

THE

MASTER

COPY

Newsletter of Wellington Masters Athletics Inc.

Volume 14 Issue 1

February 2015



Judy Hammond with the Wellington Masters Athlete of the Year Award – *Photo Sharon Wray*



Jackie Wilson with the Noeleen Perry Memorial Trophy – *Photo Sharon Wray*

WELLINGTON MASTERS ATHLETICS INC.

COMMITTEE MEMBERS 2014-15

EXECUTIVE:

President:	Michael Wray	471 2775
V.President:	John Palmer	479 2130
Secretary:	Albert van Veen	563 8450
Treasurer:	Graham Gould	973 6741

COMMITTEE:

John Hammond	04 292 8030
Tineke Hooft	237 9676
Barbara Morrison	027 271 5177
Sharon Wray	471 2775

IN THIS ISSUE . . .

Committee & Club Coordinators	2
From the President	3
Training – Exercises to Become Stronger	4
Age-Related Decline & Rest You Need	5
Training Tips – Speed Workouts & Long Run	6
Nutrition & Food	7
Recipe & Cutting Edge Nutrition Ideas	8
The Athletes Kitchen	9
The Athletes Kitchen cont. & Struggle in Heat	10
Strengthen Hamstrings	11
Injury Prevention – Prevent Running Injuries	12
Beat Back Pain	13
Strategies for Slimming Down	14
Running Injuries to Avoid	15
Miscellaneous	16
Training Program for Veteran Runners	17
Results Masters T & Field Championships	18
Coming Events	IBC

WELLINGTON MASTERS ATHLETICS INC.

COMMITTEE MEMBERS 2014-15

PATRON:	Bruce Perry	Apt 512, 134 Burma Road, Johnsonville, Wellington 6037	473 0877
PRESIDENT:	Michael Wray	24 Fitzroy Street, Wadestown, Wellington 6012	471 2775
IMM. PAST PRES:	Brian Watson	14 Hewson Crescent, Otaki Beach, Otaki 5512	06 364 7758
VICE PRESIDENT:	John Palmer	122 Onslow Road, Khandallah, Wellington 6035	479 2130
SECRETARY:	Albert van Veen	95 Kamahi Street, Stokes Valley, Lower Hutt 5019	563 8450
TREASURER:	Graham Gould	PO Box 5887 Lambton Quay, Wellington 6145	973 6741
COMMITTEE:	John Hammond	148 Wellington Road, Paekakariki, Kapiti 5034	04 292 8030
	Tineke Hooft	1 Tombane Lane, Papakowhai, Porirua 5024	237 9676
	Barbara Morrison	15 Brees Street, Epuni, Lower Hutt 5011	567 7896
	Sharon Wray	24 Fitzroy Street, Wadestown, Wellington 6012	471 2775
SUBSCRIPTIONS:	Veronica Gould	PO Box 5887 Lambton Quay, Wellington 6145	973 6741
EDITOR:	John Palmer	122 Onslow Road, Khandallah, Wellington 6035	479 2130
MASTERS RECORDS:	Peter Hanson	Apt 206, Summerset Village, 15 Aotea Drive, Porirua 5024	237 0958

LIFE MEMBERS

Jim Blair (2004); Bruce Perry (2008) and John Palmer (2010).

CLUB CO-ORDINATORS

AURORA HARRIERS:	Hadley Bond	84 Moana Road, Porirua 5024	233 2241
H V HARRIERS:	Albert van Veen	95 Kamahi Street, Stokes Valley, Lower Hutt 5019	563 8450
H V MARATHON:	The Secretary	PO Box 30926, Lower Hutt 5040	021 689 183
KAPITI:	John Hammond	148 Wellington Road, Paekakariki, Kapiti 5034	04 292 8030
LEVIN HARRIERS:	Brian Watson	14 Hewson Crescent, Otaki Beach, Otaki 5512	06 364 7758
MASTERTON:		PO Box 375, Masterton 5840	021 456 675
OLYMPIC:	Tineke Hooft	1 Tombane Lane, Papakowhai, Porirua 5024	237 9676
	Annie van Herck	53 Kanpur Road, Broadmeadows, Wellington 6035	478 6775
SCOTTISH:	John Hines	Flat D1003 Central Park Flats, 20 Nairn St, Wellington 6011	384 3231
TRENTHAM UNITED:	Diane Rogers	42 Elmslie Road, Pinehaven, Upper Hutt 5019	528 2316
UNIVERSITY:	Richard Brandon	PO Box 6108, Wellington 6140	476 5758
WAINUIOMATA HARRIERS:	Rob Hannan	63 Bull Avenue, Wainuiomata, Lower Hutt 5014	972 6472
WGTV HARRIERS:	Neil Price	11 Hurman Street, Karori, Wellington 6012	476 6956
WGTV MARATHON:	Bruce Perry	Apt 512, 134 Burma Road, Johnsonville, Wellington 6037	473 0877
WGTV MASTERS:	Jim Blair	Flat 4, 39 Kiln Street, Silverstream, Upper Hutt 5019	528 2992
WGTV TRI CLUB:	The Secretary	PO Box 2201, Wellington 6140	

COMMITTEE MEETINGS 1st THURSDAY OF EACH MONTH AT 139 HOMEBUSH ROAD, KHANDALLAH,
COMMENCING AT 6:00pm.

CLUB REPRESENTATIVES AND MEMBERS ARE ALWAYS WELCOME

FROM THE PRESIDENT

The more eagle-eyed amongst you may have noticed that the link to the age-grading calculator from our website has changed. The World Masters Athletics body review the standards every five years or so to incorporate any changes to performance levels in that time. The new tables were approved and adopted in January.

The tables aren't just relevant to masters, although we are the main users. Youth standards are also catered for. The standards for the very young have actually been softened, with the tables' custodians saying that "some earlier times for young runners have not survived scrutiny." From the upper teens onwards, the tables are tougher on performances.

Masters athletes are running quicker, walking quicker, throwing further and jumping longer and higher. Local legend Bernie Portenski can share some of the blame for this, having set several W60 world records since 2010.

An in-depth review of the methodology and standard changes can be found at: <http://www.runscore.com/Alan/AgeGrade.html>.

We've been using the tables in our hosted events to identify best performances. At the Centre Track and Field Champs, the highest age-grade performances of the weekend are formally recognised. This year the highest male award went to Gary Rawson for exceeding 92% in the 60m sprint. Judy Hammond secured the female award, bettering 94%, also in the 60m sprint.

A new award was introduced at the Centre Champs and this also uses age-grading so that the trophy is equally accessible to all. Our Patron, Bruce Perry, has established the Noleen Perry Memorial Trophy, to be presented to the female masters' athlete who scores the highest age-graded performance in the 3000m Track Walk. Our first winner is Jacqueline Wilson, who recorded a very impressive performance to set a new W65 national record and the top score of 86.29%.

As is traditional, we also presented the Wellington Masters Athlete of the year award at the conclusion of the Centre Track and Field Champs. There were two strong nominees this year, just as there were last year, with one standout woman and one standout man. However, there can be only one. Judy Hammonds' four medal winning performances at the World Masters Indoor Champs were the clinching factor and we awarded the trophy that Judy first won 14 years ago, when the award was founded by Jim and Colleena Blair.

We are looking at expanding the award next year to allow both the best male athlete and the best female athlete to be recognised.

Next up is the NZMA National Track and Field Champs. This year, they are being held in Tauranga. Our last outing to the Tauranga Domain was in 2012 for the Oceania Championships. That event was executed very professionally, so I have every confidence this year's NZMA Champs will be a success. Flicking through the list of entrants, I spotted 21 from Wellington Masters. I look forward to seeing you all there.

*Michael Wray,
President*

TRAINING

Six Exercises to Become a Stronger Runner

By Michelle Hamilton

Roads, for the most part, are steady and predictable. Trails are not. "On the trail, every footfall is different," says Nikki Kimball, a physical therapist and ultra-runner who has won the Western States 100-Mile Endurance Run three times. "If you land on a rock or slippery moss, your body has to be able to stabilize itself." To prepare for the task, Kimball suggests adding plyometric (jumping), core strength, and flexibility exercises into your routine.

Plyometrics

"Trail running is a miniplyo workout," Kimball says. "You jump to leap over a creek, avoid mud, or to land on a rock." But if a trail run is your first plyometric workout, your muscles, ligaments, and tendons might not be strong enough to keep you upright or to handle the impact from all directions. Perform these exercises, ideally on a soft surface (dirt, grass, rubber padding at gym), once or twice a week after an easy run or on an off day.

Jump-Offs

WHY: This two-part exercise prepares the quads for the abuse they'll take on descents. Part one approximates the impact the quads experience on downhill; part two strengthens the entire leg.

HOW: Jump off a six-inch step (or curb). Then immediately jump up as high as you can. Step back up onto the step and repeat. Start with three to five repetitions (one set). After three sessions, add another set. Increase reps to eight.

