoot you naturally use a forefoot strike and strengthen the foot and lower leg muscles. Not only does this give you a better foot strike feel, it helps prevent injury. Start by spending as much time as possible walking in bare feet. Add barefoot running very gradually into your training, starting with just one session per week. Make sure the surface you're running on is well tended and clean of debris, such as a golf course or athletic field.
Marching: Begin by walking slowly forward on the balls of your feet, making sure your heels don't touch the ground. Use small steps, about 12 inches in length. Then raise your right knee to hip level (so that your thigh is parallel to the ground) on each stride. Draw your heel along your inseam as you raise your leg.

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Your right ankle should be directly under or slightly behind your right knee, and your right foot should be 'cocked' (toes pointing upwards). This will form a "Z" formation with your foot, lower leg and thigh.

Rise on the toes of your left foot as you bring your right knee to hip level. Hold your chin and trunk upright. As you get acclimated to the leg mechanics start swinging your arms slowly in rhythm with the marching stride. Use proper arm motion (see below), and don't lean backwards.

Repeat this action with the opposite leg, raising the knee to hip level and moving through a normal walking stride for 50 metres.

## Posture

When running, picture yourself as a puppet controlled by marionette with a string attached to your head. The string holds your posture vertical and perpendicular to the ground. Keep your chest out, eyes on a point about 30 feet in front of you, and head fixed. A slumped posture restricts your breathing. Keep your hips and back erect, creating an overall "tall" posture. Keep all your motion projected into the forward plane and avoid any lateral or vertical motion.

It's hard to correct your form if you can't see it. To get some visual feedback, position a mirror at various positions around your treadmill, or better yet, use a video camera equipped with slow motion to video yourself running.

## Posture drill

Hips tall position: Stand with feet at a comfortable distance apart and slowly rise, supporting your body high on the balls of your feet, while squeezing your abdominals.

## Arm motion

Your arm motion acts as a counterbalance to your hips. If you have a stiff upper body while running, your shoulders will rotate causing an opposing movement of the hips; again, wasted energy. Try keeping your shoulders loose and your arms swinging like pendulums from your shoulders. Your arms should work in the same rhythm as your legs. Keep your hands relaxed and thumbs up.
Maintain a fixed 90 -degree angle at the elbow and make sure your arms don't drop below your waist. There should be no movement at the elbow when running. Your arms should work freely forward to back and should not cross the midline of your body; remember all energy forward. Keep your hands loose, thumbs up, and don't clench your fists.

## Arm motion drills

Side Brush: Gently brush the side of your ribcage with the palms of your hands as your run. If you have a fixed angle at the elbow you can't "reach" with your hands.

Pendulum: Concentrate on relaxing your shoulders, especially the trapezius muscles, by performing a few shoulder shrugs. Now swing your arms loosely front to back, keeping a fixed 90 degree angle at the elbow. Make sure you're not rotating your shoulders. Slowly speed up the movement while maintaining a relaxed swing. Are your shoulders relaxed?

## Strides

Simply put, strides are running with perfect form. I recommend you perform strides at the beginning of your workout before you're fatigued. Work on your key limiter. Start off slowly running 100 meters concentrating on your form. Walk back to your starting point and gradually increase speed and distance as you maintain perfect running form. Strides are a great warm-up activity and should be an integral part of weekly training.

As you can see, there's a lot more to running than just moving your body faster. If you're reinforcing bad form you're working against yourself. A lot of economy problems are just bad habit, but some are caused by an injury, biomechanical problem, or flexibility issue.

The best course of action is to get some professional eyes on you and identify your individual issues. I video my runners on a treadmill and play different shots of their stride back in slow motion. This gives very precise visual feedback on what they're doing right and wrong. Don't try to change everything at once, or overnight. Your pace may actually slow slightly as you adapt to new form, so be patient.

Work on the most glaring problem with your economy and perfect it, then move onto the next. I never attempt to work on more than one or two things per session. Work on flat terrain, since it's easier to focus on form. Finally, realize that even if you are an experienced runner with great form, it's still a good idea to check your economy regularly. Old habits do die hard.

Matt Russ has coached and trained athletes for over 10 years. He currently holds licenses by USAT, USATF, and is an Expert level USAC coach. Matt has coached athletes for CTS (Carmichael Training Systems), and is an Ultrafit Associate.

## Aching Body? Check your Sinuses

The aches and pains in your body could all be in your head - specifically, your sinuses. It's even possible that your arthritis, fibromyalgia or chronic fatigue syndrome is a misdiagnosis of pain and tiredness resulting from recurring sinus infections, says Professor Alexander Chester of the Georgetown University Medical Centre. He estimates that half of people with chronic sinusitis have symptoms such as serious body aches and fatigue. The pain can be all over but more pronounced in spots such as shoulders, neck and hips.

## Aim for 55-65 Heartbeats per Minute

Athletes pride themselves on it: a lower resting heart rate indicates they're in good physical shape, so their hearts don't have to pump as hard. That usually means a lower risk of heart problems. "At a higher rate, the heart needs more oxygen, stressing the cardiovascular system," says Dr Kim Fox, of the Royal Brompton Hospital in London. The best way to reduce your rate? Exercise.

## TRAINING TIPS

## Struggling to Run Up Hills?

By Graeme Hilditch

Even regular runners find hills tiring and leaves them sore and out of breath.

Over the years, running experts have tried to develop a magic formula to make hill running more bearable on the legs and lungs. Tips range from looking at your feet to taking smaller steps while ascending hills, but sadly, no matter what tactic you adopt, it doesn't take long for a gentle jog up a hill to have your lungs working overtime and your heart pounding.

Like any form of training that's outside your comfort zone, if you don't do it for very long or that often, the body is simply not conditioned to tolerate the increased training intensity. In the case of hill running, the extra demand placed on the legs is huge

- it's the equivalent of asking them to lift a heavy weight and run at the same time. This extra workload requires masses more oxygen, hence the heavy breathing. However, the good news is that with some specific training, it's possible to make hill running more bearable. I'd suggest making two of your weekly runs hillrunning sessions. Leave two to three days between sessions, as you will need a little longer to recover.
For one session, warm up and then find a long hill that takes three to five minutes to run up. Your goal is to perform a series of intervals on it. Start by running up and down the hill at a gentle pace four to five times. You can build on this after a few weeks by adding extra intervals.
For the other session, perform a series of short, fast uphill intervals lasting no longer than one minute, and jog/walk to the bottom again. Start by performing six to eight intervals and build on it each week until you're able to perform 15 hill sprints.
Both these sessions are tough and will have you puffing and panting, but stick with it. After a few weeks, your body will have adapted and you'll get far less out of breath when taking on hills during your eight kilometre runs.


