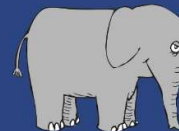




**Driving fitness
into the frontline of**
- metabolic,
- musculo-skeletal and
- mental health

RATIONALE





Fitness Frontline is a Miller Health concept, established to initiate the process of driving fitness into the frontline of health care.

We wish to introduce our metabolic, musculo-skeletal and mental health programs, publications, assessments and resources to a wider audience, with fitness and medical practitioners, along with allied health practitioners providing services that include the prescription, measurement, management and monitoring of aerobic fitness, strength and flexibility training programs, particularly for 'regular folk'

We are cognizant of the fact that the health, fitness and wellbeing of Australians is in decline. This is having a significant impact on the growth in demand for medical services, a high significant proportion of which are generated by a lack of fitness. The lack of fitness is costing the country tens of billions of dollars.

We believe fitness practitioners have a role to play in the provision of fitness services to: -

- primary medical care
- secondary medical care
- physical therapy
- mental health counselling
- nutrition counselling
- private health insurance
- work health fitness and wellbeing
- workers comp insurance
- the fitness industry
- physed in schools

HISTORY

In 1941 the Commonwealth Government passed the **National Fitness Act**. (See page 44.) Apart from establishing National Fitness Councils in each state, the major success of the Act was the establishment of physical education courses in universities. It took until the mid-70's before graduates (mostly with only a 2-year diploma) started pouring into schools in large numbers.

The 1980's saw the development of training courses for fitness practitioners, a movement inspired and driven by Garry Egger, Nigel Champion and Greg Hurst. Champion and Hurst established the Australian Fitness Network which created a professional fitness industry.

The organization, **AusActive** has in recent years taken over the fitness industry leadership role and created a dynamic national professional association with a membership of over 20,000 certified fitness practitioners..

In 2021 the Commonwealth Department of Health published the 85 page **National Preventive Health Strategy**. (See page 45 ff.) When it comes to fitness it's a limp and useless tool.

ACTION

Fitness Frontline is calling on the Commonwealth Government to create a new National Fitness Act, one that enables the fitness and allied medical and health industries to embark on a five year plan to drive fitness into the frontline of health care (schools and workplaces), in particular, get more 'regular folks' into commercial and community fitness classes.

Driving fitness into the frontline of health care - rationale

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(0424) 391 749
October 2024



Governments

- Commonwealth
- state and territory
- local
- Medicare
-

Medical care

- primary medical care – surgeries
- secondary medical care specialists
- tertiary medical care– hospitals
- aged care
- disability care

Fitness care

- fitness centres
- yoga
- personal training classes
- ...

Allied health

- mental health counselling
- nutrition counselling
- fitness practitioners
- exercise physiologists
- physical therapists
- fitness centres

Insurance

- private health insurance
- workers compensation insurance
- income protection
- life insurance

Workplaces

- work health, fitness and wellbeing

Schools

- physical education

Community

- individuals
- social groups



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It is the vaulting ambition of National Fitness Australia to be a leader in a movement that drives fitness into the frontline of healthcare - metabolic, musculo-skeletal and mental - through the prescription, measurement, management and monitoring of aerobic fitness, strength and flexibility training programs.

We are the national organization of fitness practitioners working in both commercial and community fitness centres throughout Australia.

We are specialist publishers and distributors of health, fitness and wellbeing programs, publications and assessments.

We are seeking business and government partners who wish to join us developing a national fitness initiative to drive fitness into the frontline of health care.

Modern medicine is a wonderful thing, but there are two problems:
people expect too much of it, and too little of themselves.
Don Ardell



50 years ago the majority of people were a lot fitter, healthier and slimmer than they are now. There's a big difference between the people who were at Woodstock in 1969 and those turning up at Trump rallies!

By 2000, the rot had really set in. The population may be living longer, but not because they are fitter and healthier. They're surviving on medicine - that they want someone else to pay for.

In 2021-22 Australian governments spent more than \$250 billion on medical goods and services – an average of approximately \$10,000 per person. The most meagre of proportion of it was spent on encouraging and giving people incentives keep themselves fit and healthy to the best of their ability: as if feeling fit and healthy isn't enough incentive! Most people have never experienced the joy of feeling better that comes with a good physical; fitness program.

Most people don't know how physically fit they are. Their fitness has never been measured. The governments of Australia don't know how fit people are – whether it's aerobic fitness, strength or flexibility. Rarely is fitness prescribed, measured, managed or monitored. It rarely rates a mention in the medical lexicon.

Throughout Australia on any one day, you could count on the non-opposable fingers of one hand the number of times doctors prescribe and aerobic fitness training program in a dosage based on frequency, duration and intensity (rated against heart rate).

Only a small number of people have a regular and systematic strength and flexibility training program. The medical system has fallen down when it comes to determining the cause(s) of joint and muscle pain – and prescribing, measuring, managing and monitoring strength and flexibility training programs designed to restore poor function to good.

Medicare and state and territory governments don't know what its risk is. They just presume that they will spend more money on medical care next year than this year. Their clients don't want to pay anything!

It is illegal for private health insurers to rate their premiums against risk. They don't measure risk. They must therefore make moves to give their premium holders the greatest encouragement to keep themselves fit and healthy to the best of their ability.

Workers compensation insurers don't rate premiums against risk. They don't measure the risk of personally-generated metabolic, musculo-skeletal and mental health dysfunctions becoming 'work-related' injuries. They don't keep a keen eye on pre-existing and current conditions. They are escrow agents. They've strayed from their original role as accident insurers.

Schools don't report on the fitness of their students. They are graduating students who are in poor physical condition, a condition that will only get worse during the course of their life.

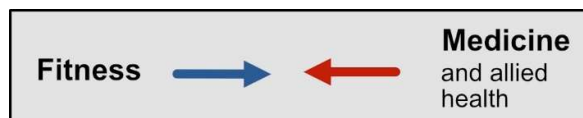
Fitness centres have shown little interest in prescribing, measuring, managing and monitoring the health, fitness and wellbeing of their members, let alone that of the community at large. They have, in the main, ignored this service to 'regular folks' who are in poor shape - and failed to generate referrals from and to doctors, nutritionists and counsellors.



National Fitness Australia is laying out the case for a dramatic change in the approach to physical fitness by all manner of health, fitness and wellbeing industry players, particularly when it comes to measuring, managing and monitoring prescriptions designed to encourage people to keep themselves fit and healthy to the best of their ability.

The focus of the National Fitness Australia concept is driving fitness into the frontline of health care.

1. expanding the scope of a range of health experts and organisations involved in the primary health care matrix - medical practitioners, fitness practitioners, physed teachers, dieticians, counsellors, employers, health and workers compensation insurers ... so they include fitness in their scope of practice and sphere of influence.
2. getting these experts and organisations working more closely with each other to get the best patient/client outcomes - in particular referring their clients to each other.



3. making better use of technology - so individuals, their health advisors and insurers can better measure, manage and monitor improvements in health, fitness and wellbeing.
4. reducing the demand for medical services, which in turn will reduce the cost of medical services borne by individuals, Commonwealth, state and territory governments and health insurers. In an ideal world where people are fitter and healthier, government and insurer outlays for medical services should be decreasing, not increasing.

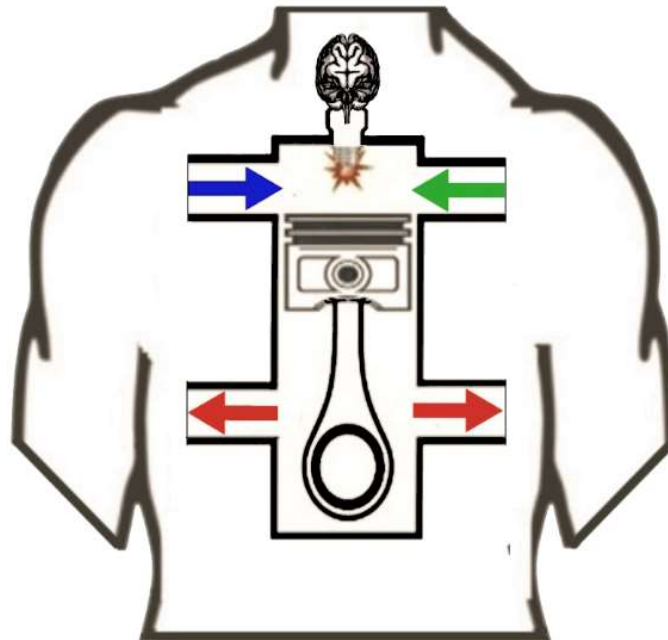
State and territory governments are on their way to spending 40% of their budget on medical services. They are borrowing money to fund it. It's an unsustainable situation. Demand is outstripping supply

5. reducing the cost of private health and workers compensation **insurance**.
6. propelling the fitness industry into the frontline of health care.
7. encouraging schools to take fitness seriously, graduating students in peak condition and knowing how to keep themselves fit and healthy for the rest of their life.

Encouraging schools to become fitness hubs by opening their facilities to the community.

Putting the overwhelming majority of the health eggs into the medical/pharmaceutical basket hasn't worked. Too many eggs that could have been kept in good condition have ended up becoming rotten. Too many eggs have been broken and trying to unscramble them is, (to put it lightly) a tough assignment. It's time for a new health care model that includes the fitness discipline.

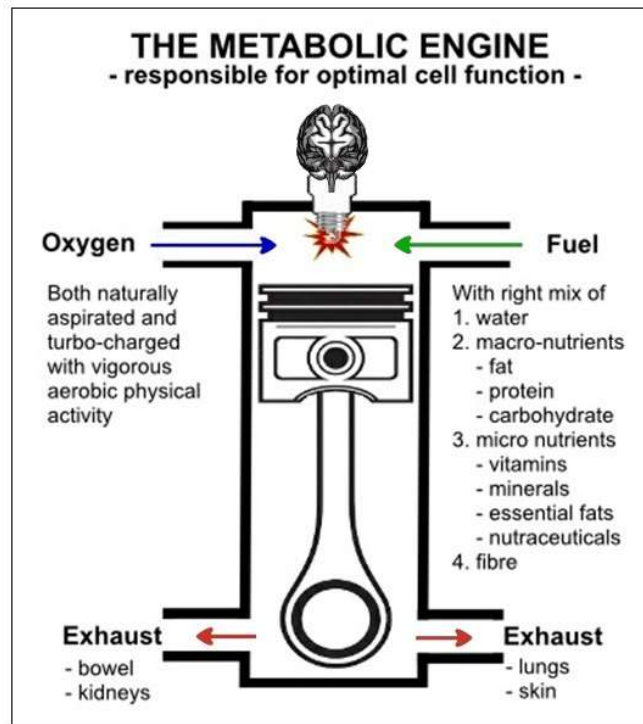
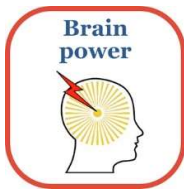
The metabolic health engine



It's a big ask expecting to stay healthy without keeping yourself fit. It's an even bigger ask expecting to get better by having someone do something to you; sooner or later you have to do something to yourself.