Single Leg Jumps

WHY: This exercise increases ankle strength and stability as well as proprioception — the body's ability to tell where it is in space — which helps to improve your overall balance.

HOW: Stand on one foot and jump from side to side and then back and forth (in a crisscross pattern) rapidly 10 times on each leg. The goal is balance, not height or distance, so jump gently. When this becomes easy, do it with your eyes closed.

Skip and Jump

WHY: Skipping and jumping develops explosive power and strength in the legs and hips that enable quick and safe negotiations of technical terrain.

HOW: (1) Skip for height for 15 steps, then skip for distance for 15 steps. Do two or three sets. (2) This is a lateral leaping exercise. Start with feet together and jump sideways. Land and then jump back to your starting position. Repeat 15 times. Build to three sets.

Core Strength

Lower-leg stability depends on strong hips and a stable pelvis. Without them, your lower extremities have to adjust to both trunk motion and changing ground surfaces, which increases your risk of injury. Do these exercises two or three times a week, after an easy run or on an off day. You can combine these with the plyometric exercises, or do them on their own.

Side Plank

WHY: These build a stable core while also strengthening the glutes, which aids lower-leg stability.

HOW: From a plank position, rotate to one side, forearm on the floor, hip raised. Hold for 20 seconds; build to 60. Change sides. When this becomes easy, lift the upper leg three to six inches off the lower leg, hold for one second, and lower. Do five to 10 repetitions on both sides.

Bridge with Leg Lift

WHY: Strengthens the glutes, the powerhouse of stability for the entire leg. Strong glutes also power climbs.

HOW: Lie on your back with your knees bent and feet on the floor. Lift your hips and back off the floor, squeezing your glutes as you rise. Hold for five to 10 seconds. Lower and repeat 10 times. Do two sets. When this becomes easy, straighten one leg after you lift your hips.

Flexibility

Having full range of motion decreases injury risk, says Kimball, who encourages runners to add these groin stretches to their post-run routine.

Groin Stretches

WHY: "The groin gets ignored by most road runners," Kimball says.

HOW: (1) Sit with the soles of your feet together. Press your knees toward the floor. Hold for 30 seconds. (2) From a wide-legged standing position, move into a side lunge. Hold each side for 30 seconds.

Michelle Hamilton is a freelance writer and journalist whose work focuses on running, health, and women's issues. As a contributing editor at *Runner's World*, she reports on training, personalities, and trends for the website and print edition. Her work has also appeared in *Women's Health*, *Running Times*, *Bicycling*, *Backpacker* and *San Francisco*, among others.

* * * *

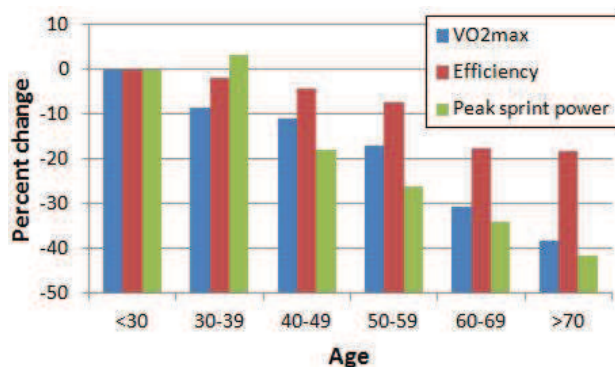
SMELLY FEET

Our feet have more than 250,000 sweat glands. And although the sweat is odorless, it attracts bacteria, which causes that stinky smell.

Is Age-Related Decline Inevitable?

By Alex Hutchinson

HOW DOES PHYSICAL performance change as we get older? And how much of that is due to changing activity/training patterns, rather than age itself? These are tricky questions to answer, but masters' athletes – that growing cohort of people who buck the society trend and keep hammering as they get older – offer a useful test group. Here's some data from a new study in the *European Journal of Applied Physiology*, from researchers in France and Australia, on masters triathletes:



The study is particularly interesting because they went to great lengths to ensure that the various groups (there were 10 subjects in each age group) all trained at similar levels. In this case, the subjects were triathletes who logged about 250 km/week on the bike. (The heaviest training group, the under-30s, was hitting 260 km/week on average; the lightest training group, 30-39, was hitting 243 km/week. That's a pretty small spread.)

The main thing the researchers were interested in is cycling efficiency, which is basically the amount of useful work performed on the bike divided by the amount of energy the cyclists burned to produce that work (measured in this study at 65% of maximal aerobic power). Studies of masters' runners have suggested that running efficiency doesn't change much with age; cycling studies have produced equivocal results. The new study offers some powerful evidence that cycling efficiency does decline with age. Why is this? One possible explanation is "decreases in muscle mass, motor unit remodelling and alterations in motor unit recruitment that occurs with advanced ageing" – in other words, the physical and neural characteristics of the muscle itself.

I've also included the changes in VO2 max and peak sprint power (measured in a series of 5-second sprints), for comparison. They both seem to decrease to similar degrees, in a more pronounced manner than efficiency. In fact, declines in peak sprint power were closely correlated with declines in aerobic capacity and efficiency: the biggest decliners lost the most ground in all three categories.

So is this a measure of "intrinsic" ageing? It's not that simple. These masters triathletes are certainly fit, but they may well be

neglecting the types of training that maintain muscle mass, strength, and power. Indeed, a study back in 2011 (with one of the same co-authors) found that (a) strength training improves cycling efficiency, and (b) the improvements are bigger in older cyclists. The new study offers another bit of suggestive evidence that strength training becomes increasingly valuable for endurance athletes as you get older.

Reproduced from *Runners World*, September 2014.

* * * *

The Rest You Need



With so much going on in life, sometimes it's hard to prioritise the rest our body needs. For some, falling asleep is half the problem. Here are a few tips to help:

Minimise stress and anxiety. Keep a to-do list going throughout the day so that at night you can focus on getting sleep.

Avoid caffeine. The effects of caffeine can last over 8 hours, so watch out for that afternoon cup of coffee or caffeinated drink.

Kill the lights. Create a tranquil atmosphere where you can relax before bed. Be sure your sleeping space is as dark as possible.

Unplug. Turn off the computer and TV and set aside your phone to help relax.

Check your mattress and pillow. Make sure your back and neck is getting proper support at night.

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 04 499 7755 or visit the website www.chiro.co.nz

* * * *

"If you can stick to the training throughout the many long years, then willpower is no longer a problem. It's raining? That doesn't matter. I am tired? That's beside the point. It's simply that I just have to." – *Emil Zatopek*

TRAINING TIPS

Three Workouts to Boost Speed

RUNNING FAST requires focus, and honing that focus takes “deliberate practice.” The term was coined by K. Anders Ericsson, a psychologist at Florida State University, and refers to practice that incorporates setting goals, developing skills, and correcting mistakes. The effort is as much mental as it is physical. Putting in 10,000 hours of this type of intense process is what produces great concert pianists, surgeons and athletes.

Speedwork is an obvious form of deliberate practice: You must set pace goals for repeats, monitor your splits, and make adjustments to speed. Deliberate training also includes form and technique drills, strength workouts in the gym, and working with a coach. One study found that the amount of time middle-distance runners spent on these three activities was a good predictor of how fast they raced. You likely do some of these sessions, but going through the motions isn't enough if you're not fully engaging your brain. The goal isn't just to increase fitness, but to help you master the skill of running.

Mastering any skill takes intense concentration, which limits how long you can do it. One to three sessions of deliberate practice a week is plenty. They won't be easy, but researchers found that workouts requiring the most concentration and highest effort level are the ones runners rate most satisfying — especially when the result is a PB.

1. Gear Shifter

A sense of pace is the most important cognitive skill for runners, as it enables you to race on the threshold of your limits. Hone it by running interval workouts that require frequent gear changes.

Get Focused: Do an inverted pyramid of 1200, 800, 400, 800, 1200 metres with a 2:00 rest between each. Run the 1200s at 10K pace, the 800s at 5K pace, and the 400 close to full-out. On each lap, aim to nail your goal pace within two seconds.

2. Form Check

Technique drills break your running form into its component parts and develop the specific strength, balance, and movement patterns that translate into smoother running. Even simple moves require focus to avoid ingraining bad habits.

Get Focused: Once a month, have a friend videotape your drills and check for cues that you're on form. High Knees: a slight forward lean, back straight, drive thigh up, parallel to ground; Butt Kicks: hips stay squared, knee comes slightly forward as heel swings back; Walking Lunges: lead foot lands flat, both legs form 90-degree angles at bottom of lunge.

3. Dress Rehearsal

Researchers have found that fast runners spend more time “associating” (focusing on their body, pace, and competitors) than “dissociating” (letting their mind wander) compared to slower runners. Speedwork develops this skill in bursts, but time trials prepare you to sustain your attention.

Get Focused: Three weeks before your goal event, run 50 to 75 percent of the race distance at your target pace or slightly slower. Curtail any daydreaming by doing a mental check-in every kilometre — assess your pace, how your legs and lungs feel, and whether you're maintaining good form.