## Four essential hill-running tips

## Practice makes perfect

Try to include several hills on your training runs. By doing your long runs and speed work on hills, your body will soon get accustomed to the rigours of inclines.

## Take it easy

On race day, avoid 'attacking' inclines by running up them too fast. Drop your pace a little on long hills, so you don't run out of steam later in the race.

## Stretch

It's important to stretch your muscles well, especially your calves. Hills add more stress on the muscles and they're more prone to injury if they're tight.

When running up a long hill, it often feels easier if you get into a good rhythm. Music can help with this, so find a track that suits your stride and run to the rhythm to help you through.

A group of chaps, all aged 40, discussed where they should meet for a reunion lunch. Finally it was agreed that they would meet at the Scottish Arms Hotel because the waitresses had big breasts and wore mini-skirts.
Ten years later, at age 50, the friends once again discussed where they should meet for lunch. Finally it was agreed that they would meet at the Scottish Arms because the food and service was good and the beer selection was excellent.
Ten years later at age 60, the friends again discussed where they should meet for lunch. Finally it was agreed that they would meet at the Scottish Arms because there was plenty of parking, they could dine in peace and quiet, and it was good value for money.
Ten years later at age 70, the friends discussed where they should meet for lunch. Finally they agreed that they would meet at the Scottish Arms because the restaurant was wheelchair accessible and had a toilet for the disabled.
Ten years later at age 80 , the friends discussed where they should meet for lunch. Finally it was agreed that they should meet at the Scottish Arms because they had never been there before.

If you have any results, articles or stories you would like included in "The Master Copy", please post to:

> The Editor, The Master Copy, 122 Onslow Road, Khandallah, Wellington 6035, or email: palmer.palace@xtra.co.nz

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## NUTRITION \& FOOD

## Are You Eating Enough Fruit?

Did you know? $62 \%$ of us don't eat enough fruit*.
We all know the message of at least two serves of fruit a day but most of us don't act on it. Only $38 \%$ of adult Kiwis manage to eat two or more serves of fruit a day* even though most of us like fruit and we live in a country where fruit is plentiful and affordable when in season.
A serve of fruit is usually one piece that fits in the palm of your hand but this can vary.

- Grapes - as many as you can hold in the palm of your hand (note this does NOT mean a large bunch balanced in your hand)
- Bananas - one small banana or half a large one
- Berries - one handful
- Kiwifruit-two
- Citrus fruit - one orange or 2 mandarins
- Dried fruit - here you move away from the palm of your hand rule. Dried fruit is very high in sugar and you can easily eat more than you need. Choose small boxes of raisins and sultanas, and just a few dried apricots rather than handfuls.
- Juice - first of all whole fruit is the best option but if you are a regular juice drinker, dilute with water, especially for children and enjoy a small rather than large glass. After all you wouldn't sit down and eat four pieces of fruit at one go but you could easily drink the juice of that much fruit.
Here are some suggestions of how you can enjoy two more serves of fruit a day.
- Smoothies for breakfast (if you have a blender) - mix together banana, frozen berries (or fresh if plentiful and affordable), a kiwifruit, grated carrot, add some oats for extra nutrition, plain yoghurt, milk and a little honey. Three or more serves right there!
- Cut up fruit for children. It just one of those things most kids prefer cut up fruit to whole fruit, or make it more fun by making "fruity faces".
- If you're a baker consider substituting apple sauce for oil in recipes for muffins and cakes. While some information suggests a straight 1:1 substitution we recommend starting with substituting half the oil with apple sauce. When buying apple sauce read the label and choose the one with the lowest amount of sugar.
- Just snack on it... Fruit is the ultimate snack food; prepackaged, sweet and delicious with a long shelf life.
- Have fruit for dessert - whole pieces are fine but make it more appealing by cutting up a variety and putting out a platter with some reduced fat yoghurt to dip it in.
Article written by Sarah Hanrahan, Dietitian, New Zealand Nutrition Foundation. Visit the website: www.nutritionfoundation.org.nz.

References:

* University of Otago and Ministry of Health. 2011. A Focus on Nutrition: Key Findings of the 2008/09 New Zealand Adult Nutrition Survey. Wellington: Ministry of Health.

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## Nutrition Is a Valuable Tool

According to an article in The American Chiropractor, nearly 70 percent of chiropractors use or reference proper nutrition in their practice. The article states, "They see it as a valuable tool in treating the whole person and keeping their patients free of chronic diseases, including heart disease, diabetes, cancer, arthritis, and obesity."

Proper nutrition is about having the raw materials necessary for health to manifest.

## Foods that Promote Wellness

Good nutrition is more than just ditching the doughnuts and banishing those bagels. It's about making daily decisions to include healthy eating as part of your wellness plan. Adding some of the most nutritious foods to your grocery cart is a good place to start.

An information article from Medical News Today reveals the top 10 foods considered to be the healthiest, according to surveys and sources across North America and Western Europe. For better health, consider incorporating these nutritional powerhouses into your diet:

1. Apples
2. Almonds
3. Broccoli
4. Blueberries
5. Oily Fish
6. Leafy Greens
7. Sweet Potatoes
8. Wheat Germ
9. Avocados
10. Oatmeal (porridge).

## Benefits of Healthy Eating

By making healthy eating a part of your daily routine, you can get more energy, lose weight, reduce medical bills, and possibly add years to your life. Though you may have to pay a little more for that organic kale or wild Alaskan salmon, you could enjoy reduced sick days and fewer trips to see your doctor.

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## RECIPE

## Sweet Potato Gnocchi

Enjoy this meal the night before a race. With complex carbohydrates and antioxidants it will give you some extra muscle power to get you strongly over the finish line!

