



NETWORK

THE OFFICIAL PUBLICATION OF AUSTRALIAN FITNESS NETWORK

SUMMER 2019

The formula for optimal training loads **11**

Real World PT **16**

TRAINING FOR MUSCLE MASS 33

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Here's to a new decade and new opportunities!



And just like that, another decade has passed! With the futuristic-sounding year of 2020 just around the corner, it's a good time to reflect on the achievements and challenges of the past while also considering our next moves for the year ahead, and beyond.

Nobody who has been involved in this amazing industry for even a few years would argue with the sentiment expressed by this issue's Perspective author, founder of Fernwood Fitness Diana Williams, that 'Much like a workout, this isn't an industry you can sit still in and expect to see results'. The industry today is not what it was in 2010, the days when boutique clubs were few and far between, small group training was only a twinkle in some PT's eyes and wearable technology was not the ubiquitous accessory it is today.

Likewise, the industry in 2030 won't be what it is today. In fact, the industry in two years' time won't be what it is today, which is why it's more important than ever to keep ahead of industry trends and to differentiate yourself by offering something that your competitors aren't. As Williams also writes, 'with an ever-evolving and competitive market, calculated risks are sometimes necessary'.

The key to this differentiation is identifying needs that are not currently being met in your market, and equipping yourself with the tools and know-how to meet them. From training pregnant and post-natal clients, to hypertrophy methodologies and bootcamp inspiration, the articles in this issue will provide the seeds of ideas that could grow into the area of specialisation for which you become renowned.

Keep reading, keep learning and keep questioning received wisdoms – by doing so you'll still be in the game – and leading it – in 2030.

Merry Christmas, and a very Healthy, Happy and Safe Summer!

Oliver Kitchingman, Editor
editor@fitnessnetwork.com.au



NETWORK'S CORE PURPOSE

'To inform, inspire and educate our members to be the best they can be'

ABN 36 624 043 367

NETWORK MAGAZINE

Editor, Oliver Kitchingman

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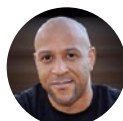
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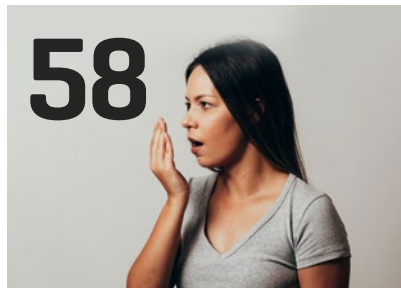
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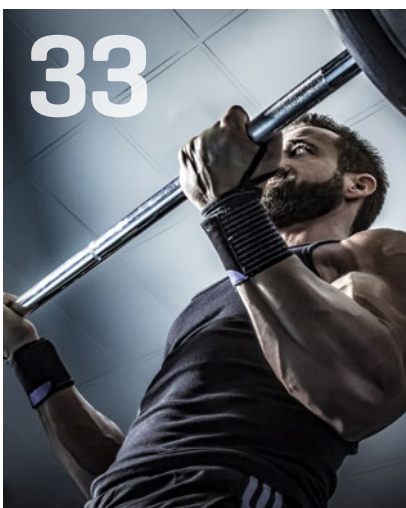


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WHAT'S YOUR NEXT MOVE?



By staying ahead of – not following – industry trends, you can differentiate your fitness business and offer services and training that your competitors haven't even considered, writes founder of Fernwood Fitness, Diana Williams.

You need to keep moving. It's a phrase we hear frequently in the fitness industry, usually in relation to running on a treadmill or lifting weights. Here, though, I'm talking about your business. After 30 years at the helm of Fernwood Fitness, I've seen my fair share of changes in the industry; equipment has evolved, attire has certainly changed, and brands have come and gone. Much like a workout, this isn't an industry you can sit still in and expect to see results.

The idea for Fernwood sparked 30 years ago when I realised there was a gap in the market for women's strength training. Most women did cardio and aerobics in their G-string leotards and didn't get to experience the benefits of training their muscles through weight lifting. The concept of a 'women's only' gym where members could work out in a safe space and try something new soon became a reality.

After our flagship Bendigo club opened, a member came to me with the idea to launch a second location in Ballarat. Just like that, our franchise model was born. Community is huge in our network, and our franchisees are always sharing new ideas with us, and each other, to deliver services and messages that are relevant and valuable to our members. Whenever we launch a new product or service, we rely on franchisees to be our eyes and ears on the gym floor; they know their audience best and gather valuable firsthand insights. It's all about collaboration. We work with them to conceptualise what should

come next, and they thrive on being part of a network that nurtures growth.

No franchise business, regardless of what industry it is, will be successful without successful people who are motivated to keep pushing, to keep moving. The success of our franchisees is paramount. Nurturing their ideas is beneficial not only to their own success, but to our entire network.

Moving with the industry

The fitness industry will never stop moving. It will continue to change and sprout in different directions, and we won't see the momentum slowing any time soon. When we first started, there was a sprinkling of gyms across the board, and now you can't turn your head without a new studio popping up. This is great for consumers who have more options than ever, but of course it has changed the game for club operators too. While most brands will have a unique value proposition in the market, it can be easy to be drowned out by the noise. So, how do you stand apart?

One of the key learnings I've seen across three decades in business is the need to cater to an ever-evolving market. We partnered with Deakin University a few years ago as we started to see more members seeking an outlet for stress and mental health. We've been pioneers in women's fitness for 30 years, and while that continues to be a core part of our service offering, our focus has shifted to reflect the needs of today's women. As such, we now deliver a

holistic health offering providing a balance in physical, social and mental wellbeing. Think more yoga, reformer Pilates, wellness programs, and meditation.

When making a change, it's often about more than just a slight shift in a service you offer or pretty posts on social media. With an ever-evolving and competitive market, calculated risks are sometimes necessary. Earlier this year we launched Fernwood Ultra, a premium sister brand skewed specifically towards balancing mind and body. We utilised what we knew from our research partners, from our franchisees, from our members, from the industry, and created something new. We'll always be Fernwood, but we'll never be afraid to move in a new direction, especially when it comes to satisfying consumer needs.

You can't wait for a trend to appear and then jump on the bandwagon – that's an easy way to get lost in the crowd. Start forecasting what your audience will want and need in one, two and five years' time and make a plan now so you're always one move ahead. **N**

Diana Williams

Diana has been giving women a dedicated and safe space to exercise for 30 years through her gym franchise Fernwood Fitness. Since winning the 2005 Telstra Business Women's Award, Diana has driven Fernwood's growth to become a nationwide 70-club franchise with 73,000 members. As Managing Director, she ensures the company stays innovative and relevant to current market trends.



INDUSTRY INSIGHT

| News, views and lessons learnt

FILEX CONVENTION TO HAVE THREE KEYNOTE SPEAKERS

FILEX, the fitness industry convention, will feature three keynote speakers for the first time when it returns to the International Convention Centre in Sydney from 1 to 3 May 2020.

'For the first time in FILEX Convention history there will be a third keynote address, with Kurt Fearnley three-time Paralympic gold medalist and two-time Commonwealth Games gold medalist being the 2020 headline keynote speaker' said a FILEX spokesperson; 'Attendees will have the chance to hear first-hand about Kurt's challenges and triumphs including how he crawled the 96 kilometre Kokoda Track for charity.'

Pre-release tickets for the event sold out in record time and with just 150 tickets available at Early Bird rate, the bargains are there for those organised enough to secure their registrations early – especially Network Members who can also save over \$150 on standard rates.

For details of the full program and to secure your registration, go to filex.com.au

Source: FILEX



INDUSTRY RESEARCH REVEALS BOOMERS AS 'MOST ACTIVE GENERATION'

Research commissioned by industry registration body Fitness Australia recently found Baby Boomers to be the country's most active generation, with an average 364 hours of physical activity annually.

By comparison, those under 40 averaged 281 hours each year. Some of this difference may be attributed to another finding of the research which found that those aged under 40 are more than twice as likely as Boomers to avoid physical activity because they feel they don't fit in.

Fitness Australia CEO, Barrie Elvish, said that while the majority of Baby Boomers are getting physically active to improve their health, confidence is also a huge driver.

'Our research found that for half of older Australians a key benefit of being active is proving to themselves that they can still do it. As a Baby Boomer myself, it is extremely gratifying to see this generation embracing physical activity, challenging themselves and enjoying the physical, mental and social benefits.'

Elvish said the desire among Baby Boomers to be healthy, confident and strong has led to an increased demand for experts who understand Baby Boomers' needs as well as tailored programs.

'We now have almost 10,000 Fitness Australia registered trainers qualified to specifically work with Baby Boomers and service the increasing number heading to gyms and fitness centres. Boomers are also enjoying a range of other activities including walking, gardening, swimming and playing team sports' said Elvish.

Source: Fitness Australia



PLANET FITNESS EXPANDS AUSTRALIAN OPERATIONS

Planet Fitness, one of the largest and fastest-growing franchisors and operators of fitness facilities in the US, recently announced significant expansion into Australia. The first two clubs are located in Tuggerah and Gosford on the Central Coast of NSW, and a Casula venue is slated to open in 2020.

Planet Fitness has signed an Area Development Agreement with Bravo Fit Holdings which will bring a minimum of 35 Planet Fitness locations to Australia in the coming years. Bravo is a joint venture among US franchisees Bravo Fit and PF Growth Partners, as well as Australian fitness operator, Dallas Rosekelly's Galactic Fitness Pty. The company has more than 14.1 million members with clubs located in all 50 states of the US, the District of Columbia, Puerto Rico, Canada, the Dominican Republic, Panama, and Mexico.

Commenting on the growth plans, Chief Development Officer at Planet Fitness, Ray Miolla, said, 'Australia represents a unique opportunity to grow in a market that combines a favourable operational environment, consumer affinity for US brands, a desirable competitive landscape and an opportunity to develop a large fleet of clubs.'

Source: Planet Fitness



The way we were...

Back in June 1995 the *Club Network* publication ran a piece by club consultant Sandy Coffman that focused on the evergreen problem of attrition, and specifically on how to find a silver lining in customer complaints:

"Our industry is plagued by attrition. Out of 68 percent of our members who leave our clubs, only 4 percent bother to tell us why, the others just quietly quit. Professional communication could be the answer.

To be professional in anything requires a good training program, and communication is no exception. Three considerations in a communications program are: 1) Response, 2) Sincerity and 3) Consistency.

Let's examine one facet of communication we all have to deal with in our industry – complaints. How do you handle complaints gracefully?

Firstly, let me say that complaints should be considered compliments! A complaint says, "I care enough about you and your club and its policies affect me." Complaints aren't the problem, apathy is what you have to worry about."





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INJURY & REHAB

MANAGING TRAINING LOADS

LESSONS FROM PROFESSIONAL SPORT TO REDUCE YOUR CLIENT'S INJURY RISK

By using a simple formula you can track and manage your client's training volumes and intensities to safely increase strength and significantly reduce injury risk, writes PT and fitness educator *Dan Jolley*.

It's in everyone's best interests to prevent injuries. Clients get to keep training. Trainers get more consistent sessions with the client. The client gets better results (we hope!), and the trainer gets referrals and enquiries from a job well done.

Injuries are impossible to predict. It's also impossible to know when an injury has been prevented (after all, it never happened). There are many things we can do, however, to significantly reduce a client's injury risk.

One of the most effective, and arguably simplest, things we can do is to monitor our client's training volumes and intensities.

There has been a clear trend in recent times towards higher intensities of exercise for everyday exercisers, and that's no bad thing. When people train on their own, research shows they usually select exercise intensities that are too low to elicit the

training response they want. With fitness professionals pushing them safely to train harder, their exercise outcomes can be improved.

There are, however, two exceptions to the 'harder is better' approach that we need to understand. First, we get different training adaptations from different intensities. We need to select the right intensity to get the job done. Second, we need to choose the right volume. As a rule, higher intensity means shorter, less frequent sessions. High volumes of hard training increase our injury risk, while short, easy sessions mean we don't get a training effect. This shouldn't be news to anyone.

But it's more complicated than that, of course. This is all relative. Our clients differ in terms of the training they can tolerate: what is a lot for one person is not for another.



THE QUICK READ

- One of the most effective things trainers can do to help clients avoid injuring themselves is to monitor client's training volumes and intensities
- Using RPE to calculate training load is a subjective way of measuring training volume and intensity that factors in changes in a client's physical and mental state
- By tracking your client's training week, you can use the data to build weekly loads over time, increasing their tolerance and safety
- Training load should be built up gradually, with increases being kept to no more than around 30% week to week.



Measuring volume and intensity

To accommodate these differences, we need a way to measure volume and intensity that is flexible and subjective. For time we can simply use minutes of training, but intensity is harder. Do we use running speed? Weight lifted? Heart rate?

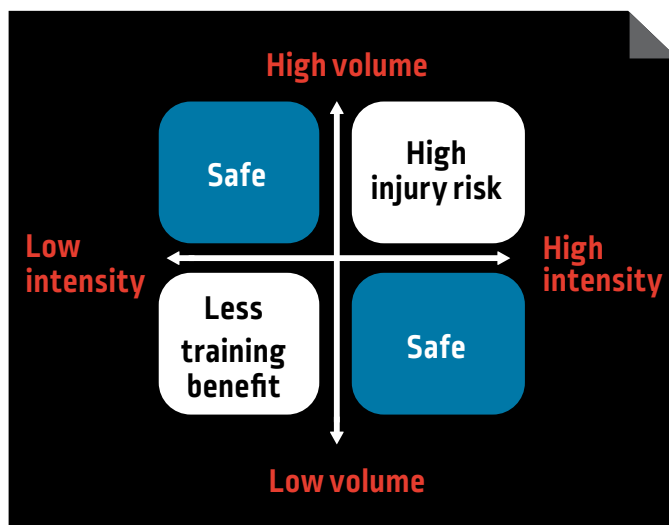
We want something we can use across all training, and something that is internal. Measuring how someone feels about a weight is more important than the actual weight (more on that later), so let's stick with the method we learnt while studying to become trainers, rate of perceived exertion (RPE) using a 1-10 scale. It's simple enough to use with novices, and despite all the resources available in professional sport, in my experience it's considered best practice.

We can multiply the RPE a client reports for a session by the length of time the session took. We then call this total 'training units'. For example, a 60-minute session with an RPE of 5 would give a load of

300 training units, and a 45-minute session with an RPE of 7 gives us 315 training units.

So, a harder, shorter session may provide a similar load to a longer, easier one. The sessions can accommodate different types of exercise: weights, cardio, group fitness, sessions with a trainer, whatever you can think of.

Using the subjective measure of RPE is an advantage in this case because our clients' ability to exercise will vary between sessions. They may be pumped or tired, focused or distracted. A weight may feel harder to lift on Thursday than it did in their Monday training session. In such instances, subjective measures can be more useful than objective ones.



How can we use training load to reduce injury risk?

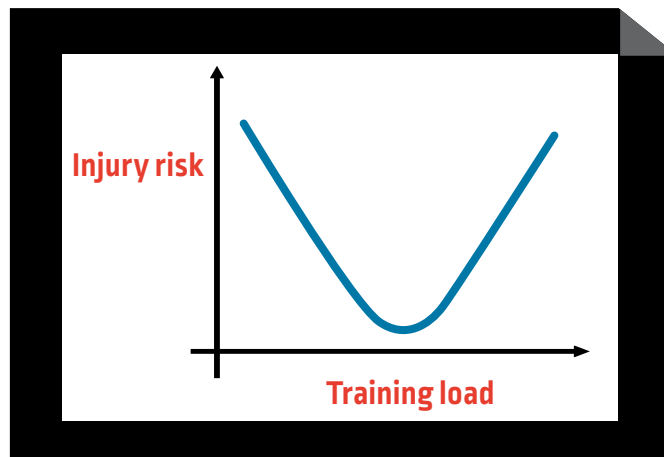
A lot of the research into training load has taken place in the arena of professional sport – so how useful is it for other populations? In 2017, when working with a semi-professional football team, we tracked the training load for every player, for every session, for the whole season. What we found after looking at the data was consistent with the research that's emerged in the last 10 years or so from the field of professional sport.

Players who trained less, got hurt more. If we don't train enough, we aren't fit or strong enough to handle the rigours of a game, or a hard session, and we risk injury. This is the same for our clients.

If we train too much, we risk getting injured too. We might not even make it to the game, or the fun run, or whatever event we are training for, because we get hurt along the way. There is, however, a middle ground. We can show this relationship between training load and injury risk as a U-shaped curve.

Now, not only does the ability to tolerate training loads differ from person to person, it also changes over time 'within' each individual. As we continue training, our strength and fitness improves and we can tolerate more.

Try tracking your clients' training week – both training with you, and on their own. It's quick and easy to get RPEs and times for all their training. You can use the data you collect to build weekly loads over time, so they can tolerate more and be safer.



Weekly training load

We tend to use weekly totals because it's convenient, but you can use a different timeframe if it suits your purposes, of those of your client, better. Then we decide how much load we want in a week.

Someone doing some light jogging for 30 minutes three times a week at an RPE of 5 will accumulate a weekly load of 450 units. Professional sportspeople, on the other hand, can accumulate weekly loads of over 5,000 units in training and games.

Those who want, or need, to do heavy training obviously need to work their way up towards heavy weights, otherwise injury is inevitable. So, what's the best way to do this?

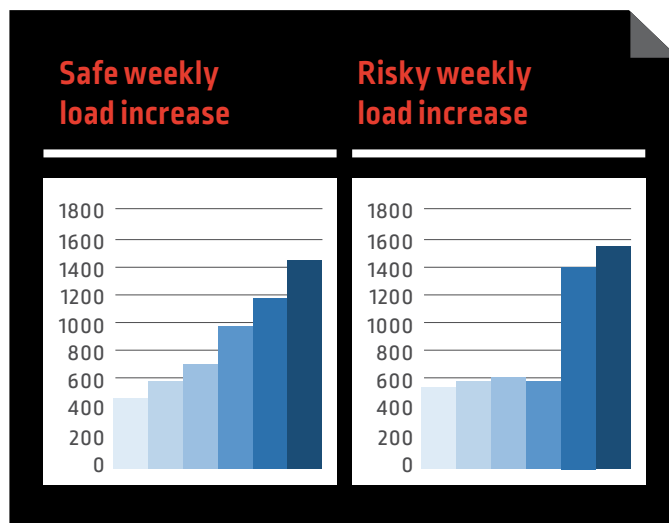
How do we build up training load?