* * * *

Four Ways to Extend Your Long Run

1. Ease up

Slowing down conserves energy for extra kilometres. A rule of thumb: Tack on 60 to 90 seconds per kilometre to your normal pace.

2. Build gradually

To avoid injury, increase your long run by two to two-and-a-half kilometres each week.

3. Fuel the tank

Runs longer than an hour call for mid-run carbs (for energy) and electrolytes (to keep your body functioning optimally). Start fuelling 30 minutes into your run and refuel again every 15 minutes.

4. Take breaks

It's not cheating! Walking for a minute or two after 10 minutes of running shifts the use of your muscles, which increases the distance you can go before you get tired. You'll still reap the endurance benefits of running non-stop.

Reproduced from Runners World, December 2013

Adprint Ltd

Commercial Printers

Kind supporters of Wellington Masters
and printer of “The Master Copy”
magazine.

60 Cambridge Terrace, Wellington

Telephone: 04 384 2844
Fax: 04 384 3265

NUTRITION & FOOD

The Original Thirst Quencher

When was the last time you drank a glass of water?

As silly a question as that may be, water often isn't the first beverage chosen when a person is thirsty. Many stop during their busy day for a quick coffee or sugary drink. For birthday parties, one can find several 2 litre bottles of soft drinks. Even the non-carbonated beverage drinkers may first pour themselves a glass of fruit juice instead of water. Athletes often look to Powerade, and other sports drinks to quench their thirst.

So why is water often neglected?

One reason is many of these other drinks contain sugar and artificial sweeteners. Water does not, so people may find themselves looking for that sugar rush. Some might consider water a boring drink, while other drinks "taste better" and are more associated with party foods and memories.

Water is essential to your health. Your body is made up of 85-90% water, so it makes sense to replenish the body with something it needs naturally. Water also provides your body with essential nutrients in order for you to stay hydrated and healthy. Staying hydrated with water allows your spine and your spinal discs to maintain proper movement and function. Your muscles and joints also benefit from water.

Generally, drinking eight glasses of water throughout the day is recommended to stay properly hydrated, depending on the individual. ¥

Eating on the Run

Getting your food intake right before a run can be tricky. Juggling between running when you're hungry or running while you feel half your last meal is still swishing about inside you, can take a while to find what works.

When runners first start running they often eat too much too close to a run, resulting in a stitch. Using trial and error, sample different foods in different quantities, beginning with eating a pre-run snack two hours before the run and gradually creeping it closer and closer, so you can see what works for you.

Choose small portions of foods like brown bagels or toast, porridge or an energy drink, all high-carbohydrate foods that would digest relatively easily. Then add a little protein to aid carbohydrate delivery and help reduce muscle damage during exercise.

This might be a small sliver of smoked salmon or hummus on toast, or some nuts and a banana prior to your run. Although many studies suggest eating one hour prior to an exercise session is optimal, you still may want to experiment with this. Most athletes find they need about 90 minutes to digest their food so it's not doing a dance inside you as you run.

Don't run on empty

When it comes to kilojoule-burning and performance, don't make the mistake of running on empty. If you're out early in the morning, sipping on 250-500ml of an energy drink while you prepare for your run will give your body a little extra food and fluid, and keep your immune system in good condition too. If you run with low carbohydrate levels you can be left far more vulnerable to picking up colds and infections, and are likely to suffer with more inflammation from training.

When time permits

If you have a little longer before your run, timing your meal so it's between one and two hours prior will leave you well fuelled. When you run after work you may struggle with the choice of running or eating, but this shouldn't be an issue if you eat a balanced mid-afternoon snack a couple of hours before.

After the event

What you do after your run is vital too; and again timing in a mixed carbohydrate and protein snack within 20 minutes of your return can speed recovery and refill your muscles' energy stores, so your next run feels relatively good too. With your body often releasing appetite-suppressing hormones after a run, it's all too common to simply not eat. It may seem counter-intuitive, but having a small snack or drink not only speeds recovery but also regulates blood sugar levels. Supporting your run at both ends with the correct foods will benefit performance progression and recovery, while helping you control your appetite.

Food intake tips

- Prior to exercise, try low-fat carbohydrate and protein combinations, such as porridge with skim milk, wholegrain bread and smoked salmon, scrambled egg on wholegrain toast, a fruit smoothie with milk or whey protein, or a carbohydrate drink.
- Eat two hours prior to exercise, not forgetting that you need to be well hydrated too. If you've opted for a sports drink, save this for one hour prior to your run and aim to sip 500ml before you head off.
- Next time you go training; eat your meal one hour and 50 minutes before you run. Then bring this time forwards by 10 minutes each time you run, to find the ideal gap between eating and running for your body.
- Eat immediately after your run. Often fluid-based food is easier to tolerate in this period, so select between a homemade milkshake with added fruit, a fruit smoothie with whey or soy protein or, if you can tolerate it, a quick food option, such as half a bagel with peanut butter.
- On longer runs, consume your post-run snack immediately, and time your next meal for one to two hours later.



RECIPE

Pea and Parmesan Risotto

Get ready to race with this carbohydrate-rich dinner which is guaranteed to fill you up!

Ingredients:

- 2 tsp olive oil
- 1 onion, finely chopped
- 1 garlic clove, chopped
- 200g Arborio rice
- 125ml white wine
- 600ml hot vegetable stock
- 200g peas, cooked
- 50g parmesan, grated
- 50g baby spinach leaves
- Salt and pepper

Method:

- Heat the oil in a large saucepan, and then add the onion, cooking until soft and translucent. Add the garlic and cook for a further minute. Next, add the rice and turn up the heat, stirring continuously. The rice will begin to fry a little and start to look translucent. Once at this stage, add the wine and stir until it has evaporated.
- Add a ladle of hot stock. Keep stirring until it has reduced and then add another ladle, repeating until all the stock is used, and the risotto is cooked and has a creamy texture. It should take about 15 to 20 minutes.
- Fold through the cooked peas and parmesan. Finally, add the spinach, and season well with salt and pepper.

Tip:

If you run out of stock, use boiling water.

Running benefits:

Providing vitamins A, C and E to bolster your immune system, this dish will top up your carbohydrate stores and give you half of your daily allowance of zinc, to support immunity and energy levels, and have you ready for the starting line!

Preparation time:

Serves: 4

Preparation: 10 minutes

Cooking: 30 minutes

Cutting Edge Nutrition Ideas

For those of you who are au fait with exercise physiology, you will know that carbohydrate is the predominant fuel of exercise, with practical efforts put in place for athletes to constantly replenish their needs. Recently there has been much debate and discussion about whether athletes could adapt their “fat burning” capacities by eating a low-carbohydrate, high-fat diet (often called a ketogenic diet) while continuing to train heavily.

1. A metabolic advantage of using fat as a fuel source: Fat is an energy-dense nutrient and can supply the muscles with more calories per grams than can carbohydrate for endurance exercise, this would be an advantage as it can enhance aerobic capacity and muscular endurance.

2. Improved blood sugar management: While this might not be relevant to all athletes, the constant bombardment of sugar (of which some may be unnecessary) keeps the hormone insulin raised in the system and prevents fat (from food or your body stores) from being used as a fuel source. High levels of insulin over time can also be harmful to long term health.

3. Leaning up: With a higher fat, lower carbohydrate diet, many people end up eating less food overall and are therefore able to lean up quite well, when they struggled to shed some unwanted fat mass in the past. Having a higher fat diet gives you enhanced satiety (feeling of fullness) and reduces the drive to eat or crave certain foods (such as sugar).

HOWEVER, while this is all very cutting edge, this regime may not be for everyone; the most important point to take away from this piece is that individual responses to foods are diverse and are dependent on individuals’ varied genetic make-up, metabolic regulatory systems, food preferences and goals. If you wanted to experiment with this system to test whether your performance could be improved or whether you simply felt better, it is wise to get some help from a dietician or nutritionist that is open to this sort of regime, which is not considered mainstream practice.

For some starter advice, focus on whole foods (minimally processed) wherever possible, i.e., good quality carbohydrates from fruit, vegetables and dairy products, nutrient — rich sources of protein and fat, and drink mainly water to keep hydrated.

Caryn Zinn (PhD) Dietitian, Sports Nutritionist, AUT Senior Lecturer.
Email: carynz@xtra.co.nz

* * * *

Super Nuts Power Guide

Almonds – Vitamin E + Calcium

Brazil Nuts - Selenium

Cashew Nuts – Copper + Magnesium + Iron

Hazelnuts – Vitamin E + Copper + Manganese

Macadamia Nuts – Monounsaturated Fats + Manganese + Fibre

Pecans – Omega 3 + Antioxidants

Pine Nuts – Antioxidants

Pistachio Nuts – Protein + Healthy Fats + Antioxidants

Walnuts – Omega 3

THE ATHLETE'S KITCHEN

Copyright: Nancy Clark MS RD CSSD, December 2014

Gluten, Grains & Good Nutrition



Good grief! Are grains really all that bad for us? To listen to some runners talk, you'd think grain foods are the athlete's demon. Often demoted to being "just carbs," whole grains are actually a beneficial part of a sports diet. But to the detriment of many runners, grain foods — in particular, wheat — have gotten a bad rap in the past few years. Sensationalized by books such as *Wheat Belly* and *Grain Brain*, the "wheat is bad" message has gone viral. Certainly, people who are gluten intolerant or have celiac disease need to shun wheat, but that's only 7% of the population. Readily available carbohydrates from whole wheat and other whole grains foods can help most runners fuel their muscles easily and optimally.