## Ingredients:

## Gnocchi

- $\quad 250 \mathrm{~g}$ cooked sweet potato, mashed
- $\quad 150 \mathrm{~g}$ cooked carrots, mashed
- 60 g plain flour
- 25 g breadcrumbs
- 1 egg, beaten
- Salt
- Pinch of nutmeg


## Tomato sauce

- 1 tbsp olive oil
- 2 cloves garlic
- 400 g canned chopped tomatoes
- 10 cherry tomatoes, halved
- 1 tsp sugar
- 1 tbsp basil, chopped
- 2 tbsp Parmesan, grated


## Zucchini and chilli salad

- 1 zucchini, cut into ribbons
- 1 chilli, deseeded and finely chopped
- 3 tbsp white wine vinegar
- 2 tbsp water
- 2 tsp sugar
- Olive oil
- Salt and pepper


## Method:

- In a large bowl, place the mashed sweet potato, carrots, beaten egg, salt and nutmeg and mix well. Fold in the plain flour and breadcrumbs. Leave to stand for at least 10 minutes. In a large saucepan, bring salted water to the boil. Drop teaspoons of the sweet potato mix into the boiling water and simmer until they float to the surface. Drain and keep aside.
- For the tomato sauce, heat a sauté pan with the olive oil and fry the garlic for a couple of minutes. Add the chopped tomatoes and simmer for six to eight minutes. Add the sugar and cherry tomatoes and simmer for a further three minutes. Season with salt and pepper. Finish with chopped basil. Gently add the gnocchi, serve and sprinkle with grated Parmesan.
- For the salad, in a small saucepan, heat the white wine vinegar, water and sugar. Bring to the boil and remove from the heat. Place the zucchini ribbons and chilli in a bowl and pour the vinegar mixture over the zucchini. Leave to infuse for five minutes. Season and drizzle with extra virgin olive oil and serve on the side with the sweet potato gnocchi.


## Preparation time:

Serves: 2
Preparation: 30 minutes
Cooking: 15 minutes.

## Per person:

2294 kilojoules
18.3 g protein
87.8g carbohydrate
13.8 g fat ( 1.8 g polyunsaturated,
7.4 g monounsaturated, 4.6 g saturated)
9.9 g fibre.

## Running benefits:

Packed with vitamin A, C and E, this pre-race dish provides an antioxidant boost to help fight free radicals. Providing plenty of complex carbohydrate too, this is an ideal pre-race meal for the night before, helping to fill up your glycogen stores to see you ready to run the next morning.

## PEAK NUTRITION

## Must buy grocery items

Eggs: One egg fulfils about 10 per cent of your daily protein needs. Egg protein is the most complete food protein short of human breast milk, which means the protein in eggs contain all the crucial amino acids your hard-working muscles need to promote recovery. Just one of these nutritional powerhouses provides about 30 per cent of the Recommended Dietary Intake for vitamin K, vital for healthy bones. Whether boiled, scrambled, or poached, eggs are great anytime. Use them in frittatas, sandwiches, burritos or wraps.

Oranges: Eat enough oranges and you may experience less muscle soreness after hard workouts such as downhill running. Oranges supply over 100 per cent of the RDI for the antioxidant vitamin C. According to a study by the University of North Carolina, vitamin C helps alleviate muscle soreness. Add orange sections to fruit and green salads, or use orange juice and pulp for sauces to top chicken, pork or fish.

Low fat Yoghurt: Besides being a good source of protein and calcium, low fat yoghurt with live cultures provides the healthy bacteria your digestive tract needs to function optimally. Low fat yoghurt is great topped with fruit, nuts, or used as a base for smoothies. Plain yoghurt can be mixed with diced cucumber and herbs like dill and spread over grilled tofu, chicken, fish and other meats. Yoghurt can also double as a salad dressing, or be mixed with herbs and served as a dip.

## Should Runners Avoid Junk Food?


"I'm training really hard, doing double workouts, and eating only healthy foods. I feel full all the time — but I am losing too much weight. I don't think I could comfortably eat any more..."
"I generally eat clean — but some days I cheat and have ice cream."
"Fruit juice is bad; it has way too much sugar! I've stopped drinking it."
Many runners go to great extremes to eat healthfully. Needless to say, the definition of "eating healthfully" varies from runner to runner and can often take on a religious zeal. "Healthy eating" tends to include these parameters:

- No refined sugar, gummy candy, soda pop, sweets;
- No potato chips, corn chips, Cheetos, salty snacks;
- No doughnuts, pastries, croissants, pancakes Pop Tarts;
- No McDonald's, Burger King, pizza, hot dogs;
- No cookies, desserts, birthday cake, holiday treats;
- No foods in wrappers - particularly among athletes who are "eating clean." (Question: Are wrapped foods actually dirty? Or is trendy terminology breeding craziness?).

While eliminating "bad" and "dirty" foods is a noble attempt to put premium nutrition into your body's engine, the questions arise:

1. Do you really need to eat a "perfect diet" to have an "excellent diet"? No
2. Does enjoying a hot dog or a candy bar once in a blue moon negate all of the "good stuff" you generally eat? No
3. Do have to "cheat" on your birthday so you can partake in cake with your family and friends? Heavens no!!!

In my opinion, there is no such thing as a "bad food." There is a bad diet, yes, as judged by looking at the whole day's intake. That is, 50 calories from refined sugar in 8 -ounces of sports drink will not ruin your health. But consuming 400 calories from a half-gallon of sports drink displaces a significant number of nutrient-dense foods - as well as can ruin your teeth. (Sipping all day on sugary, acidic fluids damages tooth enamel.)
While foods with little nutritional value fail to invest in a runner's well-being and ability to withstand the demands of rigorous training, occasional "junk food" does not ruin health when eaten in moderation. You can indeed have an excellent diet without having a perfect diet.

## How much "junk food" is OK to eat?

A healthful sports diet can target 85 to 90 -percent of calories from quality foods and 10 to 15 -percent from "whatever". Some days "whatever" might be blueberries and other days it might be (guilt-free) blueberry pie with ice cream. Given that you can ingest the recommended intake of all the vitamins, minerals, and protein you need within 1,500 calories from a variety of wholesome foods, a hungry runner who consumes 2,000 to 4,000 calories a day has the opportunity to consume LOTS of nutrients. For example, 8 ounces of orange juice offers $100 \%$ of the Recommended Dietary Allowance (RDA) for Vitamin C. A thirsty runner who chugs the whole quart can consume 4 times the RDA in that one snack. OJ is better than an all-natural vitamin pill!

