

A HEALTHY PACE

Lifestyle Magazine > Issue 4

6 things you should start doing every day...

Chiropractors, posture and the smartphone epidemic

Osteoarthritis strengthening program

Exercise for lower back pain management

Protein shakes vs. Whole food



HEALTH

FITNESS

NUTRITION

WELLBEING

www.pacehm.com.au



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Welcome to another edition of A Healthy Pace – your local lifestyle, exercise and injury prevention magazine. It was a huge 2016 for the team at PACE and we are all looking forward to helping our wonderful network of clients, business and referrers set themselves up for more success in 2017.

Would you agree that it's often the simple changes to our lifestyles that can bring about the biggest effect. One of my favourite pieces within this issue is the "6 things you should start doing" – have you thought about unplugging from technology now and again? Perhaps use these tips with the goal setting sheet that is made available on page 10.

We share some great statistics around the positive effects of exercise when preparing for surgery for those affected by osteoarthritis:

Pre-habilitation patients are stronger (sit to stand), have less pain, can walk further in 6 minutes and are more capable on stairs compared to those without exercise intervention (TPP et. al, 2010).

Our OA strengthening program is the perfect partner to help with your preparation and recovery!

Mindfulness has been a buzz word for some time now – but what does it actually mean? We outline the benefits and provide you with some helpful links to get started – either in the workplace or at home.

If you like keeping up to date with the latest advancements in health related research and best approaches for sustainable activity then head online and connect with us through facebook and instagram!

Since 1998 PACE have been helping people make better choices toward a creating a healthier lifestyle. We're here to help!

We hope you enjoy this issue, we welcome your feedback and we look forward to seeing you in one of our clinics soon.



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QUIT THE SIT

We all know that sitting too long is no good for us, but how do you encourage your team to move more? We've heard it all: "I'm too busy", "I need to get this done", "I need to be seen at my desk" and so on.

Not only is sitting too long damaging our spinal health through disc compression and the creation of muscle imbalances (psoas anyone?) - but the lack of blood flow resulting from prolonged sitting is also slowing down our metabolism (and our brains). This leads to all sorts of health problems.

The Rise & Recharge app from Baker-IDI is a great tool to use amongst your working groups. Although if you don't feel like doing the 'mosey' - you may want to help prevent musculoskeletal disorders and pain - so have a look at our Micro-Breaks initiative.

Stop the development of chronic diseases like type 2 diabetes or heart disease and stroke. Reduce the risk of musculoskeletal injury and stiffness. Keep your brains alert and enhance productivity. Encourage yourself and your team to reduce sedentary behaviour!

"The session this morning was really good, the messages you gave support what we tell employees. Relating injuries and exercises to the Workstation Checklist brings home the message of why we want everyone to reduce their sedentary behaviours." OH&S Manager.

rise & recharge

We love our chairs: on average Australians sit for nine hours a day



Efficient blood-flow is needed to clear the blood of glucose and fat



While sitting muscles are not active and blood-flow slows



Prolonged sitting increases our risk of developing serious diseases
People who sit for more than eight hours a day have:

91%

Increased risk of developing type 2 diabetes

14%

Increased risk of heart disease

15%

Increased risk of early death

Regular exercise does not completely offset the effects of prolonged sitting



Become a chair boss: spend less time sitting to stay focused and reduce health risks



20-30 MINUTES

We're made to move. Every 20-30 minutes stand, stretch or walk for a healthier balance between sitting and being active.

Download the free Rise & Recharge app to become chair-aware and spend less time in the saddle.



Available on the  




Visit www.riserecharge.com for more tips on becoming the boss of your chair.

..... *It's not*

**ABOUT NO PAIN NO GAIN,
IT'S ABOUT MOVING**

• ENJOY IT •



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www.exerciseright.com.au



RUNLAB

Pace Exercise Physiology in Sandringham in conjunction with Physio@Sandringham is excited to announce that we are now offering a new and exciting running assessment and correctional program.

Dedicated to runners who want to improve their running biomechanics, performance or reduce their risk of injury this unique program aims to provide runners with the most up to date information on their gait analysis and physiological fitness profiles.

WHAT IS INVOLVED?

The program encompasses 2 consultations. One with an accredited exercise physiologist and another with a specialist sports physiotherapist. During your first appointment with the exercise physiologist you will be taken through a running assessment plus overall musculoskeletal assessment to appropriately analyse any key areas of concern. In your follow up appointment with the sports physiotherapist, a more thorough and specific musculoskeletal assessment will take place (geared by the outcomes of the initial consultation), manual therapy provided if indicated and home exercise program creation will occur to assist in corrected any areas of concern.

WHERE TO AFTER THE PROGRAM?

We have a range of options available for each individual as certain circumstances suit different participants.

Our overall aim to increase knowledge and provide a comprehensive and individualised program to get you running faster, more efficiently and with more enjoyment!

“To give anything less than your best is to sacrifice the gift.”

Steve Prefontaine





OSTEOARTHRITIS STRENGTHENING PROGRAM

The PACE Osteoarthritis Strengthening and Education Program aims to educate and empower patients living with osteoarthritis. Through the development of a suitable and specific strengthening program, we aim to teach patients how to use exercise to decrease their pain and disability whilst increasing function, quality of life and ability to achieve activities of daily living. Our end goal is to create a self-managed exercise program that the patients can continue independently to improve their outcomes. This program is suitable for both conservative management and those undergoing joint replacement.