Good metabolic health is driven by:



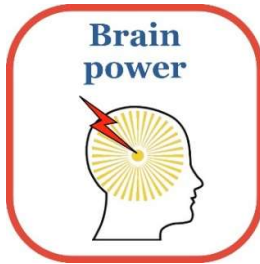
We live in an era when there is an epidemic of metabolic dysfunction. It's recognised by its symptoms most of them personally-generated, There's a good chance they can be personally ungenerated

- cardiac insufficiency
- type 2 diabetes
- headaches
- depression
- breathlessness
- elevated blood fats
- lacking energy
- insomnia
- obesity
- high blood pressure
- low libido
- sleep apnoea

The cause? a **metabolic health engine** that's

- a. not delivering enough oxygen to every cell in the body
- b. not delivering the right amount of high-quality fuel to every cell in the body,
- c. ill-equipped with an inefficient 'exhaust system', one that fails to successfully remove from every cell of the body the waste products of metabolism.

It's a journey not a sprint to get in shape.
Kerri Walsh Jennings



You've got a brain; use it to keep yourself fit and healthy to the best of your ability!

Former Australian Rules Football player and coach Tom Hafey was an inspiring and motivating guest speaker at a lot of sporting, community and corporate events, bringing his experience on the field into everyday life.

He spoke of **four D's** (which with the inclusion of 'destiny' became five D's):

- **destiny** – you've got your goal firmly fixed in your mind – you have a plan
- you have a burning **desire** to achieve it.
- you're **dedicated** to the task
- you express your **determination** in the achievement of your goal(s) but sticking to the plan
- you've got the **discipline** to achieve your destination.

If you want to improve your metabolic, musculo-skeletal and mental health, start with the desire to be fit and healthy.

There are thousands of books with quotes from great minds on 'How to be successful', 'How to get what you want', 'How to get fit'. My contribution is to leave you with two words, 'motivation' and 'persistence'.

MOTIVATION

The word 'motivation' comes from two words, 'motive' and 'action' If you want to move forward you need both.

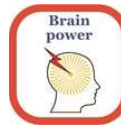
*A tip: you don't motivate yourself to do something, you do something and then become motivated.

A lot of famous runners have said that the hardest thing they ever had to do was put their shorts and sandshoes on and get outside the front door. After that it was 'one leg at a time'.

PERSISTENCE – Calvin Coolidge

Nothing in this world can take the place of persistence. Talent will not; nothing is more common than unsuccessful men with talent. Genius will not; unrewarded genius is almost a proverb. Education will not; the world is full of educated derelicts. Persistence and determination alone are omnipotent. The slogan 'Press On!' has solved and always will solve the problems of the human race.

If we could give every individual the right amount of nourishment and exercise, not too little and not too much, we would have found the safest way to health.
Hippocrates of Koz (c.460 – c.370 BC)



We'll deal with aerobic fitness in more detail later on, but suffice it to say, your level of aerobic fitness is a good indicator of the condition of the system responsible for transporting oxygen to not just working muscles, but to all major organs and every cell in your body: - via the heart, lungs and arteries. But to restrict the importance of aerobic fitness to the cardiovascular system does it a grave injustice. On the contrary, your level of aerobic fitness is one of the best indicators of the health status of most of the important body systems.

Aerobic fitness also stimulates the release of the waste products of metabolism from every cell in the body – to the outside world.

Only 10 to 15 percent of people over the age of 30 years participate in sufficiently vigorous activity (of the huff and puff variety) each week to maintain reasonable level and reap the benefits of aerobic fitness.

For too long the body system dysfunctions generated by a lack of aerobic fitness have been papered over by our reliance on the pharmaceutical industry to cure all our ills, including those that have been personally-generated. Failing to include the aerobic fitness arrow in the medical quiver has been a long standing oversight.

THE TURBO CHARGER

Aerobic fitness exercise is the body's 'turbo-charging' mechanism designed to make sure that all the trillions of cells in your body are getting the oxygen they need to work efficiently. It is the mechanism for boosting the various elimination systems, including the lymphatic system, the blood, liver, kidneys, bowel, skin and lungs. The better the cells work the healthier you are.

If you're serious about becoming aerobically fitter, merely recording time, steps or distance is pointless unless effort is also taken into account.

THE BOLD PRESUMPTION

A starting point is the bold presumption that 80% of metabolic, musculo-skeletal and mental health dysfunctions are personally generated. That's the bad news.

The good news is that if the dysfunctions have been personally generated there's a fair chance they can be personally ungenerated.

Better still is to start adult life in good physical condition and maintain it through old age.

The best time to start it NOW!

What is encouraging is the rule of thumb that for 80% of people there is an 80% chance they can get themselves back to 80% of good (better) physical condition in around 80 days, if they're diligent.

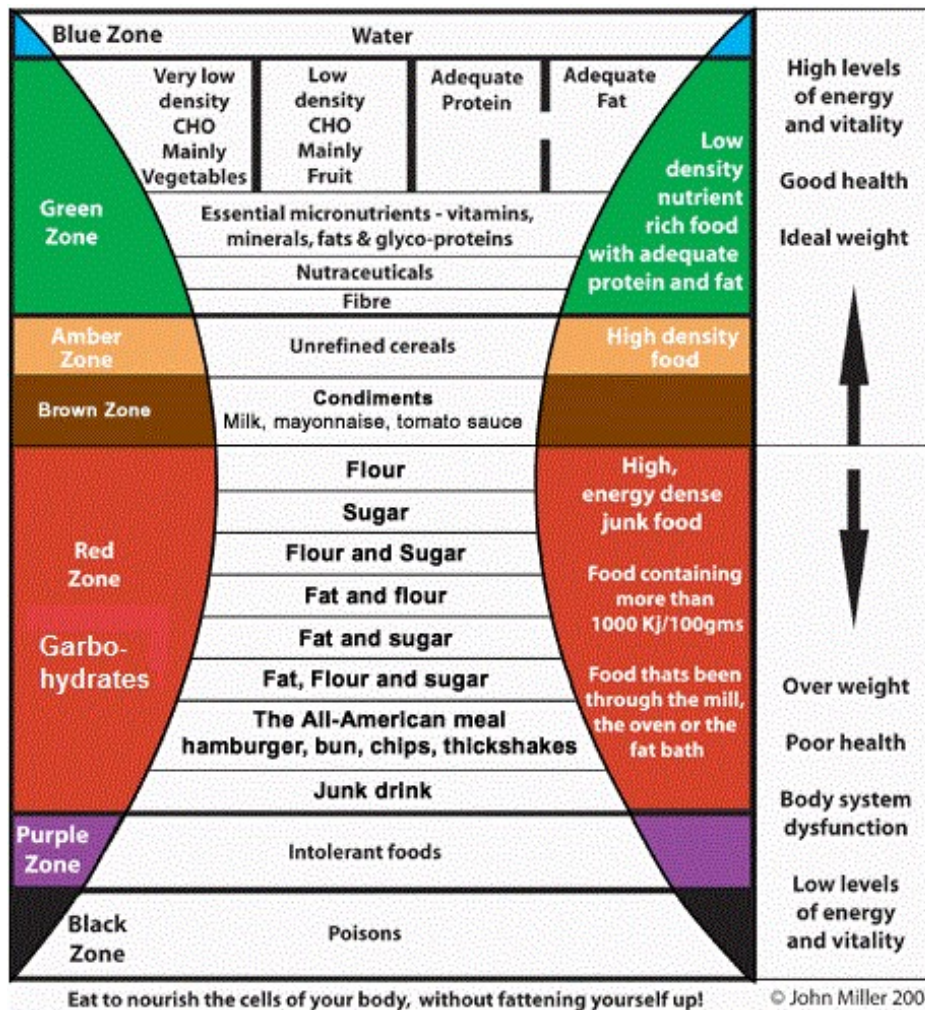


The body works best on 'high octane' fuel, delivered at the right time and in the right quantity.

As a means of doing that, you need to have a clear distinction between what's good food and what's junk food. You need more of the good food and much, much less of the junk food.

THE HOURGLASS DIET MODEL

In a nutshell, it's good food at the top and junk down the bottom.



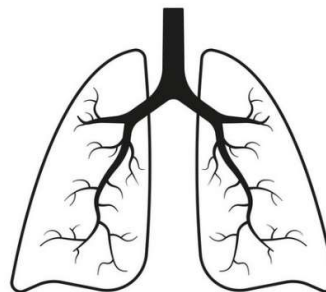
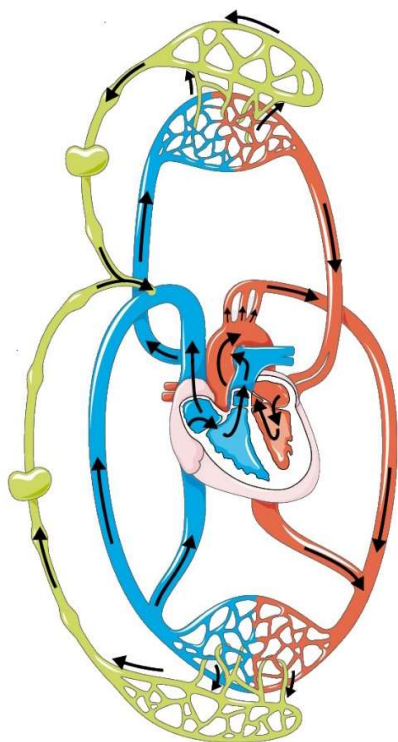
The gut microbiome plays an important role in maintaining good health, including regulating the immune system aiding digestion and being implicit in good mental health. Alcohol, processed (junk) foods, junk drink and antibiotics are some of the biggest threats to our gut microbiomes. If there's one thing that you do to improve gut micro-biome health, it's eating a wide variety of plant foods.