Because wheat myths and grain grenades abound on the Internet, Oldways (www.Oldways.org) sponsored a conference in Boston (Nov. 2014) that included all you might want to know about grains. Oldways is a non-profit nutrition education organization that encourages "health through heritage" with culturally relevant nutrition education programs, including the Mediterranean Food Alliance, Vegetarian Network, and African Health & Heritage. Their Whole Grains Council hosted this conference. More than 250 nutrition and agriculture professionals from around the world gathered to learn state-of-the-art answers to the confusion surrounding grains and gluten. Here are a few of the highlights.

Why so much confusion?

Speaker James Hamblin, senior editor of *The Atlantic*, clarified why sensational anti-grain messages are so popular in the media. "Sensational" information sells easily — which makes it easier to make a living as a writer. Sensational stories with personal appeal, such as *"How I lost 50 pounds in five weeks by eating a gluten-free diet"* can easily go viral on the Internet and influence large numbers of people. While such stories can lack scientific scrutiny, they can certainly generate lots of clicks!

As for anecdotal reports about runners who report feeling so much better when they remove grains from the diet, the question arises: What were you eating before you went gluten-free? The common answer: A S.A.D. Diet (Standard American Diet). Of course they feel better when they start to eat better!

Who should avoid gluten?

Data does not lie. Celiac disease and gluten sensitivity are indeed on the rise. About 1% of the population around the world has celiac disease. About 6% of the population is gluten intolerant; they have symptoms of gas, bloating, headaches and brain fog. Gluten intolerance (or gluten sensitivity) is a recognized entity, but this is not the same as celiac disease. The symptoms are similar, but there is no intestinal damage that causes the malabsorption of nutrients seen in people with celiac disease.

Is wheat the problem?

Do more people suffer from gluten intolerance today because wheat is different from the wheat of centuries past? Doubtful, according to Brett Carver PhD, Oklahoma State University professor who researches wheat breeding and wheat genetics. Today's wheat has the same genetic composition as wheat from 8,000 years ago, with the same chromosomes and the same protein concentration. There is no GMO wheat (despite labels that say a product contains non-GMO wheat). What differs is today's wheat is bred to match the environment in which it grows. It is shorter, has a bigger head size, more kernels, and a higher yield.

If not wheat, what is the problem?

Dr. Alessio Fasano MD, Director of the Center for Celiac Research and Treatment at MassGeneral Hospital for Children, agrees that today's wheat has not changed, but other factors have. As a pediatric gastroenterologist, he reports that a different makeup of the microbes in our gut may lead to a weaker immune system. Dr. Fasano believes that today's kids have a poorly developed immune system because they are not spending enough time out-of-doors to become exposed to a variety of microbes. They are using too much hand sanitizer and eating too many processed foods that lack the fiber needed to support beneficial gut microbes associated with a strong immune system. Consequently, they have a poorly developed immune system. (Third world countries have fewer autoimmune diseases than we do in the US.) The result is an epidemic of autoimmune diseases including multiple sclerosis, Crohn's, diabetes, asthma, and celiac disease.

To shape a healthy immune system, we need to fully develop the microbiome in our gut, particularly in the first three years of life. Babies born via C-section miss out on gathering protective microbes from the vaginal birth canal. Antibiotics in early childhood can also have a negative impact. And living in a "sanitized" environment can backfire. Different combinations of these factors can contribute to the development of autoimmune diseases such as celiac.

Continued on next page . . .

Continued from previous page

Dr. Fasano pointed out that gluten is a protein, with some pieces we are unable to digest. Protein is good for us and, for most people, gluten doesn't present any problems. But for some people, gluten can trigger an autoimmune response with a variety of symptoms that can include iron deficiency anemia that responds poorly to iron supplements. According to Dr. Fasano, the recipe for developing celiac disease seems to be gluten + a genetic predisposition to celiac disease + loss of a fully functional barrier in the intestinal wall (a.k.a. intestinal permeability or "leaky gut").

Do other foods cause gut problems?

What we once thought was gut distress caused by gluten intolerance can also be related to fermentable carbohydrates found in certain grains, fruits and vegetables. When people take gluten out of their diet, they take out many FODMAPS (Fermentable Oligo-Di-Monosaccharides and Polyols). Hence, some people do feel better with less grain. But others still suffer with tummy turmoil created by onions, garlic, apples, etc., and this can contribute to "runners' trots" during exercise.

The bottom line: Grains are good and 93% of us can enjoy fueling with wheat!

For more information: [Gluten Freedom](#) by Dr. Alessio Fasano.

Nancy Clark, MS, RD, CSSD (Board Certified Specialist in Sports Dietetics) counsels both casual and competitive athletes at her private practice in Newton, MA (617-795-1875). For information about her *Sports Nutrition Guidebook* (2014) and food guides for runners and marathoners, see www.nancyclarkrd.com. For online education, see 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.

* * * *

Running Good for Knees, claims US Study

IT'S OFFICIAL: not only does running not cause osteoarthritis in the knee, it may even help keep the problem at bay. That's the verdict from a new United States study from Baylor University that found runners, regardless of the age they were when they ran, had less knee pain and osteoarthritis.

The findings add to growing evidence that running isn't the arch-enemy of knees it's made out to be – providing knees have no pre-existing problems. Australian professor of exercise and sports science Rob Newton says a knee's worst enemy isn't going for a run – it's the couch and the TV remote. "One of the strongest risk factors for osteoarthritis in the knee is being overweight. If only we had more people running there would be less osteoarthritis," he says.

"Running may also be protective because it helps to keep the joint mobile and reduces systemic inflammation, as well as helping to keep weight off."

But if running can be so knee-friendly, why is the idea that running can damage knees so deeply entrenched?

"It's mainly because some earlier research focused on knee osteoarthritis in elite athletes who've done an enormous amount of running over a lifetime and have developed problems with their knees," Newton says.

"But these are Olympic-level runners – I'd say that even recreational marathon running is unlikely to increase the risk of knee problems."

Fairfax – Dominion Post 16/12/2014.

* * * *

Study: Older Athletes Struggle More in the Heat

By Scott Douglas

It's fairly well-established that older people's exercise performance suffers more in hot weather than that of younger athletes. According to new research, the decline in ability to handle the heat can start as early as age 40, and gets more significant with age.

For the study, 85 men aged 20 to 70 did four 15-minute bouts of stationary cycling in a hot, dry chamber (35 degrees Celsius, 20% relative humidity). They rested 15 minutes between each short ride. Researchers measured the men's total heat loss and whole-body sweat rates while the men rode and rested. Greater heat loss and whole-body sweat rate mean doing a better job at dissipating the heat generated by exercise, which in turn should allow for better performance in the heat.

As expected, the youngest men (ages 20 to 31) had the highest rate of heat loss and sweating, and the oldest men (ages 56 to 70) did the worse job at bodily cooling.

What most surprised the researchers was that with each short bout of cycling, more of the middle-aged men started to suffer in the heat. By the second ride, the participants age 50-55 were starting to sweat less (i.e., store more heat). By the fourth short ride, those in the 45-49 age group were also significantly less, and even those in the 40-44 age group were showing signs of being less able to deal with the heat than the younger riders.

These findings were consistent throughout the study participants, regardless of their cardiovascular fitness (as measured by VO2 max), body surface area or body-fat percentage.

"Age was the only variable to significantly correlate with whole-body sweat rate," the researchers wrote. "This would suggest that when the stimulus for sweating is equal for all participants ... ageing may have a larger influence on whole-body heat loss capacity than the fitness level or specific physical characteristics of the individual."

The researchers concluded that middle-aged and older adults might therefore have an increased risk of heat-related illness when working hard in hot weather.

The study was published in the online journal *PLoS One*.

Study: Strengthen Hamstrings to Improve Your Running Economy

By Amby Burfoot

Distance runners have always known they need not look like super-muscular sprinters or body builders. Bulging muscles don't improve performance; they make you big and bulky when you want to be lean and mean.

Still, moderate strength training remains popular and recommended for distance runners because it can increase power and perhaps reduce injuries. Runners do a lot of quadriceps work in particular, hoping to diminish knee problems. Many runners have quadriceps muscles (on the top of the thigh) that are 30 to 40 per cent stronger than their hamstrings (under the thigh).

This could be another example of too-much-muscle, according to a new study that compared the ratio of hamstring-to-quadriceps strength in highly-trained and recreational female distance runners. The highly-trained group had lower absolute muscle strength in both groups.