Slowly and steadily! When you haven't trained for a while, the highest risk is early in your training routine. I even see trainers make this mistake in their own training. For whatever reason, they've let their own training drop off. Attempting to quickly get back into shape, they go too hard too fast, injure themselves a couple of weeks into their renewed regime and then have to reduce their training again.

It's bad enough to injure yourself in this way, but you need to be very careful not to do the same thing with clients. Always aim for steady increases, rather than a big jump.

You may need to educate your clients about this, particularly new ones who have been hit with inspiration and are champing at the bit for their own fast and furious body transformation. If they expect lots of hard training straight away, manage those expectations from day one. Explain to them the importance of building a tolerance first – a foundation on which to build – and that failing to do so will result in them getting injured, stopping training and finding themselves back at square one.

Recommendations vary, but I try to keep jumps in training load to less than about 30%. If someone does 1,000 units one week, I look



for no more than 1,300 the next week, then 1,700 the one after that.

Of course, goals vary. The footballers previously discussed would average about 2,500 units a week, including their games. For a casual exerciser, however, 1,500 weekly training units might be more appropriate.

Once your client has reached the target load you have prescribed them, try to keep them there. Mix up the training type, volume and intensity to keep things fresh, but maintain the load. If they are preparing for an activity that involves high intensities, their training will need to reflect this. For example, footballers and cricketers injure their hamstrings less often when they do small doses of high-intensity sprints regularly at training, compared to when they don't, even with the same training load.

In summary

Managing training load is hugely important for reducing injury risk. Don't do too much too soon. If it sounds simple and obvious, it is – but very few trainers monitor their clients' training loads in a structured way.

For the casual once-a-week client, this might be as simple as slowly building up the weights lifted. For a client preparing for a half marathon, obstacle course or a sporting season, however, you'll need to spend a little more time programming. Try it and let me know how you go. **N**



Dan Jolley

Dan teaches Certificate III & IV in Fitness, and has previously worked in professional sport. He has an MSc in exercise physiology,

and a PhD in educational psychology.





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WHAT IS...?

FITBEAT

A new 'smart gym' concept provides members with personalised workouts in group training classes.

Hailing from Sydney's Bondi, Fitbeat is a club concept that fuses sports science with technology and fun. The club's Science and Athletics Team designs and tests every exercise and every workout, while its sports scientists have worked closely with tech-heads to develop advanced responsive group training environments.

Over a period of two and a half years, a team of sports scientists, athletes, personal trainers, software developers and designers developed a personalised group training model unlike any existing offerings.

Members start by selecting their long-term fitness goal, choosing from either 'Muscle & strength', 'Lean & fit', or 'Strong & fit'. Then Fitbeat's smart systems kick in and personalise the entire journey, from workouts to nutrition information and statistics.

Every time someone trains, they receive a customised workout aligned with their long-term fitness goal. Workouts appear on smart TV screens as participants train through the circuit, supported by real personal trainers who deliver motivation and monitor technique.

In addition to the actual workouts, members receive meal suggestions that align with their long-term fitness goals, as well as workout analytics and progressive body measurements that are tracked with Tigernovo heart rate monitors and body composition scanners.

FitBeat's claim to be 'gym smart' is based on both its tech features within the club as well as the accompanying app, all of which have been designed with ease of use front and foremost.

The gym experience itself is described as 'immersive': with pumping playlists and synchronised lighting, it's aiming for a nightclub vibe. The workouts guide members through a 20-station circuit, personalised to the individual's goals. 'Burn' workouts are fast-paced cardio-centric sessions, while 'Build' workouts have a heavy-lifting resistance focus.

Boasting 10,000 exercises and 2,000 workouts, the team at Fitbeat promise members will never get bored as they participate in vibrant 28 or 48-minute training sessions. **N**



MORE?

Check out the club in person at Bondi, or online at fitbeat.com where you can also register your interest in working as a PT with Fitbeat.



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**A SNAPSHOT OF HOW TODAY'S PERSONAL TRAINERS
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? What's your business called?

In my different roles of PT, S&C Coach and Crossfit Coach I actually have three businesses! These are Coach Nic, Oly Squad, and We Build Women school events.

? How long have you been a PT?
10 years!

? Are you full time or part time?
Full time and then some!

? What made you decide to become a trainer?

I knew I wanted to work for myself, and I knew I didn't want to be in an office. I had played state level netball my whole life so I was quite familiar with the industry and I loved the thought of being able to help people.

? What's your signature style of training?

I'm all about Olympic lifting, CrossFit, strength and conditioning, rehab and Body Positivity.

? How many hours do you train clients for each week?

35+

? How many hours do you spend working on your business?

Sometimes a very small amount, but currently about 5 hours per week (because I have something new in the works!)

? What hours do you work?

It varies day to day, but most weekdays look like 5:30 until 10:30am, one or two classes or PT sessions at lunchtime, and then from 3:30 to 7:30 or 8:30pm every night. On Saturdays I work from 7am-12pm.

? What do you do in any downtime during the day?

Train, nap and admin. Did I say nap?

? How much do you charge?

\$110 per hour.

? What do you do in terms of your ongoing education?

Attend events, do online education courses, personal research and personal development courses.

? How many clients do you have?

20 very committed PT clients, plus classes at two different gyms. I used to have a lot more PT clients (40+) but some were quite unreliable. I have culled them to a core group of committed legends.



? How long, on average do your clients stay with you?

Years. My longest client has been with me for 9 years.

? How do you get new clients?

Word of mouth, social media, and getting in front of people by teaching 10 or so classes each week. Classes can be a great source of prospective PT clients!

? Do you vet clients before you agree to train them?

Yes, I have a criteria! Clients must: be ready to learn some fun stuff, have a good attitude, be ready to work hard, and be willing to share food!

? Do you ever turn clients away or refer them to other PTs?

Yes, sometimes. I don't really work with people who have only aesthetic goals. I want to train people who are keen to see what their body can do, not just focus on how it looks.

? What differentiates you from other trainers?

I am very straight down the line. There is no bullsh*t with me, but it comes from the most loving place. I invest a lot into my clients and I expect a lot out them – I'm a stickler for technique, but I also live by the motto "If you're not having fun, you're doing it wrong".

? What is the best thing about being a PT?

You make your own hours, you get to spend

every working hour with amazing people and you literally make a difference in peoples' lives daily.

? And the hardest?

The hours, no sick leave and the pressure to be ON at all times. The early alarms and the late nights can make it hard on relationships sometimes.

? What's the biggest misconception about working in fitness?

That we get to train all day! There have been times when I haven't trained for weeks because I am making myself available to everyone else. That just comes down to poor time management and not blocking out my personal time properly.

? Where would you like your career to take you?

If all goes to plan, I will be the proud owner of my own boutique gym very soon!




? What is your fitness philosophy?


Take the time to do it properly – an effective warm up will get you everywhere. Your body is an instrument, not an ornament.

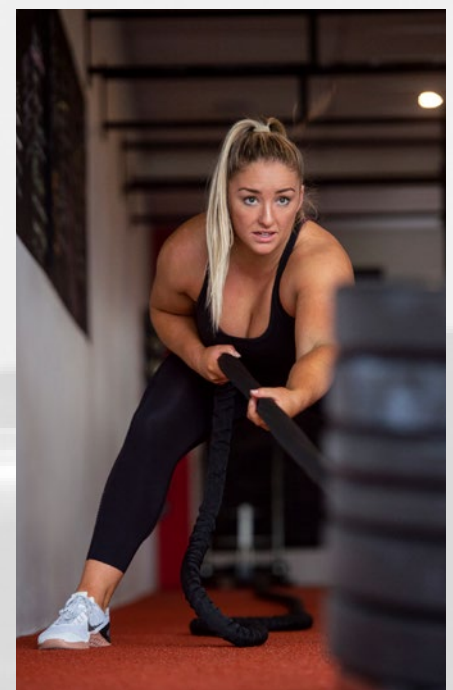
? What advice would you give to someone starting out as a PT?

Do not discount your prices for anyone. Arm yourself with knowledge and never stop learning, so you can be valuable to those who trust you with their time, money and bodies. Stay in your lane (i.e. don't go beyond your scope with regards nutrition and injuries). Don't try and do it all: arm yourself with a team of allied health professionals who you

can work with and learn from. Get outside of your own circles, you don't know what you don't know. Above all, show a real interest in people: listen to and genuinely engage with them. People can feel when you are just in it for the money. **N**

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SHOULD WE HIDE THE VEGETABLES IN KIDS' FOOD?

Kids couldn't care less about eating nutrient-rich vegetables, but, asks dietitian and nutritionist *Skye Swaney*, could 'hiding the vegies' actually be detrimental in the longer term?

We're often told that kids need to eat around five serves of vegetables each day, equivalent to two-and-a-half cups, but this can seem laughable to the parent of a child who flatly refuses to even look at a vegetable. The saying 'easier said than done' has never been truer.

Vegetables provide vitamins, minerals, dietary fibre and many phytonutrients (nutrients naturally present in plants) that are vital to kids' growing bodies. They may also help protect against chronic diseases such as heart disease, stroke and some types of cancers later in life. Research, however, shows that only 9% of 4-8-year-olds in Australia – and only 5% of 9-13-year-olds – eat the recommended daily serve of vegetables.

We know how important vegetables are in a child's diet, but kids couldn't care less. Dealing with a child who shuns vegetables can be stressful, so it's no wonder many parents resort to 'hiding the vegies' in meals and snacks. In fact, such is the desperation of parents that it's given rise to a variety of best-selling books on this very topic!

The problem with hiding vegetables

Pureeing vegetables to hide in a meal can certainly be a great way to boost the vegetable content of your usual dishes, such as spaghetti bolognese, lasagne and cottage pie. Unfortunately, it's a short-term solution, and one that you may end up paying for later. The issue with hiding vegetables is that children don't learn that they're a normal part of a meal. Nor do they get to learn about the taste and textures of vegetables and the different ways in which they can be cooked, so it ultimately denies them the chance to explore whether they

do, in fact, like them. It can also lead to suspicion of foods and lack of trust, further exacerbating fussy eating.

There is also the issue of sending confusing messages to kids. We may understand the difference between a beetroot brownie vs a regular brownie, but kids won't necessarily have that same understanding, and instead the message received on their end is that brownies are healthy.

Why won't my child eat vegetables?

It's important to remember that kids are naturally afraid of new foods – it's called neophobia and is an inbuilt survival instinct to prevent them from eating something they shouldn't. In some ways, we can be thankful for this as it, hopefully, stops them from eating dangerous things they come across. But it also means that it can take many exposures to a new food before it's accepted – up to 15 in fact!

There's also the issue of taste. Vegetables, particularly green vegetables, often taste bitter to kids, a taste that we have grown used to through repeated exposure. This also applies to foods such as coffee, dark chocolate and wine – most of us didn't like these things the first time we tried them!

What can we do instead?

- While there's nothing wrong with occasionally hiding veggies, a better approach to take is to offer vegetables in multiple forms – include some in their main meal and some on the side or in the middle of the table so they can help themselves.
- In dishes such as spaghetti bolognese, keep vegetables small but visible, so that kids can see them but aren't daunted by them. Then serve these dishes with a side of vegetables such as some peas, broccoli florets or a small salad so that kids also have the option of trying some vegetables on their own.
- Reduce the bitterness in bitter vegetables by sautéing and roasting them rather than steaming or boiling, and toss in some melted butter and a little salt.

- Serve a familiar, liked vegetable alongside a new or 'learning to like' one – this helps kids to feel more comfortable with an unfamiliar food.
- Add a familiar dip for kids to dip vegetable sticks in.
- Encourage kids to choose a new vegetable to try when you're at the supermarket – this gives them a greater feeling of control and will also foster their curiosity around vegetables.
- Involve kids in cooking as much as possible: they'll be more likely to eat something they've helped prepare.
- Try to stay calm and relaxed during meal times. A stress-free environment is your best bet for encouraging kids to be more adventurous at the dinner table.
- Remember to be a good role model by eating plenty of vegetables yourself and showing your kids how much you enjoy them.
- If in doubt, remember the golden rule of feeding kids: 'parents provide, kids decide'.

Most parents encounter the challenge of getting kids to eat enough vegetables at some point, with even carrot-chomping toddlers' tastes changing and becoming fussier as they get older. By exposing kids to a wide range of veggies at mealtimes and employing the techniques above, you can encourage greater acceptance and intake of vegetables by the kids in your life. **N**



Skye Swaney, APD

An Accredited Practising Dietitian and nutritionist with over 12 years' experience, Skye is the consulting nutritionist for Go Kidz. Go Kidz make nourishing ready-made meals for busy families who want to ensure every family member is getting the right amount of veggies per serve.





NETWORK INTRODUCES NEW FUNCTIONAL TRAINING COURSES

If you were to name one of the top fitness trends of the past decade, functional training would surely be up there. Unlike some trends, however, functional fitness has become a mainstay of many facilities' group fitness timetables, as well as many PT's client programming.

Ramping up its existing library of content that addresses this mode of training, Australian Fitness Network has added a huge seven new courses, in association with renowned industry training provider Functional Training Institute.

Delivered entirely online, and all approved for CECs/CPDs, the courses cover mobility, kettlebells, suspension training, battle ropes and functional bag training theory, techniques, exercises and progressions.

Commenting on the new additions to Network's extensive course offerings, Network Leader Katrina Cochrane said "It's fantastic to partner with such reputable course creators in order to offer our Members the very best in functional training upskilling".

The courses can be purchased individually or in bundles – including the complete 7-course package, accredited for a total of



25 CEC/CPDs – and, as always, Network Members receive special rates.

[Click here for more information on the new functional training courses.](#)

THE SOCIAL NETWORK

Click to check out these recent posts from Network's socials.

Learn why your back hurts when you run and an easy exercise to get rid of this type of back pain.



A doctor restricted by professional guidelines laments the 'advice' given by unqualified influencers.



The physical activity that you most enjoy doing is the one that best supports your mental health.



Researchers find that total daily physical activity is the strongest mortality predictor.

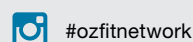
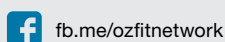


Network wished everyone a spooktacular Halloween!

WHAT'S A GHOST'S FAVOURITE EXERCISE?



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The next-generation BlueAnt Pump Air 2 True Wireless Microbuds have been designed with workouts in mind. Weighing just four grams, the Pump Air 2 are one of the world's smallest and lightest true wireless microbuds. The noise-isolating design, simple one-touch controls and stereo phone calling with Siri and Google Assistant integration enable a true hands-free wireless experience in any active environment.

Pump Air 2 are sweatproof and come with seven Comfortseal tips to ensure a

perfect fit for perfect sound. The sleek, lightweight design ensures a comfort level that lets listeners make the most of the 15 hours of HD Audio playback afforded by its micro-charging case. Available in a choice of Black, White, and Black Rose Gold, they can be purchased at JB Hi Fi and The Iconic.

For your chance to win 1 of 3 pairs of Blue Ant Pump Air 2 True Wireless Microbuds (RRP \$169.95), email editor@fitnessnetwork.com.au and tell us in no more than 50 words what you want from your earphones when you're working out. blueant.com.au/pumpair2



The acupressure 'bed' you've been dreaming of...

The Neptune Acupressure Bed Midnite works on the simple principle of acupressure: when you lie down on the bed, its 6,210 massage points apply a steady pressure to your neck, shoulders and back, making for a deep acupressure experience by stimulating and increasing your circulation which, in turn, relieves muscle tension. Extremely durable, all fabric used is hypoallergenic which means they are safe for all skin types.

The Neptune Bed pillow has 1,782

massage points to target the neck and shoulders, but it can also be used to relieve stress and muscle tension in the thighs, calves and hamstrings. Perfect for post-workout or injury recovery, the pillow can also be fitted to offices chairs for lumbar support.

For your chance to win 1 of 3 Neptune Acupressure Bed and pillow sets, (RRP \$129), email editor@fitnessnetwork.com.au and tell us in no more than 50 words why this is the bed you've been dreaming of... neptuneblanket.com.au

Eat culture for breakfast!

The Collective recently introduced its range of Kefir Spoonable yoghurts, containing 13 live culture strains and packed with both probiotics (friendly bacteria that live in various food elements) and prebiotics (the food that probiotics nibble on to help grow and reproduce). Plus, they're lactose-free, act as a source of calcium and protein, and have no added cane sugar.

Available in the four flavour combinations of Raspberry Acai, Blueberry Hemp, Date Cacao and Fig Ginger, they have been designed to give your gut a healthy dose of vitamins, minerals and nutrients.

For your chance to win 1 of 5 prize packs (containing the four different flavours) email editor@fitnessnetwork.com.au and tell us in no more than 50 words why you've got a good feeling in your gut about this fermented food. thecollectiveinoz.com.au





EARN YOUR **FREE** CEC OR CPD!

Every issue of *Network* magazine includes articles linked to a 1-CEC or CPD [NZ] course that is FREE to Network Members.

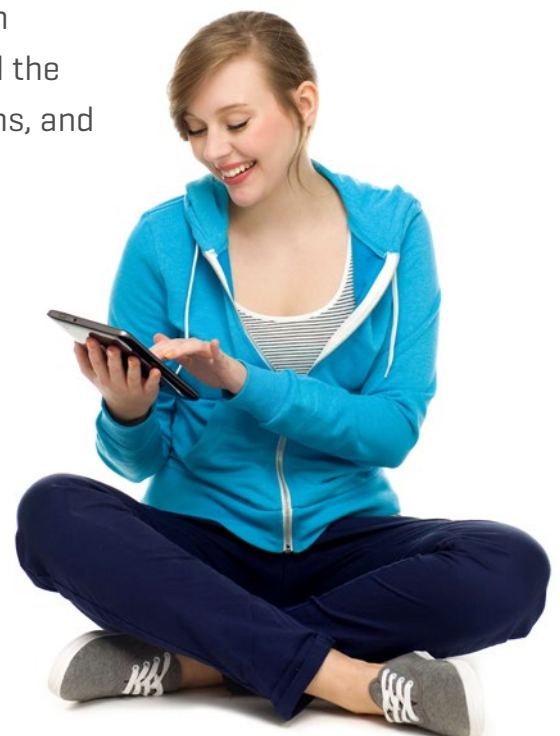
This quarter, the course is based on the following features:

- ▶ Managing training loads [p11]
- ▶ Training for muscle mass [p33]
- ▶ Mind the gap: Reducing abdominal separation [p47]
- ▶ Whip your bootcamp into shape! [p51]
- ▶ Research review: Could bad breath be good for your health and fitness? [p58]

To earn yourself 1 CEC or CPD, simply login to your [Member Portal HERE](#), click on the 'My CEC Courses (Purchased and FREE)' tab in the Quick Menu and select '**Network Summer 2019**'. Read the articles, successfully answer the multiple-choice questions, and you're done!

