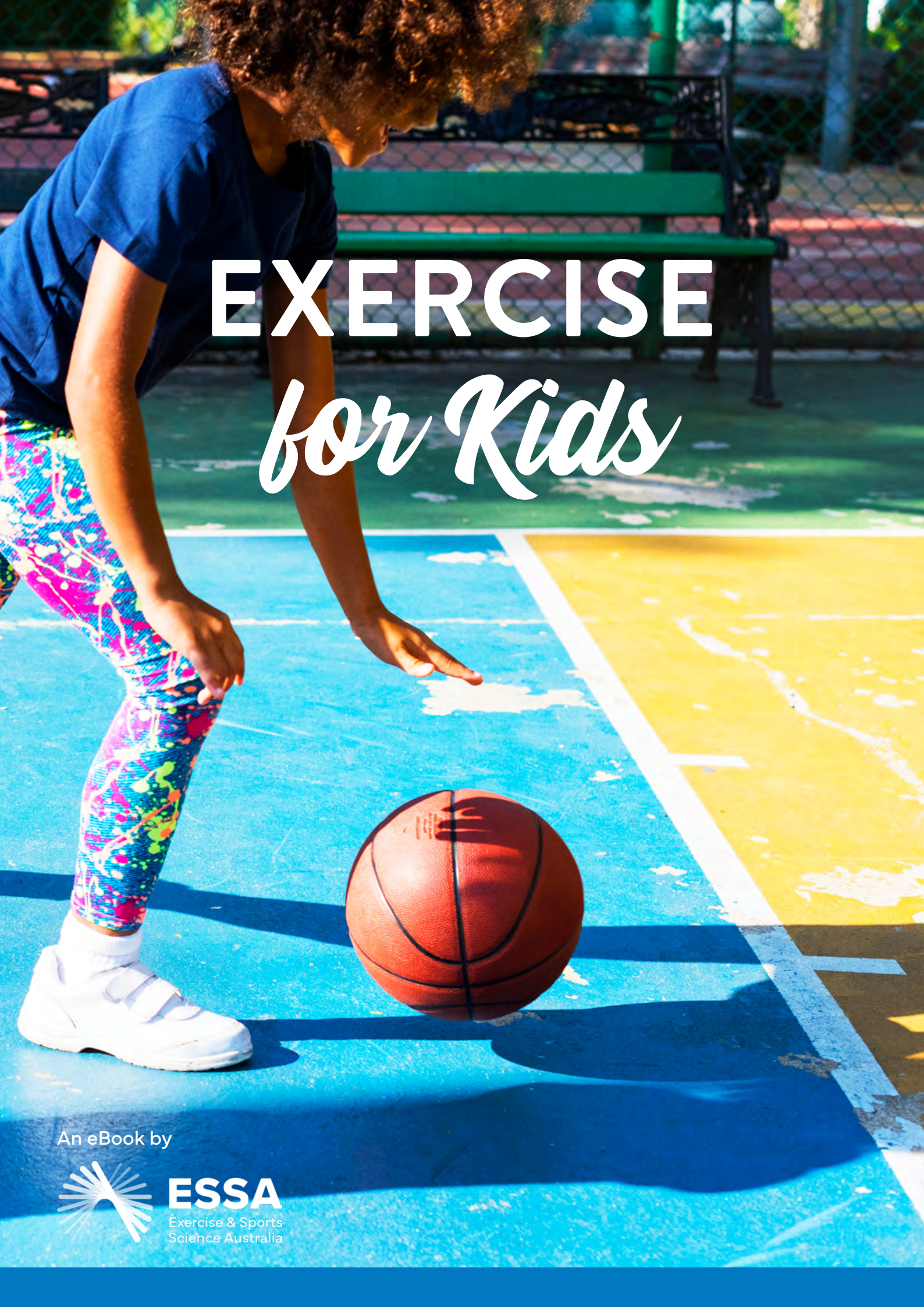
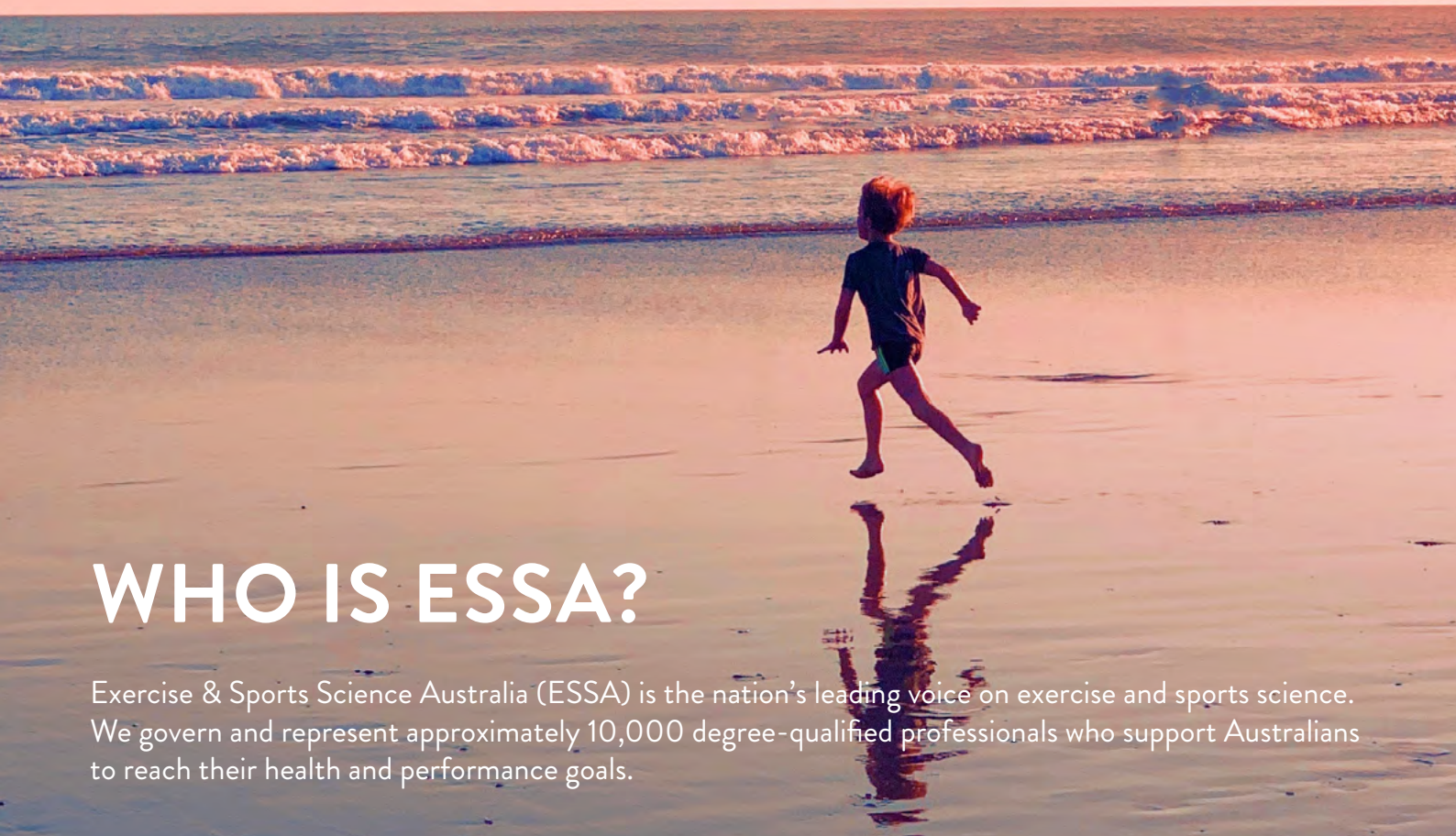