More importantly, the researchers say, the highly-trained runners had a ham-to-quad ratio of about 1:1 and significantly higher running economy than the recreational runners. Conclusion: "Running performance in long distance events may be related to greater hamstring muscle strength relative to quadriceps strength, and not to absolute muscle strength."

The study has an intriguing backstory. Oyvind Heiberg Sundby, one of the co-authors, is a Norwegian mountain runner, physical therapist and exercise physiologist. He's married to American Annie Bersagel, who recently won the Dusseldorf Marathon in 2:28:59. If she improves by several minutes in the next two years, she'll have a shot at the U.S. Olympic team in 2016.

The study compared seven highly-trained women runners with 11 recreational women runners. The first group ran more than 95km a week, on average; the second, about 32km a week. Both had an average age in the mid-20s. All runners were tested for their running economy and the ratio of their hamstring-to-quadriceps muscle strength.

The less trained runners actually had stronger muscles. However, this correlated with lower running economy. The highly-trained runners had weaker muscles, but a more balanced ratio of ham-to-quad strength, and a significantly better running economy. That is, they used less oxygen at a given pace.

As Sundby explained to *Runner's World*, the running stride forces both muscle groups to contract concentrically and eccentrically. The actions are opposite; while the quads are lengthening, the hamstrings are shortening; and vice versa. In a well-oiled machine, the two muscle groups appear to work together most efficiently when their strength is about the same.

Under "Practical Applications," the paper notes: "As running is basically a series of horizontal jumps requiring a strong and highly efficient extensor apparatus, we suggest that runners should aim to include hamstring muscle strengthening exercises that imply horizontal motions."

Sundby gave *Runner's World* the following advice for runners: "Runners should do exercises that imitate running while they add some resistance or overspeed element. For example, steep hill bouncing or running, fast downhill running, or horizontal bouncing maneuvers such as repeated single-leg long jumps. These exercises should be combined with more specific strength training that targets the hamstrings."

The paper was co-authored by Mark Gorelick of San Francisco State University, and published in the *Journal of Strength and Conditioning Research*. It's titled "Relationship Between Functional Hamstring: Quadriceps Ratios And Running Economy In Highly Trained And Recreational Female Runners."

* * * *

QUESTIONS YOU JUST CAN'T ANSWER

Why doesn't Tarzan have a beard when he lives in the jungle without a razor?

Why do banks charge a fee on 'insufficient funds' when they know there is not enough?

Why does someone believe you when you say there are four billion stars, but check when you say the paint is wet?

Whose idea was it to put an 'S' in the word 'lisp'?

What is the speed of darkness?

Why is it that people say they 'slept like a baby' when babies wake up every two hours?

If the temperature is zero outside today and it's going to be twice as cold tomorrow, how cold will it be?

Do married people live longer than single ones or does it only seem longer?

Why is there a light in the fridge and not in the freezer?

Why do people point to their wrist when asking for the time, but don't point to their bum when they ask where the bathroom is?

If corn oil is made from corn, and vegetable oil is made from vegetables, then what is baby oil made from?

If electricity comes from electrons, does morality come from morons?

Did you ever notice that when you blow in a dog's face, he gets mad at you, but when you take him on a car ride, he sticks his head out the window?

* * * *

You know you're a runner when . . . you get mad that an injury keeps you from running, not that it damaged your body.

INJURY PREVENTION

Seven Secrets to Prevent Running Injuries

By Jason R. Karp, Ph.D.

At least half of all runners deal with at least one injury per year, and 25 percent of runners are injured at any given time.

There's really no good reason why so many runners should get injured. And yet it happens all the time, mostly because runners don't train intelligently or they follow programs that are faulty in design.

Injuries happen because the physical stress from running is too much for your body to handle at that time. The human body is great at adapting to stress, but only when you apply that stress in small doses. When you apply the stress too quickly for your body to adapt, something breaks down.

Every time your foot lands on the ground, your leg absorbs two to three times your body weight. Multiply that by the number of steps you take to run five miles, and multiply that by how many times you run each week, and you can see how much stress your legs have to deal with to be a runner.

The main predictors of running injuries are:

1) Mileage: How many miles you run per week is the greatest predictor of injury risk. It's hard to say exactly how many miles per week increases the risk of injury because that's an individual matter. You may be able to handle 50 miles per week and your running partner may get injured with 30. Some runners (called Olympians) can run more than 100 miles per week and not get injured. On average, the risk of getting injured is two to three times greater when running at least 40 miles per week.

2) Previous injury: If you've had an injury in the past, you're at an increased risk for another one. A previous injury makes that body part more vulnerable.

3) Lack of running experience: If you're a new runner, you have a greater risk for injuries because you're not yet used to the stress of running.

So, do you want to stop getting injured? Follow these seven training secrets:

Secret #1: Train smart.

To train smart, train at more effective levels of effort to get the best results. The goal of training is to obtain the greatest benefit while incurring the least amount of stress. That means you want to run as slow as you can while still meeting the purpose of the workout and obtaining the desired result. Follow a systematic and progressive training plan, with each cycle of training building on what came before to create a seamless and safe program.

Secret #2: Increase your weekly running mileage very slowly and spread it out over the whole week.

How quickly you increase your weekly mileage probably has the greatest impact on whether you get injured. The slower you increase your weekly mileage, the less chance you'll get injured.

When you increase your mileage, add only about a mile per day of running so that you spread the stress around. For example, if you run 20 miles over four days in a week, run no more than 24 miles next week by adding one mile to each of the four days. Don't run 24 miles next week by adding all four miles to only one day of running.

Many books and articles quote the 10 percent rule of increasing mileage, but there's nothing special about 10 percent, and you can often increase by more than that if you're smart about how you do it.

If you're a highly trained runner, you may be able to get away with adding more miles more quickly, especially if you have experience running longer distances. For example, if you've run 60 miles per week in the recent past and now you're training for your fifth marathon and building your mileage, you don't necessarily have to go from 40 to 45 to 50 to 55 to 60 miles per week over a couple of months. You may be able to make bigger jumps in mileage because your legs already have experience running 60 miles per week. However, if 60 miles per week is brand new territory for you, then you need to increase your mileage in smaller increments. If you're a new runner, an older runner or are prone to injury, run the same mileage for three to four weeks before increasing it.

Secret #3: Don't increase your running mileage every week.

Run the same mileage for two to four weeks before increasing it. Give your legs a chance to fully absorb and adapt to the workload. You want 30 miles per week to be a normal experience for your body before increasing to 35 miles per week. And that takes time.

Secret #4: Don't increase the distance of your long run every week.

This is especially important if you're entering uncharted territory with your long runs (i.e., you've never run that distance before). Repeat the same long run for a few weeks before running longer. You want a 9-mile run to become normal before you try to run 10 miles. Most marathon and half-marathon training groups make the costly mistake of ramping up the long run too quickly because their training programs are only five to six months long, so they increase the distance of the long run every week throughout their programs until it's time to taper two to three weeks before the race. That's a good way for new or recreational runners to get injured because the stress increases week after week without a break. If you're running your first marathon or half-marathon and you're starting from a short(ish) long run, you need to give yourself much longer than five or six months to prepare without risk of injury.

Continued on next page . . .

INJURY PREVENTION

Continued from previous page . . .

Secret #5: Don't make the long run so long.

To avoid injury, don't make your long run such a large percentage of your weekly running. Ideally, your long run shouldn't be more than about a third of your weekly mileage. So, if your long run is 10 miles, you should run at least 30 miles per week. If your long run is 20 miles, you should run at least 60 miles per week. The majority of runners don't run that much, so you need to be creative when training so that you don't accumulate so much stress in one run.

Don't misunderstand—the long run should be stressful. After all, you're running for a long time and trying to make yourself exhausted so your body adapts. However, you don't want the long run to be *so much more* stressful than any other run during the week. It's always better to spread the stress around. Complete a medium-long run mid-week that's about 65 to 75 percent of the length or duration of your long run. This strategy helps to ameliorate the potential damage of your long run being more than a third of your weekly mileage.

Secret #6: Run EASY on your easy days.

The biggest mistake runners make is running too fast on easy days. This adds unnecessary stress to your legs without any extra benefit and will make it more difficult to complete a quality run on your harder days. Easy runs should feel gentle and allow you to hold a conversation (about 70-75% max heart rate).

Secret #7: Never increase your weekly mileage and the intensity of your workouts at the same time.

When you begin to include interval training and speed work into your program, either reduce the overall mileage for the week or maintain your mileage from where it was before you added the extra intensity. Your legs can handle only so much stress at once. Trying to increase your running volume while also increasing the intensity of your workouts is too much for most runners to handle.