Vigorous physical activity plays a role in stimulating the body's 'exhaust' system.

The exhaust system is responsible for taking the waste products from every cell and removing them from the body.

When it comes to metabolic health, there are a lot of parts in the exhaust system that are frequently overlooked.



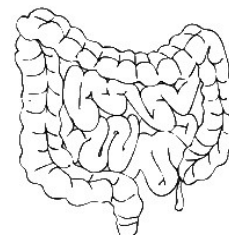
Lungs



Skin



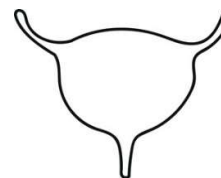
Liver



Bowel



Kidneys



Bladder

- Lymphatic system - green
- Venous return system – blue
- (Arteries – red)

Give me your over-weight, weak and depressed masses yearning to breathe free of the wretched refuse of a sedentary society built on junk food and a lack of exercise.
With apologies to Emma Lazarus



In a predominantly sedentary society, physical fitness is a fundamental requirement for the development and maintenance of good health.



Aerobic fitness is one of the key mechanisms for stimulating the development and maintenance of good metabolic and mental health.

A regular and systematic aerobic fitness training program is the key to getting oxygen to every cell in the body and removing the waste products of metabolism to the outside world.

Oxygen intake can be 'turbo-charged' by vigorous physical activity.

It can be prescribed in a scientific dosage based on a formula that includes

- frequency
- duration and
- intensity,

and calculated, measured and monitored using electronic, wearable technology.

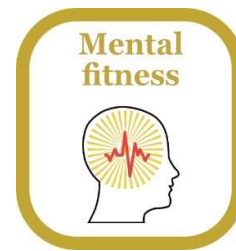


Maintaining good musculo-skeletal health involves a regular and systematic strength and flexibility training program.

Strength can be improved either by exercises that include lifting

- one's own bodyweight
- free weights or
- weights incorporated in a 'machine'

to a prescribed dosage of weight, repetitions and sets.

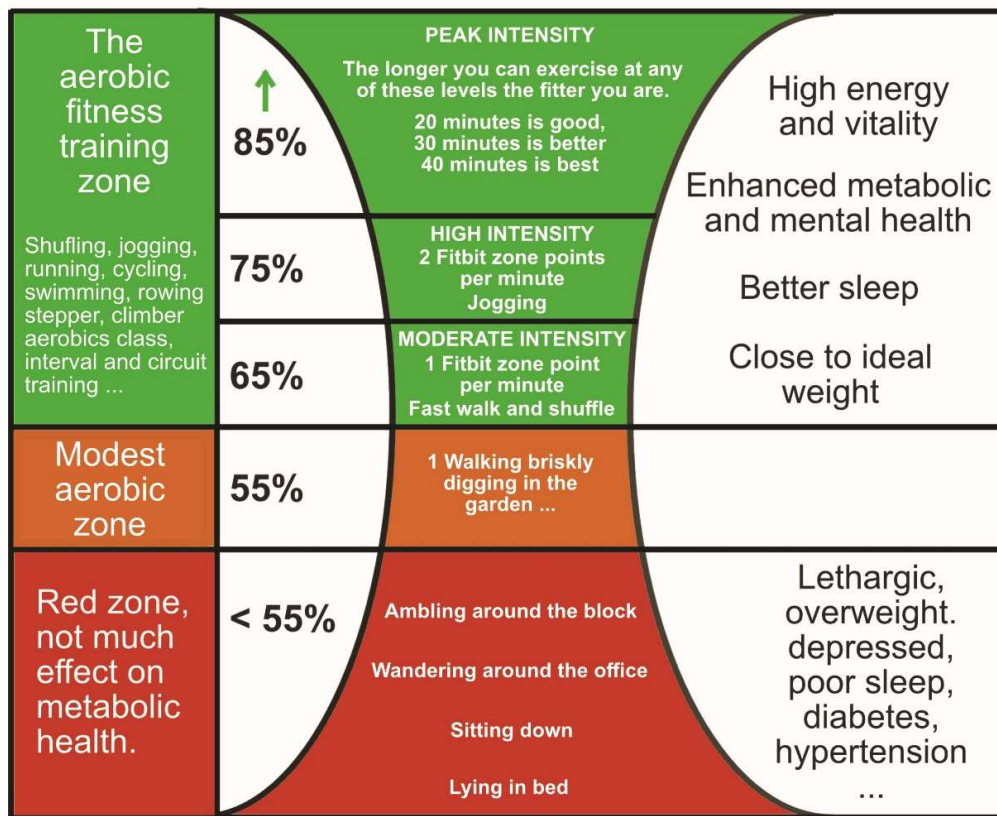


Good mental health is intimately connected with good metabolic health and hence to aerobic fitness, high quality 'fuel' and an efficient exhaust system.



Your level of aerobic fitness is a good indicator of the condition of the system responsible for transporting oxygen to not just working muscles, but to all major organs and every cell in your body - via the heart, lungs and arteries – and removing the waste products of metabolism.

HOURGLASS AEROBIC FITNESS



Exercise at the top of the hourglass.

c John Miller.

A good aerobic fitness training prescription includes a 'dosage' involving an equation based on frequency (times a week), duration (length of each session) and intensity of **effort** (based on heart rate). You can't swallow an aerobic fitness prescription!

Instituto ergo sum. I train, therefore I am.
Apologies to Rene Descarte



FITBIT - prescribing, measuring, managing and monitoring aerobic fitness training

I use and recommend the Fitbit zone points system. It fits the aerobic fitness prescription and monitoring specifications. The system is based on a scientific formula that includes an 'active dosage' (intensity of effort) based on heart rate.

Along with time, the intensity of your aerobic exercise needs to be taken into account. They say that you need to get your heart rate to at least 65% of your maximum heart rate (MHR) to gain an aerobic training effect. 75% is probably more like it. 85% is achievable and sustainable for people in good aerobic condition and is something worth aiming at. Maximum heart rate is said to be 220 minus your age. The people I see who are in the best of health are those who have a vigorous aerobic training program, for 40 minutes on most days of the week. I see little evidence that ambling around the block for 10 minutes a day does much for the cardiovascular or any other system, or that it has much of an impact on lowering stress levels.

It trivializes the concept of aerobic fitness to ascribe as its main benefit your ability to do more vigorous, muscular, physical activity for longer periods of time. Sure that's what happens, but it is a byproduct, a symptom of the fact that a range of body systems are working more efficiently, not just your muscles.

THE SOLUTION

For too long the body system dysfunctions generated by a lack of aerobic fitness have been papered over. The medical industry in particular has been blind-sided by the influence of the pharmaceutical industry. Not including the aerobic fitness arrow in the medical quiver has been a long standing oversight.

A good aerobic fitness training prescription includes a 'dosage' involving an equation based on frequency (times a week), duration (length of each session) and intensity of **effort** (based on heart rate). You can't swallow an aerobic fitness prescription!

If you're serious about becoming aerobically fitter, merely recording time, steps or distance is pointless unless effort is also taken into account.

AEROBIC FITNESS PRESCRIPTION		
<u>Frequency</u>	<u>Duration</u>	<u>Intensity</u>
- times a week	- length of each session	- the 'dosage', rated against a percentage of maximum heart rate

(The American College of Sports Medicine’s recommendation of 30 minutes of moderate intensity aerobic physical activity on five days per week, or a minimum of 20 minutes of vigorous intensity aerobic activity on three days per week is an inadequate un-scientific prescription because it doesn’t define ‘moderate’ or ‘vigorous’. It’s like prescribing a blood pressure tablet of ‘moderate’ active ingredient.)

THE FITBIT AEROBIC FITNESS ZONE SYSTEM

For the first time in history aerobic fitness can be prescribed, measured, managed and monitored by both individuals and their health advisors.

The Fitbit aerobic fitness zone system is based on a scientific formula that includes an ‘active dosage’ (intensity of effort) based on heart rate. Fitbit has two aerobic fitness zones. People exercising score:



- 1 point per minute when the heart rate is (circa) above 60% of (estimated) age-related maximum heart rate.
- 2 points per minute when the heart rate is (circa) above 75% of (estimated) age-related maximum heart rate.

When it comes to the number of points achieved in a day, 40 is good, 50 is better and 60 is best.

Fitbit records and stores the information on the Fitbit phone app and on its own servers.

For the first time, medical and fitness and applied health practitioners can prescribe, measure, manage and monitor the amount of aerobic fitness activity their clients are doing each week.

A minimum of 200 zone points per week (ZPPW) is good, 250 is better, 300 is best and 400 is ‘bestest’. I’ve called over 400 ZPPW a week, ‘defrag territory’. Once you start getting 300 or more ZPPW a week you’ll keep yourself in pretty good shape. If you want to achieve huge gains in your aerobic fitness and metabolic health, aim at (at least) 400 ZPPW.

Frequency / intensity / duration	Good	Better	Best	Metabolic defrag and 1% weight loss territory
Frequency: based on sessions per week	5	7	9	11
Duration: based on minutes per session	20	30	40	60 (2 x 30)
Intensity: based on heart rate	65%+	>75%+	>85%+	75%+
Fitbit zone points per day	40	50	60	80+
Fitbit zone points per week	200	250	300	350+

‘They say’ that your estimated, age-related maximum heart rate (MHR) is (roughly) 220 minus your age. Therefore, the maximum heart rate of a 40-year-old person is said to be 180bpm. Aiming to work at 75% of maximum heart rate for a 40-year-old is roughly 135 bpm. If you’re a 40-year-old person and you’re in good physical condition and aerobically trained, you’ll be able to sustain more than 135 bpm for at least 40 minutes.

There are 336 half hours in every week. How many can you find to exercise and keep yourself in good metabolic, musculo-skeletal and mental health? 10 is good, 12 is better and 14 is best.