EXERCISE *for Kids*

An eBook by

ESSA
Exercise & Sports Science Australia

Together, let's get all Australian kids active and healthy!



WHO IS ESSA?

Exercise & Sports Science Australia (ESSA) is the nation's leading voice on exercise and sports science. We govern and represent approximately 10,000 degree-qualified professionals who support Australians to reach their health and performance goals.

Find your local accredited exercise professional: www.essa.org.au/find-aep/

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We thank the reviewers of this eBook, as well as all ESSA accredited professionals who contributed their time and expert knowledge.

14/07/2020

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WHY EXERCISE IS IMPORTANT

First of all, let's look at the difference between exercise and physical activity.

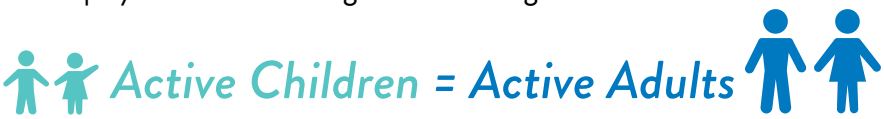
Physical activity is movement that is carried out by the muscles that requires energy. In other words, any movement one does is actually physical activity. **Exercise** is planned, structured, repetitive and purposeful movement that is intended to improve or maintain physical fitness.

Children who exercise are more likely to maintain an active lifestyle as an adult, but what child wants to consciously 'exercise'? It's hard enough for some adults to find the motivation, but as adults, we're more aware of the importance of moving and the risks when we don't move our bodies enough. Exercise should be enjoyable at all ages, but it's especially important that children enjoy moving to build long lasting habits and help them to achieve and maintain optimal physical and mental health.

Engaging in physical activity or exercise offers children the following benefits:

- Helps to achieve and maintain a healthy body weight
- Increases positive mental health and helps children to relax
- Improves self-esteem and confidence
- Helps to build strong bones, muscles and joints
- Promotes healthy growth and development
- Reduces the risk of developing, and helps to manage, chronic disease such as type 2 diabetes and cardiovascular disease
- Reduces the risk of, and assists with rehabilitation from, some cancers

It's not just the physical and mental benefits that makes being active during childhood important, there are also a host of social benefits. Encouraging play outdoors often involves interaction with other children and promotes active play (such as throwing a ball or riding a bike).



Why is it important that children get moving when they're young? Because active kids develop physical literacy!

Physical literacy is the knowledge and understanding of how to move your body, the confidence and motivation to move, and the social skills to be active with other people.