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WHAT CAN YOUR PREGNANT CLIENT DRINK?

When it comes to drinking during pregnancy, alcohol isn't the only thing that needs to be taken into consideration, writes nutritionist and exercise scientist *Brooke Turner*.

It is well known that alcohol should be avoided during pregnancy as there is no safe limit – but what about caffeine, kombucha, smoothies or protein powder? With confusion surrounding these beverages during pregnancy, do you know what recommendations you can make for your expecting clients?

Caffeine

Australian guidelines recommend expecting women limit their caffeine intake to less than 200mg per day, which equates to about two instant coffees or three black teas. It is important for women to be mindful of their caffeine intake during the first trimester due to this time bearing the greatest risk of miscarriage, and higher consumption of caffeine having been linked to low birth weights.

There has been a reasonable amount of research into consumption of caffeine during pregnancy. Studies have reported that excessive caffeine intake has been associated with a reduction in birth weight, though the exact level is still unknown. One

UK study involving more than 2,500 women confirmed that a maternal intake of more than 300mg per day was associated with low birth weight or foetal growth restriction, and that no ill effects were recorded in the babies of the women who consumed 100mg or less daily.

It is also important to consider other sources of caffeine, such as chocolate, soft drinks and energy drinks. Consumption of these contribute to daily caffeine intake. The table over the page lists some common sources of caffeine and their concentration levels.

With regards caffeine and micronutrients, tannins found in caffeinated substances, like tea and coffee, can inhibit the absorption of iron, as can calcium (think milky coffee). If clients are struggling with iron levels, then check in with them on how much coffee, tea or chocolate they are consuming per day, advise them to have any pre-natal vitamins they may take at a separate time from their coffee, and ensure they are meeting their recommended daily intake of vitamin C, which assists with the absorption of iron.



THE QUICK READ

- Pregnant women should not consume more than 200mg of coffee per day
- Inclusions of protein and fat sources in smoothies are beneficial for tissue growth, cognitive and retinal development of the growing baby
- Smoothies are a great way to hit micronutrient requirements during pregnancy, particularly in women who become averse to fresh fruit and/or vegetables due to morning sickness or nausea
- Protein powders can be useful throughout pregnancy, however, not all are created equal and artificial sweeteners, additives, fillers and stimulants should be avoided
- Pregnant women should choose a diet high in fresh, whole, healthy foods and engage in regular physical activity.

TABLE: COMMON CAFFEINE SOURCES AND CONCENTRATIONS

Caffeine source	Caffeine concentration
Serve of instant coffee	80-100mg
Serve of filter coffee	140mg
Black tea	20-70mg
Green tea	20-40mg
Coke 355ml	20-35mg
Diet Coke 355ml	20-50mg
Pepsi 350ml	40mg
50g bar of plain (dark) chocolate	50mg
50g bar of milk chocolate	25mg



Kombucha

This is another controversial beverage during pregnancy, and one that comes down to personal choice. Although it's been around for a long time, it's only in recent years that it's become a café and supermarket staple, so research into drinking kombucha during pregnancy is very limited. While kombucha is a great source of probiotics, promotes gut health and is a nice alternative to having a drink when you are trying to avoid alcohol, there are some things you should consider regarding consuming it during pregnancy.

Many people don't realise that kombucha actually does contain a very small amount of alcohol, which is produced during the fermentation process. If stored improperly, too long, or brewed in unsanitary conditions, both unpasteurised kombucha and home-brewed varieties can also develop mould and bacteria. Unless a client was a regular 'booch' drinker prior to falling pregnant, it's probably advisable for them to avoid it throughout their pregnancy. Many home brews are unpasteurised, so fall into the same category as soft cheeses that are recommended to be avoided during pregnancy due to the listeria and bacteria risk. Although the risk is low, it is important for clients to be aware of this. My recommendation would be to opt for store-bought varieties of kombucha rather than home brew throughout pregnancy, due to more controlled processing and decreased risk of bacteria.

Juices and smoothies

During pregnancy, juices and smoothies are a fantastic and convenient way to help get your daily dose of micronutrients, fruit and vegetables. However, not all smoothies or juices are created equal, with many being high in both energy and sugar. Cold pressed or freshly squeezed juices are much better options than many store-bought varieties, but can still be high in sugar. Consuming processed



foods and those high in sugar can contribute to excess weight gain, high blood sugar levels and gestational diabetes.

Juice: When making or choosing a juice I recommend opting for a 2:1 ratio of vegetables to fruit if possible. The higher dose of vegetables helps to reduce the total amount of sugar compared to fruit juice alone, in addition to adding fibre and a wider range of micronutrients. I recommend avoiding, or limiting, pre-packaged juices due to their high sugar and energy content.

Smoothies: These are perfect go-to meals during pregnancy, particularly for women who already have children, work full time or have been suffering from a decreased appetite due to morning sickness. Women who fall into these categories are often associated with a decreased intake of fresh vegetables, so smoothies are a great way to hit RDI's throughout pregnancy.

When it comes to smoothies, ensure some vegetables are included, along with sources of protein and fat which assist with tissue growth, cognitive and retinal development in the growing baby. Good sources include Greek yoghurt, protein powder, chia seeds, flax seeds/flaxmeal, nut butter, avocado and coconut yoghurt.



Protein powder

Many expecting training clients ask 'can I take protein powder whilst pregnant?' Supplements should never replace a balanced, healthy diet and whole foods, but there are times when it can be useful or advisable to supplement. Yes, it is safe to use protein powders during pregnancy, as long as you don't have a 'high' consumption of protein already.

The Nutrient Reference Values for Australia and New Zealand for protein during pregnancy is 1g per kg of body weight per day. I recommend active individuals to aim for a minimum of 1-1.5g per kg per day: for someone weighing 70kg, that equates to about 70-105g of protein per day during pregnancy. An example of how a client may reach this level of protein intake might be:

- Breakfast of 3 boiled eggs, approximately 21g protein
- Lunch or dinner of one serve (100g) of chicken, approximately 30g protein
- Snack of one serve of almonds (15-20g), approximately 6-10g protein

- One serve of most protein powders is 25-30g

Protein powders can be useful during pregnancy to support the increased requirements and tissue development, but they are not essential. It is important to note that not all powders are created equal, and trusting the brand used, as well as reading and interpreting the nutrition label, is essential in understanding the ingredients within the product and if it is right for you. Clients should opt for brands that don't contain artificial sweeteners, fillers or stimulants.

Alcohol

When it comes to alcohol during pregnancy, there is no safe limit. The National Health and Medical Research Council, Australia's peak body on developing national health advice, recommends that for women who are pregnant, planning pregnancy or breastfeeding, not drinking alcohol is the safest option. This is because no amount of alcohol has been proven as safe. The evidence is clear: alcohol causes birth defects. All alcohol crosses the placenta, increasing the risk of miscarriage, stillbirth, premature birth, low birth weight, birth defects and brain conditions.

Soft drinks

I recommend clients avoid soft drinks completely. While there are not a great deal of studies looking at soft drink and pre-natal women, the effects of excess sugar in any individual are well known. It goes without saying that these types of beverages are high in energy and sugar yet lacking in nutrients. A refreshing low-sugar alternative for those used to cracking open sweetened sodas could be chilled mineral or sparkling water with freshly squeezed lime, lemon or grapefruit, or even flavoured magnesium powder.

Water

Your body is approximately 60% water, with the brain being made up of ~70% water. Inadequate water intake affects optimal functioning and can lead to digestive problems, constipation and weight gain. If you aren't adequately hydrated, you may consume more calories and confuse thirst with hunger. This is because our thirst and hunger receptors are controlled by the same part of our brain, namely the hypothalamus. I recommend pregnant clients consume a minimum of 2-2.5L of water per day, and more on training days or if they live or work in a hot environment. Pre-natal women have the urge to go to the bathroom more regularly, so it helps to try and get at least half of their intake in before lunchtime, both to ensure that they meet their quota, and to



help limit sleep disturbances through night time trips to the bathroom.

Sound nutrition can assist greatly in promoting a happy, healthy pregnancy, and in post-natal recovery. Regardless of where your clients are at with their pre-natal nutrition, it is never too late to start eating and drinking well. **N**



Brooke Turner

Brooke is a nutritionist, exercise scientist, personal trainer, writer, presenter and mother of two with over ten years' experience in the health and fitness industry. Brooke's programs include her six-week STRIVE program and Happy, Healthy Pregnancy eGuides. Brooke is a

believer in striving for a balanced approach to health and fitness and aims to inspire and empower others to see that healthy active living need not be a hindrance but a habit.



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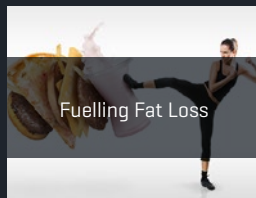
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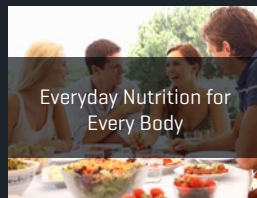
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CORRECTIVE EXERCISE FOR THE MIND

The state of your mind affects your movement, fitness, sensations of pain, and overall wellbeing, so training it reaps both physical and mental dividends, writes corrective exercise specialist *Justin Price*, creator of *The BioMechanics Method*.

As a passionate fitness professional, you have spent many hours, weeks, even years, training and developing your body to look, feel and function at its best. Your hard work has likely resulted in feelings of pride when you catch a glimpse of your reflection in the mirror. However, in all this time spent working on your body, have you neglected or overlooked the part that matters the most? What would your answer be if you asked yourself, ‘What would my mind look like naked’?

The difference between the mind and brain

People often use the mind and the brain as interchangeable terms. In actuality, they are very different things. The brain is the control centre for the body. It sends and receives signals from inside and outside the body to help you act, react, and interact with the world. From a body functioning standpoint, the brain enables you to breathe, eat, sleep,

and move so that you can exercise, recover and perform other important activities of daily life (Ackerman, 1992).

The mind helps oversee the brain, and establishes the quality of the messages sent from the brain to the body. The mind creates and processes your thoughts, feelings and emotions, which then influence the signals sent by your brain to your body (positively or negatively). The health and state of your mind, therefore, ultimately affects your movement performance, fitness capabilities, sensations of pain, and overall wellbeing (Ozanich, 2011).

The mind and the body

Negative thinking in the mind produces emotions such as sadness, anger, depression and anxiety (Rankin, 2013). These unpleasant emotions change your brain chemistry and directly affect your nervous system. Feelings of uneasiness and worry, for example, have been linked to increased heart rate, increased muscle tension and sweating, increased recovery



THE QUICK READ

- The brain sends and receives signals from inside and outside the body to help you act, react and interact with the world, whereas the mind creates and processes your thoughts, feelings and emotions
- Unpleasant emotions change the brain chemistry and affect the nervous system, negatively affecting the ability to exercise and recover effectively
- Pay attention to any recurring negative thoughts you experience and make a note of them
- Stretch yourself mentally by considering alternative and positive ways to think about the same topics
- Reinforce your new mental habits by performing multiple reps and sets.



times needed after activity, and shortness of breath (Pert, 1997). These physiological reactions to mental processes and patterns negatively affect one's ability to work out successfully and recover effectively.

Your mind has imbalances, just like your body

As a fitness professional, you know that the musculoskeletal and neuromuscular systems can develop imbalances that affect physical appearance and movement capabilities. Similarly, the mind can develop bad habits and negative thinking patterns that can adversely affect the body's performance (Sarno, 2001). Just as you would regularly assess the body for disparities, you must also learn to observe and evaluate the mind to understand its

“

Just as one would search around the body with a foam roller to uncover areas of tension, the mind should be explored for problematic tendencies and stress.

”

imbalances, compensations and weaknesses so that these issues can be corrected.

Corrective exercise for your mind

Corrective exercise for the body typically begins with some form of self-myofascial release. These techniques help identify and rejuvenate areas of the body that have been adversely affected by muscle and movement imbalances (Price and Bratcher, 2018). Corrective exercise for the mind begins with a similar process of identifying destructive mental habits and negative thinking patterns.

Step 1: Identifying and releasing bad mental habits

Just as one would search around the body with a foam roller (or similar massage tool) to uncover areas of tension with self-myofascial release techniques, the mind should be explored for problematic tendencies and stress.

Begin by paying attention to any recurring negative thoughts or emotions you have throughout the day. Make a note of these propensities in a notebook or journal. For example, you might notice that every time you are warming up for a run you have recurring anxious thoughts about the knee pain you tend to get after running a couple of miles. Alternatively, you may realise that you always feel guilty or demean yourself after eating a piece of cake or other desert. It doesn't matter the subject of your thoughts, but rather the negative mindset that accompanies them. Whatever your mental tendencies, record them in your journal.

Step 2: Introducing new mental habits

Corrective exercise for the body typically progresses from self-myofascial release to stretching exercises (Price, 2018). Stretching introduces new ranges of motion to the body to enable new movements, improve physical confidence and facilitate better function. Corrective exercise for the mind employs comparable strategies to produce similar results.

Look at the list of negative thoughts and emotions you have written down. Now stretch yourself mentally by considering alternative and positive ways to think about the same topics.

In the runner's scenario above, for example, recurring stressful thoughts about knee pain were identified. The optimistic alternative to this is to replace the destructive thoughts with a buoyant substitute such as 'I have been integrating corrective exercise into my workouts consistently now for almost three months and the cause of my knee pain is being addressed. I'm confident that I'm doing a great job of making sure my knee doesn't hurt when I run'.

Alternatively, in the eating scenario, a more positive way to think about having a piece of cake might be to say to yourself 'It's my friend's birthday. I feel extremely fortunate to be celebrating their happy day and enjoying a piece of cake with them'.

Step 3: Reinforcing positive mental habits

The final stage of any corrective exercise program involves using strengthening exercises to reinforce those areas of the body that require it in order to maintain and/or develop optimal function (Price and Bratcher, 2018). The same goes for reconditioning exercises designed to strengthen the mind. In Step 1 of your corrective exercise program for the mind, you identified your negative mental habits. In Step 2, you came up with alternative points of view to replace your recurring problematic thoughts and emotions. In Step 3, you

will reinforce your new mental habits, implementing these thought processes on a recurring basis by performing multiple reps and sets.

When you find yourself engaged in a negative thought process, replace it promptly with the positive one you have identified. As you would any exercise program, begin this transformation process gradually. Pinpoint one negative thought per day and replace it with a positive thought. As your self-confidence grows, increase the number of repetitions you perform each day of replacing destructive thoughts and emotions with positive ones. As you become more proficient, you will find that you recognise your negative mental habits more quickly and replace them swiftly before they become overwhelming and debilitating to your state of mind (and body).

Reaping the rewards

As you work to improve the condition of your mind, your body will thank you. Positive and constructive thoughts about what you are doing (for example, to prevent knee pain while running) will manifest in the body via signals from the brain (in this instance as reduced, and eventually, no knee pain). Similarly, negative thoughts about eating (as discussed above) will inflame the gut and cause gastric distress. Replacing these thoughts with positive sentiments and emotions will have a direct effect on the way the gut operates, improving digestion, and ultimately the way the entire body feels and functions.

Developing a fit and robust mind requires hard work and dedication. However, by routinely identifying your problematic thought patterns and emotions and replacing them consistently with more constructive/positive mental habits, you will enjoy the incredible benefits that come with a healthy body and mind. **N**

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Justin Price, MA

Justin is the creator of Network's Corrective Exercise Specialist Certification course, *The BioMechanics Method®*. His techniques are used in over 65 countries by specialists trained in his unique pain-relieving methods.





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4 STEPS TO STARTING YOUR NEW BUSINESS

Launching any business involves risk, but by following a few simple steps you can make an informed decision that increases your chances of success, writes business entrepreneur Alan Manly.

Deciding to start a new business is a life-changing move. Perhaps you've reached the top of your game while working for a club and want to launch your own program, or maybe you've got an idea for a unique service offering. Regardless of the nature of your venture, the fact is that launching a business involves risk: risking the security of your full time job, risking a hefty chunk of your savings or just risking your own reputation. There's a lot to ponder, but you can make an informed decision by following these four simple steps.

1. Make a plan and write it down

After all the thinking, talking and dreaming comes the hard part: writing it down so someone else can understand that your dream is a genuine business opportunity.

Few people enjoy writing a business plan, but it's a great 'sobriety test' for bright entrepreneurs with new ideas – and a must if you are planning on approaching investors. There are plenty of templates available online, so grab one and start writing. Ask yourself tough questions – as if you were asking for money from your arch enemy – then answer them. Your business plan will guide you and equip you with the answers to the many difficult questions you'll be asked along the way.

2. Assess your skills

If you've already achieved success in your chosen field, work out what skills contributed

to that success. Startups are created by people from all backgrounds with an equally wide range of skills. A frank assessment of your skills may tell you that you are a subject matter expert, but that other people have also contributed to your success. It's vital to understand the skills you have, and how you can complement them by hiring the right people in your team. If you're not yet in a position to hire other people as 'staff', you may still be able to outsource certain functions of your business, such as accounting or marketing. Starting a business requires a wide range of skills, and the people you get on board to support you can be your greatest assets.

3. Time it right

When launching a new business, timing is everything. There may never be a *right* time to launch, but through careful calculation you might find an acceptable time. Evaluate the employer benefits you currently enjoy, such as paid leave, sick leave and the ability to sleep not worrying about company cashflow. Write down the entire value of your salary package including the extras. Can you afford to live without it for a while? Can you operate successfully without the structure?

It's also important to analyse the market to figure out when to take the leap. Is there a current need for your product or service? Is there a trend for growth in your chosen industry? How long will it take to establish yourself and will the market have moved on

in that time? What is the competition like? When it comes to timing, arm yourself with the facts and be realistic.

4. Learn through experience

You can be given all the advice in the world, but just like riding a bike for the first time, starting a business is frightening, as well as exciting. If you misjudge a turn, you will almost certainly crash and hurt yourself. That's called experience! You can't succeed if you're not willing to fail a few times along the way. Get up, dust yourself off and keep going.