PROGRAM GOALS:

1. Increased lower limb strength and mobility for increased function and reduction of pain.
2. Provide education on osteoarthritis and its management, which includes surgical intervention and outlining rehabilitation guidelines post-surgery where necessary.
3. Improved function and self-management of hip/knee following the program, including home or gym based exercise program.

SUPPORTING RESEARCH FAST FACTS:

1. Exercise intervention prior to surgery (total hip & joint replacement) reduced surgical complication from 32% to 12%, and additionally reducing the length of hospital stay by 4 days post-surgery (Crowe & Henderson, 2003).
2. Pre-habilitation patients are stronger (sit to stand), have less pain, can walk further in 6 minutes and are more capable on stairs compared to those without exercise intervention (TPP et. al, 2010).
3. Physical function is shown to increase by 30% and knee strength by 50% after surgery by undergoing exercise intervention (Brown et.al, 2010).
4. Physical activity has been shown to improve pain, physical function and joint stiffness for patients who do not need surgical intervention.

HOW DOES EXERCISE HELP OSTEOARTHRITIS?

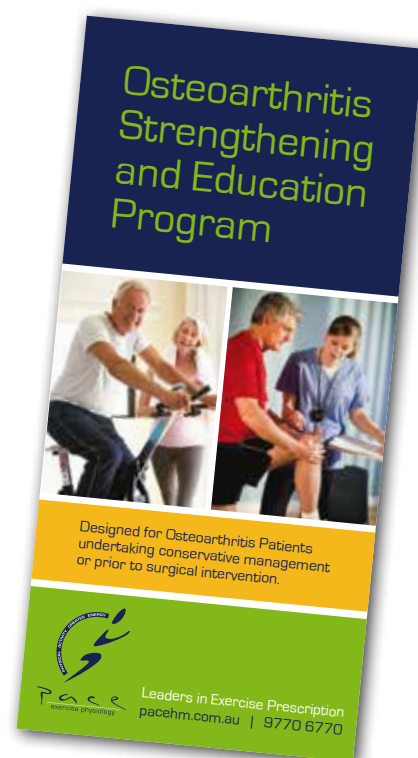
Clinical research shows that exercise is the most effective way to treat osteoarthritis. Exercise intervention is as effective, if not greater than medication. Additionally, exercise is safer and has fewer side effects.

An exercise program can help to:

- Reduce pain
- Increase muscular strength
- Improve joint range of motion
- Improve balance and stability
- Prevent de-conditioning
- Improve physical wellbeing
- Improve quality of life

If eligible, an Enhanced Primary Care Plan can be put in place to help with Medicare rebates. Private Health Insurance rebates are available from supported providers.

Call your closest clinic today for more information on the Osteoarthritis Strengthening & Education Program or to book a consultation.



YOU'RE NEVER TOO OLD TO **START** **FEELING YOUNG AGAIN.**

.....



LET AN
ACCREDITED
EXERCISE
PHYSIOLOGIST
SHOW YOU HOW
EXERCISE CAN
MAKE YOU FEEL
STRONGER, FITTER
AND HEALTHIER.



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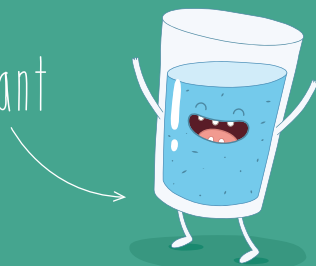
www.exerciseright.com.au



6 THINGS YOU SHOULD START DOING EVERY DAY...

DRINK MORE WATER

Want



Need



1. DRINK MORE WATER

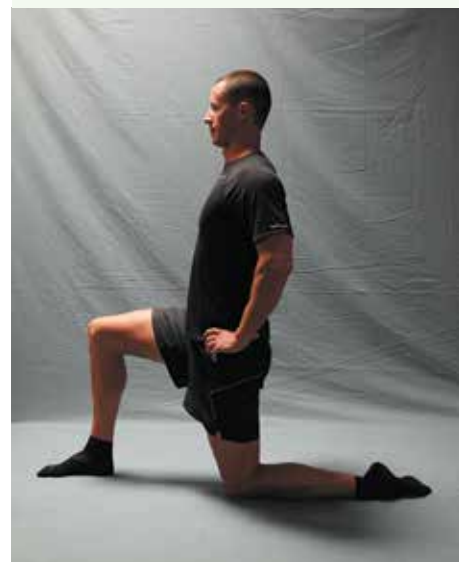
- Most people are chronically dehydrated. Dehydration can be responsible for; headaches, lethargy, poor sleep patterns, decreased physical performance and muscular aches.
- Thirst is commonly misinterpreted for hunger, which can cause us to over eat and gain weight. Mistaking thirst for hunger changes how our hunger hormones Grellin & Leptin function, which makes it harder for us to feel full, which can lead to long-term weight gain.
- Try increasing your water intake to notice a difference to how you feel each day.