Research suggests that engaging in physical activity as a child predicts participation in physical activity and exercise as an adult. This ensures the benefits of physical activity carry through from childhood to adulthood, reducing the risk of chronic disease, illness and injuries. Conversely, those who do not participate in physical activity as a child are unlikely to be active as adolescents and adults; they are less competent, confident and motivated to move.

THE PHYSICAL ACTIVITY GUIDELINES FOR CHILDREN

Australia has developed Physical Activity and Sedentary Behaviour Guidelines which outline the minimum amount of physical activity required for children and adolescents to obtain health benefits, and recommendations for reducing time spent in front of screens.

The physical activity recommendations for healthy growth and development in the early years are:

» **Infants (birth to one year)** should be encouraged from birth to engage in physical activity particularly through supervised interactive floor-based play in safe environments. For those not yet mobile, 30 minutes of tummy time including reaching and grasping, pushing and pulling, and crawling spread throughout the day during awake periods is encouraged.

» **Toddlers (aged 1–2)** should spend at least 180 minutes a day doing a variety of physical activities including energetic play such as running, jumping and twirling spread throughout the day – noting more is better.

» **Pre-schoolers (aged 3–5)** should spend at least 180 minutes a day in a variety of physical activities, of which 60 minutes is energetic play such as running, jumping and kicking and throwing, spread throughout the day – noting more is better.

For ages 5–17, children and adolescents should achieve the recommended balance of high levels of physical activity, low levels of sedentary behaviour, and sufficient sleep each day for optimal health benefits. A healthy 24 hours includes:

PHYSICAL ACTIVITY

» Accumulating 60 minutes or more of moderate-to-vigorous physical activity per day involving mainly aerobic activities (i.e. brisk walking, swimming, running).
» Several hours of a variety of light physical activities.
» Activities that are vigorous, as well as those that strengthen muscle and bone should be incorporated at least 3 days per week.
» To achieve greater health benefits, replace sedentary time with additional moderate-to-vigorous physical activity, while preserving sufficient sleep.

SEDENTARY BEHAVIOUR

» Break up long periods of sitting as often as possible.
» Limit sedentary recreational screen-time to no more than 2 hours per day.
» When using screen-based electronic media, positive social interactions and experiences are encouraged.

SLEEP

» An uninterrupted 9 to 11 hours of sleep per night for those aged 5–13 and 8 to 10 hours per night for those aged 14–17.
» Have consistent bed and wake-up times.

PHYSICAL ACTIVITY LEVELS OF AUSSIE CHILDREN

Participating in physical activity and limiting sedentary behaviour is vital to a child's health, development and psychosocial well-being. However, a report card released by Active Healthy Kids Australia in late 2018 scored the physical activity levels of Australian children as a D-minus. It also ranked Australia at number 32 out of 49 countries for children's physical activity levels.

Research from 2019 found that the physical activity levels of Australian teens (aged 15–17) is particularly poor; we ranked 140 out of 146 countries for adolescent exercise levels.

The Australian Health Survey (AHS) 2011-2012 indicates that only 1 in 3 children, and 1 in 10 adolescents, undertook the recommended 60 minutes of physical activity every day. These findings highlight that only 19% of Australian children and adolescents aged 5–17 are accumulating 60 minutes of exercise every day of the week, while only 33% to 39% of primary school students are engaging in at least 120 minutes of exercise per week.

SCREEN-TIME AND SEDENTARY LEVELS

Technology continues to play a bigger role in the lives of Aussie kids, and so too does the subsequent increase in sedentary behaviour among children and teens. **Sedentary behaviour** is defined as sitting or lying down for activities.

It's important to remember that some sedentary activities are good for children such as:

» Reading and looking at books
» Listening to stories
» Quiet play such as art and craft, drawing and puzzle

However, those who spend long periods of time inactive watching TV and playing computer games are more likely to have poor physical, social and intellectual development.

Recommended screen-time for children based on the Physical Activity and Sedentary Behaviour Guidelines are:

» Children under 2 years old should have zero screen-time (including watching television, electronic media, computers and electronic games).
» Children aged 2–5 should be spending less than 1 hour per day.
» Children/adolescents aged 5–17 should spend less than 2 hours per day.

In 2011–12, less than one-third (32%) of children aged 5–14 met the screen-based activity guidelines. In fact, children aged 10–14 were less likely than those aged 5–9 to have met the screen-time guidelines (26% compared with 39%).

Quick Facts

In 2011–12, less than one-quarter (23%) of children aged 5–14 undertook the recommended 60 minutes of physical activity every day.

On average, children aged 5–14 spent more than 2 hours (123 minutes) each day sitting or lying down for screen-based activities. Children aged 2–4 spent 83 minutes a day on average in front of screens.

In 2012–13, while Indigenous children and non-Indigenous children aged 5–14 were equally as likely to have met the screen-time guidelines, Indigenous children were more likely to have met the physical activity guidelines (54% compared with 41%, respectively). Furthermore, Indigenous children were more likely to meet both physical activity and screen-time guidelines (29% compared with 22%, respectively).