As Winston Churchill famously said: 'Success is not final, failure is not fatal; it is the courage to continue that counts.' With so much on the line, it's a wonder anyone decides to start a business. But being courageous enough to take a few initial steps can reap huge rewards. So be brave. You might surprise yourself – and your competitors. **N**



Alan Manly

Alan is the founder of Group Colleges Australia, and author of two books, *The Unlikely Entrepreneur* and *When There Are Too Many Lawyers There Is No Justice*.



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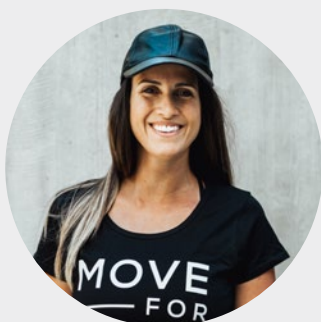
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ABOUT THE COURSE CREATOR



KYLIANNE TURTON

Kylianne is a counsellor, fitness industry educator and presenter, personal trainer, founder of The Movement Room and the Move for Mental Health Initiative. Her mission is to integrate different therapy strategies over movement and nature-based activities to overcome physical, emotional and mental challenges and boost mental wellbeing.



TRAINING FOR MUSCLE MASS: AN UPDATE

Recent study findings have seriously challenged decades of firmly held belief that heavy loads, high volume and post-exercise anabolic hormones are required for the growth of muscle, writes exercise physiologist *Tony Boutagy*.

In 1988, at a weightlifting meet in Canberra, the Russian Leonid Taranenko successfully clean and jerked 266kg. Due to restructuring of the weight classes in 1993, 1998 and 2018, Taranenko's official world record is, sadly, no longer recognised (that honour now belongs to the Georgian Lasha Talakhadze, who lifted 264kg in 2018, after coming back from serving a 2-year ban for doping). Despite not officially being 'recognised', Taranenko's lift is the heaviest weight to be lifted in weightlifting ever – and he performed this feat of herculean strength 31 years ago.

Training to increase muscle strength

If you look to classic texts on strength training from that period, such as Vladimir Zatsiorsky's *Science and Practice of Strength Training*, Dietmar Schmidtbleicher's *Strength Training: Structure, Principles,*

And Methodology or Yuri Verkhoshansky's *Programming & Organization of Training*, you find a very consistent approach to the development of muscular strength.

All strength authorities agree that the repetition range for the development of maximal strength is between 1-6, the number of sets for each primary exercise is 4-8 and the rest between sets is 3-5 minutes. A casual glance through the autobiography of the world's most successful weightlifter, Naim Suleymanoglu (*The Pocket Hercules*), detailing his training in the 1980's or the *Russian Weightlifting Yearbook*, which outlines the strength routines of the world's best at the time, reveal an astonishingly high percentage of primary lifts for maximal strength being performed in that range: 60% of the yearly repetition range for the snatch and clean and jerk was 2, and 93% of all squat sets for the year was performed between 2-7.

How much has changed in the actual training methods used by the strongest

weightlifters decades ago, when the clean and jerk world record was set and classic textbooks written? The answer is, not much. The sets, reps, volumes, exercises and training methods remain very similar to the programs that Taranenko used in the 1980's. Put another way, a very long time ago, the Russians had worked out the training methods to maximally increase strength and little of significance has changed since those days.

So what about muscle size?

But what do the early texts say on the topic of training for muscle hypertrophy? Zatsiorsky¹ states that the training protocols to induce muscle hypertrophy have a rep range of 5-7 or 10-12, short rest periods (1-2 minutes), three or less muscles trained per workout (a split routine) and a high training volume per muscle group. This view of hypertrophy was echoed by the ACSM's position stand, published in 2009², and

“

This is a large paradigm shift for those writing hypertrophy programs

”



THE QUICK READ

- Beliefs regarding the best training methods to maximally increase strength have not significantly changed since the 1980's – but the same is not true of muscle hypertrophy
- Modern science examining the training variables for hypertrophy have caused the profession to modify entrenched views
- With regards reps, some researchers have concluded that 'performing resistance exercise to task failure, regardless of load lifted or repetition duration, necessitates the activation of type II muscle fibres'
- With regards volume, once a muscle has failed, there does not appear to be a great value in persisting with more sets from the perspective of hypertrophy
- Studies in the early 2000's found no relationship between the hormones released in response to resistance training and muscle protein synthesis or muscle hypertrophy.

stated that the “emphasis [should be] on the 6-12 RM zone using 1- to 2-min rest periods between sets at a moderate velocity. Higher volume, multiple-set programs are recommended for maximising hypertrophy.”

Virtually all textbooks state the same: 6-12 repetitions and high volumes are required for the development of muscular hypertrophy. However, unlike the training protocols for maximal strength – which have stood the test of time – modern science examining the training variables for hypertrophy have caused the profession to modify deeply held and entrenched views of some of these aspects.

Repetition range

The opinion has long been held that the loading scheme for hypertrophy should cause volitional fatigue between 6-12 repetitions. Going higher than this, such as to 15, 20 or 30 reps, will cause improvements in muscular endurance, but is insufficient 'load stimulus' to create muscle mass. Indeed, I remember the late renowned strength coach Charles Poliquin making the 'fart' noise as he handed me back a program I had written for his examination in the early 2000's. I had used a 15-20 rep range. He said I 'failed'.

However, several research groups around the world have re-examined the accuracy of this belief and have convincingly and consistently shown that the heavier loads traditionally recommended for muscle mass may not be 'the only way'. For example, studies led by both Brad Schoenfeld in the US and Professor Stuart Phillips in Canada have demonstrated that the load, or repetition range, for hypertrophy does not occur in the precise zone that has been historically suggested. Phillips and his team have recently stated 'muscular hypertrophy is similar between lower-load (~30-50 %1RM) and higher-load (>70 %1RM) resistance training exercises, when loads are lifted to the point of volitional fatigue, thus, load does not mediate resistance training-induced muscular hypertrophy.'³ This is a large paradigm shift for those writing hypertrophy programs. From a practical perspective, modern research has shown that the rep range can be much wider than has historically been recommended, which can be employed in a workout or as part of a periodised program over many months, exploring different rep ranges and methods.

Much of this change in thinking can be traced back to the thought process of Stuart Phillips several years ago. Based on the Size Principle of muscle fibre recruitment, Phillips hypothesised that the point of muscle failure would cause high-threshold motor units (type II fibres) to be activated, regardless of repetition range. Over fifty years ago, Henneman⁴ identified the orderly recruitment of muscle fibres, now called the Size Principle. He showed that at the point of volitional fatigue, all available muscle fibres will have been recruited, and by extension, whether that happens at a load causing failure



at 10 reps or 30 reps, it is the task failure that drives motor unit recruitment and, therefore, the key signal of hypertrophy.

Since Phillips thought experiment, a number of studies have confirmed this, the latest being from Phillips' lab, led by Rob Morton⁵. Historically, heavier loads, in the 6-12 repetition range, have been viewed as necessary to recruit fast twitch type II fibres, based on the EMG measurement of contracting muscles⁶. However, Morton and colleagues had participants perform resistance training to task failure under four different lifting conditions: with heavier loads at 80% of 1RM, both at a normal speed and a slow tempo, and lighter loads at 30% of 1RM, again with a normal speed and slow tempo. In addition to measuring EMG amplitude of the working muscle, the researchers also examined glycogen depletion across the muscle fibre types, allowing a more precise determination of type I and type II muscle fibre recruitment. Morton and his colleagues found that type I (slow twitch) and type II (fast twitch) muscle fibre glycogen depletion was not different between loads and lifting speeds when resistance exercise was performed to task failure. The authors concluded that 'performing resistance exercise to task failure, regardless of load lifted or repetition duration, necessitates the activation of type II muscle fibres.' In summary, Brad Schoenfeld, Stuart Phillips and their colleagues have provided the physiological framework to overturn decades of thinking about the loads (and repetitions) required to develop muscle hypertrophy.

Training volume

All historic texts on training for muscle mass also agree that training volume, that is, sets x reps x exercises for the same muscle group, should be high. This has led to the preferred use of a training split – dividing the training week into specific body regions – over the 'total body' regime. It is not uncommon for hypertrophy programs to have fifteen to twenty sets per muscle group per workout. But how much volume is enough? Surely there is an upper limit to reach with respect to training volume, where the signals that trigger muscle anabolism is achieved and further volume becomes superfluous (or even detrimental) to muscle growth?

Modern studies examining the role of volume have shown that once volitional muscle fatigue is attained, increasing volume by increasing the number of sets per workout, the number of repetitions per set, the number of sessions per week, or the load lifted per repetition does not result in superior muscle hypertrophy⁷. In other words, muscle effort, or muscle fatigue/failure, appears to be a primary driver of muscle growth pathways. Volume becomes increasingly important where high levels of fatigue are not present⁸. However, once a muscle has failed, there does not appear to be a great value in persisting with more sets from the perspective of hypertrophy. Although there will undoubtedly be individual differences with respect to how volume impacts muscle growth, the totality of evidence suggests that a weekly volume of 10-15 sets per muscle group⁹ is sufficient for most people, which can be organised in a split regime or, somewhat controversially, as a total body program.

Targeting hormones

The 1980's ushered in the modern era of hypertrophy research, with studies examining the effect of resistance training on anabolic hormone release. Over several decades, William Kraemer and colleagues published a huge amount of data on the way the various training variables alter the hormonal response to a workout¹⁰. Trainers were quick to adopt this information, designing resistance training programs with the goal of optimising testosterone, growth hormone and IGF-1 levels by carefully selecting the loads, repetitions, sets, exercise choices and recovery between sets that had been identified by Kraemer to result in the highest hormonal release and therefore the greatest potential for hypertrophy.

The cracks in the 'hormonal hypothesis' of muscle hypertrophy began to appear in the mid 2000's when, in a series of studies,



Stuart Phillips and his colleagues found no relationship between the hormones released in response to resistance training and muscle protein synthesis or muscle hypertrophy¹¹. This was yet another area of firmly held belief that research had caused us to completely reassess. Muscle fibre recruitment is regarded as the primary driver of muscle hypertrophy and, to quote Rob Morton's most recent study examining the hormonal response to exercise, 'in agreement with our previous studies, it is clear that the post-exercise increases in systemic hormone concentrations are unrelated to changes in muscle hypertrophy or strength.'

Summary and recommendations

The highest load lifted in the sport of weightlifting occurred in 1988. Textbooks on strength training written around that decade outline the training variables required to develop maximal strength. In the thirty to forty years that have passed since these seminal works were published, little has changed in the thinking and programming for strength training. The same cannot be said, however, with regards muscle hypertrophy. Recent studies have overturned decades of historic dogma that heavy loads, high volume and post-exercise anabolic hormones are required for the growth of muscle. We now understand that, providing exercises are performed with high effort and focus to volitional fatigue, the load lifted, the repetition range, tempo, periodisation scheme¹² and training volume, are all the 'details' that comprise the training program, but are subordinate in value to the effort/failure of the exercise being performed. **N**

FOR REFERENCES CLICK HERE



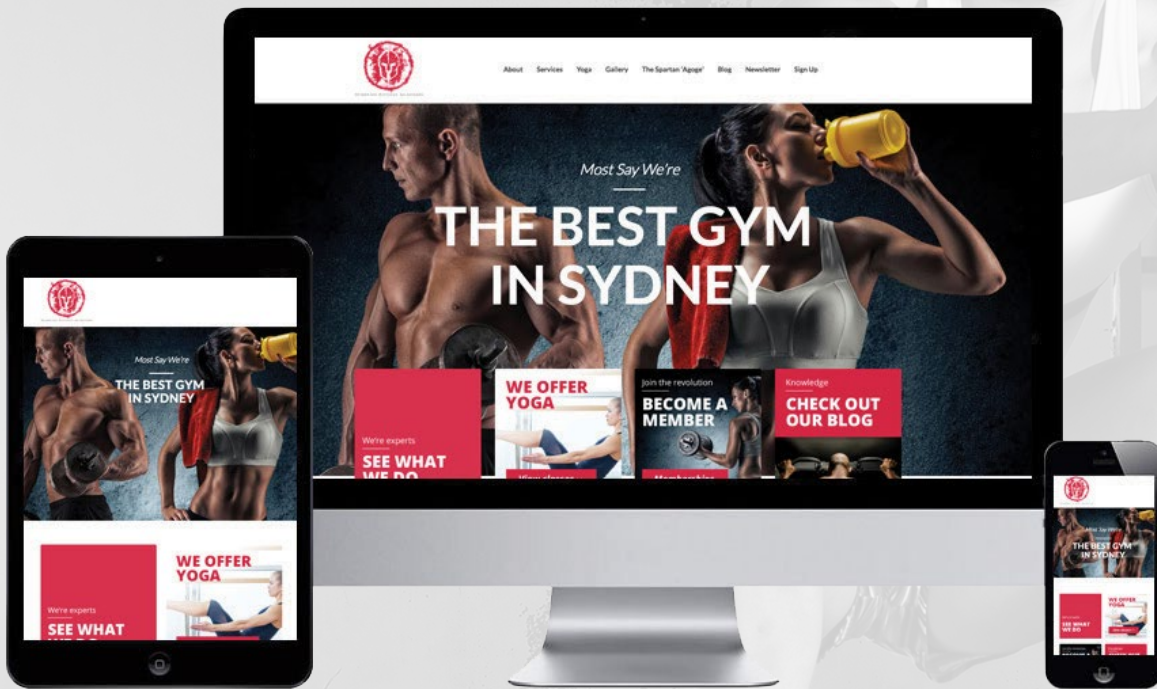
Tony Boutagy, PhD

Tony has been a trainer for 25 years, specialising in the development of strength and endurance, and training for body composition. He holds a PhD in Exercise Science and is an Accredited Exercise Physiologist (ESSA). Tony runs educational courses for personal trainers in his Sydney-based facility.



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WE NEED TO TRAIN OUR FEMALE CLIENTS BETTER

By taking advantage of hormonal shifts and appreciating female physiological differences, you can vastly enhance your client's outcomes, whatever her age, writes female training expert *Nardia Norman*.

In 2016 at the Rio Olympics, Chinese swimmer Fu Yuanhui earned international praise when she told reporters that her poor swimming results were due to her menstrual cycle. 'It's because my period came yesterday, so I felt particularly tired – but this isn't an excuse, I still didn't swim well enough' she said.

In doing so, she broke a long-held taboo: discussing the menstrual cycle and, specifically, the impact it had on her lacklustre performance. Yuanhui highlighted one of the big issues in women's sport today. The menstrual cycle is an under-studied area of sports medicine, even though it impacts an individual's performance, recovery and injury risk.

But it goes beyond performance. The menstrual cycle is the body's natural report card, and it tells a lot about the health status of the woman. Biologically, the female body has evolved to carry, grow and give birth to a child. The female sex hormones oestrogen and progesterone are the reasons why it can do this. However, the sex hormones don't

exclusively impact the reproductive system. Nor does every woman choose to, or is able to, have children and fill that biological program.

The female sex hormones oestrogen and progesterone influence practically every system in the body, from bone health, body composition and mobility and strength gains, to mental health, appetite control and cardiovascular function.

These hormones, which are crucial to a woman's entire being, are created in the ovaries via the menstrual cycle. That is why menstrual cycle irregularities or dysfunctions such as PCOS (polycystic ovary syndrome), and reproductive system stress, such as excessive exercise and low energy diets, negatively impact her overall health, wellbeing and performance.

The menstrual cycle is considered so important to a woman's health that the ACOG (American College of Obstetricians and Gynaecologists) in 2016 declared it to be a 'vital sign'. This report stated that 'By including an evaluation of the menstrual cycle as an additional vital sign, clinicians reinforce its importance in assessing overall health status for patients and caretakers.'

In other words, a healthy menstrual cycle is an essential element of being a healthy woman. So, what does this have to do with you in your role as a personal trainer? Well, if you train women, of any age, then it has everything to do with you.

Women are not little men with breasts

In the fitness industry our biological differences are too often either dismissed or taken advantage of. Rarely are they given the attention



THE QUICK READ

- In the fitness industry, female biological differences are too often either dismissed or taken advantage of
- The female sex hormones oestrogen and progesterone influence practically every system in the body, including bone health, body composition, mobility, strength, mental health, appetite control and cardiovascular function
- Women respond differently than men to loads and frequency of strength training, utilise fuel differently depending on the stage of the menstrual cycle, and have different tolerance for heat depending on oestrogen and progesterone levels
- Trainers must also adapt training to support a client's body through the hormonal shift of menopause
- Trainers need to teach female clients how to make great lifestyle choices for their bodies as often as possible, because each decision impacts hormonal profile and overall health and wellbeing.

and focus they deserve.

On one hand, there is the school of thought that says, 'women are just like men, train them the same way'. This way of thinking underpins the majority of the exercise prescription recommendations we are currently using in the fitness industry.

Up until 1990, it wasn't compulsory to include female subjects in exercise science studies. Therefore, a gender bias towards male subjects existed (and still does); in fact, the average man used in these studies was white and 72kg. The idea was that the results could just be extrapolated and made to 'fit' a female.

Given that females are, on average, smaller than the average man, and have monthly hormonal fluctuations, the recommendations don't neatly fit. For example, modern science has shown that women respond differently than men to loads and frequency of strength training. Women are able to train at higher percentages of their 1RM for a given number of sets and reps than men. Another example is the way in which a woman's fuel utilisation (fats or carbohydrates) changes depending on what phase of her cycle she is in. In a final example, a woman's ability to tolerate heat changes depending on her levels of oestrogen and progesterone; this is true both for menstruating women and those in their later years.

As trainers, we need to be aware of all of these subtle, yet profound, differences in order to maximise gains for our clients.

While women and men have the same physical blueprint, i.e. we each have a skeleton and our connective tissues are made of the same compounds, the sex hormones subtly impact the body differently, resulting in the following issues:

- Women are more likely than men to experience musculoskeletal issues such as knee joint problems, shoulder impingement, rotator cuff tendinitis and feet problems.
- Women are more likely than men to experience mental health issues, such as general anxiety disorder and depression, as well as hypertension which can lead to heart disease, the number one killer of Australian women (women are almost 3 times more likely to die from heart disease than breast cancer – Source: Heart Foundation).
- Women are 2.5 times more likely than men to have IBS and have a more sensitive gastrointestinal tract.
- Women have a lower eccentric loading capacity than men, which has implications for how plyometrics and strength programs are designed and implemented.
- Women who haven't had children can still experience pelvic floor dysfunction such as incontinence, and are more likely to do so than men.