About the Author:

Dr. Jason Karp is one of the foremost running experts in America, 2011 IDEA Personal Trainer of the Year, 2014 recipient of the President's Council on Fitness, Sports & Nutrition Community Leadership award, and creator of the [Run-Fit Specialist](#) certification. He holds a Ph.D. in exercise physiology. A prolific writer, he has more than 200 articles published in international running, coaching, and fitness magazines, is the author of five books, including [Running for Women](#) and [Running a Marathon For Dummies](#), and is a frequent speaker at international fitness and coaching conferences. Follow Jason on Twitter [@drjasonkarp](#) and Facebook at [DrJasonKarpRunFit](#).

* * * *

Beat Back Pain

By Gert van der Walt

Lower back pain is guaranteed to put a halt to your training. Here is a chiropractor's view on how you can prevent it and continue running.

Back pain – especially lower back pain – can be a debilitating complaint. As well as putting the brakes on your running, it can also stop you in your tracks in everyday life, the result of which can leave you feeling stressed and sluggish. But what causes lower back pain – and how can you prevent it? In order to understand the causes and prevention, you need to get to grips with the design (anatomy) and function (physiology) of the lower back itself.

BACK TO BASICS

The lower back consists of the lower spine (lumbar spine), comprising five vertebrae (spinal bones); and pelvis, comprising the hips, sacral bone and coccyx. The pelvis provides support for the upper body and is a protective frame for the reproductive organs, lower bowel and bladder. The lumbar spine supports the lower trunk, and protects the lower spinal cord and exiting nerve roots, which feed energy and messages from the brain to the pelvis, legs and to organs in the abdomen.

THE LOW-DOWN

Lower back pain can be caused by:

1. A spinal or pelvic imbalance as a result of a fall, incorrect lifting technique, poor seating posture or trauma.
2. Organ or system breakdown or disease. It's common for women who suffer from reproductive system disorders, such as ovarian cysts, fibroids or pelvic inflammatory disease, to feel lower back pain.
3. A tilted pelvis. This is common in road runners, where the camber of the road can cause the pelvis to tilt towards the lower side of the road. The resulting pelvic imbalance then causes a ripple effect, which upsets the lumbar spine and upper spine, causing neurological or biomechanical disorders in the lower back and legs.
4. Disc problems – discs are spinal 'shock absorbers' and injuries resulting in bulging or protrusion against nerve roots or the spinal cord can have serious neurological ramifications.
5. Muscle fatigue or weakness of the core muscles that support the lower back.

PAIN PREVENTION

You can help to prevent back pain by:

1. Strengthening your core muscles – speak to a personal trainer, or try yoga or Pilates.
2. Stretching before and after running – your muscles need to be prepared for the stresses of running, while stretching after running helps to speed up the clearance of lactic acid.
3. Working on your posture – make sure you are sitting, standing and walking correctly.
4. Running on both sides of roads, to counter the effects of the camber on your lower back.
5. Running on grass, for added shock absorption.

Pain is your body's way of telling you something's not right. So slow down and seek help if it affects you. Remember, painkillers only mask the symptoms and won't cure the problem.

Strategies for Slimming Down

Runners who want to lose weight and are already maxing out their mileage burn plenty of kilojoules, so the easiest way for them to create a deficit is to eat smarter. Don't eliminate meals or skip your post-run snacks, though you could end up under-fueled, constantly hungry or with a sluggish metabolism – none of which are good for weight loss or for racing at your best. Instead, try these sustainable strategies:

CUT OUT THE JUNK – “The most important thing you can do to get lean is improve your overall diet quality,” says Matt Fitzgerald, author of *Racing Weight*. “Focusing on what you're eating instead of how much can get you 90 per cent of the way.” That means fewer sweets, refined carbs, fried foods, fatty and processed meats, and liquid kilojoules, while adding fruits, veggies, nuts and seeds, whole grains, and lean meats and fish.

MAKE SMART SWAPS – Instead of pancakes after your morning run, eat a veggie and cheese omelette. Trade your pasta dinner for a brown rice and edamame stir-fry. And instead of an ice cream with topping, celebrate post-race with one scoop of natural yoghurt, topped with fruit and crushed nuts. Even if these substitutions are close in kilojoules to your usual, they're higher in protein and fibre that will help keep you feeling fuller for longer.

SHRINK YOUR PORTIONS – Cutting out just a few bites from each meal and snack can make a difference – up to 2090 kilojoules a day is enough to lose half a kilo a week. The only time you shouldn't cut back? After a particularly long or hard run. “That's when you recovery – and your appetite – should be the priority,” nutrition councilor Alicia Shay says. “For most people, that will only apply to two meals a week.” Be vigilant the rest of the time.

EAT ON A SCHEDULE – Have a meal or snack every few hours – and keep that consistent day after day. “Runners can't always trust their bodies' hunger signals, because intense exercise can suppress appetite at times and make you feel starving at others,” says Rosa Troup. An insatiable hunger after long runs may be less about your workout and more about the fact that you aren't eating enough throughout the day.

INCORPORATE RESISTANCE TRAINING – “Research shows that if you're an active runner and you lose weight, you're going to lose both fat and muscle,” says exercise physiologist Paul Vanderburgh. To avoid shedding too much of the latter – which is what gives runners their power – aim for five to 10 minutes a day of body weight exercises, like pushups, planks, lunges and squats.

FILL UP WITH FLUIDS – Most people need three to four litres of water a day, and if they're not getting that, it can throw off a lot of things in the body – including hunger cues. “Your stomach's going to crave food when what it really wants is

water,” says Shay. To help maintain his weight loss, marathoner Tom Storey employs a trick he read about in an interview with Olympic marathon champion, Meb Keflezighi – drinking a pint or two of water before every meal.

DON'T RACE TO FINISH – Runners dealing with extreme hunger tend to inhale their post-workout meals faster than their brains can process satiety signals from the stomach says dietitian Emily Brown – so it's easy to think you need more kilojoules than you really do. Practice mindful eating when you refuel after a run: Sit down, eliminate distractions and pay attention to the taste, texture and satisfying nature of every bite.

HAVE FUN – If you're in the habit of rewarding yourself with junk food after a hard run, try thinking of the workout as a reward in itself instead. A recent Cornell University study found that runners tended to eat less after a run when they considered it enjoyable, rather than hard work. Take time to evaluate your running: Have you become too focused on outcomes? Reclaim the joy of the activity, and make fitness its own reward.

* * * *

Learn from your elders

A lawyer and a senior citizen are sitting next to each other on a long flight.

The lawyer is thinking that seniors are so dumb that he could get one over on them easy.

So the lawyer asks if the senior would like to play a fun game.

The senior is tired and just wants to take a nap, so he politely declines and tries to catch a few winks.

The lawyer persists, saying that the game is a lot of fun. I ask you a question, and if you don't know the answer, you pay me only \$5. Then you ask me one, and if I don't know the answer, I will pay you \$500, he says.

This catches the senior's attention and, to keep the lawyer quiet, he agrees to play the game.

The lawyer asks the first question. 'What's the distance from the Earth to the Moon?'

The senior doesn't say a word, but reaches into his pocket, pulls out a five-dollar bill, and hands it to the lawyer.

Now it's the senior's turn. He asks the lawyer, 'What goes up a hill with three legs, and comes down with four?'

The lawyer uses his laptop and searches all references he can find on the Net.

He sends e-mails to all the smart friends he knows; all to no avail. After an hour of searching, he finally gives up.

He wakes the senior and hands him \$500. The senior pockets the \$500 and goes right back to sleep.

The lawyer is going nuts not knowing the answer. He wakes the senior up and asks, 'Well, so what goes up a hill with three legs and comes down with four?'

The senior reaches into his pocket, hands the lawyer \$5, and goes back to sleep.

INJURY PREVENTION

Common Running Injuries to Avoid

The only thing runners fear more than rabid dogs and porta-potty emergencies is getting hurt. An injury means taking a break, and runners hate the thought of losing fitness, gaining weight, or missing an endorphin fix. But what if you knew what injuries you were likely to face — before a single symptom struck?

Sports physician Jack Taunton, M.D., and exercise scientist Michael Ryan, both recreational runners from the University of British Columbia, were studying sports injuries four years ago when they recognized a lack of data linking specific traits, weight, gender, foot type — to running injuries. So they decided to conduct research that was later published in the *British Journal of Sports Medicine*. "We found that certain injuries were statistically more significant among particular people," Ryan says. "Women are more likely to experience one kind of knee pain — patellofemoral pain syndrome — while men are more likely to experience another — patellar tendonitis."

Ryan and Taunton's findings focus on five injuries and the runners they most commonly afflict. Whether you're in a high-risk group or not, simple training adjustments can keep you safe. These precautionary measures could save you from the dreaded routine of rest and rehab.

Achilles Tendonitis

What It Is - Tenderness in your lower calf near your heel that usually strikes when you push off your toes.

You're at Risk - Men with a BMI of 25 or higher (a man who is 5'10" and weighs 175 pounds, for example) who run a nine-minute-per-mile pace or faster.

Why - The Achilles absorbs several times your body weight with each stride. A faster pace and additional body weight put even more stress on this tendon.

Prevent It - Strengthen your calf muscles (with your toes on a step, lower and raise your heels). Stretch your calves (keep your heel on the ground, lift your toes back toward your shin).