Source: *Australian Institute of Health and Welfare*


Children who exercise are more likely to maintain an active lifestyle as an adult.

MEET THE EXERCISE PROFESSIONALS

Sometimes it can be hard to know who the exercise professionals are. In Australia, there are three types of accredited exercise and sports science experts who can support children in many ways, from getting fit and losing weight, managing and treating their chronic condition, or getting ready for their next big race or sporting event.

WHAT DOES *"ACCREDITED"* MEAN?

Accredited means the professional is registered with Exercise & Sports Science Australia (ESSA) and as such have been approved for meeting all of the requirements necessary to be considered an exercise health professional, as well as undertaking regular professional development to ensure their knowledge and skills are up to date.

ESSA's accredited exercise professionals are:

Accredited Exercise Physiologists (AEPs) complete a minimum 4 years of study at university in order to specialise in prescribing and supervising exercise for people who have complex health conditions, such as cancer, diabetes, heart conditions, and mental health conditions, or a disability or injury.

Accredited Exercise Scientists (AES) complete a minimum 3 years of study at university, providing them with a high level of training in exercise and sports science. They use exercise to improve health, well-being and fitness, and assist in the prevention of chronic conditions.

Accredited Sports Scientists (ASpS) complete a minimum 3 years of study at university and are highly trained professionals who provide sports science services and conduct research relating to sport in an elite environment such as the Australian Institute of Sport, state academy or professional sports club. They use exercise to improve sporting performance for individual athletes or teams.

TIP:

How can I find an accredited exercise professional?

Currently there are over 7,000 ESSA-accredited exercise professionals throughout Australia. You can find one close to your home by looking at the online directory provided by Exercise & Sports Science Australia (ESSA), the accreditation body for exercise and sports science professionals: www.essa.org.au/find-aep.

ASTHMA

Asthma is a long-term lung condition that can be controlled but cannot be cured. Children with asthma have sensitive airways of their lungs which react to triggers causing a flare up, also known as an asthma attack. Symptoms vary from child to child but typically include breathlessness, tight feeling in their chest, wheezing or coughing. These symptoms usually occur at night, early in the morning or during/just after physical exertion.

WHAT ARE THE BENEFITS?

It is important for children with asthma to participate in physical activity, as it can reduce symptoms by strengthening their heart and lungs. This in turn can improve their breathing and reduce asthma attacks – thereby enhancing quality of life.

It is important to understand the pattern of a child's asthma (including triggers and treatment approaches) for effective symptom management. Children, parents, teachers and coaches should also be educated about the child's asthma management plan as every child is different and will have different experiences with their asthma.

If you have any concerns about a child exercising with asthma, please get in touch with an Accredited Exercise Physiologist who can develop a suitable exercise program.

THINGS TO REMEMBER

- The identification of triggers (such as grasses, pollens and pollution) is important. By minimising exposure to triggers and having an appropriate asthma management plan, children with asthma can participate in physical activity with reduced risk of an attack. Always ensure the child has their reliever medication readily available before exercise participation begins.
- Before the activity, children should take reliever medication up to 15 minutes before warming up or as directed by their doctor.
- Always be sure that the child is warming up prior to exercise and cooling down after exercise.
- The type of exercise and the amount of time exercising is also important. Vigorous activity for six minutes or more in cold, dry air is more likely to trigger asthma. Ensure that the child has followed guidelines for taking their reliever medication if participating in early morning activity or if training/playing at night in winter months.

TYPES OF EXERCISE RECOMMENDED

Many great and recommended exercises for kids with asthma are yoga, walking, biking, hiking, gymnastics and swimming and they should be aiming to meet the physical activity guidelines while being active.

Parents and guardians: When beginning a new activity, ensure that your child commences at a low level and gradually increases their level of movement as they feel comfortable. Performing new activities that are too vigorous for your child's level of fitness may cause a trigger of asthma symptoms. Know that over time, as your child becomes fitter, so do their lungs and asthma attacks will become less likely. Always have reliever medications available at all times when your child is exercising.

Content provided by Exercise Right for Kids

> **Physical activity can help to reduce asthma symptoms by strengthening a child's heart and lungs.**

ATTENTION DEFICIT HYPERACTIVITY DISORDER

Individuals with attention deficit hyperactivity disorder (ADHD) often experience behavioural and cognitive challenges. Exercise is known to influence brain function and structure, and research suggests a positive association between increased physical activity and ADHD symptoms, particularly behavioural and cognitive improvements.

Currently, medication and behaviour modification techniques are used to manage ADHD. Physical activity and exercise can help to support these interventions and can have multiple physical and mental health and well-being benefits for children with ADHD.

WHAT ARE THE BENEFITS?

The mechanism behind the role of exercise for adolescents with ADHD can be due to the changes in brain structure and behavioural regulation that exercise promotes. Exercise may influence ADHD by increasing the availability of a chemical signal in the brain. Research suggests that exercise naturally stimulates the brain in a similar way to medication. Exercise may also be particularly effective for adolescents struggling with medication and/or behavioural interventions, as exercise also comes without negative side-effects.