2. UNPLUG FROM TECHNOLOGY

- Did you know your smartphone, tablet and laptop are all illuminated by blue light. This blue light disrupts the release of a hormone in our body, called Melatonin, which is responsible for sleep patterns.
- Poor sleep patterns as a result of changes to melatonin levels due to blue light before sleep can cause decreases in attention span, memory, concentration and mood.
- Try unplugging from technology 2 hours before heading to bed, and notice the change in time taken to fall asleep, as well as the quality of your slumber.
- Side note: Poor sleep patterns can lead to an increased release of Cortisol, which breaks down muscles and causes our body to store more fat.



“This stretch can help a lot if you spend too much time sitting!”



3. IMPROVE YOUR SLEEP QUALITY

- a. Quality of sleep is far more important than quantity. Most adults require 7-9 hours of sleep per night. If you experience less than this, or note poor sleep quality, try the below tips.
 - i. Keep regular times for going to bed and getting up.
 - ii. Keep distracting things out of the bedroom.
 - iii. Get some sunlight during the day.
 - iv. If you haven't fallen asleep within 20 minutes, get up and go to another room before you feel tired again.
 - v. Visit www.sleephealthfoundation.org.au for more helpful tips.

4. HUG SOMEONE FOR 7 SECONDS

- a. When you hug someone for 7 seconds (Yes, 7 seconds...), our body releases two amazing hormones; Oxytocin and Dopamine.
- b. Oxytocin, also referred to as the love molecule, cuddle chemical or hug hormone, acts to slow our heart rate and lower the amount of Cortisol in our blood stream (responsible for raising stress levels, blood pressure, increasing risk of heart disease, breaking down muscle, and storing excess fat). Oxytocin is responsible for making us feel better after times of high stress.

- c. Dopamine, the pleasure hormone, is also released when we hug someone.
- d. So, if you want to live a healthier and happier life, you should be mentally making a list of who you are going to hug today...

5. PRACTICE MINDFULNESS

- a. Mindfulness- a mental state achieved by focusing ones awareness on the present moment, while calmly acknowledging and accepting one's feelings, thoughts and bodily sensations, used as a therapeutic technique.
- b. In a world of over stimulation, its important to sometimes step back and take stock. With increasing rates of stress/ anxiety in Australia, Mindfulness is a simple tool to improve mental health, concentration, attention span, feeling of self worth and happiness.
- c. Try downloading the App 'Smiling Mind' to give it a try today.

6. PSOAS STRETCH

- a. 90% of Australian's suffer lower back pain. The majority of these cases can be improved through a simple release of Psoas Major (aka Iliopsoas), a strong hip flexor that originates from the Lumbar Vertebrae. When it is tight and over active, it pulls on your lower back, causing shear forces to be placed through your spine.
- b. Try incorporating this stretch into your daily activity, or around the office/ worksite for 90 seconds each side. Repeat as needed.



SUMMER GOALS

WHAT ARE YOUR GOALS THIS SUMMER? HAVE YOU WRITTEN THEM DOWN YET?

Why not take 3 minutes to fill in the below goal setting sheet, and then apply the top 3 actions needed to reach your goal. Once you have your goal set and steps in place, simply list a review date to increase accountability to completing the 3 actions to achieve your goal. Your assessment outcome will simply be how you measure your success. I.e. If waist girth reduction is your goal, then measure your waist girth (tape measure around navel) today and at your review date...

HELPFUL TIP; TRY AND WRITE GOALS WHICH HAVE MEANING TO YOU, WHY YOU WANT TO ACHIEVE YOUR GOAL IS FAR MORE IMPORTANT THAN HOW...

Need some help with setting goals and strategies? Simply ask one of our team members to help you through some goal setting and creation of an action plan next time you are in one of our clinics.

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YOUR GOALS



GOAL 1: _____

ACTION 1: _____

ACTION 2: _____

ACTION 3: _____

GOAL 2: _____

ACTION 1: _____

ACTION 2: _____

ACTION 3: _____

GOAL 3: _____

ACTION 1: _____

ACTION 2: _____

ACTION 3: _____

DATE OF REVIEW: ____ / ____ / ____

ASSESSMENT OUTCOMES:

GOAL 1:

GOAL 2:

GOAL 3:

Mornington
103 Main St (rear)
Ph 5973 6109

Mt Martha
Suite 5, 34-38 Lochiel Ave
Ph 5974 3147



FOLLOW @PACEHM
TO ENHANCE YOUR
HEALTHY LIFESTYLE

PACE Exercise Physiology®
pacehm.com.au





REACTIVE OR PROACTIVE?

In some industries, strain and sprain musculoskeletal injuries account for up to 80% of all lost time incidents (Victorian Workcover Authority).

It just so happens a lot of our work is spent addressing age related wear and tear within physical workers. And to be honest - only so much 'manual handling' training can help combat this.

What the worker (and the OHS/HSE leaders) need is an athletic preparation mind-set. Teaching employees and team members how to condition bodies for physical tasks that have to be completed day in, day out.