Others at Risk - People who regularly run hills (the Achilles has to stretch more on inclines) and who have increased their mileage more than 10 percent per week (sudden increases in mileage strain the tendon).

Medial Tibial Stress Syndrome

What It Is - Pain and soreness along the inside front of the lower leg, commonly called shin splints.

You're at Risk - Runners whose feet roll inward excessively (over pronate).

Why - The posterior tibial tendon, the connective tissue that gets sore with shin splints, runs into the arch of the foot. If your feet roll inward, this tendon has to work extra hard to counteract that motion.

Prevent It - Wear motion-control shoes. Strengthen your calves (hold dumbbells while doing toe raises). If you've had daily shin pain for longer than a month, see a doctor for a bone scan to rule out a stress fracture.

Others at Risk - Beginning runners; people who train on slanted surfaces; women who wear high heels.

Patellar Tendonitis

What It Is - Pain in the tendon that connects the kneecap to the shinbone.

You're at Risk - Men with a BMI of 25 or higher or who have a history of playing basketball and have suddenly increased their weekly mileage.

Why - The patellar tendon helps your leg extend during running or jumping, but that repeated motion can create small tears in the tendon. After years of activity and then a sudden increase in mileage, your body may struggle to repair those tears. Extra body weight doesn't help.

Prevent It - Keep your weight in check. Do squats to strengthen the patellar tendon and stretch your quads and hamstrings. Avoid increasing mileage by more than 10 percent per week.

Others at Risk - Runners with a history of tendon injuries; over pronators.

Patellofemoral Pain Syndrome

What It Is - Pain and stiffness around the kneecap.

You're at Risk - Women who run a 10-minute-per-mile pace or slower.

Why - Ideally, your kneecap glides smoothly in the groove at the end of your thighbone. But because women have more flexible joints and a more extreme angle from hip to knee (called the Q angle) than men, their kneecaps are more likely to fall out of alignment. Pain intensifies at slower speeds because the knee goes through less range of motion, putting more demand on a smaller area of the joint.

Prevent It - Strengthen your quads, hamstrings, and glutes with squats and lunges to stabilize your kneecaps and help keep the pelvis level while you run.

Others at Risk - Runners who over pronate, have flat feet or high arches.

Plantar Fasciitis

What It Is - Inflammation of the tissue along the bottom of the foot that's usually worst first thing in the morning.

You're at Risk - Men over 40 who have a family history of the injury.

Why - The make-up of the tissue in the plantar fascia is stiffer in men and gets less flexible with age. Experts think it could be a genetic condition.

Prevent It - The fascia tightens overnight, so stretch your calves before getting out of bed (straighten your legs; flex your toes). Strengthen your calves with toe raises or eccentric heel drops.

Others at Risk - People who wear shoes that lack good arch support (flip-flops, ballet flats); pregnant women.

MISCELLANEOUS

MEMBERSHIP

Our current membership is 88 members. Welcome to new members Mike Milburn (Masterton), Marshall Clark (Scottish), Bianca Mueller (WMA), Bob Gardner (Scottish), Jenny Mason (Scottish) and Lawrie Cornish (WMA).

* * * *

New Anti-Doping rules in place

1st January 2015

New Zealand athletes are being warned that tough new anti-doping rules come into force from 1st January 2015.

The rules will see those who intentionally cheat by using performance enhancing drugs or methods face longer bans from all sport.

New Zealand's Sports Anti-Doping Rules have been updated to bring them into line with the World Anti-Doping Agency's 2015 World Anti-Doping Code.

The chief executive of Drug Free Sport New Zealand, Graeme Steel, says the rules will help to better protect clean athletes.

"These new rules are powerful and far-reaching and will enable anti-doping organisations to more easily catch those who intend to cheat.

"New Zealand has proud tradition of clean sport and Drug Free Sport NZ works hard to ensure that tradition is maintained and continued. We believe these updated rules are a significant step forward in the fight against doping in sport," Mr Steel says.

Key changes introduced as a result of the revised World Anti-Doping Code include:

- longer bans of up to four years for those who dope intentionally
- penalties for athletes who associate with anyone who has previously committed a doping offence
- sanctions for those who help to cover-up doping
- an extension of the anti-doping rules to cover athlete support personnel.

"The introduction of longer bans sends a clear message to athletes that intentional doping will not be tolerated. Bans of this length could effectively end an athlete's sporting career so they are taking a huge risk if they choose to dope," Mr Steel says.

He adds that those who support athletes will also need to be aware of the changes because they are now bound by the anti-doping rules and can also face penalties.

"It's vital that everyone involved in athletics is committed to being drug free and this includes those supporting athletes like coaches and trainers. There's no level playing field if we don't have everyone on board and following the rules," Mr Steel says.

Other changes that have been introduced include a greater focus on investigations and intelligence to identify doping and target testing.

"In the future, the fight against doping will increasingly be about intelligence gathering, investigation and targeted testing. This intelligence-led approach will make it easier to catch the real cheats and protect all those competing cleanly and fairly," Mr Steel says.

Drug Free Sport NZ has produced a factsheet on key changes introduced as part of the new code. Download one from the website <http://www.drugfreesport.org.nz> or request one via info@drugfreesport.org.nz

You can find out more about the revised Code and the new rules at Drug Free Sport New Zealand's website: www.drugfreesportnz.org.nz

* * * *

WELLINGTON MASTERS ATHLETE OF THE YEAR

Past winners:

2000	Judy Hammond
2001	Ellis Goodyear
2002	Barry Prosser
2003	Bernie Portenski
2004	Simon Poelman
2005	Bill Nicholson
2006	Peter Baillie
2007	Colleena Blair
2008	Jim Blair
2009	Grant McLean
2010	Anne Hare
2011	Jim Blair
2012	Jacqueline Wilson
2013	Jacqueline Wilson
2014	Judy Hammond

* * * *

THANKS

Veronica Gould asked that I publish a huge thank you to all the members who responded promptly to Andrew Stark's request. She has already heard back from more than half our members and will contact those by phone who don't have email contact.

* * * *

NEW TROPHY

The Noeleen Perry Memorial Trophy will be awarded to the female masters walker who scores the highest age-grade percentage score in the 3000m Walk. This trophy has been presented by Bruce Perry in memory of Noeleen who held the record in the 3000m Walk.

What's the Best Training Program for Veteran Runners?

By Amby Burfoot

It's easy to get fitter and faster when you're a beginning runner. More kilometres, hills, tempo runs, and speedwork – they'll all do the trick.

It's much more difficult to improve when you're a veteran, hard-training athlete. If you keep doing the same-old same-old, you'll likely stay stuck in place. But what should you be doing instead?

A new study of national class Austrian runners, triathletes, cyclists and Nordic skiers may provide an answer: polarised training. The term isn't used frequently by runners, but essentially it means a workout program that includes many easy runs, a number of quite hard ones, and little in between (i.e., tempo running).

Simply enrolling top competitors in a training experiment often proves a challenge. "You have to convince both the athletes and their coaches to follow a specific training regimen that might not be their normal routine," head author Thomas Stoggl told *Runner's World*. "This isn't easy."

Nonetheless, Stoggl managed to get 41 athletes to complete one of four 9-week training programs. The programs focused on polarised training (POL), high intensity training (HIT), tempo training (TEMP) or high volume (slow) training (VOL). The athletes in each program were equally matched fitness-wise, and accustomed to completing 10 to 20 hours of workouts per week.

The following table shows the four different training programs. Note in particular the percentages of training done in the three common training intensities: low intensity, tempo pace and high intensity.

	POL	HIT	TEMP	VOL
Hours training	104	66	84	102
Workouts	54	47	49	58
Low intensity	68%	43%	46%	83%
Tempo pace	6%	0%	54%	16%
High intensity	26%	57%	0%	1%

After following these training systems for 9 weeks, the POL training group clearly showed the greatest improvement in vo2 max (+ 11.7%) and time to exhaustion (+17.4%). The HIT group placed second, with vo2 max climbing 4.8% and time to exhaustion 8.8%. The other two training regimens produced lesser and insignificant improvements.

Another important result: The HIT athletes lost 3.8% of their starting body weight, while the other training programs produced no change in body weight. Some might regard this 3.8% weight loss as a benefit of HIT training, but Stoggl doesn't believe that's the case with serious, veteran athletes. Instead, it's more likely that they were overtrained and suffering from lowered immunity.

"These results show that tempo training and volume training don't lead to additional adaptations among veteran athletes," Stoggl said. "Also, too much high-intensity training leads to a catabolic [muscle-wasting] state. I was surprised to see such enormous gains by the polarised trainers even though they were used to doing tons of training already. The message seems to be that veteran athletes should focus their training on a mix of long, slow training combined with high-intensity workouts. So train in the extremes, and avoid the middle-intensity zone."

* * * *

Strong Ankles Fight Off Age-Related Slowdown?