Children and adolescents who have ADHD can often experience reductions in working memory, goal-oriented activity, and emotional regulation. Regular, moderate-to-vigorous physical activity and exercise has been found to be associated with the following cognitive benefits:

- Improved brain processing speed
- Working memory
- Greater planning and problem-solving ability
- Reduced impulsivity
- Reduced anxiety
- Improved attention

In particular, brain function and working memory may be heightened immediately after exercise. Therefore, it's important to continue to exercise on a regular basis.

THINGS TO REMEMBER

Adolescents with ADHD are often less likely to participate in organised sport and regular physical activity. This may be due to a number of reasons including reduced confidence or interest due to difficulty with movement planning or motor skills or in finding programs that are inclusive of children with behavioural challenges. Whichever the reason, they are at the same risk as their age-matched peers for a multitude of negative health implications associated with inactivity.

From evidence, we know adolescents with ADHD will see the same gains in muscular capacity, strength, aerobic fitness, motor planning, motor skill development, etc. as their age-matched peers, which contributes to increased self-esteem and confidence. Therefore, participation in regular exercise can have a holistic effect on not only behaviour and cognition but improvements can be seen in other skill deficits, as well as improved physical well-being.

TYPES OF EXERCISE RECOMMENDED

- Regular varied exercise that the child or adolescent enjoys should be a regular part of daily life.
- Adolescents with ADHD should participate in at least 60 minutes or more of exercise per day and reduce their daily screen-time in line with Australian Physical Activity guidelines for children and adolescents.
- Participation in sport and structured exercise can focus energies and reduce negative behaviours.
- Yoga 1-2 times per week can help regulate behaviours. Poses, breath control, mental concentration, and deep relaxation will positively affect mental states by promoting self-control, attention and concentration, self-efficacy, body awareness, and stress reduction. The practice of yoga exercise elicits reduced activation of the sympathetic nervous system (active state) and increased activation of the parasympathetic nervous system (relaxation state) resulting in increased emotional self-regulation.

ASK THE PROFESSIONALS

An Accredited Exercise Physiologist will be able to tailor an exercise plan that is safe and based on the individual needs of a child with ADHD.

Parents and guardians: The role of exercise is not necessarily to replace medication and behaviour modification strategies, but to work as a complementing therapy. However, it has been noted in at least one study that children with ADHD who performed high intensity exercise most days of the week were able to reduce their medication intake. It should also be noted that each individual will respond differently to exercise, thus benefits may vary.

Content provided by Exercise Right for Kids

AUTISM SPECTRUM DISORDER

Children with Autism Spectrum Disorder (ASD) are usually less able to interact with the world as other children do. They typically have deficits in verbal and non-verbal communication, social awareness and interactions, and imaginative play (variable interests and behaviours). However, the severity of these challenges can range from mild to very severe. As children with ASD often find it difficult to interact and/or communicate in social contexts, and often experience repetitive patterns of behaviours and interests, it can sometimes make it difficult to engage in healthy lifestyle interventions.

In addition, although not part of the diagnostic criteria, delays or difficulties with motor development are common in children and adolescents with ASD. Delays in the development proficient movement skills have been shown to further contribute to physical inactivity in youth with ASD.

As the number of ASD diagnoses increase, so too does the interest in the health and well-being of those living with ASD. Research supports the many benefits of exercise for children and adolescents with ASD. Exercise not only reduces the negative effects of inactivity, but also assists with the management and improvement of ASD symptoms.

Despite evidence supporting the importance of exercise for autism, youth with ASD do less physical activity than their peers. Given that 80% of Australian kids don't get enough exercise, this is cause for concern. Sedentary behaviour increases the risk of heart disease, diabetes, obesity and a number of other chronic health conditions for all children, including those living with ASD. There are no specific physical activity guidelines for children and adolescents with ASD, and the recommendation is to follow the Australian Physical Activity guidelines specific to the age of the individual.

WHAT ARE THE BENEFITS?

ASD related symptoms:

We all know exercise is good for us, but it may be even more beneficial for individuals with ASD. There is increasing evidence to support additional benefits for ASD other than just physical health including:

- Better emotional regulation and attention
- Improvements in behaviour (e.g., reductions in stereotypical and repetitive behaviours)
- Increased social behaviour and communication skills

In fact, research demonstrates that exercise interventions lead to a 37% improvement in symptoms of ASD, specifically behavioural and academic improvement.

Motor improvements:

Balance, posture, walking, flexibility and coordination are often more challenging for those with autism. These challenges can be reduced by increasing levels of physical activity. Improvements in movement abilities lead to better:

- Overall physical endurance (e.g., strength and aerobic fitness)
- Independence and function for daily tasks
- Self-confidence, self-esteem and a sense of belonging

THINGS TO REMEMBER

Children and adolescents with ASD face a number of unique barriers to being active. These include sensory challenges and differences with information processing. They may also exhibit a lack of confidence due to motor planning, coordination or proprioception difficulties (perception or awareness of the position and movement of the body).

Moderate-to-vigorous exercise can decrease repetitive behaviour for children and adolescents with ASD. Exercise can reduce self-stimulatory behaviour, it is inexpensive and the added health benefits of exercise may help improve the quality of living for children and adolescents with ASD. An Accredited Exercise Physiologist can work together with the child and family to design and tailor an engaging exercise plan to encourage regular participation.