All of these issues directly affect a woman's health, wellbeing and results, yet due to a widespread lack of knowledge, they are routinely ignored or dismissed. As trainers, our number one job is to improve our clients' health, while getting them results. Remaining ignorant to the subtle but powerful impact that female sex hormones have on her body, throughout her lifetime, is doing her a disservice.

On the flip side, from a social standpoint, there's a part of the industry that still preys on women's insecurities and counts on their failures in order to profit. Historically, the only goals that women have been 'allowed' to pursue have been ones to do with making themselves smaller. Many fitness marketing campaigns have centred around messages such as 'lose weight', 'drop a dress size', 'tone up', 'slendernize your muscles', 'get bikini ready', 'lean up', 'shrink', 'detox' and 'sculpt'. These campaigns are accompanied by images of small, lean women holding a pastel dumbbell in one hand and an apple in the other.

Thankfully the tide is turning, and a concerted effort is being made to use positive marketing messages that include women getting 'strong', 'fit', 'fast', 'bigger', 'confident' and 'powerful'. This is to



Results? That's not how you do it.

encourage women to get into the gym and not be afraid of doing resistance training or lifting heavy weights. But there is still a long way to go to help women overcome their fear of 'getting bulky'.

Understanding a woman's beliefs, fears, barriers and motivations is crucial if you are to help her create sustainable change.

The later years

Like with the menstrual cycle, the perimenopausal and menopausal years are rarely discussed, and if they are, are associated with negative experiences. Hot flushes, change in body shape, sleep disruption, dry skin, change in emotions and loss of libido are some of the signs and symptoms that start to impact women as young as 40.

It is a time of momentous change; her reproductive functions start to wind down and she enters her next phase of life. Often, the signs and symptoms can be alarming, and the woman can feel confused, upset and frustrated by what's happening to, and in, her body. Society, in general, doesn't like to talk about these changes, and neither do some individuals, but it's important that we, as trainers, are privy to her experiences.

It is up to us to adapt our training to support her body through this hormonal shift. If we keep throwing high intensity exercise at her in order to combat her mid-section fat gain, we can accidentally cause the opposite to happen. This isn't to say that a woman in this transition can't do high intensity training, rather that – as with everything we prescribe – it must be personalised and tailored to her capability, experience and lifestyle.

Lifestyle choices impact results

Many women today juggle the multiple demands of careers, families and domestic responsibilities, while also being bombarded

with targeted messages tying their worth to their looks. They are time poor and inundated with often contradictory information, and marketing and social media-fanned misinformation, about health.

We have to teach our female clients how to make great choices for their bodies as often as possible. Each decision will impact her hormonal profile and therefore her overall health and wellbeing.

Some of the key things that can negatively impact a woman's health are:

- Chronic stress (and associated poor coping strategies)
- Nutrient poor diets high in manufactured sugars and fats
- Nutrient poor diets where there is low energy availability (e.g. dieting, detoxing, not eating enough calories)
- Poor liver health
- Excessive bouts of exercise, or long periods of exercise, coupled with low energy availability.

It's time to start giving female clients the attention they deserve. It's time to train women like women – knowing full well that they are more than capable of being fit, strong, powerful, fast and whatever else they want to be.

This means taking advantage of her monthly hormonal shifts over her menstrual cycle, paying attention to how the sex differences impact her ability to get results, using strength training to mitigate the effects of age-related decline, and delivering individualised, nuanced training programs.

Let's help women unleash their potential and normalise all aspects of being a woman. **N**



Nardia Norman

An award-winning presenter and educator, Nardia has 20 years' experience in coaching, education and personal training. Recipient of FILEX's Presenter of the Year Award 2018, Personal Trainer of the Year 2014 and an Australian Institute of Fitness Legend, her passions lie in business coaching for female fitness professionals, and educating trainers on how to work with women clients more effectively.

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The Female Health & Performance Course is Australasia's first female-centric certification for personal trainers that compliments and extends upon pre-and post-natal training.

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Designed for personal trainers who work with women of any age, this 14-CEC course targets knowledge gaps and provides the tools and strategies to help female clients achieve healthy, sustainable results.

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THE GX EFFECT

You may 'know' that working out in a group seems easier somehow, but new research backs up this innate wisdom with science.

Research recently conducted on behalf of Les Mills and published in *Sport, Exercise, and Performance Psychology* has illustrated the importance of getting group dynamics right in order to retain club members.

Discussing the findings, Les Mills' Head of Research, Bryce Hastings, said; 'We wanted to take our knowledge of the group effect in a group fitness environment up a notch in a bid to more fully scope its effect(s) on a club member's experience.'

Conducted by Dr Blair Evans of Penn State University, the Les Mills Group Dynamics Study saw a concept known by exercise psychologists as 'groupness' scrutinised. Groupness relates to the extent to which someone feels that the group impacts their workout; if they feel part of a close-knit group, their perceived level of groupness is rated as high, while a lack of group interaction equates to low perceptions of groupness.

After analysing 97 study participants' feelings about a range of group fitness workouts over a two-week period, Evans

said the majority of the findings were in line with what they had suspected when they embarked on the study. However, the data revealed an additional, equally important, finding correlated with high levels of groupness.

'Our research showed conclusively that high levels of groupness have a significant bearing on peoples' satisfaction, enjoyment and exertion but we now have the evidence to demonstrate its influence on a person's intention to return to a class.

'This means groupness has a bigger impact on peoples' behaviour in a group fitness environment than first thought, so our recommendation to our club partners is to use it as an additional attendance tool.

'Get groupness right and your members' commitment to your group fitness offering is solid; choose not to prioritise it and you may lose them' said Evans.

Hastings said carefully-crafted strategies to enhance groupness are a critical component of designing and delivering group fitness workouts, but that without skilled instructors to create the sense of 'we', success would be elusive.



'Our instructors are armed with the talent, skills and resources to help people feel like they're working out as a true group with shared goals. They know how to take what we know from the science and turn it into a positive experience for members. This latest piece of research means we now have a deeper understanding of the power of group dynamics and the far-reaching influence these complex phenomena have on member behaviour' Hastings said.

For more information on research conducted by Les Mills visit lesmills.com/research **N**

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ABOUT THE COURSE CREATOR



KIRSTY NIELD

Over the past 20 years Kirsty has established herself as one of Australia's leading group fitness instructors and educators, creating and delivering challenging and dynamic group fitness classes. A GFM since 2009 and fitness presenter since 2012, she is passionate about mentoring and educating fellow fitness professionals.

HEALING TRAUMA WITH YOGA

To move past trauma, survivors need to learn to befriend the body, and yoga asana practice and meditation can help them do that, writes YogaFit founder *Beth Shaw*.

We don't need to look far to see that as a society we are suffering; from mass shootings and suicides to homelessness and addiction. For many, trauma is the root cause of suffering. Unless the root of the problem is dealt with, time is wasted dealing with the symptoms. It is often hard to differentiate symptom from cause. Untreated trauma, often occurring in childhood, leads to mental health issues such as anxiety, depression, mood, personality and psychotic disorders.

The human mind has incredible protection mechanisms as well as coping skills. Unfortunately, we don't always opt for the healthiest coping techniques first. Those skills usually have to be learnt after some unhealthy ones have been given a run. Trauma varies from person to person, so it's fortunate that the path to healing is a very wide one with many options.

People living with residual trauma are continually getting ready for the next attack or life-altering event. When someone is preoccupied by a real or imagined threat, the resulting fear, rage, or disappointment will be reflected in the body. Research shows that trauma survivors suffer more illness, in addition, muscle tension, disease, and injury are physical manifestations of this preoccupation.

Trauma has such a severe impact because of the way it affects, and ultimately, rewires the brain. When the brain gets stuck in stress mode, it leads to physical changes and a complicated ripple of life-altering symptoms. Enter yoga, mindfulness and meditation. To move past trauma, survivors

need to learn to befriend the body, and yoga asana practice and meditation/mindfulness can help them do that. Yoga allows us to be the witness to the body, mind, and emotions, and make better choices that contribute to a healthier lifestyle, more positive mood, better relationships, improved quality of life and balanced living.

From the place of being the witness, we can then seek the appropriate treatment. In yoga and mindfulness, we learn that if we can find contentment and focus in the present moment, we will find joy. Trauma survivors can lose this connection to the present moment and, as a result, can easily lose their sense of peace, joy, and connection to others. This has been my personal experience.

In certain respects, one may never heal completely from trauma, but we can certainly learn to mitigate and cope with the daily symptoms and feelings associated with PTSD, trauma, addiction, anxiety and depression by applying these mind body healing tools and principles. Mindfulness allows us to stay open, curious, positive, and present to our unique and individual process of healing.

Awareness is the key component to managing the day-to-day shifts and storms. My own approach to living with trauma, depression, and emotional dysregulation is simple yet complex. It involves a constant vigilance and being the witness to the body, mind, and emotions. I use intention plus action to get results.

One of the best ways to start a mindfulness practice is to simply try a few yoga classes. Try at least five different types, styles, and teachers. Letting go of judgement of yourself

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and expectation can be very helpful. Maybe even try a few classes online in the privacy of your own living room.

Having experimented, I can honestly say that taking your healing into your own hands is one of the most empowering things you can do. Yoga helps give you that power. We all heal in different ways, but what is most important is that we recognise our victories towards that goal. Celebrate your progress, be kind and loving to yourself. May you have more sunny days than rainy ones – and if it is raining, don't forget to dance in that rain! **N**



Beth Shaw

Beth is CEO and founder of YogaFit Training Systems Worldwide Inc, which has trained more than 200,000 fitness professionals across six continents. She is the author of Healing Trauma with Yoga and Mind Body Tools.





GX SKILLS

TEAM PLAYING FROM THE FRINGES

Reward and recognition programs for instructors can be great in theory but less so in practice. Instructor *Mel Morony* looks at how to navigate the challenges of these vote-based systems.

A group fitness instructor reads an email that includes a reminder of the centre's monthly Reward and Recognition (R&R) program, which is contingent on the staff voting for each other. The instructor thinks about how nice it feels to be appreciated and decides to 'pay it forward' to a fellow staff member. Upon further reflection, however, the instructor realises that due to the limited interaction they have with staff in the centre, they barely even know the names of their colleagues, let alone whether their recent actions have been worthy of a vote. Finally, in the absence of more inspiring options, they settle on voting for someone who covered for them last week, even though they are unsure as to whether this is really worth a vote.

Ideology versus reality

What I have just described has been my experience when it comes to engaging with voting-model R&R programs. At centres where I am a staff member, I am regularly faced with the dichotomy of understanding the importance of encouraging fellow staff members in this way and the limitations that being a sessional instructor places on me, both socially and operationally. Nearly every centre at which I am employed as an instructor has an ideology stating that I am regarded as part of the staff. However, when an instructor teaches at multiple centres, spends most of their time at those facilities behind the closed doors of a studio, and most of the rest of their time building rapport with their patrons, the result can be a feeling that any interaction with that centre's staff program is from the fringes. Here, we explore ways that instructors can work around these challenges when it comes to voting model R&R programs.

Challenge 1: Knowing the staff

It is not uncommon for an instructor to have limited interaction with their fellow staff. Over my years of teaching group fitness, there have been numerous facilities at which the extent of my interaction with fellow staff has been of the 'Hi', 'Bye' nature. Yet, as I describe in the article *The Loneliness of the GFI*, there are ways of changing this, including spending time in the space of fellow staff members, attending meetings and social events, and making use of face-to-face upskilling opportunities.

Challenge 2: Probability of experiencing vote-worthy behaviour

While getting to know our fellow staff could be described as a hurdle for an instructor wanting to engage in an R&R program, actually experiencing actions worthy of a vote may well seem like a pole-vault, as the probability is very low. This is particularly so for land-based instructors, as once we are in our studios and the doors are shut we don't expect to see or engage with any fellow staff members over the next 30 to 60 minutes. As an instructor who also teaches aqua fitness, I have a bit more opportunity to interact with and see what other staff are doing – mainly lifeguards, swim-teachers and duty managers – but even then my main focus while I am teaching is on my participants. Nevertheless, there are some ways around this.

Members are our eyes and ears

'Bella's class was really good the other day', 'When I arrive, Joel on the front desk always remembers my name', 'Last week Alana coached my technique on that exercise really well.' If our members



THE QUICK READ

- Reward and recognition programs that require instructors to vote for their colleagues can pose some challenges for casual 'sessional' instructors who teach at multiple facilities and have limited interaction with other instructors
- Making the effort to attend meetings and social events, and make use of face-to-face upskilling opportunities, will foster relationships with fellow instructors
- Talking to participants can provide insights into cases of praiseworthy behaviour on the part of fellow instructors
- The act of covering classes, though often contractually expected, is an action that may be considered vote-worthy, as is simply going about daily activities with a positive attitude.

are attending regularly, they will see and hear more about our fellow staff members than we do, so make use of their observations. There have been numerous occasions when my class participants have passed on feedback to me about fellow staff members, for whom I have subsequently cast a vote in R&R programs. When we consider the amount of negative feedback that gets relayed to us, hearing something positive can make somebody's day.

Covers – contract or favour?

While it may be in an instructor's contract requirements to cover classes, for which they will of course be paid, I like to consider where I would be if they had not agreed to cover for me. Would I be able to enjoy my time off as much if they had not agreed to cover for me and my class had been cancelled or the format changed? I also consider that there are centres and classes that I've decided not to cover at again, often due to the way I was treated as a cover instructor in those places. Hence, as well as being simply good manners, if I want people to agree to cover for me, then it only makes sense that I treat them well.

Encourage doing the right thing

If you notice a fellow staff member being helpful or friendly to you or the patrons, or even reporting or sorting out OHS issues, then consider a vote for that contribution. Attention is often given to extremes of behaviour, both poor and excellent, rather than to those who are simply getting on with



the job with a positive attitude. Sometimes a shout out for doing the job right can have a profound effect.

Challenge 3: Casting your vote

It's one thing to know who you want to vote for, but quite another to actually get your vote in. From boxes in staffrooms to online surveys with access restrictions, it is easy for our best intentions to go by the wayside as we juggle the countless other demands of our lives and our instructor roles. However, there are ways to get around these challenges:

Keep a log

For facilities at which R&R voting is done via an online survey that only opens at certain times of the month, I keep a log of positive things I have seen, heard and experienced. This keeps the who, what and when fresh in my mind for when voting opens.

Take some forms home

Where R&R voting is done on paper forms, I keep a few of them on me. That way, when I see something but have to dash from that centre to another, then I can still jot it down and put it into the receptacle the next time I'm back at that centre. It also enables me to jot it down if someone does something noteworthy when I'm not physically at the centre, such as agreeing to a last-minute class cover via a Facebook page. While I could jot it down in my diary and then fill in a form the next time I'm at the centre, I rarely linger in staffrooms: if I arrive early, I prefer to spend that time building rapport with participants.

Team leader discussions

If the R&R program still isn't working for you – and it matters to you – then it might be worth engaging the management in a discussion. Those in the leadership team will usually have had a different experience of the R&R program to their instructors and may need convincing that a dialogue is necessary. In such cases, if the centre has a stated ethos of valuing and listening to its staff then ask them to uphold that commitment.

If we all commit to fair, open and objective conversations between employers and sessional employees, the purpose of R&R programs can be fully realised. **N**



Mel Morony

Mel is a group fitness instructor based in Eastern Melbourne. She is passionate about raising standards in the area of group fitness, for both participants and instructors.

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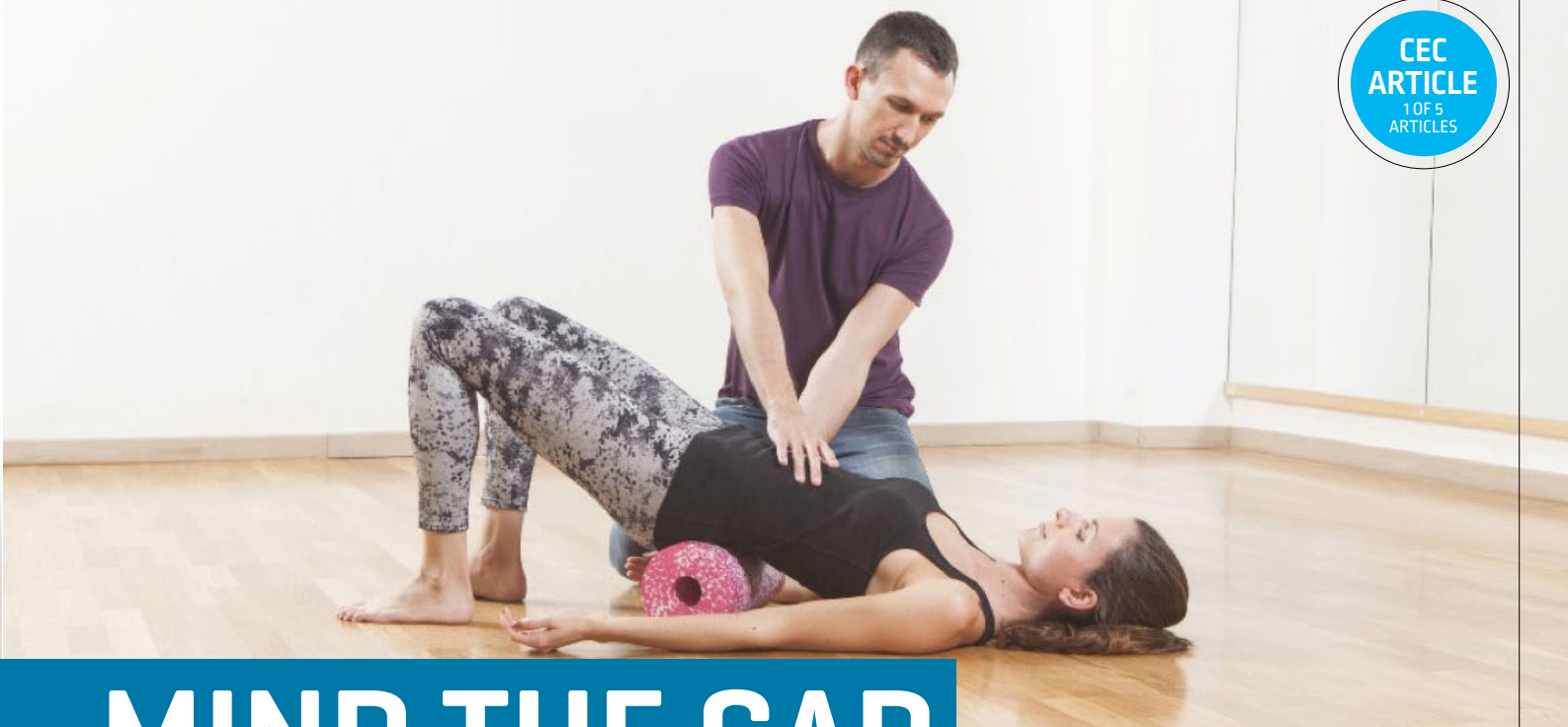
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MIND THE GAP

REDUCING ABDOMINAL SEPARATION SEVERAL YEARS POST-CHILDBIRTH

Women's health expert *Dianne Edmonds* looks at the case of a personal trainer who discovered her own abdominal separation nine years after giving birth, and proceeded to reduce it by rebuilding her deeper core.