AS YOU GET OLDER various muscles and joints start to work less effectively. But which are the key muscles that matter most when it comes to walking and running? That's the question a group of researchers at the University of Jyväskylä in Finland set out to answer in a study that was recently published in the *Journal of the Royal Society: Interface*.

To answer the question, they assembled three groups of runners (13 in each group) with average ages of 26, 61, and 78. Then they analysed their biomechanics while walking, running (at ~4:10 per km), and sprinting all-out, looking for changes in the motion and forces at the ankle, the knee, and the hip.

There are no significant differences between the age groups at any point. That suggests that weakened muscles around the knees don't appear to be a limiting factor for the older runners. The same is mostly true for the hips. The ankles, though, reveal a different story. Even when walking, the oldest group isn't able to generate as much power at the ankle; this finding is consistent with previous studies. The difference is even more pronounced in running and walking: the older you get, the less power you're able to deliver at the ankle.

Why is the ankle seemingly unique? One possibility the authors mention has to do with the fact that the muscles around the knee and hips tend to be big and powerful, while the muscles around the ankle are smaller. That means that during walking or running, you're generally using a much higher percentage of your maximum strength at the ankle than at the knee or hip. This means that as you get older and begin to lose muscle throughout the body, the ankle is likely to become a limiting factor much sooner than the other joints.

So what's the answer? An obvious possibility is to spend a little extra time and energy strengthening the muscles that plantarflex (bend toward the ground) your ankle, like calf raises. Of course, it's premature to start designing exercise programs based on one biomechanical study. It will be interesting to see if the researchers follow up with a training study to see what effects ankle strengthening has on mitigating the decline in walking and running speed with age. These are hard studies to do, so I don't expect they'll be available very soon. Still, it's an interesting idea and something to keep in mind.

WELLINGTON MASTERS T&F CHAMPIONSHIPS 2015

Newtown Park - Day 1, Saturday 14th February – Day 2, Sunday 15th February

Grade	Name	Result	Wind	Grade	Name	Result	Wind
60m				M40-44	Sean Lake	7:38.48	
W40-44	Vanessa Story	8.65	1.2	M60-64	Bob Gardner	8:22.11	
W45-49	Petra Stoeveken	8.82	1.2	M65-69	Peter Baillie	7:49.61	
W60-64	Jenny Mason	10.25	1.2	3000m Track Walk			
W75-79	Judy Hammond	11.35	1.2	W55-59	Terri Grimmett	18:34.68	
M45-49	Mike Horlor	9.08	-0.7	W65-69	Jacqueline Wilson	18:35.89	
M50-54	Mark Macfarlane	8.29	-0.7	W70-74	Daphne Jones	21:09.53	
M55-59	Gary Rawson	8.13	-0.7	M40-44	Sean Lake	18:33.22	
	Gordon Cameron	8.64	-0.7	M60-64	Bob Gardner	17:40.10	
M65-69	Rob Hannan	13.26	-0.7	M65-69	Peter Baillie	16:03.11	
					Geoff Iremonger	20:22.20	
100m				High Jump			
W40-44	Vanessa Story	13.58	0.1	W75-79	Judy Hammond	1.00	
W45-49	Petra Stoeveken	14.43	0.1	M45-49	Mike Horlor	1.25	
W60-64	Jenny Mason	17.22	0.1	M50-54	Mark Macfarlane	1.40	
M45-49	Mike Horlor	15.76	-1.7	M55-59	Gary Rawson	1.40	
M50-54	Mark Macfarlane	13.24	-1.7	Long Jump			
M55-59	Gary Rawson	13.25	-1.7	W75-79	Judy Hammond	2.79	NWI
	Gordon Cameron	13.99	-1.7	M45-49	Mike Horlor	4.12	0.4
M65-69	Rupert Watson	16.84	-1.7	M50-54	Mark Macfarlane	4.71	1.2
	Rob Hannan	23.15	-1.7	Triple Jump			
200m				M45-49	Mike Horlor	8.55	0.9
W40-44	Vanessa Story	26.68	3.0	M60-64	Jonathon Harper	8.01	0.4
W75-79	Judy Hammond	39.60	3.0	Shot Put			
M50-54	Mark Macfarlane	26.44	1.3	W40-44	Michelle Ward	8.50	
M55-59	Gary Rawson	27.06	1.3	W45-49	Michelle Scriven	9.27	
M60-64	Richard Brent	31.14	1.3	M45-49	Mike Horlor	8.45	
400m				M60-64	Peter Orman	8.10	
W40-44	Vanessa Story	1:01.10		M65-69	Peter Jack	5.49	
	Andrea Williams	1:04.41			Rob Hannan	5.18	
M50-54	Mark Macfarlane	1:01.14		Discus			
M60-64	Richard Brent	1:05.28		W45-49	Michelle Scriven	26.99	
800m				M45-49	Mike Horlor	22.16	
W40-44	Andrea Williams	2:26.41		M55-59	Gary Rawson	27.27	
	Renae Creser	2:26.55		M60-64	Peter Orman	25.04	
W50-54	Helen Willis	2:55.05		M65-69	Peter Jack	14.96	
W55-59	Terri Grimmett	3:44.04			Rob Hannan	12.74	
M45-49	William Twiss	2:20.79		Javelin			
M60-64	Richard Brent	2:32.84		W45-49	Michelle Scriven	19.55	
	Jonathon Harper	2:49.44		W75-79	Judy Hammond	12.75	
M65-69	Rupert Watson	2:58.18		M55-59	Gary Rawson	29.79	
M80-84	Michael Browne	5:03.03		M60-64	Peter Orman	26.63	
1500m				M65-69	Rob Hannan	11.31	
W40-44	Renae Creser	5:14.35		Hammer Throw			
W50-54	Vickie Humphries	5:22.01		W40-44	Michelle Ward	29.91	
M40-44	Kevin Pugh	4:49.50		W45-49	Michelle Scriven	26.52	
M45-49	William Twiss	4:33.62		M60-64	Peter Orman	20.77	
M55-59	Tony Price	5:03.49		M65-69	Peter Jack	16.53	
M70-74	Dougal Congalton	6:38.83			Rob Hannan	11.67	
M80-84	Michael Browne	10:23.52		2000m Steeplechase			
2000m Steeplechase				W40-44	Michelle Van Looy	8:13.91	
W40-44	Michelle Van Looy	8:13.91		W55-59	Terri Grimmett	10:18.75	
W55-59	Terri Grimmett	10:18.75		3000m Steeplechase			
3000m Steeplechase				M45-49	Michael Wray	11:08.78	
M45-49	Michael Wray	11:08.78		1500m Track Walk			
1500m Track Walk				W55-59	Terri Grimmett	8:53.92	
W55-59	Terri Grimmett	8:53.92		W65-69	Jacqueline Wilson	8:56.63	
W65-69	Jacqueline Wilson	8:56.63			Barbara Morrison	9:37.02	
	Barbara Morrison	9:37.02		W70-74	Daphne Jones	10:11.80	
W70-74	Daphne Jones	10:11.80					



- COMING EVENTS -

2015:

27 Feb-

1 Mar 41st NZMA Track & Field Championships

Tauranga

March

7 Ironman New Zealand

Taupo

13-15 Mooloolaba Triathlon Festival

Sunshine Coast, Brisbane

15 Mt Lowry Challenge - 11.75km & 22km

Williams Park, Days Bay

28-29 Barfoot & Thompson World Triathlon

Auckland

April

11 Sovereign Duathlon

Christchurch

20 119th Boston Marathon

Boston

26 Gold Coast Bulletin Half Marathon, 10km and 5km

Robina, Gold Coast

May

2 51st Rotorua Marathon

Rotorua

3 Nelson Half Marathon, $\frac{1}{4}$ Marathon and 5km

Saxton Field, Stoke

24 Masters Classic Relay

Trentham Memorial Park

July

4-5 Gold Coast Airport Marathon, Half Marathon, 10km & 5.7km

Gold Coast

5 Armstrong Motor Group Marathon, Half Marathon, 10km & 5km

Westpac Stadium

Aug

4-16 WMA Stadia Championships

Lyon, France

Oct

5-9 OMA Stadia Championships

Rarotonga

14-18 ITU World Duathlon Championships

Adelaide, South Australia

Nov

21 Air NZ Queenstown International Marathon

Queenstown

2016:

Feb

13 Buller Gorge Full & Half Marathons

Westport

26 Oct-

6 Nov WMA Stadia Championships

Perth, Australia

2017:

April

21-30 World Masters Games

Auckland

2018:

Jan

20-27 OMA Stadia Championships

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 04 237 0958.

WELLINGTON MASTERS ATHLETICS INC.

**SUBSCRIPTION FOR THE 2014/2015 YEAR
(1st September 2014 to 31st August 2015) = \$50.00**

NAME(S): _____

ADDRESS: _____

BIRTH DATE(S): _____ **EMAIL:** _____

CONTACT PHONE No. _____ **CLUB (if any)** _____

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: **06 0565 0064415 00**
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

✂ -----