Neil Gray



Musculo-skeletal dysfunction has reached epidemic proportions in our community. By far and away the greater proportion of this dysfunction is personally generated. People without a regular strength and flexibility training are setting themselves up for musculo-skeletal dysfunction. In the first instance it's tight muscles that take the skeleton out of alignment. It's essential to maintain the pelvis in good alignment.

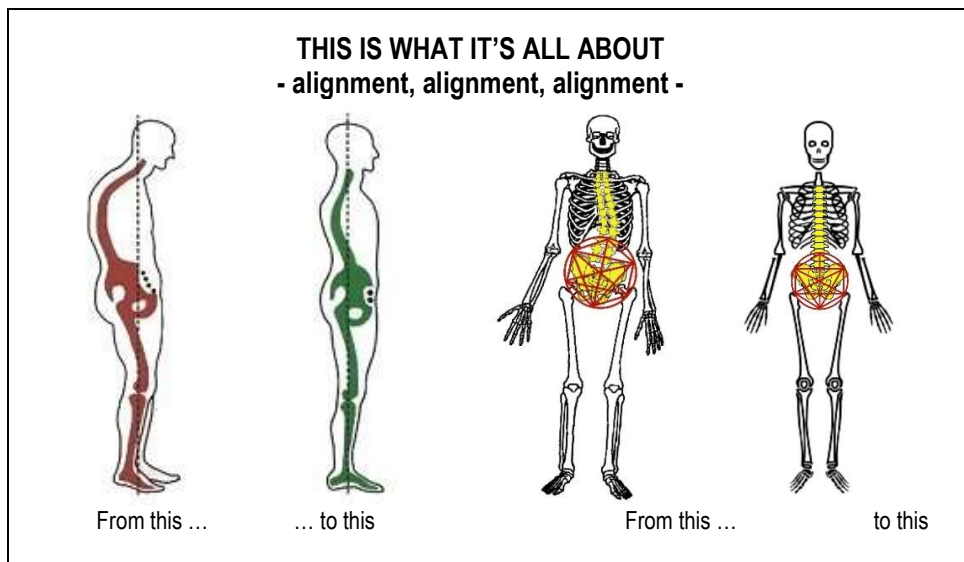
Bill Clinton might have said, 'It's the system, stupid.' So, look after the skeletal system and the parts will look after themselves. And being a system problem the cause of the pain is rarely at the site of the pain.

The good news is that if the dysfunction has been personally-generated, there's a better than even chance it can be personally ungenerated – providing the dysfunction can be 'caught' in time.

1. FLEXIBILITY and its role in skeletal alignment

Most people with joint and muscle pain don't have a regular and systematic flexibility training program.

Joint and muscle pain is a symptom, telling you to get your skeleton back into better alignment. It is not caused by a lack of rubbing, crunching, heating, cooling, electronic muscle twitching, doping or surgery.



Bend and stretch, Reach for the stars.
Rex Hunter

2. STRENGTH and its role in supporting the skeleton

Most people with joint and muscle pain don't have a regular and systematic strength training program.

They have failed to keep their skeleton supported by muscles that are strong enough to enable the body to do everyday tasks without breaking down.

THE STRENGTH AND FLEXIBILITY EXERCISE PROGRAM

Muscle relaxation and flexibility exercises

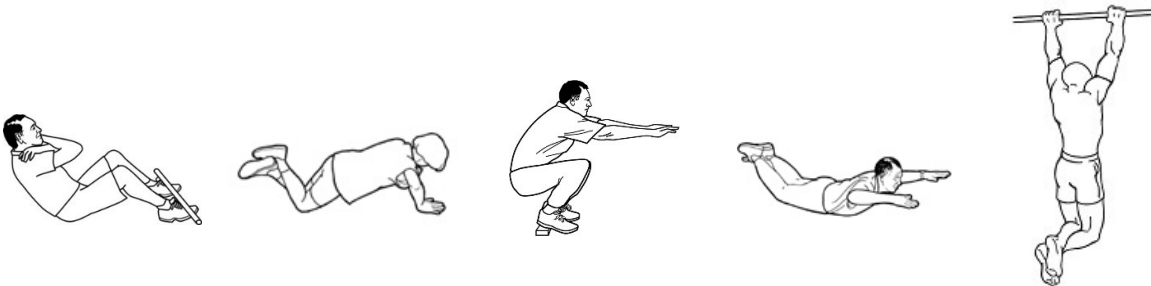


Muscle relaxation

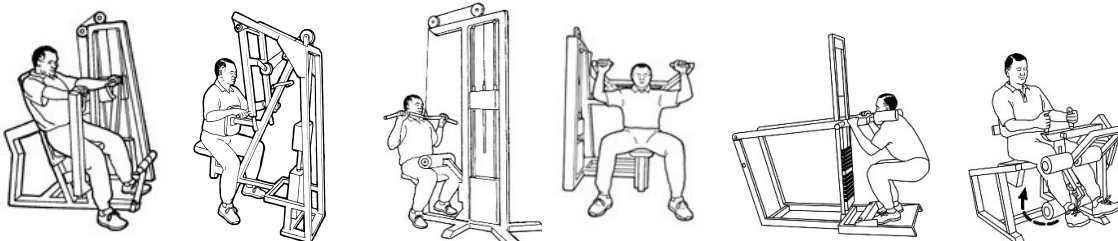


Strength training exercises

At home



In the fitness centre



Push out

Pull back

Pull down

Push up

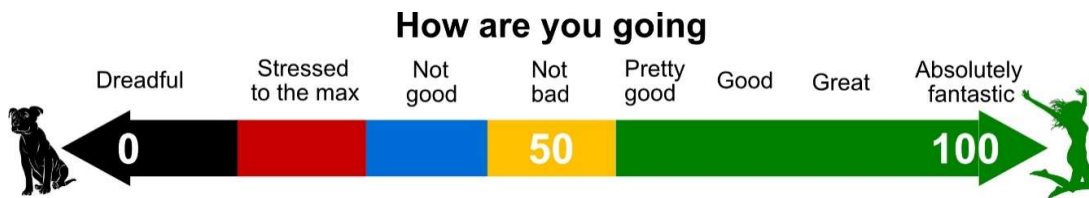
Leg extension

Leg curl

All it takes is an investment - in time, some effort and if you're a member of a fitness centre, some money.

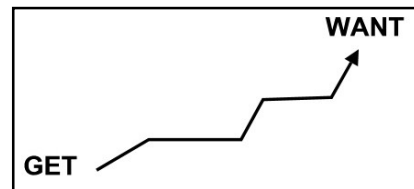


Mental health covers a very broad spectrum of conditions. To simplify the issue we'll start at midway along the spectrum with a brief discussion on 'stress'.

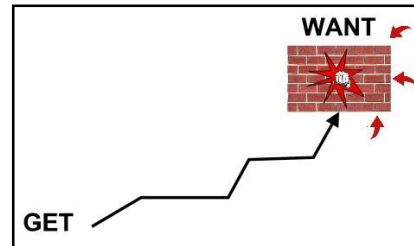


1. STRESS – WHAT IS IT? Stress is the distance between what you're getting and what you want

If you know what you want and you're on the way to getting it, you feel pretty good. When you get there you feel absolutely fantastic. If you know what you want and you're not on the way to getting it, you feel wretched. The further you get away from what you want the more stressed you feel.



If one of the brick walls of life is stopping you from getting what you want you can start to feel stressed sad, miserable or unhappy. You can lose energy and vitality.



If you want the want badly enough and you genuinely believe it is within your ability to get it, then you'll need to do some serious thinking to work out how to get past the brick wall - crawling under it, around it, over it, or crashing through it.

2. STRESS – WHERE DOES IT COME FROM?

We feel distressed when:

- we're not getting enough - of the things we want
- we don't have a clear idea of what we really want out of life. We haven't written down what we want
- there is a gap between potential and achievement
- there is an imbalance between the demands of life and our capacity to deal with them
- when we're not giving enough back to our *Self*
- when we're not exercising enough.



3. STRESS - WHAT DOES IT DO TO YOU?

Here are some of the symptoms.



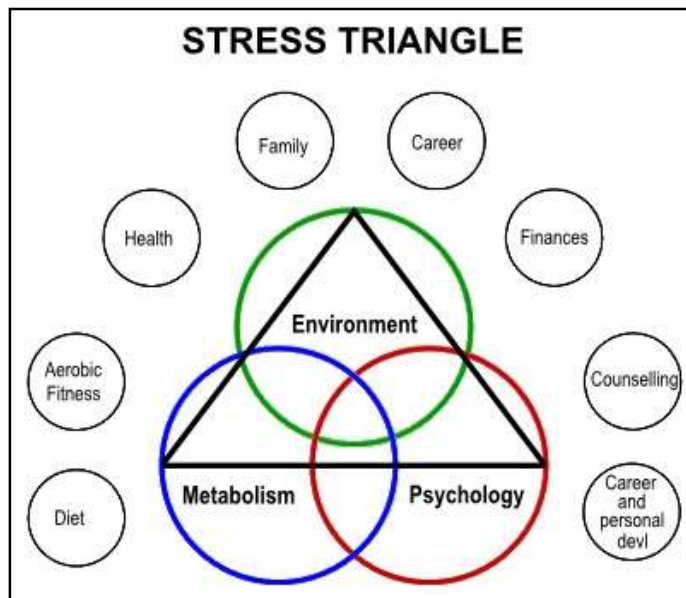
There are more symptoms –unhappiness, despair, depression, anxiety, putting on weight, losing weight ...

4. STRESS – HOW TO GET AHEAD OF IT?

If we presume that stress is generated by a range of factors, then the treatment must address those factors.

If stress is generated by metabolic dysfunction it needs to be treated with diet and exercise. It's hard to say, 'I feel fantastic' when you're under a metabolic cloud.

Of course, for many people, the great stress of life comes from not knowing what they want and having to put up with what they're getting.



Happiness is the only good. The time to be happy is now. The place to be happy is here.
The way to be happy is to make others so.
Robert Ingersol

5. THE RELATIONSHIP BETWEEN MENTAL HEALTH AND AEROBIC FITNESS

Research has discovered the relationship between mental health and fitness training. Here's what several studies show.

1. Exercise more effective than medicines to manage depression

In a report published in the British Journal of Sports Medicine, researchers at the University of South Australia are calling for exercise to be a mainstay approach for managing depression as a new study shows that physical activity is 1.5 times more effective than counselling or the leading medications.