ASK THE PROFESSIONALS

Accredited Exercise Physiologists (AEPs) are allied health professionals that have the expertise to prescribe appropriate exercise for autism. They understand the barriers and facilitators to physical activity in those with ASD and can provide a safe and specific exercise program.

An AEP will consider the following when prescribing exercise for those with ASD:

- Common co-morbidities such as attention deficit hyperactivity disorder (ADHD), obesity and epilepsy
- Medication side-effects
- Stage of motor development to target appropriate exercise interventions
- Cognitive ability and learning style to enhance participation

Parents and guardians: Initially, a session may not always look like a 'traditional' exercise routine. Movement modifications are made to support the individual's needs, and to make it fun.

It's important for your child to work with an AEP who has an understanding of ASD – so don't be afraid to ask. It is also encouraged for parents to educate the AEP about their child's individual abilities and strengths.

Remember that exercise physiology services delivered by an AEP can be funded by the NDIS, under *'Capacity Building – Improved Health and Wellbeing', as well as 'Capacity Building – Improved Daily Living Skills'.*

TYPES OF EXERCISE RECOMMENDED

- Cardiovascular exercise and strength/resistance training (under supervision) every day for a total of 60 minutes (remember this can be broken up across the day).
- Start at 5-10 minutes of continuous activity, 1-2 days a week. Slowly increase the duration of activity to 10-30 minutes, 3-4 days a week. You can later increase it to 15-60 minutes for 5-7 days a week.
- Swimming and water play work well for children with sensory needs.
- Focus on encouraging fundamental movement skills – running, catching, kicking, leaping, throwing, or jumping. Whilst this may seem like big steps for some, break each skill into parts and focus on exaggerating each part of the movement.

Expert Contributor: *Lauren McDougall, Accredited Exercise Physiologist at Achieving Abilities Exercise Physiology.*

> Focus on encouraging fundamental movement skills — running, catching, kicking, leaping, throwing, or jumping.

CHILDHOOD CANCERS

Of 145,000 cancers diagnosed in Australia each year, around 1,000 are children and adolescents (aged under 18); representing just under 1% of all diagnoses. While childhood cancers may be regarded as rare, its impact is large. It is often referred to as a 'family illness' as it also impacts siblings, parents, grandparents, and other family members as the child undergoes lengthy treatments of up to two years, which may include long periods spent in hospital.

Leukaemia is the most commonly diagnosed cancer for those under 10 years of age, contributing to around one-third of all diagnoses. In adolescents, lymphoma is the most commonly diagnosed cancer.

Nearly all survivors of childhood cancer will develop at least one chronic health condition. Survivors of childhood cancer are up to 10 times more likely to develop heart and metabolic conditions than other children. Because of this, improving modifiable behaviours, such as increasing physical activity, improving diet and being sun smart, represent important efforts in improving the length and the quality of the lives of those diagnosed with childhood cancers. Although limited, emerging research on exercise for children with cancer shows the potential benefit is promising.

WHAT THE RESEARCH IS SAYING

The Australian Government Department of Health suggests that all children should be achieving 60 minutes of moderate-high physical activity each day. A recent study showed that only one-quarter of childhood cancer survivors are achieving this recommendation, and survivors with higher screen-time present with lower fitness levels. Efforts are clearly needed to support survivors and their families to become more active.

Exercise research among childhood cancer survivors has shown promise in improving cardiorespiratory fitness, body composition, flexibility, muscle strength, and quality of life. This is vital as all these are known to be diminished both during and after treatment and are associated with longer term health and survival.

TYPES OF EXERCISE RECOMMENDED

There are no established guidelines for childhood cancer survivors, as is the case for adults with cancer, although these are currently being developed by a global network of researchers. Exercise should be tailored to the needs of the individual survivor, with exercise physiology services shown to be well received by families of childhood cancer survivors.

During treatment, children are at risk of becoming sedentary and experience decreased fitness, muscle mass and quality of life. Children must be encouraged to move as much and as often as possible.

- Outdoor play with siblings, when safe during any cancer treatments, provides a great opportunity for children to engage in physical activity, even if it's at a light intensity.
- Digital play and wearable technology, such as Fitbits, to increase steps are great for kids, particularly with younger children.
- Apps are also a great way to engage the younger generation, e.g., 'UNICEF Kid Power' for children or 'Couch to 5K' and exercise tutorials on YouTube for adolescents.

After treatment, it is vital for children to participate in aerobic and strength/resistance exercise, such as:

» Aerobic exercise: skipping, jogging, playing outside, swimming, bike riding, school sport
» Resistance exercise: body weight exercises, resistance bands or yoga, climbing up or along playground equipment

Muscle strengthening activities can also be useful in increasing the muscle mass lost during treatment, whilst stretching exercises can improve flexibility.

Increasing fitness and strength is great in the short term, particularly for increasing confidence when returning to school and sport, as well as benefits to body-image among adolescent survivors. In the longer term it is vital for reducing risk for developing other chronic disease such as diabetes and heart disease.