The preventative intervention mindset has 2 distinct advantages:

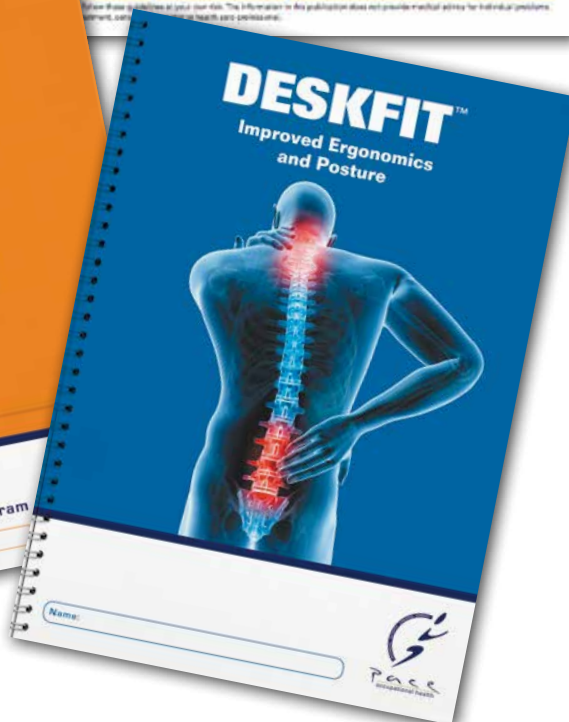
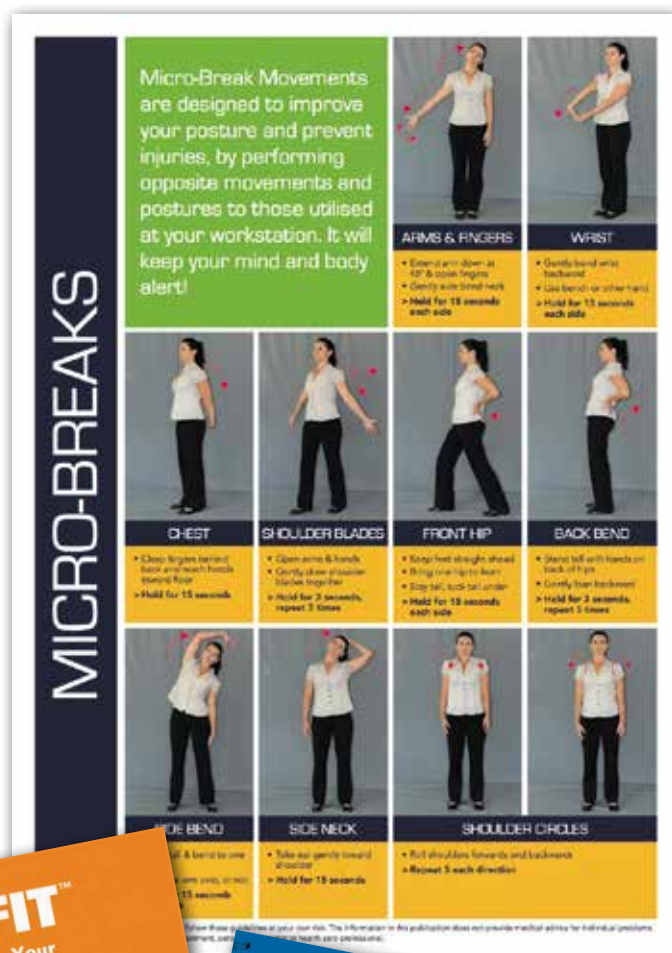
1. IT CAN SAVE YOU MONEY!

Most strains and sprains can be avoided, or managed correctly to avoid a costly musculoskeletal disorder (MSD). MSDs can cost tens of thousands of dollars in direct and indirect costs. The implementation of a structured physical preparation program can help to reduce these costs through preventative intervention.

2. PREVENTATIVE INTERVENTION ENGAGES YOUR PEOPLE

By applying either one-to-one or group intervention, the facilitator will connect with your people on a personal level. We are able to modify behaviour patterns and encourage long-term change, which in turn leads to safer working practices.

We know you may have compliance training to tick-off. Why not introduce a new approach to this type of training? BackFit and DeskFit are a great introduction to the preventative intervention mindset.



**START TAKING THE
RIGHT STEPS TO
VALUE YOUR MIND.**

**EXERCISE CAN HELP
COMBAT DEPRESSION
AND THE EFFECTS OF MEDICATION**

**CONTACT YOUR
LOCAL ACCREDITED
EXERCISE
PHYSIOLOGIST
FOR EXPERTLY
PRESCRIBED
EXERCISE**



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www.exerciseright.com.au

EXERCISE FOR LOWER BACK PAIN MANAGEMENT



If you were to sit at your computer desk and type into Google “Exercise for lower back pain” a range of different websites would appear. Anything from “Heal your lower back pain with these top 5 yoga poses” to videos on “Why exercise is imperative for lower back pain”.

So how do you know what to click on?

Lower back pain affects up to 80% of Australians at any stage throughout life, with 1 in 10 individuals experiencing significant activity limitation¹. With that said, individually designed exercise programs including stretching and strengthening techniques have been shown to improve pain levels for chronic lower back pain². Ninety percent of these patients with low back pain in primary care will have stopped presenting with symptoms within three months. However most will still be experiencing low back pain and related disability one year after initial presentation³. This highlights to us that rehabilitation and management for lower back pain isn't completed once patients are pain free.