'People with the lowest combined aerobic and muscular fitness had 98% higher odds of depression, 60% higher odds of anxiety, and 81% higher odds of having either one of the common mental health disorders, compared to those with high levels of overall fitness.'

The research underscores the need for physical activity, particularly structured exercise interventions, to be a mainstay approach for managing depression and anxiety.' Ref: <https://bjsm.bmj.com/content/57/18/1203>

Published in the British Journal of Sports Medicine, the review is the most comprehensive to date, encompassing 97 reviews, 1039 trials and 128,119 participants. It shows that physical activity is extremely beneficial for improving symptoms of depression, anxiety, and distress.

The review showed that exercise interventions that were 12 weeks or shorter were the most effective at reducing mental health symptoms, highlighting the speed at which physical activity can make a change.

The largest benefits were seen among people with depression, pregnant and postpartum women, healthy individuals, and people diagnosed with HIV or kidney disease.

Lead UniSA researcher, Dr Ben Singh, says, 'Physical activity must be prioritised to better manage the growing cases of mental health conditions. 'Physical activity is known to help improve mental health. Yet despite the evidence, it has not been widely adopted as a first-choice treatment.'

Higher intensity exercise had greater improvements for depression and anxiety, while longer durations had smaller effects when compared to short and mid-duration bursts.

All types of physical activity and exercise were beneficial, including aerobic exercise such as walking, resistance training, Pilates, and yoga.

Importantly, the research shows that it doesn't take much for exercise to make a positive change to your mental health.

'Examining these studies as a whole is an effective way for clinicians to easily understand the body of evidence that supports physical activity in managing mental health disorders.'

2. Exercise as medicine for depressive symptoms?

The Sport and Health Sciences, Social and Preventive Medicine, Faculty of Human Sciences, University of Potsdam, Germany conducted a systemic review to estimate the efficacy of exercise on depressive symptoms compared with non-active control groups and to determine the moderating effects of exercise on depression.

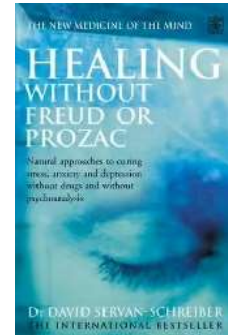


The conclusion was that ‘exercise is efficacious in treating depression and depressive symptoms and should be offered as an evidence-based treatment option focusing on supervised and group exercise with moderate intensity and aerobic exercise regimes.’

3. Healing Without Freud or Prozac

In the book *‘Healing without Freud or Prozac’* psychiatrist, (the late) David Servan-Schreiber outlines the case for aerobic exercise. He reports a study from researchers at Duke University who compared the anti-depressant effects of jogging with those of Zoloft.

‘After four months patients treated with either approach were doing well. On the other hand, a year later, there was a major difference between the two types of treatment. More than a third of the patients who had been treated with Zoloft had relapsed, whereas 92 percent of those who had followed the jogging programme were still doing well.’



HOLISM VERSUS DUALISM

For all intents and purposes, what the research findings indicate is that the body’s metabolic, musculo-skeletal and mental health systems work together as a whole. No part is an island. All parts work together, for good or ill. What happens in one part may affect what happens in other parts.

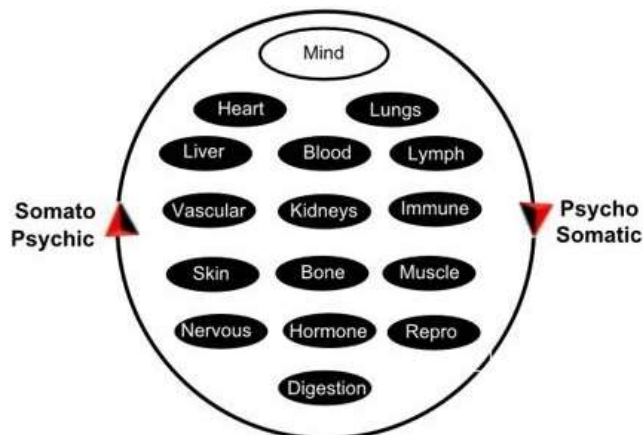
Dualism denies this fact. In particular it treats the mind as a quite separate part of the body, divorced from the other parts. If the head/mind was inside the torso instead of sitting on top of the shoulders, we’d have a completely different view of mental health. We’d recognise its close association with metabolic health.

THE PSYCHO-SOMATIC / SOMATO-PSYCHIC ECOSYSTEM

What happens in the mind effects the rest of the body – that’s the psycho-somatic response. The simplest example of that is when you’re about to give a speech you get sweaty palms or your hands shake.

What happens in the rest of the body affects the mind - that’s the somato psychic response.

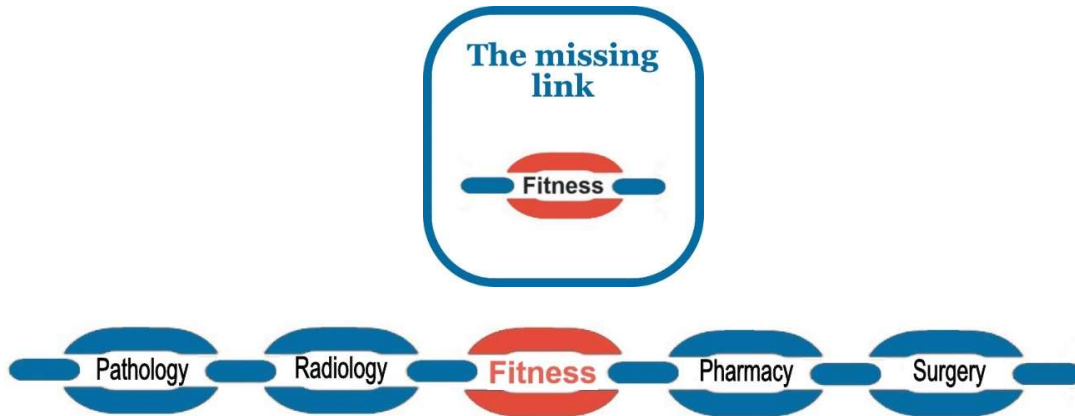
Aerobic physical activity has a positive affect on all parts of the metabolic health system. The mind is a part of the metabolic health system.



THE GUT MICROBIOME – another forgotten piece in the mental health jigsaw

The gut microbiome plays a significant part in the maintenance of a healthy nervous system through the gut-brain connection — the network of nerves, neurons and neurotransmitters that run from the GI tract to the brain. Certain bacteria actually produce or stimulate the production of neurotransmitters (like serotonin) that send chemical signals to the brain. It’s a missing link in the diagnosis and treatment of poor mental health.





Generally speaking, the most common tests associated with 'popular' personally-generated body system dysfunctions, tend to focus on the symptoms of dysfunctions not the underlying cause(s).

'Fitness' is the missing link.

METABOLIC HEALTH

The assessment

The current assessment and treatment of poor metabolic health is based largely on the assessment of symptoms - not causes.

For instance, the focus of the NH&MRC guidelines on determining the causation of adult onset diabetes lies on the measurement of a symptom - the amount of sugar in the blood. If it's high, clients will be given

- a sermon in the surgery about losing adipose tissue and cutting back on carbohydrates (yep that's a 'g' not a 'c'); meals based on combinations of fat, flour, starch and sugar with a high proportion of meals including all three.
- a prescription for a blood glucose lowering drug, despite the fact that elevated blood glucose is not caused by a lack of a *biguanide antihyperglycemic*.

Of course what's been measured is a symptom of a metabolic health engine that's not getting enough 'turbo-charged' oxygen or high grade fuel into the cells of the body -- and a clogged exhaust system.

Rarely is a simple field test of aerobic fitness included in the assessment mix. A metabolic health assessment that adds diet and counselling into the assessment and prescription mix is more than useful.



The prescription

Medical, fitness and metabolic health assessments needs to be followed up with medical, fitness and metabolic health prescriptions



Rarely is a scientific aerobic fitness training program prescribed, measured, managed or monitored.

Wearable technology now enables medical, fitness and nutrition and counselling practitioners to keep a record of the amount and intensity of aerobic exercise their clients do each week.

MUSCULO-SKELETAL HEALTH

Personally-generated metabolic and musculo-skeletal health dysfunctions need both a medical and fitness assessment. The fitness test involving assessments of strength, flexibility and skeletal alignment takes precedence.

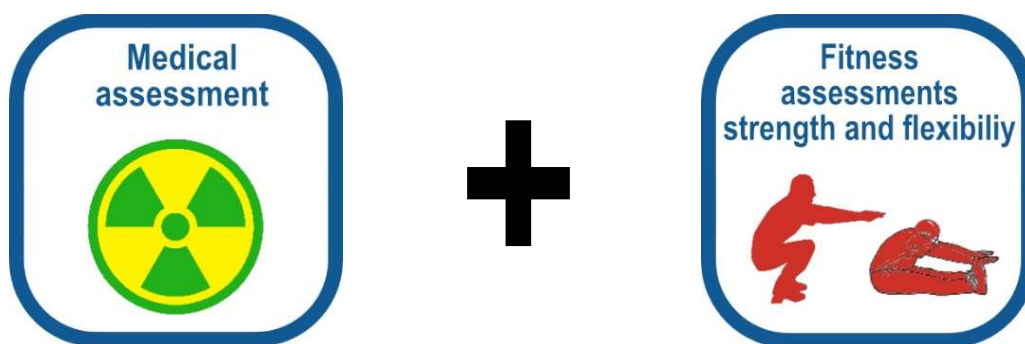
The assessment

Generally speaking, most musculo-skeletal pain is usually the symptom of a system problem. (Look after the system and the parts will look after themselves is a fair aphorism.) Most people with joint and muscle pain do not have a regular and systematic strength and flexibility training program.

Anyone who goes to a doctor with joint and muscle pain will be sent off for a radiological scan. All the scan does is tell the radiologist and the doctor 'what is', not what's caused 'what is'. i.e. two bones are out of alignment and the 'bearing' between them is wearing out. The report from the radiologist doesn't mention why this has happened, why ligaments, tendons and muscles are being stretched beyond their pain threshold, why discs are bulging or that fact that the cause of the pain is rarely at the site of the pain.

Rarely is there a test of strength and flexibility.