THINGS TO REMEMBER

» If children are immunocompromised during treatment, they should avoid busy places where there will be greater exposure to illnesses, such as public pools or playing around sick friends.
» If they have received high doses of cardiotoxic chemotherapy (such as anthracyclines) or radiation around the area of the heart, consultation with their oncologist or cardiologist prior to participating in high intensity aerobic or strength/resistance exercise is advised.

ASK THE PROFESSIONALS

For all the reasons above, survivors of childhood cancer may have complex medical needs that would be well supported by an Accredited Exercise Physiologist (AEP). Treatments and medical considerations may differ considerably across childhood cancers, so there is no one-size-fits-all approach.

Parents and guardians: There are numerous effects from cancer and therapies that can be improved by being physically active. Many families may not be aware that childhood cancer survivors may be eligible to access Medicare subsidised AEP services. An AEP can provide guidance and education to families about how to safely exercise during and after cancer therapy, which can set up healthy and independent behaviours, leading towards living with improved health for many years.

Another valuable resource is Little Big Steps, who are working to make sure every Australian child with cancer gets access to exercise medicine as part of their cancer treatment. The website offers a range of research, resources and guidelines.

Expert Contributor: *Dr David Mizrahi PhD, Clinical Research Officer at the Prince of Wales Clinical School, University of NSW and Accredited Exercise Physiologist at Care Connected.*

CHILDHOOD OBESITY

Overweight and obesity are defined by the World Health Organization (WHO) as abnormal or excessive fat accumulation that may impair health. Body Mass Index (BMI) is a simple way of determining whether a person is overweight or obese. However, for children, age must be considered. Click here to calculate a child's (aged 2–19) BMI for a clearer indication regarding childhood obesity.

HOW SERIOUS IS CHILDHOOD OBESITY IN AUSTRALIA?

- In 2014–15, 1 in 4 (26%) Australian children aged 2–17 were overweight or obese.
- Approximately 1.2 million children are overweight or obese in Australia.
- About 1 in 6 (18%) children and adolescents aged 2–17 were overweight.
- About 1 in 13 (8%) children and adolescents aged 2–17 were obese.
- Childhood obesity is a risk factor for chronic disease in adulthood.
- If current trends continue, the proportion of overweight or obese children and adolescents (aged between 5 and 24) is expected to increase by 14% in 2020.

WHAT ARE THE CONSEQUENCES?

In most cases, obesity is a reversible lifestyle-related condition, which if left untreated can lead to several health risks and initiate the vicious cycle of chronic disease. Childhood obesity can lead to:

- High blood pressure and high cholesterol (two risk factors which can lead to cardiovascular disease)
- Impaired glucose tolerance and diabetes
- Asthma and sleep apnoea
- Joint problems
- Liver disease
- Psychological issues (anxiety, depression and low self-esteem)
- Social problems such as bullying
- Adulthood obesity

RISK FACTORS FOR CHILDREN

There are several factors which increase the incidence of childhood obesity. Fortunately, most of these risks are modifiable, that is, we have the ability to control them. These factors include:

Lack of physical activity: This is a great opportunity for a child to utilise their excess energy stores and help maintain a healthy weight. A lack of exercise will do the opposite, by leading to an increase in energy stores and weight, increasing the risk of other chronic diseases such as diabetes.

Overweight parents: Physical activity and eating habits are highly influenced by parents. Parents with poor behavioural choices will have a flow-on effect to the child where eating unhealthy foods and not participating in physical activity are what they learn as children.

Community environments: Childcare centres, schools and after-school care organisations have a substantial influence on child physical activity and health eating behaviours. Further, factors such as affordability of healthy food options, social supports and marketing also play an important role in how the community encourages children to move and eat.

Poor diet choices: Consuming foods that are very energy dense, high in fat and lack nutrient value will increase the chance of a child being overweight.

Poor behavioural habits: Spending significant time indoors, playing video games, swiping their iPads, watching TV, not being physically active and excess sleep are all examples of poor behavioural habits.

Genetics: Genetic mutations and genes also play a role in the susceptibility of a child being overweight. Even though these conditions are quite rare, genes do play a part. It's important to be aware of any family medical history and be proactive in managing not only obesity but all medical conditions.

TYPES OF EXERCISE RECOMMENDED

All children and adolescence should be participating in a minimum of 60 minutes of exercise and physical activity per day. Parents, carers or guardians should encourage activities that are incorporated into daily activities such as walking to school, kicking the ball in the back yard or helping with house cleaning.

Weight-bearing exercises and flexibility are also recommended to keep the body strong and flexible.

THINGS TO REMEMBER

The emphasis on managing weight in childhood and adolescence is not weight loss but weight maintenance. As the child grows, their BMI will stabilise and reduce as they increase in height. A healthy diet with a variety of food groups and regular daily physical activity that meets the guidelines will assist in achieving a healthy weight as a child grows.

Parents and guardians: Many overweight children are hesitant to participate in group sports for fear of not keeping up with their fitter friends and teammates. Encourage exercise that is fun and can be done in other unstructured environments such as bike riding, swimming or walking. There are many programs in the community that offer non-competitive social activities and games which encourage exercise and physical activity, and some of these programs are even offered for free. It's recommended to check out the local gyms, YMCAs or local health districts for Active Kids programs.