What is more important is that all strengthening programs are individualised to the client and tailored towards their specific cause of lower back pain⁴. More so, a long term approach to implementing management techniques, coping strategies and promoting habitual change rather than a quick fix method has been more widely regarded in reducing low back pain. We know “motion is lotion” for spine health but a treatment plan for every stage of

lower back rehabilitation reinforces that moving correctly and more efficiently breaks the long term pain cycle and improves functional capacity⁵.

REFERENCE

1. Descarreaux, M., Normand, M., Laurencelle, L. and Dugas, C. (2002). Evaluation of a specific home exercise program for low back pain. *Journal of Manipulative and Physiological Therapeutics*, 25(8), pp.497-503.
2. Searle, A., Spink, M., Ho, A. and Chuter, V. (2015). Exercise interventions for the treatment of chronic low back pain: a systematic review and meta-analysis of randomised controlled trials. *Clinical Rehabilitation*, 29(12), pp.1155-1167.

BENEFITS OF CORRECTIVE EXERCISE IN INDIVIDUALS EXPERIENCING LOW BACK PAIN INVOLVE:

- Decrease in pain.
- Increase strength and spine stabilization.
- Reduced disability and increased functional capacity to perform activities of daily living.
- Improved manual handling and lifting technique.
- Increased sitting, standing and walking tolerances.
- Better education in coping strategies for managing flare up periods.



SUP YOGA

Did you know? Stand up paddle boarding has a long history, but was popularised by surf legend Laird Hamilton in the early 2000s when he used a longboard and paddle as a form of training.

If you've mastered your downward dog and are looking for a bigger challenge, there's a new fitness trend that takes core strength and balance to a new level. It's yoga, but on a stand up paddle board. On the water. The trick is to maintain your balance while holding the asanas (yoga poses), and not fall in.

Stand up paddle boarding (SUP), like surfing, originated in Hawaii and has recently gained widespread popularity as an aquatic sport. The outdoor Foundation's 2013 US recreation

report found that SUP was the fastest growing outdoor activity, with 56 per cent of participants trying it for the first time that year.

As its appeal grew, enthusiasts began to dream up other ways to balance on a board, and before long SUP yoga was born. Classes are springing up all over the world, including here in Australia.

The boards are designed for stability but anyone who's keen to give SUP yoga a try should practise on dry land, or in a swimming pool, before taking to open water. Not only does SUP yoga help to hone your technique and challenge your fitness in new ways, it also gives core muscles a more rigorous workout than a standard yoga session. This is great for strength and balance, and helps maintain a healthy spine.

Source: Health Agenda July 2016



CHIROPRACTORS, POSTURE AND THE SMARTPHONE EPIDEMIC



WE ARE DESIGNED TO STAND UPRIGHT

Yet in this day and age, a lot of us spend our days **slumped** over, for hours. **Why? Simple!** We're staring at the tiny screen of a **smartphone/laptop/tablet**.

Whether it's at work, school, on the train, bus, or at the shops, everyone from kids to the elderly can be spotted looking down at their smartphone from time to time.

NOW LET'S LOOK AT SOME NUMBERS

At 0 degrees, or having the head where it is meant to be, the average adult head weighs 4-6 kg.

Tilting your head 15 degrees to look at your phone screen can put an extra 6kg of extra pressure on your cervical spine, that's like putting a bowling ball on top of your head!

15 degrees equals 12kg
30 degrees equals 18kg,
45 degrees equals 22kg,
60 degrees equals 27kgs.

These numbers are insane!

Losing the natural **curve** of the neck leads to **increased stresses** to the neck. These **stresses** may lead to early **wear** and **tear, degeneration** and in extreme cases, possible surgery.

Chiropractic Care may help correct posture and decrease the stress placed on your neck and spine.

Using gentle low force approaches the team at Nelson Chiropractic are uniquely suited to assess your posture and the various conditions that can stem from poor posture.

So contact the team at Nelson Chiropractic for your initial consultation to help improve your spine, and your posture.

NELSON CHIROPRACTIC

2/33 DAVA DRIVE MORNINGTON | P 5975 7975

REFERENCES

1. Hansraj, KK. Assessment of Stresses in the cervical spine caused by posture and position of the head. Surg Techno Int 2014 Nov;25:277-9

0 degrees 5kg 15 degrees 12kg 30 degrees 18kg 45 degrees 22kg 60 degrees 27kg



MANAGING KIDS' SCREENTIME

Back in the days before tablets, computers and smartphones became ubiquitous, it was relatively easy for parents to manage the amount of time their children spent looking at screens—they just turned off the TV and sent them outside to play.

Nowadays it's hard for kids to avoid screens as they use them for entertainment, education and socialising. While there are many benefits to having the world at your fingertips, it's also important that parents monitor how much time kids are spending on their devices, along with how they're interacting with them.

A recent survey by the American Optometric Association found that 41 per cent of parents said their kids spent three or more

2+ hours
Time 56% of Aussie
kids are spending on
digital devices per
day

Source: ABC

hours per day on digital devices. In addition to the potential eye strain, excessive screen time can also cause headaches and blurred or double vision, as well as neck and postural issues.