## But isn't fruit juice filled with sugar?

Yes, all the calories in juice come from natural sugar. This sugar fuels muscles. Vitamin C, potassium, folate, and a multitude of healthprotective, anti-inflammatory bio-active compounds also come in the juice. For runners who want to eat "healthy" but have trouble getting in enough calories to maintain weight, I often recommend grape, pomegranate, tart cherry, orange, and blueberry juices. (In contrast, overfat people who reduce their juice intake can easily delete some calories. For them, eating the whole fruit would be more satiating.)

## Should runners try to avoid refined sugar?

Refined white sugar is a nutritional zero, void of any vitamins, minerals or protein. Yet, the calories in sugar come from carbohydrates. Muscles welcome these carbs to fuel depleted glycogen stores. Muscles don't know the difference between carbs from juice, candy, and sports drinks vs. apple, sweet potato, and banana. The difference shows up in health, immune response, and ability to fight off colds and flu.

A rule of thumb is to limit refined sugar to $10 \%$ of total calories. For most active women, that equates to 200 to $250+$ calories from sugar a day. And for active men, 250 to $300+$ calories. That means an athlete could enjoy either 16 -ounces of a sports drink and a gel or a few cookies - and stay within the recommended sugar-budget for the day.

## Continued from previous page . . . . .

Note: The sugar is evil message is targeted to the $66 \%$ of Americans who are overfat and underfit, not to runners. The muscles of runners easily take up sugar from the bloodstream with far less insulin than needed by unfit people. Hence, unfit people who sip on Big Slurpees all day easily consume excessive, health-erosive sugar-calories. They need to seriously think about their future and if they want to be vibrant and healthy enough to enjoy fun times.

## Can you eat too healthfully?

Yes. Eating too many healthy foods can actually be bad for you. For example, fruits \& veggies are healthy foods, but eating only fruits \& veggies creates a bad diet. Eliminating all unhealthy foods is also needless. Enjoying birthday cake can be good for the soul!
Rather than categorize a food as being "bad," please look at your whole diet to see if it is balanced. I differentiate between a diet filled with PopTarts for breakfast, Fluffer-nutters for lunch, candy bars for snacks, and sweet \& sour chicken for dinner vs. the occasional PopTart tossed into a gym bag for a preexercise energy booster when traveling to an event. While not trendy, choosing a balanced sports diet based on moderate portions offers a sustainable, effective path that can help you eat well, run well, and feel great.

Nancy Clark, MS, RD counsels active people at her private practice in Newton, MA (617-795-1875). Her Sports Nutrition Guidebook and Food Guide for Marathoners offer abundant tips to help you balance your sports diet. The books are available at www.nancyclarkrd.com. For online education, visit: www.NutritionSportsExerciseCEUs.com.

Ed: - This article has been reproduced with the kind permission of Nancy Clark. For more information on this article and others relating to sports nutrition etc. visit the websites listed above.

## Can Ginger Help You Recover from Hard Training?

By Scott Douglas

Here are two well-established findings concerning exercise and your immune system: First, moderate exercise boosts your immune system, thereby making you less susceptible to colds and other forms of sickness. Second, hard exercise, such as an intense track session or an especially long run, temporarily compromises your immune system. That's why it's common to come down with a cold when you're training hard. And that's why part of post-workout recovery, such as taking in carbohydrates soon after a particularly draining session, centres on bolstering your immune system.
New research suggests adding another arrow to your postworkout recovery quiver, namely, ginger, which lowered markers of inflammation in runners in a study published in the Central European Journal of Immunology.

Iranian researchers gathered 28 well-trained male runners for a 12 -week training block. The subjects were young (average age
of 23), fit (average VO2 max of 67, a level commonly found in national-class competitors) and lean (average size of about $173 \mathrm{~cm}, 65 \mathrm{~kg}$ ); they were used to training hard.

Throughout the hard 12 -week cycle, all the runners did the same training. After six weeks, they did a treadmill run to exhaustion, in which they started at a $10 \%$ grade, and kept running as long as possible while the incline and pace were increased every three minutes. Immediately after the treadmill test, the researchers measured plasma levels of three types of cytokines, which are hormone-like proteins that are considered markers of inflammation. As expected, the runners showed elevated levels of these cytokines after the treadmill test six weeks into their training.
For the final six weeks of the training cycle, half the runners took 500 milligrams of powdered ginger three times a day (in pill form that didn't taste or smell like ginger), while the other half took a placebo.

At the end of the training cycle, the runners repeated the treadmill test to exhaustion. When the researchers then measured the runners' cytokine levels, the differences between the groups was striking.
In the placebo group, cytokine levels were $32 \%$ greater than they'd been after the treadmill test six weeks earlier. This finding suggests that the runners' immune systems were increasingly challenged by bouts of hard running. In theory, this would increase their susceptibility to upper respiratory tract infections, just when, in many schedules, they'd be getting ready for their key races.
In the ginger group, cytokine levels were $18 \%$ lower than they'd been post-treadmill test six weeks earlier. That is, if anything, their immune systems were stronger than they'd been halfway through their training cycle. In theory, this would lessen their susceptibility to getting sick as their key competitions neared.
The researchers attributed their findings to ginger's antiinflammatory properties, which they said mimic those of common anti-inflammatory medications but without the drugs' side effects.

Ginger is widely available as a supplement in capsule or powdered form. A 2.5 cm piece of crystallised ginger contains about 500 milligrams of ginger, while a cup of strong ginger tea contains about 250 milligrams.

## G20 Terrorism, High Alert Causing Me Problems

When I was at the checkout and ready to pay for my groceries the cashier said, "Strip down, facing me."

Making a mental note so I could complain to my local MP about this security rubbish, I did just as she had instructed.
After the shrieking and hysterical remarks finally subsided, I found out that she was referring to how I should position my credit card.
Nonetheless, I've been asked to shop elsewhere in the future.
They need to make their instructions a little clearer for seniors. I hate this getting older stuff!!

## Three Shoe-Lacing Methods to Prevent Foot Injuries

Blisters and bunions can thwart even your best intentioned training efforts.

## 1. BLACK TOENAILS

Prevent irritation by lifting the shoe's toe box. Lace the bottom pair of holes as usual, but make the outer section of lace twice as long as it is on the inner side. Bring the shorter piece from the inside through the top hole on the shoe's opposite side. Pull the longer piece up through the next hole on the opposite side. Then bring it down through the hole across from it. Repeat the process with the remaining holes.