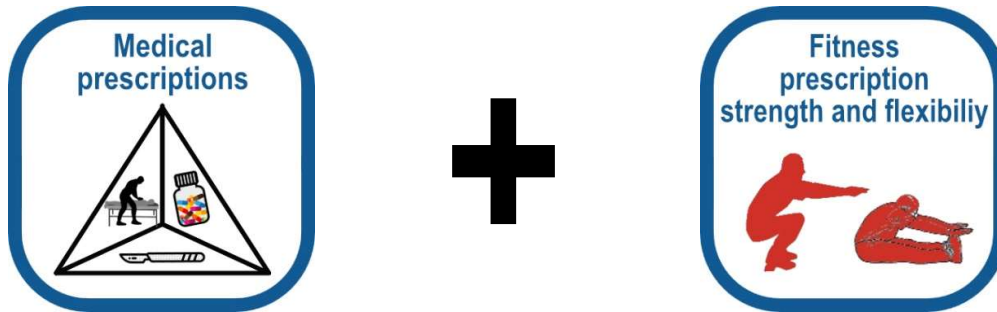
The cause of the problem is rarely at the site of the pain. A bulging disk and arthritis are symptoms of a system problem. They are local symptoms not the original source of the dysfunction.



As a general rule, clients get sent off for a rub down, crunch, heat pad and an electronic muscle twitch at the site of the pain (or depending on how painful or out of alignment a joint is, a surgeon) rather than a strength and flexibility training program designed to get the skeleton back into better alignment and supported by strong muscles.

The prescription

The first thing people need is a fitness (strength and flexibility) prescription. A medical prescription without a strength and flexibility training program is more likely to treat the symptoms of the pain, rather than restore poor skeletal alignment to good.



MENTAL HEALTH

Mental health is neither a simple nor a straight forward dysfunction to address or to deal with. There are too many different types, too broad a spectrum to make generalized comments. It requires a range of medical, psychological and metabolic health assessments and prescriptions. For now we'll focus on stress, 'the blues' and depression. Fitness and gut biome need to be integral parts of mental health assessments and prescriptions.

The assessment



The prescription





The **Fitness Frontline** initiative is designed to provide

- medical, fitness and allied health practitioners
- workplaces
- workers compensation and private health insurers
- physed teachers and
- individuals

... with the tools to better measure, manage and monitor health, fitness and wellbeing.

The tools include:

- seminar programs
- assessments - health, fitness and wellbeing, with the results forming the basis from which prescriptions can be measured, managed and monitored
- publications
- websites
- videos
- newsletters
- social media posts

- the use of smart connected (wearable) devices to capture data – as part of the process of prescribing, measuring and managing fitness programs
- digital health, fitness and wellbeing ‘prescriptions’ that are designed to restore poor health to good - rather than being symptom masking - that can be put into practice by people themselves at minimal cost to themselves or the community
- a cloud-based digital platform that enables results to be recorded and stored in such a way that individuals and their health advisors can have instant access
- reliable, practical, evidence-based information drawn from a range of sources
- ... and for individuals - a pair of shorts, sandshoes, a tee shirt and Fitbit fitness watch.

The responsibility

Practitioners and organisations who adopt the Fitness Frontline concept are committed to providing people with advice and encouragement to keep themselves fit and healthy to the best their ability. They have adopted the process of prescribing, measuring, managing and monitoring the fitness programs they give to their clients.

The catch

Individuals who adopt the Fitness Frontline philosophy with acknowledge that there is a catch. When it comes to doing anything to improve their health, fitness and wellbeing it's not something that can be sub-contracted out to someone else – to passive treatments, pills, potions or cremes.

Exercise physiologist, Kenneth Cooper put it succinctly when he said, *'I can give you the program, but I can't do it for you.'*

The corollary is that if people are not interested in improving their own health, fitness and wellbeing, what is the use of the State (together with health and workers compensation insurers) spending more and more money subsidizing treatments that don't restore poor function to good.

If exercise and physical activity could be packaged as a pill, it would be the single most widely prescribed and beneficial medicine in the nation.
Psychiatrist, Robert Butler inaugural CEO of the American Institute on Aging



National Fitness Australia has created and conduct a range of health, fitness and wellbeing seminar programs.

LIFESTYLE

- Seven Habits of Fit and Healthy People – one day
- Models of Good Health – 2 hours

MUSCULO-SKELETAL HEALTH

- Musculo-skeletal Health – 2 hours
- Manual Handling 30 minutes
- Workstation assessment – 10 minutes
- Pro-Active Rehab class - one hour
- Clinical diagnostic assessment - one hour
- Back in alignment class - one hour

STRESS MANAGEMENT

- How to Manage Stress - 3 hours
- Work-Life Balance – 1 hour
- How to Manage Your Career – 1 hour
- How to relax and get a good night's sleep – 1-hour

METABOLIC HEALTH

- How to Improve Metabolic Health - 1 hour
- How to improve Aerobic Fitness – 1 hour
- Complete Fitness Workout – 2 hours at a local fitness centre
- Hourglass Diet – 1 hour
- How to Lower Blood Pressure, Glucose and Cholesterol – 1 hour
- Smoke Free – 1 hour
- Headache Free – 1 hour



National Fitness Australia has developed a range of health, fitness and wellbeing assessments. My Fitness Record is a book and interactive website containing most of the Fitness Frontline assessments. The word 'fitness' is used in a broad sense covering health, fitness and wellbeing parameters.

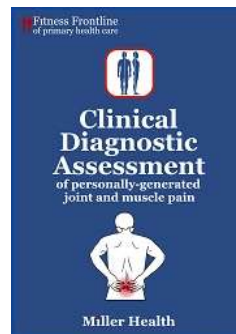
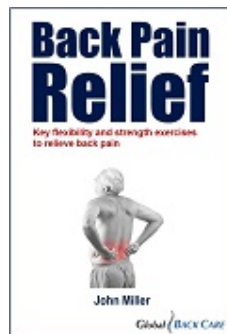
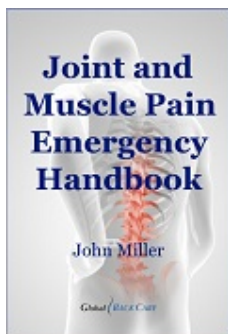
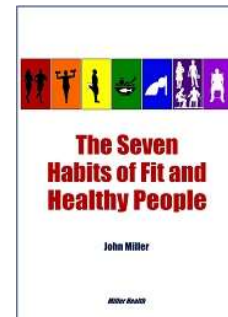
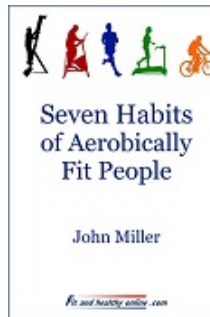
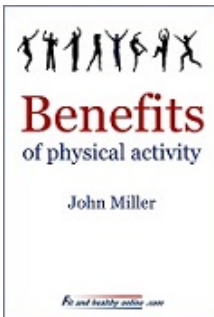
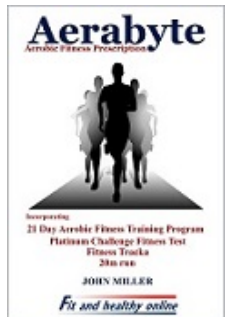
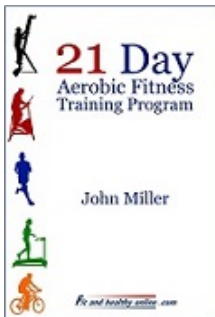
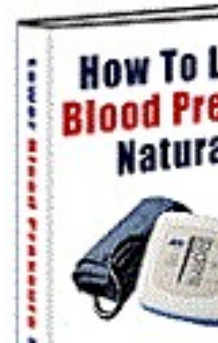
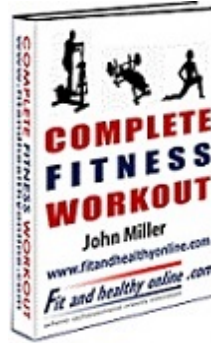
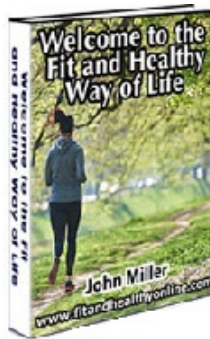
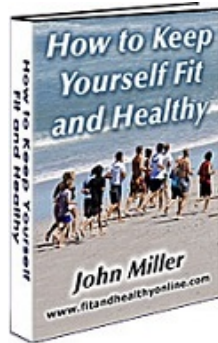
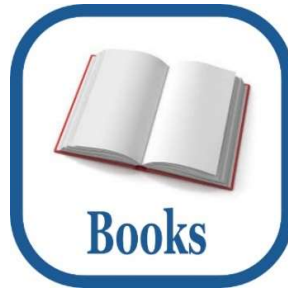


The assessments are designed for

- individuals to get a picture of their health, fitness and wellbeing
- medical and allied health practitioners to include fitness assessments in the primary health care mix, side by side with pathology, radiology ...

People often go to a doctor or allied health practitioner with a particular complaint, but when they complete the assessments on the My Fitness Record website (of in the book) a range of 'whole of life' issues lurking in the background will often be brought into the foreground.

The assessments are also relevant to employers along with health and workers compensation insurers.





Nobody ever mastered any skill except through intensive persistent and intelligent practice.
Norman Vincent Peale



I am perfectly satisfied that the highest possible philosophy is to enjoy today, not regretting yesterday, not fearing tomorrow. So, let us suck this orange of life dry, so that when Death does come, we can politely say to him, 'You are welcome to the peelings. What little there was we have enjoyed.' Robert Ingersoll



my fitness record

Health, fitness and wellbeing assessments

How are you going

A grid of 18 small icons representing different health and fitness metrics: Health climate survey, Universal Fitness Test, Elite Athlete Test, Physical fitness, Metabolic health record fitness, Health care consultation, Clinical assessment, Metabolic fitness, Diet, Chemical Intake, STRESS, Cancer satisfaction, Meaningful purpose, Family, People, and Finance.