Abdominal separation – or diastasis recti – is common in pregnant and post-natal women, with up to two-thirds displaying separation of some degree. The condition is defined by a separation of the connective tissue (linea alba) joining the two strips of muscles (rectus abdominis) down the middle of the abdomen. It occurs when the abdominal wall muscles and their connective tissue attachments stretch due to a combination of abdominal weakness, hormonal changes, weight gain and abdominal wall stretch caused by the growing foetus.

Case study 1: The 9 years post-natal PT

Amber is a personal trainer who had twins 9 years ago. Until she attended a practical professional development course on training postnatal clients, she had no idea

that she herself had an abdominal separation remaining as a result of her pregnancy. She discovered that she had a 3-finger-width separation above and at her umbilicus (belly button) level, and the gap felt like quite a dip in between her rectus abdominis muscles.

Amber had noticed 'doming' in her abdominal wall while performing certain exercises during CrossFit training, but had not been aware of what the gap was. During the post-natal client training course, she learnt what an abdominal gap was, how to check for its presence in female clients, and what exercises to implement with clients who exhibited the condition to help train their changed abdominal wall.

For her, the big revelation was learning how the pelvic floor is wired together with the lower abdominal muscles, and although she had worked transversus abdominis before, she hadn't felt the link working with her pelvic floor. This changed the pattern of recruitment she was using and, over time, she felt her gap reduce as she increased



THE QUICK READ

- Abdominal separation – or diastasis recti – occurs to varying degrees in up to two-thirds of pregnant and post-natal women
- Some women will not realise they have the condition until a considerable time after they have given birth, with some discovering only several years later
- By learning how to modify training, and remove exercises that put excessive tension on the abdominal wall and cause 'doming', trainers can help clients reduce their abdominal gap and safely strengthen their pelvic floor
- Many personal trainers will not have the knowledge to screen clients for diastasis recti and to program their training accordingly.



There had been no strategy in place to screen and check for abdominal separation as part of the client assessment process



the effectiveness of her deep transversus abdominis action with her pelvic floor.

Several months later, the gap was less of a distinct dip, there was more tension formed in the linea alba and it had reduced to a 2-finger width. Amber also learnt how to control the tension during training and ensure that her activation patterns improved with specific core exercises. She focused on first recruiting her pelvic floor with transversus, before adding load, so that doming no longer occurred along the length of the linea alba.

Identifying the knowledge gap

With this new knowledge front of mind, Amber reflected on her training career and recalled seeing doming in some of her female clients. She remembered that while training to become a PT, she had observed a client with some abdominal wall changes who also had back pain – but that there had been no strategy in place to screen and check for abdominal separation as part of the client assessment process. She also recalled her PT training having very limited information about pregnancy-related abdominal muscle changes and hardly anything about the role of the pelvic floor and its importance in training, particularly for women who have given birth.

Amber now screens her clients for an abdominal muscle separation and works with them to prescribe abdominal training at an appropriate level for the client, to protect from any doming or strain on an existing abdominal separation. She also now includes pelvic floor training and protection principles in her programming.

'Clients often don't know what they should be feeling, so I spend time explaining this to them and giving them feedback' says Amber; 'There are some questions I ask the clients now that I didn't before doing the course. I explain why certain movements are included in my program, and start the clients at an appropriate level so that they are less likely to need to regress their program due to an ab gap bulging or doming with an exercise that is too challenging for their core.'

'Sometimes, if they are used to working hard, they find this frustrating at first, and are challenged or annoyed that their body



Abdominal separation

can't go straight back into doing what it used to do, but with education and progression and monitoring their progress, they notice the improvement, and can make an informed decision on how hard they work in their training.

'Whether clients present a few months post-natal or several years after the birth, they need their abdominal wall to be screened. The other thing I now do is to recommend clients go to see a physiotherapist working in women's and pelvic floor health so that they can get their pelvic floor technique checked. This is not something I as a trainer can do, so it really helps the client's awareness of the action of these muscles.'

'PT's need to know the importance of the pelvic floor in the recruitment patterns of the lower abdominal wall. Some of our overweight clients could have a pelvic floor issue or an abdominal muscle separation, so checking and screening for this is important before starting to program for them.'

'Some women want to push regardless of what is going on in their body, however I've heard of some of the problems that can occur in addition to an abdominal muscle separation, such as pelvic organ prolapse.'

Case study 2: The 2-months post-natal client

Amber's realisation of her abdominal separation came fairly belatedly, but many women will identify something being 'not quite right' far sooner after giving birth.

Post-natal mum, Sally, was ready to return to the gym following the birth of her first baby by caesarean section. She had learned how to do 'post-natal abdominal bracing', activating through transversus abdominus, and had been doing the baseline exercises in sitting, standing, and side lying. She had no pain in her caesarean site and so went to the gym at seven weeks post-natal to commence light weights and treadmill walking. She planned to introduce stationary cycling and then, over the next few weeks, the rower.

Sally resumed training with her PT and at around 10 weeks post-natal she started performing curl ups with her upper back supported on the fitball. She soon started feeling 'unusual' in her upper abdominal wall and, noticing an occasional bulge, she went to see her physiotherapist. Assessment revealed a 3-finger-width gap in her upper abdominal wall which bulged slightly but closed down to a 2-finger-width gap when she lifted her head. At the belly button level, and below it, was a smaller gap of 1-finger width.

She had started also to do some modified planks holding for up to 40 seconds and, on testing, tension was felt through her upper abdominal wall that increased the doming the longer she held the position.

In light of discovering the gap, Sally eliminated both the modified plank and curl up over the ball, and instead focused on hands and knees single arm reach/alternate arm/leg reach, with some work in side-lying and supine to build her deeper core control and endurance levels. She had no problems with her pelvic floor.

A month later, when she was 4 months post-natal, testing revealed Sally's abdominal gap to have reduced to 1 ½-finger-width, with minimal bulging. She continued to work on these post-natal progressions for several more months, attending the gym and working with her trainer to build her strength and aerobic fitness.

Case study 3: The pregnant PT

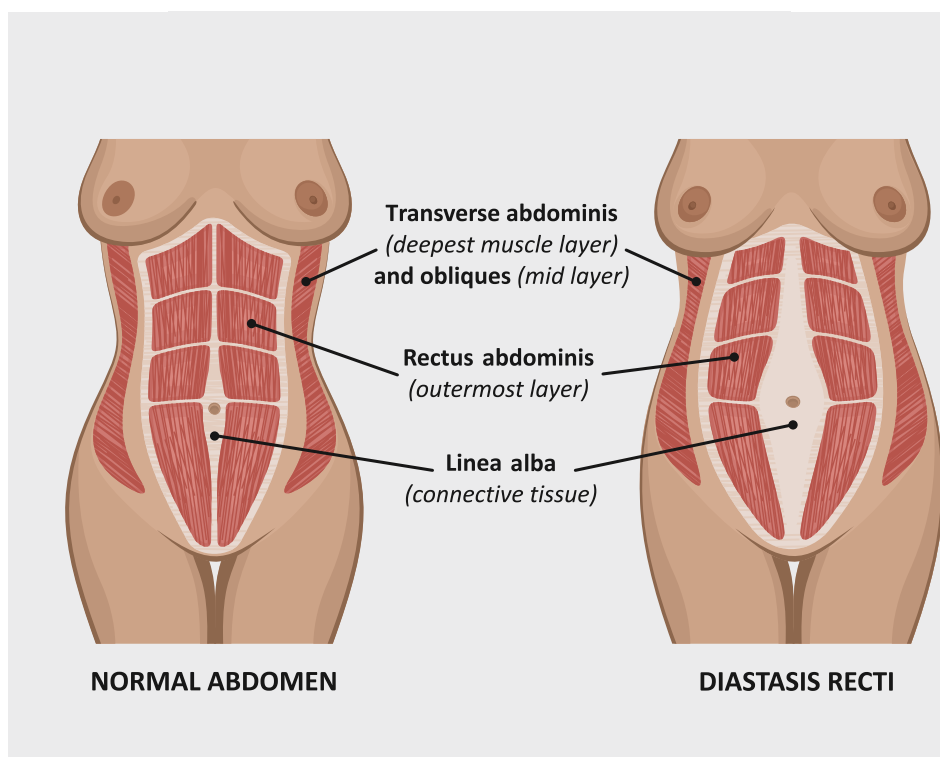
Of course, diastasis recti is not only identified in post-natal clients – it can also be detected fairly early into a pregnancy. At 12 weeks of pregnancy, Bobbie, a personal trainer, came in for an abdominal muscle wall check. It was a surprise to find that she had a 3-finger-width gap between her rectus abdominis muscles when measured above and at the level of the umbilicus.

As a PT, she had worked with some pregnant and post-natal women during her career, but she now had to apply her knowledge in a new way, to herself.

Having previously demonstrated some post-natal core progression exercises for some educational materials a year before her own pregnancy, Bobbie knew she had a weakness in her lower abdominal wall compared to her stronger upper abdominal wall and external obliques. Due to her years of training predominantly upper rectus and external obliques, a strong activation pattern dominated in these muscles and inhibited some of her transversus abdominis activation, making them relatively weak in comparison. Also, when she did her pelvic floor activation, the effect of the intra-abdominal pressure created through her upper and lateral abdominal wall resulted in activation and then descent initially of her pelvic floor, when observed on real time ultrasound.

Focusing on some 'detraining' and retraining, Bobbie learnt to specifically activate the lower transversus abdominis muscles, using the pelvic floor muscles to initiate the action. She included breathing awareness and took the time to learn the patterns of recruitment needed to change her focus towards learning 'pregnancy abdominal bracing' in preparation for the lengthening of her abdominal wall with the uterus expanding. This 'softer' approach was learnt during a training session, to replace the 'train hard' patterns that she was used to.

At 16 weeks of pregnancy, her abdominal separation had reduced to a 2-finger-width gap above and at the level of the umbilicus.



Abdominal separation

Her patterns of activation of her deep abdominal wall had improved, and she was able to activate around her now-expanding uterus with less excessive activation of the upper section of her rectus abdominis and external obliques. Her pelvic floor technique was now one of ascent (lifting): there was no descent and her endurance had improved.

Bobbie volunteered for some filming of her pregnancy abdominal bracing activation patterns, enabling regular input to refine this pattern, which is often needed with clients as the abdominal wall continues to lengthen. By observing her patterns and feeling the abdominal wall activation in different positions as her pregnancy progressed, these regular checks and 'tune ups' helped her to refine her technique.

We were able to film Bobbie activating her abdominal wall using a pregnancy abdominal bracing action at 40 weeks, with a good technique. Her level of gap was maintained at less than 3-fingers-width during her pregnancy.

So, the question to be asked is, how big would her gap have been if she hadn't had it checked and modified her training at 12 weeks of pregnancy?

It's never too late – or too early

As the three case studies above show, starting conversations about the changes that pregnancy and birth can bring about in the body is important. Interestingly, some men can also have abdominal separation, which

could impact upon their core conditioning training, their back and their pelvic floor.

As Amber's story illustrates, it's never too late to look at changing a gap if one is identified in a client. Abdominal separation is something that can be screened for by PTs, so it is advisable to undertake specific training that will teach you to identify the way the abdominal wall is working with the pelvic floor, and how intra-abdominal pressure control is occurring. The occurrence of any bulging or doming during an exercise indicates that there is strain on the linea alba, and the exercise should cease.

If an identified gap measures more than 2-fingers-width, the client should be referred to a physiotherapist working in pelvic health physiotherapy for an assessment and management. **N**



Dianne Edmonds

A physiotherapist based in an obstetric GP clinic, Dianne is a course creator, Women's Health Ambassador for Australian Fitness Network and the Director of The Pregnancy Centre. She has worked in women's health and fitness for 25 years and was integral in the development of the Pelvic Floor First resources.





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About course creator, Dianne Edmonds

Dianne is a physiotherapist with over 20 years of experience with pregnancy, postnatal and pelvic floor education, treatment and fitness programs. She was the lead physiotherapist and project officer for the Pelvic Floor First project, run by the Continence Foundation of Australia and is a Pelvic Floor First Ambassador.

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WHIP YOUR BOOTCAMP INTO SHAPE!

The combination of fresh air, a social environment and a well-planned workout can be a recipe for training and business success, writes personal trainer *Theresa Prior*.

Starting your own outdoor group fitness business or bootcamp can seem overwhelming, but with some planning you can establish a strong structure that will cope with whatever you and your clients throw at it.

By taking some time to create some simple but flexible systems, you can ensure that you are not spending hours planning sessions – which will allow you more time to work on the bigger picture for your business.

By considering the following points, you'll be well on your way to filling amazing sessions with clients who, by becoming your raving fans, will be the best marketing you could wish for.

It's a numbers game

The first consideration with any group fitness class is the expected number of participants. Unless you are doing a class where every participant is doing the same, bodyweight-only exercises, then numbers will be important to you. While it is nice to know who is coming along to your session beforehand (and important in order to plan for any contraindications for certain participants), the clients you have booked in to your session will not always be the clients who actually participate in your session. It is prudent to plan the session so that one person could do it, or 30 people could do it. Ways to do this include:

- Using a timer for circuit stations (there are plenty of great interval timer apps available)
- Being flexible with circuit stations if one is a timekeeper station (i.e. everyone moves after 30 ball slams) – you may need to decrease or increase the stations to suit the number of participants

- Understanding that a group of three can work in the same way as a pair – simply have two participants do the same thing in that trio
- Understanding that a group of three can also be a pair in boxing – either two boxers or two pad holders, and have them switch around more often than the actual pairs.

When you first start out, planning for a sudden change in participant numbers can be helpful. It's good for your own confidence and peace of mind to have a Plan A, Plan B and even Plan C for each session. Over time, however, you'll gain the confidence and experience to safely alter a session plan on the fly to suit the number of participants standing in front of you.

The great outdoors session template

So what can a typical outdoors session look like? You will know your own training style and the interests of your clients, so if you're a fan of the ViPR or your clients revel in padwork, then include elements of what you love doing. Remember, however, that most people sign up to outdoor training because it's different to what they could get from an indoor gym or studio-based group workout.

An element of fun can really add that *joie de vivre* to your sessions and have your clients talking about you for days afterwards. A great session template that packs in the smiles as well as the effort could include the following (times are recommendations only):

Warm up [5 minutes]

- Keep this simple, timed and relevant to the planned, main circuit.

- Participants should work individually.
- Timing movements, rather than counting, allows for latecomers to slip in without disruption (there will always be a latecomer – allowing them the chance to fit in without embarrassment is a welcoming thing to do)
- The warm up also gives you the chance to observe participant energy levels, participant engagement, attitudes towards the session and any injuries that will require exercise modifications.

Game [10 minutes]

- It is not imperative to play a game, but doing so will encourage client interaction, set the tone for the session, and raise energy levels



THE QUICK READ

- Participant numbers in outdoor training sessions can vary considerably, so plan sessions that one person could do, or 30 people could do
- A great template for an outdoor session might include a warm up, a game, a main circuit, another game and then a cool down
- To avoid client burnout, you need variety throughout the week, month or six-week block, rotating through cardio/running sessions, strength-based sessions and interval sessions
- By making sessions fun and incorporating opportunities for client interaction, you will increase adherence, participation and word-of-mouth referrals.



- Keep the first game simple – your participants are still warming up, and warming to each other
- As before, have a Plan A and a Plan B, so you can accommodate varied participant numbers.

Main circuit (20 minutes)

- The theme of this section should be in keeping with what has been delivered in the Warm up and Game. Stick to one training style (i.e. is it a cardio/running session, a boxing session, or a strength session? More on this below)
- Keep it to timed stations if you are really unsure of participant numbers
- Do not participate yourself: this is your clients' workout, not yours. By all means, do a few ball slams beside Sam to help correct her technique, but do not do the whole circuit.

Finisher game/challenge (5 minutes)

- This is like the initial game – it is not imperative to do it, but it's a great finisher because it gives clients a final burst of energy, allows for further client interaction and will be the thing clients remember after the session is finished
- Your finisher can be more mentally challenging than the initial game, as your clients have warmed to each other and have definitely woken up!
- Again, have a Plan A and a Plan B to accommodate varied numbers

Cool down and stretch (5 minutes)

- Whether you believe stretching at the end of the session is effective for client results or not, it is important in the group fitness setting as it allows your participants to come together as one group
- This is a chance to celebrate the achievements of the session

- Initiate discussion and excitement for the next session
- Discuss any group events that you may have coming up, such as fun runs or endurance events
- This time gives your clients a further chance to interact.

The bigger picture

As you are planning your outdoor group fitness sessions, it's wise to look at the bigger picture first. Are you running a six-week block, or do you run ongoing sessions? Do your participants tend to come to all sessions on offer, or do some only come one or two days a week? Whatever that bigger picture looks like for you, it is very important that you plan your sessions to avoid client burnout. You need variety throughout your week, your month or your six-week block. If you've got clients only coming one day a week, then each Tuesday should look different to avoid client burnout and boredom.

This variety will be dependent on the equipment that you have available. Ideally, though, you should be rotating through cardio/running sessions, strength-based sessions and interval sessions. If you have the equipment, the training and the insurance, then you could add boxing or other training styles into that mix as well.

Make everyone feel valued – and be prepared!