## 2. SQUISHED TOES

Alleviate pressure by freeing up more room for your feet to move inside your running shoes. As you lace each shoe, skip the bottom pair of holes (the ones nearest to your toes); instead, start threading the lace at the second pair of holes. Then lace the remaining holes upward toward your ankle, using the same pattern and tightness that you would normally use to securely tie your running shoes.

## 3. HEEL BLISTERS

Make the shoe more snug around your ankle. Lace all of the holes except for the set located closest to your ankle. Thread one end of the lace through the next hole on the same side of the shoe, leaving enough slack in the lace to form a small loop. Repeat the process on the other side of the shoe. Bring each lace through the loop on the opposite side. Pull to tighten, and then tie the shoes as you normally would.

## When Should Runners Stretch?



Pelvis, knee and hip movement during the swing phase of the gait cycle weren't improved following static hamstring stretching, a study from Austin Peay University in Tennessee has found.
Writing in the Journal of Athletic Training, researchers described an experiment in which 34 recreational runners ran on a treadmill while the researchers measured the range of motion in their pelvis, hip and knee during the swing phase of the
gait. (The swing phase is from toe-off to landing.) After the first run, half the subjects did nothing, while the other half did a classic runner's stretch - a straight leg raise held for 30 seconds, three times, with the hope of stretching the hamstrings. Then both groups repeated their treadmill runs, and the researchers again measured pelvis, hip and knee movement.
Both groups had greater movement at the three bodily sites on the second run, thanks to being warmed up from the first run. But the stretch group and the sit-around group had similar improvements; the three 30 -second hamstring stretches had no effect on increasing range of motion at the three sites.
Research is increasingly showing that pre-run static stretching is either ineffective, as in this study, or detrimental to performance, as in other studies showing less power and strength after a pre-run static stretch. Static stretching is best saved for after runs, when your muscles are already warmed up and are receptive to being elongated. Before runs, dynamic stretching is a better way to prime your muscles for activity.

Don't forget to visit our website at:
www. wellingtonmastersathletics.orq. nz
and another site that may be of interest to members:
http://athleticsrankings.com

One night a nurse was making her rounds in a nursing home. While walking down the hall, she came across an open door.
She looked in and saw old Frank sitting up in bed pretending to drive.
She asked, "Frank, what are you doing?"
He replied, 'I'm driving to Toronto."
The nurse smiled at him and carried on making her rounds.
The next night as she walked past Frank's room she saw the same thing.
Again she asked, 'Frank, what are you doing?'
He replied, "I'm driving to Toronto. It's a two day trip, you know!"
The nurse smiled at him and carried on making her rounds.
Five minutes later she came across another open door and looked in.
She saw Bob pretending to dance with someone.
She then asked, "Bob, what are you doing?"
Bob replied, "I'm dancing with Frank's wife. He's gone to Toronto for a couple of days".

## INJURY PREVENTION

## Is Running Bad For Your Joints?

There's a common perception that running regularly, particularly when you're older, is bad for your joints and can do untold damage to your knees, ankles, hips and back. However, far from harming us, research now shows that running may actually preserve your joint health in the long-term - but only if you exercise safely.
"If you launch into an unsuitable running regime - overtraining, pushing yourself too far and too fast or not warming up properly - you're likely to harm your joints," says Chris Lendrum, a physiotherapist and personal trainer. "But avoid a few common running errors and your joints, as well as the rest of your body, will stay fit and healthy," he says.


Indeed, Stanford University in the US has been tracking the long-term effects of regular running in an ongoing study lasting more than 20 years. The research, published in the Archives of Internal Medicine and led by Professor James Fries, began in 1984 when scientists feared that the long-term effects of the then-new jogging craze would be a flood of orthopaedic injuries. Participants are now in their seventies and older, and the runners have stayed significantly fitter and healthier than the non-runners. The study is showing that running is not associated with greater rates of joint disease, such as osteoarthritis. "Runners do not require more total knee replacements than non-runners," says Fries. "Running straight ahead without pain is not harmful," he says, adding that running seems safer for the joints than high-impact sports such as football. Even more encouraging, 34 percent of the non-runners had died during the two decades of the study, which compares to only 15 percent of the runners!
Another study, in the journal Arthritis and Rheumatism, found that runners had thicker and healthier knee cartilage than nonrunners. This suggests they would be less likely to develop osteoarthritis, which is caused by the breakdown and loss of cartilage. It's also conclusive that carrying extra weight is one of the greatest risk factors for damaging your joints - and runners are far more likely to maintain a healthy weight than nonrunners. Keeping your weight down reduces the risk of miniscule tears in your cartilage, which can eventually break down the cushioning around your joints and lead to the onset of arthritic pain.

Runners still need to take care to avoid the common running errors that might increase their risk of joint injury.

## Common error 1: Overdoing it

Exercise is a stressor. It produces positive fitness results by stressing your body, which then adapts to suit the new level of exertion. This adaptation takes place during rest times, so you must give your body time to recover. "Never overdo it. Always rest every couple of days, especially if you're a beginner. Overdoing it dramatically increases your risk of joint injury," says Lendrum.

Common error 2: Poor footwear


One of the key ways of preserving your joints is wearing supportive properly fitted running shoes. Visit a running shop where you can have your gait analysed and runners properly 'prescribed' to suit the biomechanics of your body. "If your footwear is wrong, it will set off a negative kinetic chain that may harm your joints," says Lendrum. Running in old worn our shoes can also increase your risk of joint injuries. It is recommended that you replace running shoes every 500-800 kilometres. You can check for signs of wear on the sole by placing your shoes on a table and looking at them from behind. If the soles are worn and leaning to one side, the midsole cushioning is probably worn as well.

## Common error 3: Building up mileage too rapidly

Avoid the temptation to suddenly try a longer run to see if you're up to it. Build mileage as slowly as you can - and never add more than 10 percent to the distance you run each week. Allow your joints time to adjust to the new stress.

## Common error 4: Overtraining on hard surfaces

Constant pounding on roads and footpaths can stress your joints. Mix your training surfaces up to vary the impact on your joints. Try different surfaces such as the treadmill, grass, soft ground and sand.

## INJURY PREVENTION

Continued from previous page . . . .

## Common error 5: Neglecting strength training, warming up and stretching

Strong core muscles are important for holding your joints stable. If your core is out of balance or weak this will affect all your joints, so make sure you take time out of your running programme for core strength training exercises, such as squats, lunges and abdominal work. It's particularly important to work on your quads (front thighs) and glute (buttock) muscles to stabilise your biomechanics. Always stretch out and warm up before a workout to prepare your body for exertion, and stretch and cool down afterwards.