The Australian Department of Health recommends no TV, DVDs, computer or electronic games for children under 2, less than one hour per day for those between two and five, and no more than two hours a day for children aged five to 17. These guidelines are

based on 15-year-old recommendations and some experts feel as though they need to be revisited, given the exponential increase in screen usage and availability during that time.

Source: Health Agenda, October 2016



PROTEIN SHAKES VS. WHOLE FOOD

Protein shakes and supplements are a staple in a large number of gym goer's diets. They claim to help build muscle or "bulk up," aid recovery, speed up metabolism, and help weight loss.

There is some truth to these claims – but are shakes and supplements the answer, or could we get the same effect (or better?!) from eating whole foods. I'll outline the argument for and against using protein shakes/supplements but the simple answer is that there is no "one size fits all" approach.

CASE FOR WHOLE FOODS

1. Shakes are not necessarily BETTER than whole foods – as long as you are eating enough protein in your diet (trust me, you are!) there is no evidence to suggest that protein shakes are better than protein-rich foods for muscle growth and repair.
2. Chewing food makes you feel full – if you are watching your intake, eating protein from food may be better for your energy budget.
3. Whole foods are cheaper – recovery shake = \$3.66 for 1 serve vs. Milk = \$1.80 for 1 Litre (at least 3 serves!).
4. Whole foods offer a whole range of essential nutrients to help you meet other nutrition goals such as recovery, hydration and immune function – protein is not the only nutrient that helps in muscle gain and recovery.
5. There are a huge variety of protein-rich options – eggs, milk, lean meat, chicken, fish, yoghurt, just to name a few.
6. Protein supplements often contain long list of ingredients that we've never heard of and are of little benefit or potentially harmful.

CASE FOR PROTEIN SHAKES

1. Protein shakes are convenient – easy to pack in your gym bag.
2. Protein shakes are easy to get down – if you are not feeling very hungry after your workout, shakes may be an easy option to kick start your recovery.

You can decide what works for you!

Warning: Protein supplements may contain harmful substances – you never know exactly what's in your shake. If you are competing at a high level, make sure you know where your supplements have come from and if they have been tested for banned substances.





CEREBRAL PALSY

Cerebral palsy is an umbrella term that refers to a group of disorders affecting a person's ability to move. It is due to damage to the developing brain either during pregnancy or shortly after birth.

Cerebral palsy affects people in different ways and can affect body movement, muscle control, muscle coordination, muscle tone, reflex, posture and balance. Although cerebral palsy is a permanent life-long condition, some of these signs of cerebral palsy can improve or worsen over time.



BENEFITS OF EXERCISE:

Research indicates that children with cerebral palsy have a greater energy demand of locomotion, reduced muscle strength and endurance, reduced maximal aerobic power and early onset of muscle fatigue. Additionally, research investigating the effects of strength and resistance training in cerebral palsy, shows that it can increase both muscle strength and endurance, producing no unfavourable effects upon spasticity or movement patterns as was previously thought. In fact individuals with cerebral palsy have reported an overall reduction in spasticity following long-term participation in an exercise program. This benefit of decreasing muscle tone allows for an increase in function, as well as a decreased reliance upon antispasmodic medications.

DID YOU KNOW?

“
1 in 500 Australia babies are diagnosed with cerebral palsy – there is no known cure.
”

PACE CLIENT TESTIMONIAL:

What do you do in your exercise physiology sessions and how does it help?

Natalie follows a program that changes depending on her body function, a fun program for Natalie with specific exercises to improve her function in day-to-day activities. Brooke works closely on all the areas of her body that her condition affects.

In what ways do you feel your exercise physiologist has helped you?

Brooke has built a trusting relationship with Natalie and Brooke puts her all into every session – both at PACE and volunteering at Natalie's school so she is able to participate to her full ability in her physical education sessions. Brooke has also helped me as a parent to get the best out of Natalie.



DID YOU KNOW EXERCISE CAN

- **Reduce** the amount of **fatal heart attacks** by up to **50%**
- Help you **recover from cancer** treatment **quicker**
- **Improve** the **breathing** of those with **lung disease** by **70%**
- **Reduce** the **risk** of **type 2 diabetes** by almost **60%**
- Help **combat depression** and the effects of medication
- **Improve recovery rate** after surgery
- **Reduce** the **pain** and **increase movement** of those with **osteoarthritis**
- Help **manage** your **chronic pain**





PERIODISATION

A BRIEF OVERVIEW

Periodisation can be defined as the appropriate manipulation of training stress to optimise improvements in physical performance and minimise the likelihood of injury. Structured manipulation of total training stress both over the long term and within short term training cycles is essential for successful preparation, especially in the lead up to competitions or games. Periodisation is often broken down into smaller easier to manage segments, typically referred to as phases of training. Phases are broken into macro-, meso-, and microcycles, which typically progress from high volumes of non-specific training to high intensity sports specific training. A microcycle is typically one week of planned activity in an annual training program, a mesocycle can be a number of weeks/months and a macrocycle can be a year or a number of years. For example, a typical Australian Rules Football Season can be broken down into the macrocycle which typically last the year, broken into mesocycles including the pre-season, in-season, finals preparation and post-season training blocks, and finally microcycles which is the week to week preparation.