Digital

Work health and fitness record

Measuring, managing and monitoring staff health, fitness and wellbeing

Digital

Universal Fitness Test

Digital

How are you going

A weekly record of the health, fitness and wellbeing of individuals, corporate organisations and the community

Digital

20m run

The universal test of aerobic fitness and metabolic health
Incorporating the 20m run schools' class challenge

Digital

Metabolic health record

Digital

fitbit

- Prescribing
- Measuring
- Managing &
- Monitoring

aerobic fitness

Clinical diagnostic assessment of personally-generated joint and muscle pain



Miller Health

Fit and healthy online
where achievement meets intention

Global  **BACK CARE**

 Fitness Frontline
of health care



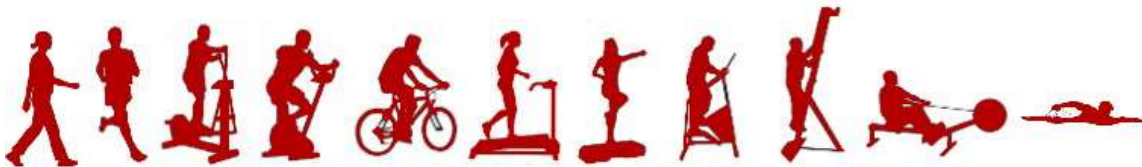
Life is like riding a bicycle. To keep your
balance, you must keep moving.
Albert Einstein



Deciding who should pick up the tab for the treatment of personally-generated body system dysfunctions is another matter.

If the prescriptions people are given lead to treatments that they can do themselves, if they lead to the restoration of poor health to good, then there is a high likelihood that the tab will be miniscule compared with the current tab for medical and pharmaceutical interventions.

It doesn't cost a lot to put on a pair of sandshoes and go for a vigorous walk/shuffle/jog/run ...



A gym membership where professional program guidance is available is an investment, not a cost.

Encouraging people to keep themselves fit and healthy – measuring, managing and monitoring exercise programs - is an investment for governments, employers and workers compensation insurers

One of the key measures that the health of the community is becoming healthier is when the cost of providing services for illhealth rehabilitation is decreasing. Money saved is money earned.

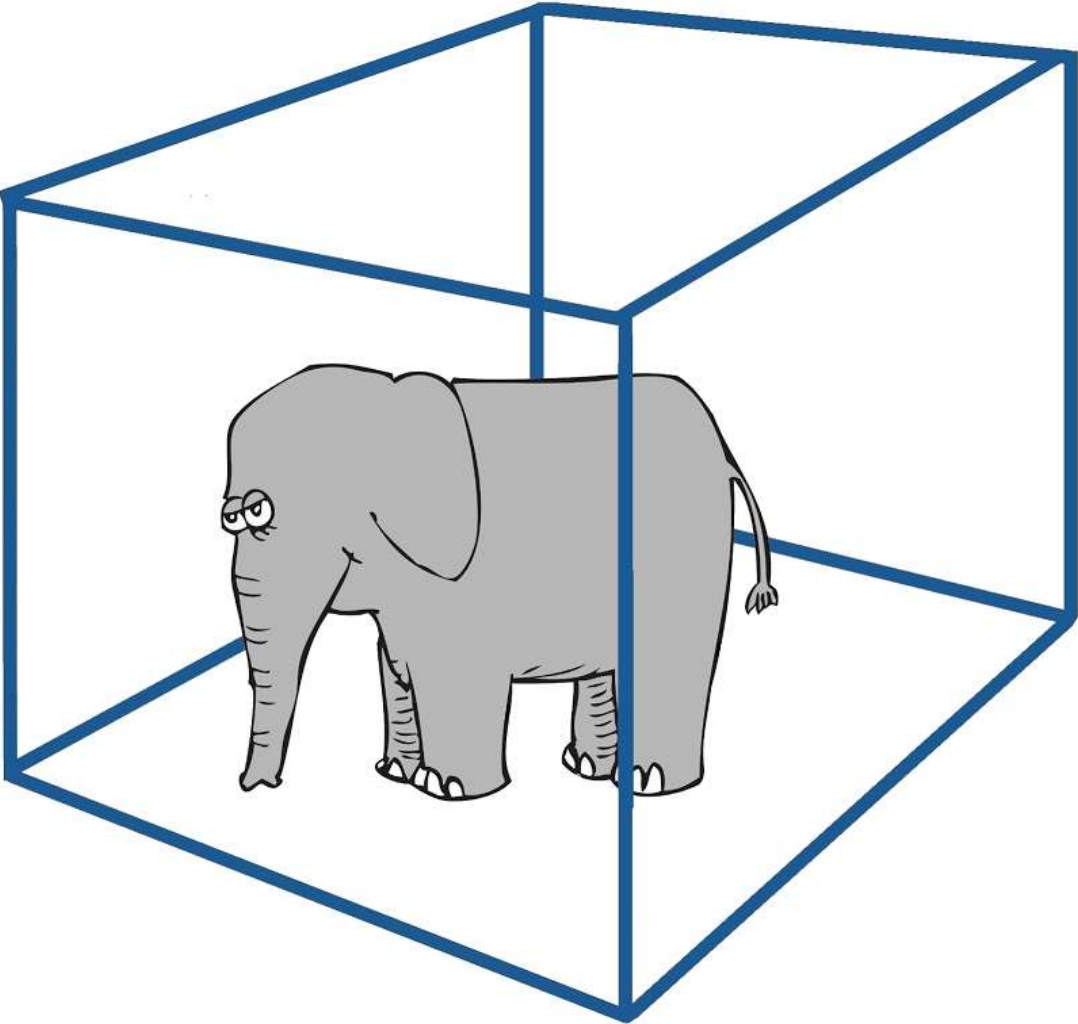
The other key measures are whether people are becoming fitter, healthier and slimmer. The benchmark? when state and territory governments are spending less than 25% of their budget on medical services and 5% on 'fitness'.

There is a compelling reason for private health insurance companies to measure, manage and monitor the fitness of their premium holders and reward those who

- have a regular fitness program
- improve their fitness.

The digital age makes this monitoring possible.

In a society that counts money, kilograms, calories and steps, count your blessings.





When it comes to health, *'fitness' is the word that dare not speak its name*. It's the elephant in the room that's neither heard nor seen.

Along with poor diet and little or no personal development, the lack of regular and vigorous aerobic, strength and flexibility exercise is the root cause of

- the decline in the health status of the Australian community and
- the increase in the cost of medical services.

Rarely in any organization that has a health program, or delivers health services, is the word 'fitness' mentioned. If it is, it's given lip service or masquerades as 'preventive health' – if ever there was a misnomer. You don't prevent health you encourage it, you do the things that make your healthy. And rarely are people given a scientific exercise prescription, one than contains a dosage with an 'active ingredient based on heart rate intensity. Rarely is it measured, managed or monitored. The digital tools are now available to do this.

Throughout the Western world, it's virtually impossible to keep oneself healthy without keeping oneself fit. Do people and their medical advisers not know this?

Keeping one's self fit and healthy is impossible without a regular and systematic aerobic fitness, strength and flexibility training program.

The rapid expansion of waist lines is a sure sign that people are under-exercised. The backside of the Western world is approaching axe-handle proportions. It's hard to lose weight just by thinking about it.



Meanwhile, as the nation's health - metabolic, musculo-skeletal or mental declines, government and community reaction is to spend more money on medical services and build more hospitals.

Workers compensation and private health insurance premiums continue to rise because of the lack of fitness of many of the individuals who are insured. The difference between accidental injuries and personally generated body system dysfunctions has become blurred.

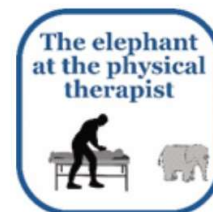
Too many students are leaving school who are overweight and underfit. Soon the only thing students will need to bring to school is their head – and their fingers!

THE SOLUTION

Making available to all health, fitness and wellbeing practitioners, assessments, resources and tools that enable them to prescribe measure, manage and monitor fitness programs.



The fitness elephant is hiding in all manner of health related industries – starting at the top.





First we'll take Canberra then we'll take...



Close to home, the ACT Government is spending in excess of 35% of its budget subsidizing medical treatments (protecting the medical industry) – most of the money being funnelled into the hospitals. But let there be no misunderstanding, the work being done in hospitals and the care and attention being given to patients is world class, state of the art.

The problem is that demand is outstripping supply – and will keep doing so as the population's health, fitness and wellbeing continues to decline.

The hospitals are chock-a-block full of people, a significant proportion of whom are suffering from personally-generated body system dysfunctions, big problems that they could have fixed themselves when they were small problems.

Something has to be done to dampen demand for public hospital services. One way is to insist that those who can afford to pay, either have private health insurance or receive an account for services rendered in the hospital. Too many people want something good, for nothing.

Another way is to mount a multi-pronged, Canberra-wide pilot program to give people the greatest encouragement to become involved in a regular, systematic aerobic fitness, strength and flexibility training program - one that's prescribed, measured, managed and monitored.

It would be in the interest of the ACT Government to allocate a modest percentage of its \$2,510,000,000 (yep that's \$2.5B) health budget to an evidence-based, multi-factorial pilot program designed to improve the fitness of Canberrans of all ages.



Strategy –first galvanise the fitness industry into action.

1. More 'regular folks' need to be welcomed into fitness centres.
2. The fitness industry needs to 'tool up' so it's ready to receive referrals from doctors and other allied health practitioners.
3. Fitness practitioners (and fitness centres) need to be 'trained up' to become the 'go to' professionals for fitness tests and fitness programs – aerobic, musculo-skeletal and strength.



There has to be an education program to encourage doctors to prescribe, measure manage and monitor the aerobic fitness, strength and flexibility of their clients – or pass that responsibility to trained fitness practitioners and exercise physiologists

This means giving doctors the tools – assessments, booklets and referrals to accredited fitness centres and accredited fitness practitioners where people will be looked after and poor function restored to good.



It's in the interest of Medicare to devote a modest percentage of the \$39,500,000,000 (yep that's \$39.5B) budget to support a fitness pilot project.

In the 2024 budget, the Commonwealth Government allocated \$383m for a 'Fit and Healthy Australia' program, \$250m of which went to the Australian Institute of Sport and \$133m to community and school sport. A modest share of the \$383 would help kick-start the Canberra fitness pilot program.



A side issue, but an important one.

If the ACT Government is to take fitness seriously it's imperative that the Commonwealth Government's My Health Record be complimented with a **My Fitness Record** with information being 'deposited' by medical, fitness and allied health practitioners.