## Diet and supplements



There's some evidence that supplements may help reduce inflammation when you have a joint injury, but the jury is out on whether they can protect and strengthen joints in the first instance. Omega-3 fatty acids, found in oily fish such as salmon, may reduce the symptoms of joint pain and reduce inflammation. Glucosamine and vitamin D may also help protect joints.

## Age and your joints

The connective cartilage tissue in your joints acts as a shock absorber. As you age, this cushioning gradually thins, especially once you're over 40. You also lose muscle mass as you age, so your bones and joints, rather than muscles, absorb the shock from movement and exercise. Runners are more likely to maintain muscle mass as they age, and this can have a protective effect on joints. Add extra strength training exercises to your running programme, such as weights in the gym, to help preserve muscle mass as you age. Previous joint injuries, even from years ago when you were much younger, can damage cartilage. These can often return to trouble you later in life as this cartilage begins to thin - so do everything you can to prevent joint injuries in the first place.

## Treadmill running and jointcare

The cushioned, rubber treadmill belt provides less impact on all your joints than running on pavement or concrete. However, you still need to warm up for five to 10 minutes to avoid injury.
"Treadmill running is kinder on your joints, but it may increase the risk of soft tissue injuries because your running style on a moving surface is slightly unnatural," says physiotherapist, Kendall Rowland. "So make sure you alternate running on the treadmill with running outside - avoid overdoing it on one surface," she says. Increase your heart rate and warm up your body by walking on the treadmill, or do a gentle workout on another gym machine, such as the cross-trainer or exercise bike. Don't push yourself too hard or too soon on the treadmill, or you risk injury - increase intensity and distance gradually. "The treadmill surface is constant and even, unlike outdoors. This means every stride you take is the same - with the same impact on your joints - which can lead to overuse injuries," adds Rowland.

How to Treat and Prevent Running Injuries: Hamstring Tendinopathy
When you think of a hamstring injury, you may picture a sprinter motoring down the homestretch of a race and suddenly lurching in pain, grabbing the back of his leg and stuttering to a halt. While hamstring strains, sprains and tears do happen, it's less common for distance runners. The velocity that is required to cause that kind of acute injury generally occurs via quick, forceful movements. For the greater running population pounding out longer miles on roads and trails, high hamstring tendinopathy (HHT) is a more widespread issue.
Considering the hamstrings play a big role in the gait cycle, it's hard to ignore HHT. The hamstring muscles run from behind the knee, attaching at the femur and the pelvis. It is the attachment to the latter near the ischial tuberosity or "sit" bone that HHT occurs. The pain and discomfort resulting from this type of injury materializes deep within the glute muscles.
"HHT presents as an annoying intermittent sharp pain and dull ache clear up in the buttock region right on the ischial tuberosity," explains Amy Parkerson-Mitchell, a physical therapist, RRCA-certified coach and owner and coach of Personal Best Running and Fitness in Kansas City.
"Usually the pain starts at the beginning of the run, settles down as you warm up, and then returns later in the run," says Parkerson-Mitchell. "After the run, it tends to present as a dull ache that is different from normal workout soreness."

## What Causes Hamstring Tendinopathy

Training errors can be one cause of HHT. Introducing speed work or hill repeats is often problematic, as well as doing any high intensity workouts without warming up properly.
Wendy Rhodes, a physical therapist and running coach based in New York City, says that physiology can also play a role. "This type of injury can be caused by intrinsic factors like pelvic obliquity or one side of the pelvis being 'off,' gluteal or butt weakness, or hamstring or core weakness," she says.

# Are You an Efficient Runner? 

By Phoebe Thomas<br>The better your running technique, the easier it will be for you to run faster and achieve the times you'd like. Here's how to tell if your technique is as efficient as it could be.

What do we mean by "running economy"? This phrase refers to how efficiently you use oxygen at a given running speed (or, for that matter, in cycling, swimming or another endurance sport) and it's still one of the least understood and poorly recognised aspects of the sport, though it's crucial to your performance.

In simple terms, when developing your running economy, you are looking to ensure that you are running at your optimum speed while expending as little energy as possible. There are many aspects to developing and improving running economy, but the focus here will be on three critical aspects - oscillation, cadence and ground contact time.

## OSCILLATION

We've all seen runners out and about - gazelle-like, bouncing, flying through the air. It looks fantastic. There are even shoes being sold on the basis that they help you bounce. It might then come as a surprise that "bounce" or vertical oscillation in your running stride is not an efficient way to run. Your energy is propelling you upwards rather than forwards and you are increasing the force of each foot strike.

## TOP TIP

Lean, don't push. Actively pushing yourself up or "toeing off" using a big calf-muscle contraction tends to lead to a high degree of bounce. Instead, focus on engaging your core and glute muscles to extend your hips, taking your weight onto your forefoot. From this position a gentle lean from your ankles will set your body in motion, reducing your body's need to "push" off.

## CADENCE

Think of changing gears on a bike or a car to get uphill or when you have the wind in your face. You drop a gear and turn your legs or the engine over at a faster rate to operate more efficiently. Many runners tend to "lope" with a long, slow stride, striking the ground in front of their body, causing a breaking action in their stride, which both slows them down and increases the risk of injury. Increasing your cadence will improve your running economy and reduce muscle fatigue.

## TOP TIP

- Run to the beat - download a metronome onto your phone and set the counter to 180 bpm . Practice turning your legs over at this rate through "strides" - short bursts of smooth, relaxed running over 100 m .
- Cut the stride - reducing your stride length can be a very easy way of increasing your cadence. Count how many strides it takes you to run 100 m in 30 seconds. Now repeat, still aiming for 30 seconds but with more foot strikes. You're aiming for a balance. Your speed is governed by your cadence and your stride length - cut this too far and you start to lose efficiency again.
- Keep everything moving forward - check your arms, as they play a big role in governing the tempo of your legs. Your arms should be moving freely and smoothly from the shoulder and in a straight line backwards and forwards in short, efficient movements, with a 90 -degree bend at the elbow - not rotating across your body.


## GROUND CONTACT TIME

Why is it some runners seem to float over the ground, barely touching - running like a deer - whereas other runners appear to plod (sometimes very fast!)? While it's only a matter of milliseconds, every moment your foot is on the ground means a little momentum is lost. Trying to increase the speed at which your foot strikes and returns from the ground is crucial to increasing running economy. At any given race distance you find that elite runners spend less time in contact with the ground than non-elite runners - so it works.