At the end of the day, whether you've got four participants or 34 participants, it is prudent to make each and every one of them feel valued and important. Make a latecomer feel just as welcome as the client who got there early and helped you set up. Make the client who just rocked up without booking in feel just as welcome as the client who booked two weeks ago. Make the client who can't yet run 100m feel just as welcome as your marathoner client.

Your session plans should be equally as varied as your clientele. Plan for a variety of ability, a variety of numbers, and a variety of training styles. Know that the session you plan on paper may not be the session that you deliver – and that that's OK. As long as everything is done safely, with common sense and within your scope of practice, it will all get easier with time. **N**



Theresa Prior

Theresa is a personal trainer with a specialised qualification in post-natal assessment and functional exercise prescription. She is also a qualified outdoor education teacher. Theresa is passionate about helping mums rebuild their strength, function and confidence.



MORE?

Click these links for further reading and resources to assist you with session planning:

- Bootcraft
- Fitness Games Zone
- Games Fitness
- Unique Bootcamp Workouts
- Bootcamp Specialist Certificate

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BASE GX



GUT FEELING: WHAT'S THE FIZZ WITH KEFIR?



Packed with live microbes like the ones found in our gut, the ancient fermented drink kefir has become popular with those conscious of maintaining a well-balanced gut microbiota, writes dietitian and nutritionist Lauren Marino.

There's a bit of a buzz at the moment around kefir, and sooner or later it's likely that one of your clients will ask you about it. So, what is it, and what does it do?

Kefir is a fermented drink made by adding kefir grains to either milk or a sugary water. The grains look like small pieces of cauliflower and are a complex mix of bacteria and yeast. By adding these to the milk or sugar water, the kefir grain creates a fermentation process with the available sugar, resulting in a drink with a very mild natural fizz. In the case of most kefir where dairy milk is used, the naturally occurring lactose is the sugar that undergoes the fermentation process. Kefir can also be made with plant-based milks such as coconut or soy, and with coconut water, as long as there is a small amount of available sugar to ferment.

Although it has become increasingly popular over the past couple of years, kefir actually originated thousands of years ago in the Caucasus Mountains in the former Soviet Union. The word 'kefir' is said to

have originated from the Turkish word 'keyif' which means 'good feeling' and relates to the feeling of health and wellbeing when it's consumed.

Kefir and gut health

Kefir has become more prevalent as we learn more about gut health. Due to the fermenting process to create kefir, live microbes like the ones found in our gut microbiota are produced. This may contribute to creating a well-balanced gut microbiota.

A well-balanced gut microbiota

Our gut microbiota is incredibly diverse, with 10 to 100 trillion interrelated bacterial cells calling our intestine home. They perform a range of functions such as increasing our immunity, preventing the growth of harmful species, and producing hormones, vitamins and amino acids. They can also strengthen the gut barrier, deactivate toxins and influence gut movement and function.

Imbalance of the gut microbiota is

associated with obesity, is linked to chronic inflammation diseases such as rheumatoid arthritis and irritable bowel disease, and may even be capable of causing disease by allowing infection. So, maintaining a well-balanced and healthy gut microbiota is important to maintain overall wellbeing.

Other benefits of kefir

Kefir has also been shown to be an anti-fungal and anti-bacterial which can protect against infection. These properties may be part of the reason why a study has shown that short term consumption of kefir can reduce risk of tooth decay. A small-scale study has shown that daily kefir may reduce the symptoms of chronic constipation, which is not surprising as we know that a healthy gut microbiota is responsible for maintaining bowel movements. As both of these studies are small and not of high quality, however, more research and studies are required before these potential benefits influence nutrition recommendations.

Although the kefir grains are called grains, they do not contain any gluten, so kefir is fine for those with coeliac disease and gluten sensitivities. It is also low in lactose because the lactose is the sugar that undergoes fermentation, meaning it may be better tolerated than regular milk or yoghurt by those with lactose intolerance or irritable bowel syndrome.



Nutrients in kefir

Other qualities of a dairy-based kefir are its high calcium content, which encourages strong bones. In fact, a small-scale study showed increased bone mineral density in patients with osteoporosis who supplemented with kefir plus a calcium supplement. This new research is exciting but needs to be investigated further.

Kefir is also a good source of protein, which increases meal satisfaction and fullness and assists in muscle building. Kefir also contains Vitamin B12, which can prevent fatigue and help keep the body's nerve and blood cells healthy.

More high-quality research is required to back up some of the anecdotal and theoretical claims around this fermented drink. However, kefir is a nutritious, safe and inexpensive food that makes a great addition to most people's diets.

Although more high-quality research is required to back up some of the anecdotal and theoretical claims around this fermented drink, for most people kefir is a nutritious, safe and inexpensive addition to their diet. **N**

FOR REFERENCES CLICK HERE



Lauren Marino, APD

Lauren is a Melbourne-based Accredited Practising Dietitian with clinical experience in a range of areas including chronic disease, sports and gut

health. A nutrition ambassador for The Collective, Lauren is passionate about empowering individuals to take control of their health, improve their relationship with their bodies and fuel themselves better.



YOUR CHANCE TO WIN

The Collective recently introduced its range of Kefir Spoonable yoghurts, containing 13 live culture strains and packed with both probiotics (friendly bacteria) and prebiotics that fuel the probiotics!

Available in the four flavours of Raspberry Acai, Blueberry Hemp, Date Cacao and Fig Ginger, they have been designed to give your gut a healthy dose of vitamins, minerals and nutrients.

For your chance to win 1 of 5 prize packs (containing the four different flavours) email editor@fitnessnetwork.com.au and tell us in no more than 50 words why you've got a good feeling in your gut about this fermented food.

LISTEN UP!

A roundup of the recent episodes of The Fitness Industry Podcast, powered by Australian Fitness Network. Click to listen directly, and subscribe at Soundcloud or Apple Podcasts.



The 7 practical habits of mental vitality

with Professor Paul Taylor

Prominent exercise physiologist and neuroscientist Paul Taylor discusses practical strategies to immediately improve thinking; cold showers, stress response and immunity; choosing who we want to be each day; and digital sunsets and honouring our circadian cycles.

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Become the GFM your club needs

with Kirsty Nield

Leading instructor and educator Kirsty Nield chats about the early days of group exercise; getting to know each instructor as an individual; understanding demographics and timetabling, and the importance of consistency among instructors when it comes to format and technique.

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Passion persuades: keeping members and clients for longer

with Paul Brown

Paul Brown, aka 'Mr Retention', talks about making members want, not just need, exercise; keeping services in-house for the good of your brand; and helping clients switch their focus from how exercise makes them look to how it makes them feel.

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How Les Mills stays relevant through continual adaptation

with Clive Ormerod & Ryan Hogan

The CEO's of Les Mills International and Les Mills Asia Pacific, Clive Ormerod and Ryan Hogan, discuss staying relevant by continually adapting to customer expectations; growth markets and regional program preferences; and demand for high quality instructors.

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Moving for mental health

with Kylianne Turton

Counsellor and movement coach Kylianne Turton chats about about changing the language and stigmas around mental health; combining physical challenges and nature to improve mental wellbeing; and how touch and breathing can calm the sympathetic nervous system.

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Your first month defines your PT career, so give it your all

with Pete Gleeson

Head of PT for Goodlife Health Clubs, Pete Gleeson, chats about the importance of PTs leading by example; focusing on the golden prospects on the gym floor before you spend a cent online; and using 'champion networks' to build your reputation for you.

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INFORMATION HANDOUT

WORK OUT WITHOUT THE BREAKOUT

Getting your sweat on is part and parcel of exercise, but it can negatively affect your skin. Dermal Therapist *Dr Giulia D'Anna* shares her top tips for caring for your skin post-exercise.

A great workout usually results in a satisfying sweat, but a little less rewarding is the consequent skin breakout that can occur. The following will help you to keep your skin looking and feeling as good as the rest of you.

3 top skincare tips for exercisers

Schedule workouts around any skin treatments

After having any kind of facial, skin needling or even a humble 'wax', try and avoid the gym for 24 hours. These sorts of treatment make the skin hyper-inflamed, so afterwards, it has to work hard to repair, restore and rebalance. If you add a workout to the mix, it is just too much for the skin. The sweat glands are often 'sealed shut' due to inflammation caused by the treatment, so if you proceed to exercise, the sweat will still form but have no means of escape. This causes a blockage in the sweat gland, often leading to localised infection or acne. So, sweating is best avoided after having any kind of skin treatment or waxing.

Use skin-friendly products

After sweating heavily, you may find that your skin looks shiny or oily and be tempted to wash or exfoliate frequently to try and combat this. However, washing away the oils on the skin often leads to more oil being produced by the skin to combat this surface loss. Instead, use oil-free moisturisers. If you wear makeup at the gym or when training, it is advisable to limit your use of varieties that contain silicones, which are heavy and do not allow the sweat to escape the skin. Instead, use mineral makeup which sits on the surface of the skin and allows sweat, oil and moisture to escape.

Shower smarter – not hotter or longer!

When you've had a sweat session, it can be tempting to treat yourself to a long hot shower. The truth is, however, that this is no treat for your skin. Hot water dissolves the surface oil on the epidermis, leading to dehydration of the skin, so although it may feel therapeutic, it isn't. Taking a long shower is also not great, because the skin surface has a natural pH of around 5.5, whereas water's is 7.0. Over time,

washing with even water alone can raise the skin's pH. Add ordinary soap into the mix, and the pH rises to 10. Such an elevation in skin pH leads to a greater risk of skin breakouts as bacteria thrive in a neutral or basic environment. Those with sensitive skin will more likely also show signs of increased irritability and redness each time their skin pH deviates north of the usual acidic surface pH. It is far kinder to your skin, therefore, to set the temperature a little lower and to limit your shower time to around five minutes or less (which is also more environmentally and economically friendly!) **N**



Dr Giulia D'Anna

Giulia graduated from the University of Melbourne in 1996. After commencing her own dental practice in 1998, her interest in cosmetic facial procedures led to further training and study within the field of non-surgical cosmetic injectables and dermal science. She now practices in both fields, with expertise in facial rejuvenation and enhancement procedures.





RESEARCH REVIEW

COULD BAD BREATH BE GOOD FOR YOUR HEALTH AND FITNESS?

Researchers set out to investigate whether using antibacterial mouthwash could negate the blood pressure-lowering benefits of exercise by reducing the nitrate-enabling activity of oral bacteria.

Review by *Dr Mike Climstein PhD* and *Dr Joe Walsh PhD*

“

If the bacteria in the mouth are removed with the use of antibacterial mouthwash, nitrite cannot be produced and the blood vessels remain in their current state

”

Title: Post-exercise hypotension and skeletal muscle oxygenation is regulated by nitrate-reducing activity of oral bacteria

Authors: Dr Cutler and colleagues. (Institute of Health & Community, University of Plymouth, Plymouth, UK)

Source: *Free Radical Biology and Medicine* 143:252-259.

Introduction: We see a large number of patients in the SCU student-led Exercise Physiology clinic, and the majority of them are on either beta blockers, angiotensin-converting enzyme inhibitors, calcium channel blockers or some other class of antihypertension medication to help reduce their blood pressure to normal levels. It is important to note that the American College of Cardiology and American Health Association have now defined high blood pressure (i.e. hypertension) as a blood pressure of > 130/80 mmHg (the old threshold was > 140/90 mmHg). Clearly, the medical and health experts are taking a more conservative approach to what threshold represents high blood pressure! This is highly beneficial to the individual's health, as it reduces the likelihood of cardiovascular disease (i.e. heart attacks), cerebrovascular disease (i.e. strokes) and kidney disease.

Unfortunately, we see a large number of patients in their late 30s

to early 50s who are generally healthy but have elevated blood pressure. The GPs refer these patients so we can prescribe evidence-based exercise to help them improve their resting blood pressure without the need for medication. Regrettably, some of these individuals will not adhere to the recommended dose (i.e. frequency, intensity, duration) of aerobic and resistance training exercise and subsequently will require medication to normalise their resting blood pressure. It should be noted that these same individuals also usually have unfavourable cholesterol levels (i.e. high total cholesterol, high low-density lipoproteins, high triglycerides and low high-density lipoproteins – the latter being good cholesterol) which is another risk factor for cardiovascular and cerebrovascular disease, and which has also been shown to improve with exercise. These same patients therefore end up on yet another prescribed medication (usually a statin) to help reduce this risk factor for cardiovascular and cerebrovascular disease.

There is substantial research which illustrates the benefits of regular exercise training on resting systolic and diastolic blood pressure. However, most individuals do not realise that there is a benefit seen in both acute (immediately following an exercise session) and chronic (i.e. 10 weeks or more) exercise training.

Dr Cutler and his colleagues, as part of his PhD, conducted a very interesting study which has recently attracted worldwide attention. They are aware that post-exercise hypotension (i.e. blood pressure lowering) occurs in both healthy and hypertensive individuals following an aerobic exercise session. The mechanism for acute post-exercise blood pressure lowering is still not fully understood, but in brief, it is believed that post-exercise hypotension has an effect on nitric oxide. Nitric oxide causes blood vessels to relax and dilate, and this lowers blood pressure. For example, Houston and Hays (2014) gave hypertensive individuals oral lozenges that generated nitric oxide in the mouth, and this resulted in a significant decrease in resting blood pressure (4mmHg systolic and 5 mmHg diastolic).

What is unique about Dr Cutler's study



is that the researchers postulated that normal antibacterial mouthwash has nitrate-reducing properties on the oral bacteria in the mouth, and that simply washing the mouth out with an antibacterial mouthwash would negate the blood pressure-lowering benefits of the exercise session. A fascinating and important research question.

The researchers recruited 23 healthy individuals who were non-smokers, not obese (BMI not > 30kg/m²) and had normal blood pressure. Participants completed 2 treadmill workouts at 65% (moderate intensity) of their maximal aerobic capacity (VO₂max). The subjects completed four sets of seven minutes running on the treadmills, with a three-minute rest period between each exercise bout. The subjects were randomised such that prior to one treadmill run they rinsed their mouth with an antibacterial mouthwash (0.2% chlorhexidine) and prior to the other with a placebo (mint flavoured) one. They were unaware of which they were using in each instance. Blood pressure and nitric oxide was measured before the treadmill exercise, one hour post-exercise and two hours after.

Results: The average systolic blood pressure was significantly lower at one hour post-exercise (-5.2mmHg) and at two hours post-exercise (-3.8mmHg) as compared to the baseline resting measurement. However, when the antibacterial mouthwash was used, the systolic blood pressure response post-exercise was reduced by 61% (i.e. the systolic blood pressure only decreased by 2.0mmHg) at the one hour post-exercise time period and 100% reduced at the two hours post-exercise period.

Dr Cutler concluded that it appears that oral bacteria are the key to opening up the blood vessels, which is itself key to seeing blood pressure decrease. If the bacteria in the mouth are removed with the use of antibacterial mouthwash, nitrite cannot be produced and the blood vessels remain in their current state (i.e. they do not relax and vasodilate after exercise). He further added that existing studies show that, exercise aside, antibacterial mouthwash can actually raise blood pressure under resting conditions.

Pros: This was a very interesting study. We have seen a number of gut-related health and fitness research articles in the past two years. It is becoming apparent that the oral and gut microbiomes are far more important to our health and wellbeing (and fitness) than was previously suspected.

Cons: It would be beneficial for researchers to conduct the study with individuals who were hypertensive, elevated, stage 1 and stage 2. This would be a good avenue for future research. **N**



THE QUICK READ

- There is substantial research which illustrates the benefits of regular exercise training on resting systolic and diastolic blood pressure
- Researchers investigated whether using antibacterial mouthwash could negate the blood pressure-lowering benefits of exercise by reducing the nitrate-enabling activity of oral bacteria
- Study subjects who rinsed their mouths with antibacterial mouthwash after an exercise session had a significantly reduced systolic blood pressure response
- The researchers suggested that oral bacteria are the key to opening up the blood vessels, which is essential for blood pressure to decrease.

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- Houston, M., & Hays, L. (2014). Acute effects of an oral nitric oxide supplement on blood pressure, endothelial function, and vascular compliance in hypertensive patients. *Journal of Clinical Hypertension*. 16(7): 524-529.



**Dr Mike Climstein, PhD FASMF
FACSM FAAESS AEP**

Dr Climstein is one of Australia's leading Accredited Exercise Physiologists. He is a faculty member in Clinical Exercise Physiology, Sport & Exercise Science at Southern Cross University (Gold Coast).



Dr Joe Walsh, PhD

Joe is an exercise science researcher. He has worked in a number of large international research teams with study findings presented around the world. In addition to working in the university sector, he is a director of Fitness Clinic Five Dock and Sport Science Institute.





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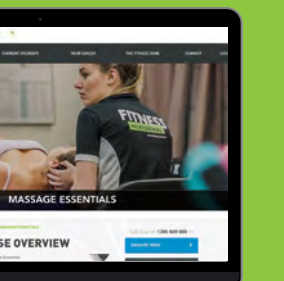
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GET YOUR PT BUSINESS ALIGNED ONLINE

Jill Schoolenberg explores how aligned website and social media strategies can help to boost the power of your PT business.

A personal training business can succeed if it provides a service that people want: effective, motivational workouts that get results. In addition to offering compelling products and services, having an effective online strategy can also help your business grow, by allowing you to more effectively engage your current clients and reach new audiences which may ultimately convert into new clients.

Research by web hosting company GoDaddy showed that 58% of respondent Australian small business owners believed that a website opens up new opportunities. Although most PTs will have an online social presence, it's by no means a given that they will have their own website.

Whether a website functions as a platform for clients to book sessions online, or as a source of information about training services, classes or upcoming events, it can be a central hub for information you control about your business. A social media page, meanwhile, can be an effective tool to connect with your clients, develop a brand

identity on a more personal level, and help drive traffic to your website.

Individually, websites and social media pages can be extremely useful, but together, they can be even more effective. The following tips can help you make the most of your online presence by aligning your website and social media strategies.

Build a consistent brand story

A website and social media page that reflects your PT business' persona can be used to help create a digital image about your business. Think about the brand you want to build. Do you want to be informative? Witty? Inspiring? Once you have a clear image in mind, it's important to make sure that image is consistent on every channel, from your business website to your Instagram feed.