There are any numbers of reasons why corporate organisations and government departments need to encourage their staff to keep themselves fit and healthy to the best of their ability.

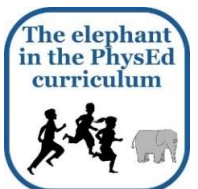
Fit and healthy staff increases productivity, lowers unplanned absences and sick leave and reduces workers compensation claims.



Workers compensation insurers are insurers in name only. They are escrow agents. They don't rate their premiums against risk. They don't measure risk. They have let themselves become victims of personally-generated body system dysfunctions being dressed up as work-related accidents/incidents. This system is in need of a revised way of doing business.



Like the workers compensation industry, private health insurers don't rate their premiums against risk. It's illegal. workers compensation insurers are insurers in name only. They too are escrow agents, struggling to make a profit. They can't keep up with the demand for medical services.



Establishing fitness courses in schools makes eminent good sense with student reports including fitness test results - and the introduction of the 20m run aerobic fitness challenge.

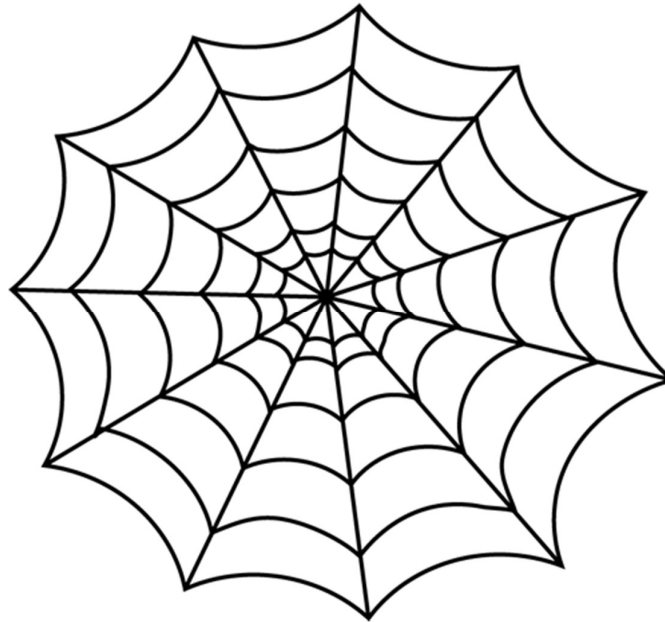
Using school facilities for community fitness classes also makes good sense.

The greatest weapon against stress is our ability to choose one thought over another.
William James



THE STRATEGIC WEB

Designing and putting into practice the pilot project of the Fitness Frontline concept, involves bringing together a strategic web of players of many descriptions, thinkers, designers, educators, service providers ... all working together for good.



We don't need to be perfect, we just need to get started.
Continuous improvement is better than delayed perfection.
Mark Twain



THREE OF THE GREAT HEALTH TRAGEDIES

Three of the great health tragedies are:

1. the lack of interest of governments in encouraging – nay demanding - that as a condition of being able to access highly subsidized universal medical care, people keep themselves fit and healthy to the best of their ability.

When you look around you can't help but notice how many people are under-exercised (and over-fed). Since they left school they've never had a fitness assessment.

Governments collect statistics on all manner of pathologies, but not how physically fit people are, how often they exercise, the quality of the exercise and how much they do. Wearable technology now makes these statistics readily available.

2. the lack of interest of the medical, fitness and allied health industries in prescribing, measuring, managing and monitoring the aerobic fitness, strength and flexibility of clients.
3. the lack of interest of schools in seeing that students leave school in peak physical condition.

When you look at the ever-increasing amount of money spent by governments on health care of one sort or another (Medicare, hospitals walk-in-clinics ...) you'd have to agree with Ivan Illich who wrote:

'The true miracle of modern medicine consists in making not only individuals but whole populations survive on inhumanly low levels of personal health.'

The greatest of opportunities for the fitness industry is to elbow its way into the frontline of health care, shouldering the responsibility for assessing function, prescribing, measuring, managing and monitoring aerobic fitness, strength and flexibility training programs for all people.



PRECIS

The Governor-General may appoint a Commonwealth Council for National Fitness consisting of such number of members (not exceeding nine) as the Governor-General thinks fit.

The Council shall advise the Minister with respect to the promotion of national fitness, and in particular in relation to-

- (a) the measures to be adopted to develop appreciation of the need for physical fitness;
 - (b) the provision of facilities for instruction in the principles of physical education;
 - (c) the organization of movements, and the provision of facilities, for attaining or maintaining personal physical fitness; and
 - (d) the training of teachers of classes, and of leaders of movements or groups, formed for the purpose of promoting physical fitness.
3. The Council may make enquiries into the causes of physical unfitness in the community and may for that purpose co-operate with the National Health and Medical Research Council.
 5. The Minister may apply the moneys standing to the credit of the Fund for the purpose of providing assistance: -
 - (a) to encourage the development of national fitness in each State under the direction of a National Fitness Council appointed by the Government of the State
 - (b) to promote physical education in schools, universities and other institutions; and
 - (c) for such other purposes in relation to the matters specified ... as the Minister determines.

Now for the National Fitness Act 2025.

Increase the fitness of school students by having some fitness programs conducted by fitness practitioners.

Focus on what the fitness industry can and must do to improve the fitness of all Australians.

As illustrated by the National Preventing Health Strategy excerpts on the next few pages, governments are unable to do this work themselves. They don't have the resources. A national fitness program needs to be run by the fitness industry, with the inclusion of a wide range of public, corporate, private, professional and volunteer organisations and individuals.



THE AUSTRALIAN DEPARTMENT OF HEALTH

The **National Preventive Health Strategy 2021-2030** presents a powerful opportunity for Australia to build a sustainable prevention system for the future – building on previous success and momentum, addressing the increasing burden of disease, reducing health inequity and increasing preparedness for emerging health threats.

The National Preventive Health Strategy aims to provide more balance to the health system by enhancing the focus on prevention and by building systems-based change over a 10-year period.

The strategy aims to improve the health and wellbeing of all Australians at all stages of life, through a systems-based approach to prevention that addresses the wider determinants of health, reduces health inequities and decreases the overall burden of disease.

This is a strategy for Australians; governments, the non-government sector, local health service providers, private providers, industry, communities and individuals.

We all have a role to play.

December 2021

The following pages contain excerpts from the National Preventive Health Strategy published in December 2021.

- You don't prevent health, you keep yourself fit and healthy.

INCREASING PHYSICAL ACTIVITY

For all Australians, there is immense value in being healthy and maintaining health right across one's life course, from prenatal to older age.

But health is not just the presence or absence of disease or injury. More holistically, health is a state of physical, mental and social wellbeing, and for Aboriginal and Torres Strait Islander people and other communities, this also includes cultural wellbeing.

Australians in good health are better able to lead fulfilling and productive lives, participating fully in their community, in their education and/or in their employment.

The benefits of this are experienced system-wide with decreased disease burden leading to a reduction in the pressures on our health and aged care systems, and economic benefits demonstrated by an increase in Australia's gross domestic product (GDP).

In 2017, the Productivity Commission conservatively estimated that the GDP could be increased by \$4 billion (and the rest!) per year if the health of people in fair or poor health was improved.

Preventive health action is the key to achieving a healthier Australia by 2030.

Even though the majority of Australians have one of the longest life expectancies in the world due to successful and sustained prevention programs and a world-leading health system, more Australians are now living with and suffering from chronic illness than ever.

On average, Australians live almost eleven years in poor health, or around thirteen percent of their life (and the rest.)

Over the past fifty years, the prevalence of chronic conditions has increased, leading to the majority of disease burden in Australia to be caused by cancer, cardiovascular diseases, musculoskeletal conditions, and mental and substance use disorders.

It is estimated however that 38% of this disease burden, 49% for Aboriginal and Torres Strait Islander people, could be prevented through a reduction in modifiable risk factors such as overweight and obesity, physical inactivity, dietary risks, and alcohol, tobacco and other drug use.

Preventing these conditions and their associated risk factors requires addressing the underlying 'causes of the causes', also known as the wider determinants of health.

PHYSICAL ACTIVITY POLICY ACHIEVEMENTS BY 2030

- Physical activity action in Australia is guided by a specific national policy document.
- Mass media campaigns that link to actionable behaviour change are used to create healthier social norms and influence physical activity behaviour.
- Prioritise urban design, land use and infrastructure to support physical activity by providing Australians with access to natural environments, public open spaces and green areas, and active transport networks.
- Physical activity measures are standardised and defined consistently across jurisdictions.
- Early childhood education and care settings, pre-school, primary and secondary schools are supported to ensure that children and students are physically active.
- Investment in preventive health action is prioritised for Australians who are currently least active.
- Physical activity levels in children are increased through enhanced support for parents and carers.
- Healthcare professionals are trained and supported to provide advice and support to patients to promote physical activity and to engage in social prescribing (connecting patients with community services to improve health and wellbeing).
- Increased physical activity and reduced sedentary behaviour is promoted and facilitated in workplaces.
- Communities are encouraged and supported to deliver locally designed programs that support physical activity, which are inclusive and promote social connection through physical activity.
- More Australians are engaged in sport and active recreation throughout every stage of life.
- Behavioural and social marketing approaches are used to modify the behaviours of Australians to be more active.
- All national guidelines and policies are updated using the latest scientific evidence.
- Sleep and screen time recommendations for all age groups are incorporated into national guidelines and policies where appropriate.
- Additional advice is provided in national guidelines and policies to increase physical activity for priority population groups.
- A greater role is played by the Australian sport sector in preventive health action to increase physical activity and improve mental health within the community.

ACTIVITY RECOMMENDATIONS FOR ADULTS

All healthy adults aged 18–65 yr should participate in moderate intensity aerobic physical activity for a minimum of 30 min on five days per week, or vigorous intensity aerobic activity for a minimum of 20 min on three days per week.'

COMMENT; Were these guidelines to include a definition of intensity, based on frequency, duration and heart rate, the exercise guidelines would be much more scientifically based, and in the digital era, be easy to prescribe and monitor. As they stand, the guidelines are the equivalent of prescribing a pharmaceutical with no known dosage.