## TOP TIP

- Tread lightly - consciously try to limit the sound of your foot strike on the ground.
- Run on hot coals - not literally! But try to imagine the ground as super-heated under your feet - and don't get burned!
- Drill yourself - running drills can be enormously helpful in reducing ground contact time. Carry out a "flick-out" drill, where, with the weight on the balls of your feet, you kick your legs out in front of you with your feet flexed up, in a short, snappy motion and lightly moving from one step to the other. Repeat three times over 20m.
- Get a rope - skipping can be a highly effective, lowimpact plyometric exercise that helps your muscles, tendons and nervous system improve the speed of your foot strike. It may be tough at first, but stick with it - your body will soon adapt.

Phoebe Thomas is an experienced running coach, qualified Advanced Personal Trainer and holder of numerous strength and conditioning qualifications. Seek her out in the RunLounge and you will find that she is currently Women's Running magazine's head running coach whilst also coaching and advising runners of all levels from the absolute beginner to experienced athletes looking to progress and achieve new personal bests.
Phoebe specialises in strength and conditioning for runners. At RunLounge we believe you need to be strong to run to your potential so her advice in this area is invaluable.

## PUNS FOR EDUCATED MINDS

Two hats were hanging on a hat rack in the hallway. One hat said to the other: "You stay here; l'll go on a head."

I wondered why the baseball kept getting bigger. Then it hit me.
A sign on the lawn at a drug rehab center said: "Keep off the Grass."
If you jumped off the bridge in Paris, you'd be in Seine.

## Eight Ways to Improve Distance Running Performance

Maximizing speed and performance in distance running can be achieved by improving lactate threshold and running economy. While VO2max - the maximum volume of oxygen your muscles can consume per minute-has received most of the attention among runners and coaches, a high VO2max alone is not enough to attain competitive performances.

A high VO2max simply gains one access into the club, since a runner cannot attain a high level of performance without a high VO2max. But, while you can improve your VO2max, it is largely genetically determined.
The other two major physiological players of distance running performance - lactate threshold (LT) and running economy (RE) - influence your performance more, and are more responsive to training.

From the time of the classic study published in Medicine and Science in Sports and Exercise in 1979 by some of the most prominent names in exercise physiology-Farrell, Wilmore, Coyle, Billing and Costill - research has shown that the LT is the best physiological predictor of distance running performance.
LT is an important physiological variable that demarcates the transition between running that is almost purely aerobic and running that includes significant oxygen-independent (anaerobic) metabolism. It represents the fastest speed you can sustain aerobically. Since the LT represents your fastest sustainable pace, the longer the race, the more important your LT.

## What is LT Pace?

LT pace is about 10 to 15 seconds per mile slower than 5 K race pace, or about 10 K race pace for runners who take 40 minutes or more to complete 10 K . If using a heart-rate monitor, the pace should be about 75 to 80 percent of your maximum heart rate.
For highly trained and elite runners, LT pace is about 25 to 30 seconds per mile slower than 5 K race pace, or about 15 to 20 seconds per mile slower than 10 K race pace, and corresponds to about 85 to 90 percent max heart rate. The pace should feel "comfortably hard."

## How to Improve LT?

Sample workouts to improve lactate threshold include:

- Continuous runs at LT pace, starting at 3 miles and increasing up to 7 to 8 miles, or about 45 minutes for marathoners.
- Intervals at LT pace with short rest periods, such as 4 to 6 x 1 mile at LT pace with 1 minute rest.
- $\quad$ Shorter intervals at slightly faster than LT pace with very short rest periods, such as 2 sets of $4 \times 1,000$ meters at 5 to 10 seconds per mile faster than LT pace with 45 seconds rest and 2 minutes rest between sets.
- Long, slow distance runs with segments run at LT pace (for marathoners), such as 12 to 16 miles with the last 2 to 4 miles at LT pace, or 2 miles +3 miles at LT pace +6 miles +3 miles at LT pace.


## How Running Economy Makes Running Easier

Running Economy is the volume of oxygen consumed at submaximal speeds. In 1930, David Dill and his colleagues were
among the first physiologists to suggest that there are marked differences in the amount of oxygen different athletes use when running at the same speeds, and that these differences in "economy" of oxygen use are a major factor in explaining differences in running performance in athletes with similar VO2max values.

For example, research has shown that, while Kenyan runners have similar VO2max and LT values as their American or European counterparts, the Kenyans are more economicalpossibly due to their light, non-muscular legs that resemble those of thoroughbred race horses. The heavier your legs, the more oxygen it costs to move them.

RE is probably even more important than the LT in determining distance running performance because it indicates how hard you're working in relation to your maximum ability to use oxygen.

For example, if two runners, Jack and Martin, have a VO2max of 70 milliliters of oxygen per kilogram of body weight per minute and a LT pace of 7 minutes per mile, but Jack uses 50 and Martin uses 60 milliliters of oxygen while running at 7:30 pace, the pace feels easier for Jack because he is more economical. Therefore, Jack can run faster before using the same amount of oxygen and feeling the same amount of fatigue as Martin.

I have yet to see a runner who has superior RE who does not also have a high VO2max and LT.

## Four Strategies to Improve Running Economy

Despite its importance, RE seems to be the most difficult of the three physiological players to train. While many runners and coaches think that RE is a reflection of running form, it is more influenced by those microscopic structures that influence oxygen delivery to and use by the muscles-capillaries and mitochondria, the densities of which are both enhanced with high mileage.

- Research has shown that runners who run high mileage-more than 70 miles per week - tend to be more economical.

In addition to increasing mitochondrial and capillary density, the greater repetition of running movements may result in better biomechanics and muscle fiber recruitment patterns and a synchronization of breathing and stride rate, which may reduce the oxygen cost of breathing.

- RE may also be improved by the weight loss that often accompanies high mileage; the change in body weight lowers oxygen cost.
Since VO2max plateaus with about 70 to 75 miles per week, improved RE may be the most significant attribute gained from running high mileage. However, it's not entirely clear whether high mileage runners become more economical by running more miles or they're innately more economical and can therefore handle higher mileage.
- Intervals and tempo runs can also improve RE since, as VO2max and LT improve, the oxygen cost of any submaximal speed is also likely to improve.
However, it is possible to become more economical without improving VO2max or LT, as research on power training with very heavy weights and plyometrics has shown.
- Power training focuses on the neural, rather than metabolic, component of muscle force development to improve RE.