GENERAL PREPARATION VS. SPECIFIC PREPARATION

During an athlete's preparation phase of training their program can be broken into two sub phases, these include a General Preparation Phase (GP) and a Sports Specific Preparation Phase (SSP). The objective of GP is to improve the athlete's work capacity and maximise adaptations in preparation for future workloads. While SSP serves as a transition into the competitive phase, whereby physical capacity is developed specific to the physiological profile of the athletes chosen sport. During the GP phase the athlete lays the foundations for success through the development of both aerobic and anaerobic capacity. A key focus of the GP phase is increasing neuromuscular functioning through microcycles of resistance training which typically follow a cyclic pattern of muscular endurance and hypertrophy, followed by strength and finally power training. If the training stimuli are sequenced appropriately, each phase of training will enhance or potentiate the next training phase.

An inverse relationship between volume and intensity is seen as a program advances through the GP phase towards the SSP phase where the emphasis on training technique becomes greater as a competition nears. SSP training focuses on imitating specific skills or a specific aspect of a person's chosen sport with the intention of that training being highly transferable to

Initial
Assessment

Corrective Exercise
Program

Periodised Strength &
Conditioning Program

Regular
Re-assessments

Peak for
Competition

Unloading
Phase

Rest &
Rehabilitate

Rebuild into Next Year
of Competition

SAMPLE PERIODISATION MODEL

Complex training model
for power development:

Anatomical Adaptation
(Training to Train)
2 weeks

Strength Hypertrophy
Phase (6-8 weeks)

Transitional Offloading
(1 week)

Power Development
(6-8 weeks)

Transitional Offloading
(1 week)

Complex Training
(6-8 weeks)
(Mix of Strength & Speed
exercises for maximal
power development)

competition. The SSP phase of training may focus on a few (or just one) specific adaptations needed for an athlete to be successful. For example, a basketballer might focus specifically on vertical jump height, to increase their movement efficiency and improve their ability to rebound, block or intercept the ball during competition.

BENEFITS OF PERIODISATION

- Promotes optimal performance via the strategic implementation of periods of high volume low intensity training, low volume high intensity training, sport specific training and tapering to ensure athletes peak during their competition phase;
- Reduces the effects of diminishing returns, through variation in training volume, type, intensity and frequency;
- Periodisation incorporates periods of reduced training stimulus often referred to as a 'taper'. Planned reduction in volume load will help to facilitate recovery, reduce accumulated fatigue and promote physiological adaptation;
- Program variability keeps training interesting and stimulating both physiologically and cognitively.

USE FAMILY AND FRIENDS AS A CHEER SQUAD

Ask friends and family to encourage you to eat healthily and to be physically active. Let them know that you are aiming to avoid weight gain so they can stop you going off track if you go out for dinner or think about staying on the couch when you should be going for a walk.



MONITOR YOUR WEIGHT

Keep a check on your weight and waist measurement.

“Weigh and measure once a week on the same day and at the same time,” Professor Lombard says.

“If you’ve gained a few hundred grams, make a decision to get back to where you were by the same time next week.”



WALK WITH FRIENDS

In a study involving 250 women with an average age of 40 in Victoria, walking regularly in a group halted kilo creep.

‘Find a group of friends you’re happy to walk with and go for a walk instead of catching up over coffee,’ Professor Lombard says. Plus you’re more likely to stay motivated if you know friends are expecting you to walk with them.

BE AWARE OF HIDDEN ENERGY BOMBS

Think about the snacks and treats that contain hidden kilojoules, including soft drinks, a glass of wine and sugary breakfast cereals. ‘Restrict foods that come into your house. If you bring in those energy bombs it’s harder to resist them; Professor Lombard advises.



SRI LANKAN ADVENTURE



8 yr old Xavier Poole styling near Arugam Bay, Sri Lanka



School kids showing off their new sporting equipment

Recently our founder Ryan and his family visited Sri Lanka for a well-deserved holiday.


Aware of the disadvantages some remote villages contend with the family wanted to do a little something to help. With the support of A-Mart Sports in Mornington we were able to provide a small village on the southern east coast with some new sporting goods for their school.

This area was devastated by the boxing day tsunami of 2004.

The village was totally destroyed with many people killed (amongst the more than 30,000 confirmed dead), and entire families totally displaced or torn apart.

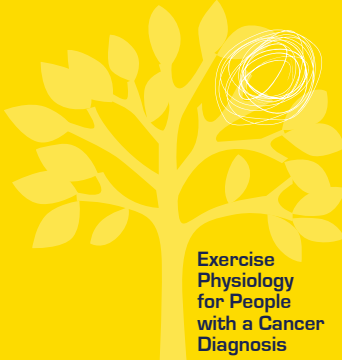
Our friend who we met whilst in the area told us that he and his remaining family of 8 lived in a dirt floor tent for 2 years, and then a make shift hut for another 2 years prior to being able to return to the village.

There are many ways to help others and this is just a small gesture. We often wonder what they think of the Aussie rules footballs!



LIVING WITH CANCER PROGRAM


An exercise and lifestyle program designed to improve the wellbeing and manage the symptoms of participants during and post cancer treatment.