Take the time to think about whether the content you are posting is aligned with your business' brand story. For instance, if your aim is to be informative, consider sharing educational content about nutrition. On the other hand, if your aim is to be inspiring,



THE QUICK READ

- In a crowded marketplace, your PT business needs to stand out from the crowd
- A website can function as a central hub for information you control about your business
- A social media page can help you to connect with your clients, develop a brand identity on a more personal level, and help drive traffic to your website
- Facebook, Instagram and LinkedIn have different audiences, so consider who you want to reach, and through which platform
- Creating shareable content on social pages is a great way to engage both potential and existing clients and encourage them to visit your website.



The more meaningful content you add to your website, the more pages there will be listed from your domain name.



consider sharing motivational quotes or images. Maintaining consistent content that reflects your business' persona also helps ensure your clients easily recognise your brand across any platform.

Choose social media platforms with your audience in mind

As you consider how to align your website and social media strategies, take some time to consider your audience. By doing so, you can identify the most effective social media platforms to reach them.

If you're looking to communicate directly with clients, Instagram and Facebook can be great choices. Research shows that 90% of small businesses using social media have a Facebook profile to interact with their customers. However, if you're looking to increase engagement with professional contacts such as gyms, other trainers or sponsors, you might want to use LinkedIn. Once you have identified the best social media platforms for your PT business, you can develop your strategy to be aligned to your targeted audience.

Optimise your content

Whether you're new to the optimisation game or an organic marketing specialist, you may want to think about Search Engine Optimisation (SEO). Essentially, SEO is the process that helps your business website rank higher with Google and other search engines. An effective SEO strategy can help drive more traffic to your website. SEO and

social media often share common goals: to increase website traffic and boost conversions. Therefore, aligning the two could help you reach more people.

One way to increase your SEO ranking is by adding blogs to your website. The more meaningful content you add to your website, the more pages there will be listed from your domain name. This helps your website reach more people who search for PT businesses online. A blog is also a great way to keep your website fresh and relevant for your audience, and can demonstrate that you are an authority and expert voice in your specific field of fitness. For instance, you could pen a piece around the best foods to eat before a workout, or a blog about muscle building vs. fat burning exercises. Blogs that include keywords or phrases that people are likely to search can help increase your SEO ranking. Good content won't only attract more people to your website, it will also increase the amount of time that people spend on your site, which will also help boost your ranking.

Create shareable content

Publishing content that encourages people to engage with it and re-post on social pages is a great way of expanding your reach and steering traffic to your website. Research shows that over half (51%) of small businesses have a presence on social media, so it's important to stand out from the crowd. To engage your clients on social media, it can be helpful to publish eye-catching content that encourages your followers to like, comment and share your posts. This could be in the form of a link to your latest blog post, or a dramatic muscle gain transformation photo. Consider the purpose of your post. Is it supposed to be informative or visual? Entertaining or thought-provoking? There is no definitive way to create shareable content, but producing high-quality and engaging content for your news feed could encourage people to spread the word about your PT business through your website.

Creating shareable content is just the first step though. When someone visits your website after seeing a social post, it's important that content is consistent and aligns with your brand image across every platform. Lighthearted and witty social content that links to a dry and characterless website presents an incongruous brand image.

No matter the industry, engaging with your clients through both your website and social media simultaneously can help you create an aligned brand identity. Take a few moments to think about how an aligned website and social strategy could help promote your brand and grow your PT business. **N**



Jill Schoolenberg

Jill is the Regional President for Australia, Canada and Latin America at web hosting company GoDaddy, which aims to empower entrepreneurs. For simple tech solutions to help make your life as a business owner easier, visit godaddy.com.au



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YOUR HEALTH IS THE KEY TO YOUR BUSINESS PERFORMANCE



Making conscious choices about how you treat your body and mind will greatly influence how you respond to challenges and be the recipe for success in small business, writes Anastasia Massouras.

Remember when you decided to start your own fitness business, fuelled by the prospect of freedom, flexibility and unrestricted earning potential? The excitement of choosing the hours you worked, taking holidays when you wanted, for as long as you wanted.

Now compare this to the reality: working up to 80 hours per week, struggling with cash flow or financial expertise, dealing with mental health and wellbeing issues, and managing casual staff and their issues. These are the most common challenges facing many small business owners today.

Statistics from the *Australian Small Business and Family Enterprise Ombudsman* show that 97% of Australia's economy is made up of small business with no more than twenty employees. Yet more than 60% of these fail within their first three years, and the odds are stacked against those that continue.

In addition, in 2019, the Productivity Commission Inquiry into Mental Health Report, conducted by The Mentally Healthy Workplace Alliance, revealed one in five working Australians reported experiencing mental illness, with evidence suggesting psychological distress is most acute for sole traders. Fleeting instances of excitement, achievement and growth are often buried among feelings of isolation, fatigue and ongoing financial stress. There is, however, a way to bring happiness back to your work.

Bring happy back

Just as you have achieved success in your business and life thus far, you can achieve further success with the right support, education, tools and strategies surrounding your health. Extending your hand for help is the first step towards gaining a sense of control over your environment. Knowing you can change yourself, your business and your life is crucial: not just to survive, but also to progress. Silent suffering is the silent killer of a business.

Your mindset plays a huge role here. Your perception of your reality powerfully influences the decisions you make in business. It helps you move from talking about what you wish for to actually taking steps, and doing the stuff that will transform your life. This kind of growth brings feelings of freedom, power, authority, motivation and encouragement. This is a tipping point in your business. You can breathe again and start to find joy in why you do what you do each day. You shift from feeling overwhelmed and helpless to hopeful and in control.

24/7 self-care

Running your own small business is a 24/7 activity, which is why you need to be mentally healthy, fit and strong. There will always be pressure: it will never go away. There will always be setbacks, failures, and obstacles. What counts is how you deal with that pressure, with those challenges.

It's essential to move away from simply reacting to events and toward responding to events. It is also important to learn how to prevent stress or adversity that you may be experiencing in one aspect of your life from negatively impacting other areas.

Taking conscious choices each day about what to eat, when to exercise, and how to switch off from work and on for home is the recipe for success and stamina in small business. As Phil Knight, the CEO of Nike, said, 'There is an immutable conflict at work in life and in business, a constant battle between peace and chaos. Neither can be mastered, but both can be influenced. How you go about that is the key to success.'

Maintaining your own health and that of your business requires time, consistent effort, commitment and care, but it is an investment that will reap dividends. **N**



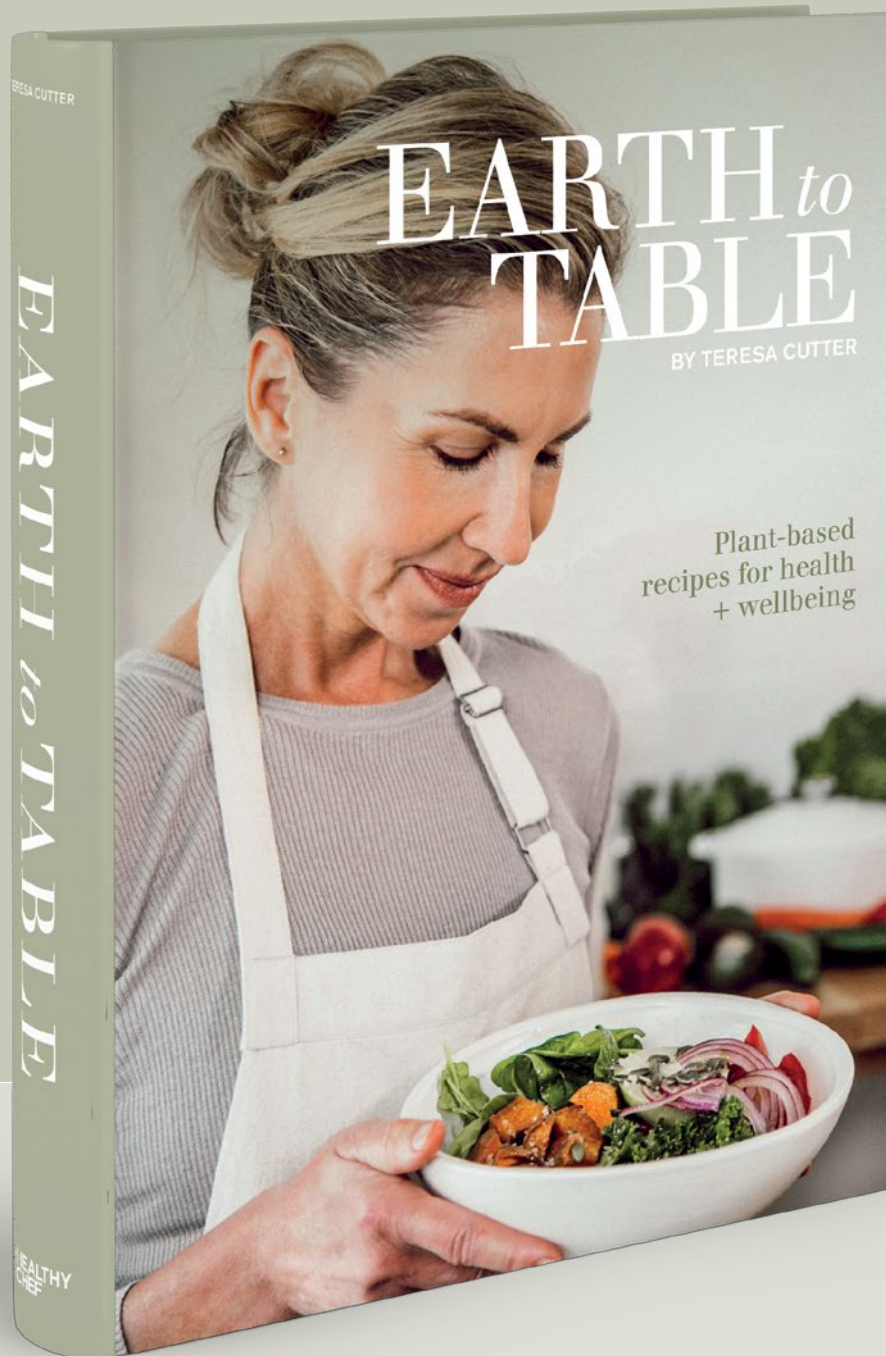
Anastasia Massouras

Anastasia is a leader, facilitator and coach helping small business owners and teams to overcome barriers that prevent growth and success. She is the CEO

of Work Happy, which provides wellbeing and employee assistance programs and tailored advice for corporates, as well as the founder and CEO of Pure Insights, a consultancy specialising in mental health intervention.



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PROTEIN BALLS AND VEGGIE MUFFINS

Whether you're looking for nutrient-packed snacks or brekkie bites to grab'n'go, *The Healthy Chef Teresa Cutter* shares some delicious inspiration.

Collagen protein balls

These scrumptious balls are filled with antioxidant superfoods such as turmeric and pure collagen protein to help you glow from the inside out. Zesty and bite-sized, they're the perfect snack to take when you're on the go.

Makes 10

Ingredients

155g (1½ cups) almond meal
100g (1 cup) desiccated coconut + extra for rolling
1 tablespoon Healthy Chef Marine Collagen
½ teaspoon ground turmeric

1 orange, zest and juice
155g dried apricot
1 tablespoon extra virgin avocado or olive oil
1 tablespoon pure maple syrup or a little stevia to sweeten

Method

1. Combine almond meal, desiccated coconut, collagen, turmeric, zest from 1 orange and the dried apricot into a food processor.
2. Process until combined. The mix should be moist, golden and crumbly.
3. Spoon the mix into a mixing bowl, then add the avocado oil, maple syrup and the juice from one orange.
4. Squish together with your hands until you have a soft delicious ball, adding more orange juice or water if required for mixing.
5. Roll into balls, and then roll in desiccated coconut.
6. Refrigerate for 1 hour before serving and enjoy.

Notes and inspiration: Add a spoonful of protein powder in place of marine collagen.



Savoury vegetable muffins

High in protein and packed with fibre and antioxidant-rich veggies, this delicious savoury muffin makes the perfect portable breakfast or lunch.

Makes 12

Ingredients

1 leek, washed and sliced
2 tablespoons extra virgin olive oil
1 bunch Tuscan kale (cavolo nero), washed, trimmed and sliced
220g baby spinach
300g ricotta cheese (firm deli-style) or firm organic tofu, grated
4 organic eggs
1 bunch parsley, chopped
1 lemon
sea salt and white pepper to taste
125g spelt flour or rice flour

Method

1. Preheat oven to 160°C fan-forced.

2. Sauté leek and Tuscan kale with the olive oil over a low to medium heat in a large pot until softened.
3. Add spinach and cook for a few minutes until the spinach has wilted then remove from the heat and cool. Drain off any excess liquid.
4. Combine ricotta and eggs into a separate bowl, then add the parsley and lemon zest followed by the vegetables, and fold through gently.
5. Season with salt and pepper, then add the flour and mix through until just combined.
6. Spoon into muffin tins and bake for 35 minutes or until cooked through, or alternatively spoon into a larger spring-form baking tin and bake for 45 to 50 minutes.
7. Remove from the oven and cool.

Notes and inspiration: Top with ricotta and micro herbs or add a little grated pecorino over the top before serving. If preferred, you can use this recipe to make 1 large tart for slicing rather than individual muffins.

These recipes are from Teresa Cutter's new plant-based cookbook *Earth To Table* (\$49.95).



Teresa Cutter

Founder of *The Healthy Chef*, Teresa is an author, nutritionist and classically trained chef. You can find more tips and recipes on her website, *Healthy Recipes App*, eBooks, Facebook and Instagram.





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NZ NEWS



News and views from the **New Zealand fitness industry.**

A new direction for Exercise New Zealand



Recently Exercise New Zealand hosted over 1,200 exercise professionals, managers, yoga teachers and individuals involved in supporting New Zealanders to be more active at three major events: the FitEx Conference, The Exercise Industry Awards, and the Hauora Yoga Conference.

At these events a new direction for ExerciseNZ was shared with the industry. The new direction is underpinned by our recent work with the World Health Organisation (WHO), and by the fact that New Zealand ranks 13th in the world in terms of physical inactivity (while at the same time being rated 10th best in the world in terms of gym membership penetration rates).

While there are many elements to the changes that we will be instigating, the two most obvious will be:

- a complete re-brand (and possible re-naming) of ExerciseNZ and all our initiatives, projects and events
- a public-facing message around 'be more active', with a simple and clear message about how to do this and where to get support.

While still very much in the early stages of development, each time the new direction was discussed, it was apparent that the industry strongly supported it, particularly with regards 'cutting through' the multitude of messages around exercising and what do to, how much to do, why to do it and – most importantly – how to get started. Many people commented that ExerciseNZ was in a unique position to deliver a singular clear message to the public with regards the benefits of physical activity and the steps needed to achieve this, without showing bias to any one product, brand or training philosophy.

In my 30 years in the exercise industry, I have never encountered an idea with such potential to positively affect the wellness of New Zealanders on such a large scale. The good news is that, while there is lots of work to do to make this a reality, we already have many pieces of the puzzle in place. Our new partnership with Com Marketing has enabled us to cost-effectively produce



professional marketing videos which, together with our proactive media engagement resulting in regular TV, radio and newspaper interviews and quotes, positions us well for when we start to engage directly with the public.

Of course, all this doesn't change one very important underlying fact: ExerciseNZ does not deliver exercise services to the public, and as such is not limited in its messaging with regards 'product'. Our message will be about the benefits of increasing physical activity by engaging with a wealth of providers from New Zealand's diverse exercise, activity and movement community – the vast majority of whom are registered exercise professionals or members of ExerciseNZ.

It's certainly an exciting time to be part of the exercise and movement community in New Zealand, and we look forward to the opportunity that this new direction opens up for us all into 2020 and beyond.

Richard Beddie
CEO, ExerciseNZ
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Learn how to deliver the most effective warm ups to prepare your clients for functional training. Exercises include basic joint rolling, self-myofascial release with foam rollers and tennis balls, joint mobilisations, muscle activations and static stretching. This preparation makes functional training safer and more accessible to previously injured or deconditioned clients.

[MORE INFO](#)



8 CECs
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FUNDAMENTALS OF KETTLEBELL – LEVEL 1&2 BUNDLE **NEW**

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[MORE INFO](#)



6 CECs
CPDs **\$289**

FUNDAMENTALS OF SUSPENDED FITNESS – LEVEL 1&2 BUNDLE **NEW**

Discover suspended fitness concepts and learn how to assess and adjust essential and advanced suspension exercises in order to safely train individuals of all levels. Level 2 delves deeper, exploring planes of motion, closed kinetic chain, myofascial lines, shoulder joint mechanics and uncontrolled lumbar extension. Learn the underlying principles of key exercise techniques and become an advanced suspended fitness training expert.

[MORE INFO](#)

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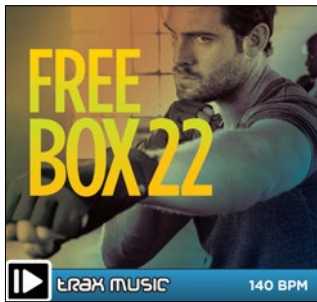
Power Music

Power Music is Australian Fitness Network's EXCLUSIVE provider of PPCA-free music. As a Network Member, you receive 10% off all purchases, including custom playlists, individual tracks, CDs, choreography videos and more.

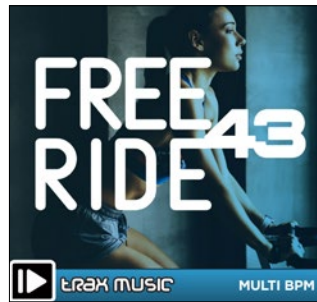
Power Music also features ClickMix, which enables you to create your very own custom mix at whatever BPM you like and perfectly 32-count phrased. This allows you to truly use the music of your choice for your classes.

Click each album below for full playlist and preview listen, and [CLICK HERE](#) to check out the full range of Power Music – remembering to use the code **network2020** to save 10% at checkout!

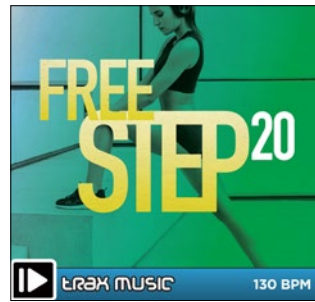
Trax Music (PPCA-free)



FreeBox 22



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Let's Go To The Movies Vol. 2



Songs of Fall 2019



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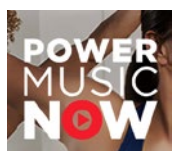
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