## MISCELLANEOUS

## MEMBERSHIP

Our current membership stands at 88 members. There has been no change since the last newsletter.

## The Importance of Water and When to Drink it

How many people do you know who say they don't want to drink anything before going to bed because they'll have to get up during the night!!

I asked my Doctor why do people need to urinate so much at night time.

## Answer -

Gravity holds water in the lower part of your body when you are upright (legs swell). When you lie down and the lower body (legs and etc.) is level with the kidneys, it is then that the kidneys remove the water because it is easier.

I knew that you need your minimum water to help flush the toxins out of your body, but this was news to me.
Correct time to drink water... Very Important. From A Cardiac Specialist!

Drinking water at a certain time maximizes its effectiveness on the body:

2 glasses of water after waking up - helps activate internal organs.
1 glass of water 30 minutes before a meal - helps digestion.
1 glass of water before taking a bath - helps lower blood pressure.

1 glass of water before going to bed - avoids stroke or heart attack.

I can also add to this... My doctor told me that water at bed time will also help prevent night time leg cramps. Your leg muscles are seeking hydration when they cramp and wake you up.

Ed: This article was sent to me by a friend who thought that this may be relevant to our membership.

## Heart Monitors: When they Can Help and When they Can't

When Heart Monitors can help:

1. To hold you back during a long one - especially at the end.
2. To make sure that an easy day is really easy.
3. To ensure that "form accelerations" are "easy gliders".
4. To help you improve racing form - without overtraining.
5. To keep you from having a long recovery after speed sessions.
6. To tell you when you have rested enough between repetitions in a speed session.

## When Heart Monitors don't help:

1. At the beginning of long ones (especially if you try to stay close to 70 percent max heart rate).
2. When you don't know your exact maximum heart rate.


NZMA AGM
Some information from the AGM held at the recent NZMA track and field championships held at Tauranga.
Elected to the board were the following:

Patron: President: Vice President: Sec/Treasurer:

Jim Blair
Andrew Stark
Chris Thompson
Stewart Foster
Committee: Murray Clarkson; John Campbell; Derek Shaw; Karen Gillum-Green.
Alan Galbraith re-appointed as Legal Advisor and Rob McGregor as Financial Reviewer.
Wellington Masters put forward nominations in the NZMA Athlete of the Year for Judy Hammond in the Jumps category and Grant McLean in the Middle to Long Distance category. Judy was successful winning the Jumps but unfortunately Grant, after a stellar year winning all the major events he entered last year missed out with Alastair Prangnell from Auckland winning the Middle to Long distance category.
It was recommended at the AGM that the NZMA handbook be made available to all members. There is a pdf version available on the NZMA site. We have requested some hard copies to be posted out to those members who do not have access to the NZMA website.


## - COMING EVENTS -

2015:

May
$2 \quad 51^{\text {st }}$ Rotorua Marathon
3 Nelson Half Marathon, $\frac{1}{4}$ Marathon and 5km
24 Masters Classic Relay
July
4-5 Gold Coast Airport Marathon, Half Marathon, 10 km \& 5.7 km
5 Armstrong Motor Group Marathon, Half Marathon, 10km \& 5km
12
Aug
4-16
Oct
5-9 OMA Stadia Championships
11 Bank of America Chicago Marathon
14-18 ITU World Duathlon Championships
25 Lower Hutt 10km
Nov
21
2016:
Feb
13
26 Oct-
6 Nov WMA Stadia Championships
2017:
April
21-30 World Masters Games
2018:
Jan
20-27 OMA Stadia Championships

Rotorua
Saxton Field, Stoke
Trentham Memorial Park

## Gold Coast

Westpac Stadium
Olympic Harrier Clubrooms
Lyon, France
Rarotonga
Chicago
Adelaide, South Australia
Venue to be confirmed

Queenstown

Westport
Perth, Australia

Auckland

Dunedin

Note: While every attempt is made to provide correct dates of events, intended dates and venues can change. It is advisable to check the information from official entry forms, websites or event organisers.

## CENTRE RECORD:

If you feel that you have set/broken a Centre record, please send the appropriate paper work, completed and signed-off to Peter Hanson at phanson@xtra.co.nz for ratification by the committee. His postal address is Apartment 206, Summerset Village, 15 Aotea Drive, Porirua 5024, and telephone number is 042370958.

## CHANGE OF ADDRESS:

If any member changes their address, it would be appreciated if they could notify the Subscription Secretary. This enables us to keep records that are accurate and up to date and ensures that you continue to receive your newsletter and any other Master's material.
It is also important that Club Co-Coordinators notify the Secretary of any change of address to enable the information to keep getting out to the clubs in the Centre.

# WELLINGTON MASTERS ATHLETICS INC. 

## SUBSCRIPTION FOR THE 2014/2015 YEAR

(1st September 2014 to 31st August 2015) $=\mathbf{\$ 5 0 . 0 0}$

## NAME(S):

$\qquad$
ADDRESS: $\qquad$
$\qquad$
BIRTH DATE(S): $\qquad$ EMAIL: $\qquad$
CONTACT PHONE No. $\qquad$ CLUB (if any) $\qquad$

## How to Pay:

$\$ 50$ (\$100 for couple) - Cheque made out to Wellington Masters Athletics Inc. - (WMA Inc.) and send with form to: VERONICA GOULD, PO BOX 5887, LAMBTON QUAY, WELLINGTON, 6145.

Direct Credit to: Wellington Masters Athletics Inc., ANZ Bank, The Terrace: 060565006441500 and forward a completed form to Veronica Gould at the above or email to:
gvgould@xtra.co.nz
NOTE: Wellington Masters Athletics singlets and T shirts are also available from Veronica Gould at a cost of $\$ 30$ and $\$ 50$ respectively.

## Please advise any change of address as soon as possible

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Wellington Masters Athletics: If unclaimed please return to 122 Onslow Road, Khandallah, Wellington 6035


[^0]:    Ed: This article has been reproduced with the kind permission of Dr Louise Bruce-Smith, Back to Living Chiropractic, Level 1, 50 The Terrace, Wellington 6011, phone 044997755 or visit the website www.chiro.co.nz