Exercise Physiology for People with a Cancer Diagnosis

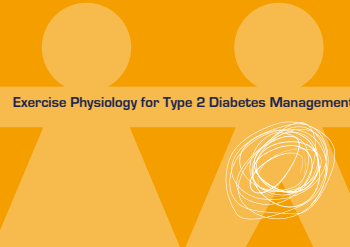
Regular exercise after cancer diagnosis will increase cancer survival rates by 50-60%, with the strongest effect seen for prostate, colorectal and breast cancers.

Australian Association for Exercise and Sport Science Position Statement Optimising Cancer Outcomes through Exercise. Hayes, C. Spence, R. Galvao, D. Newton, R. J. Science and Medicine in Sport, 2009; 12: 428-434



TYPE 2 DIABETES MANAGEMENT COURSE [MEDICARE SUBSIDISED]


An exercise, nutrition and lifestyle modification course to assist in the management of Type 2 diabetes.



Exercise Physiology for Type 2 Diabetes Management

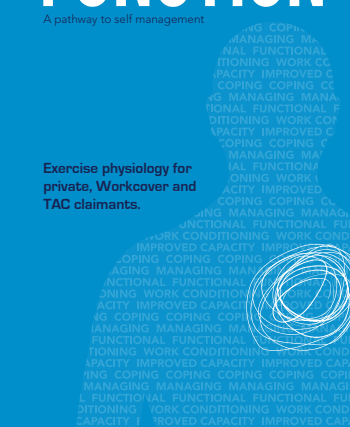
Exercise training improves glycaemic control, body composition, cardiovascular risk, physical functioning and wellbeing in patients with type 2 diabetes.

Exercise and Sports Science Australia position statement: Exercise prescription for patients with type 2 diabetes and pre-diabetes.



RETURN TO FUNCTION


A pathway to self management



Exercise physiology for private, Workcover and TAC claimants.


Worksafe research shows that physical work conditioning programs are effective in returning workers to work faster, reducing pain and disability and reducing the likelihood of recurrent injuries.

F. Franche, R. Gallo, K. Davis, J. van E. Broek, S. Frank, J. Institute of Work and Health, J. Occup Rehabil 2008, Dec 15, 18 1027-31



POSTURE PERFECT PROGRAM


A specific and individualised exercise and educational program to promote optimal posture and improve workplace ergonomics and manual handling.



Exercise Physiology for Optimal Posture

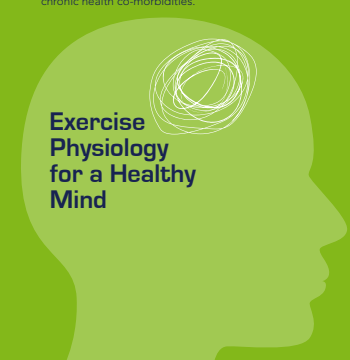
80% of people will have some degree of lower back pain across their life span.

Walker, B.F., Muller, R., Grant, W.D. Low back pain in Australian adults: prevalence and associated disability. J Manipulative Physiol Ther 2004; 27(4):238-44



MIND YOUR OWN HEALTH!

An exercise and lifestyle program to improve the psychological well being of an individual with a mental health condition and to prevent or manage other chronic health co-morbidities.



Exercise Physiology for a Healthy Mind

In Australia, it is estimated that 45% of people will experience a mental health condition in their lifetime. Anxiety is the most common mental health problem in Australia with depression the leading cause of disability worldwide. (Beyond Blue)

PACE Mind Your Own Health Program:
An 8 week exercise and lifestyle program designed to assist individuals with the management of mental health conditions (e.g. depression or anxiety).
Note: Individual sessions may be subsidised by Medicare if your GP deems appropriate.

Program Goals:

- To improve psychological well being through implementation of strategies to facilitate overcoming barriers, improved motivation and management of stress, fatigue and symptoms.
- Induce the release of the body's natural feel good hormones and the flow of oxygen to the brain which improves mood and awareness.
- Assist with maintaining a healthy weight, increasing energy, reducing lethargy and improving sleep patterns.


Program Outline:

- > 1 x 30 minute assessment
- > 2 x 30 minute individual sessions
- > 5 x Exercise Physiology group sessions

Contact Details:

| | |
|--|--|
| Frankston South 24 Yuille St Ph 9770 6770 | Endeavour Hills Medical Centre 1/61 Heatherton Rd Ph 9700 7777 |
| Frankston LifeCare 342 Nepean Hwy Ph 9770 2343 | Dandenong South - Select Medical Group 440 Frankston Dandenong Rd Ph 9706 5168 |
| Rosebud Physiotherapy Clinic 42-44 Boneo Rd Ph 5986 3655 | Sandringham 2 /18-34 Station St Ph 9598 3169 |
| Mornington 103 Main St (rear) Ph 5973 6109 | Malvern 73-75 Station St Ph 9576 3216 |
| Mt Martha Suite 5, 34-38 Lochiel Ave Ph 5974 3147 | Langwarrin Sports Medicine Centre 83-85 Cranbourne Rd Ph 9789 1233 |

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Exercise Physiology • Personal & Group Training • Corporate Wellness

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