ASK THE PROFESSIONALS

There are a range of health professionals who can help parents and their children to better understand how to exercise and eat correctly to prevent or manage childhood obesity.

Accredited Exercise Physiologists (AEPs) are specialists in all things exercise as medicine. An Exercise Physiologist will help a child to understand how to exercise within their limits to achieve their goals. They will also tailor exercise to suit specific medical conditions and prevent further onset of disease.

Accredited Exercise Scientists (AES) use exercise to improve health, well-being and fitness. An Exercise Scientist will educate, promote and implement the adoption of physical activity and/or exercise for children and adolescents.

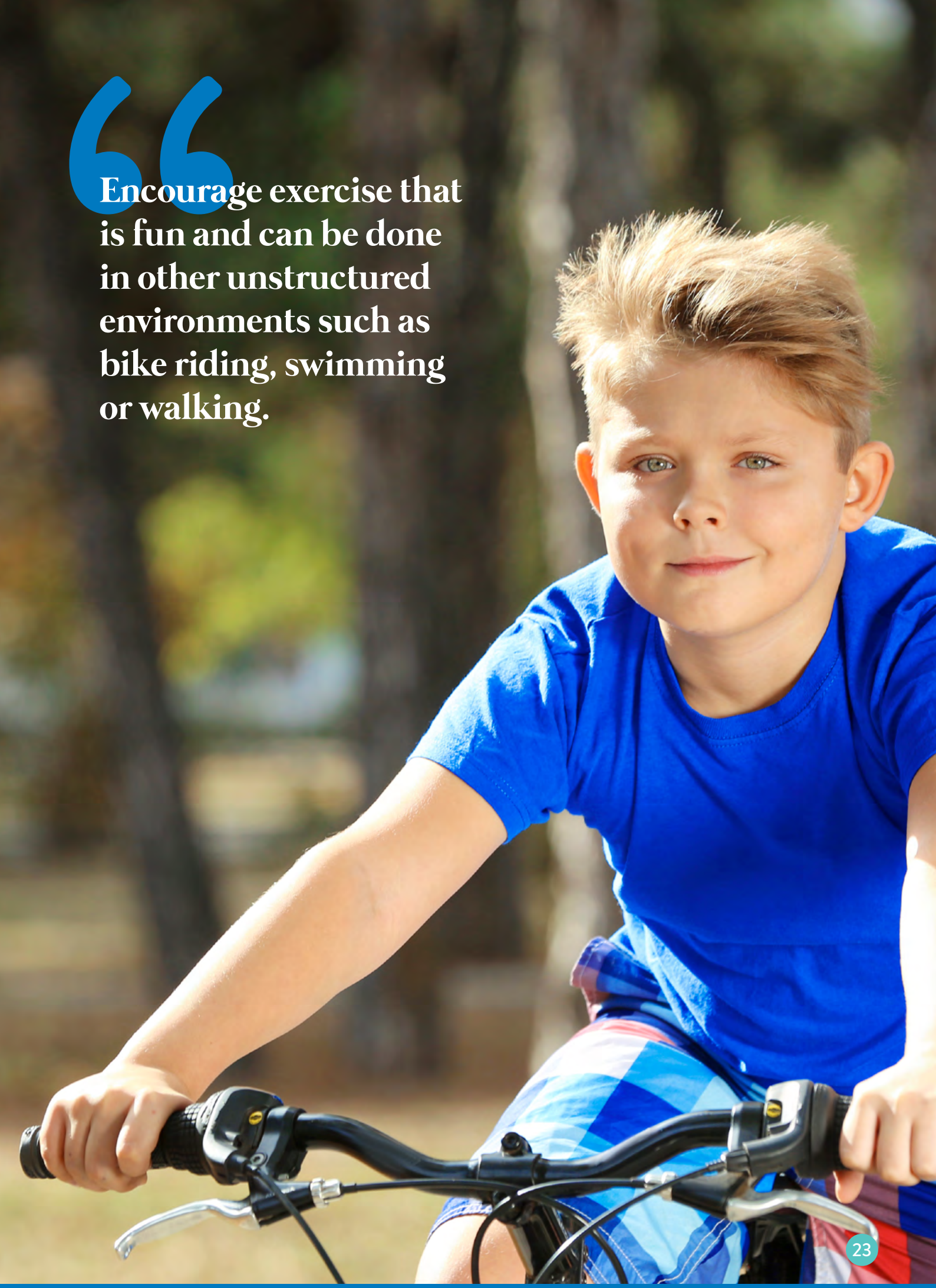
Contact your local accredited exercise professional via the ESSA online directory here: **www.essa.org.au/find-aep.**

Dieticians are specialists in all aspects of food. They understand how what goes into your mouth will affect your health and energy levels. Dieticians will help provide education on how to eat for good health and prevent chronic disease.

Doctors or GPs can be consulted with if a child is believed to have an eating disorder or suffers from the above-mentioned risk factors of childhood obesity. They will also act as a mediator to help find the appropriate health professional to manage the child's well-being.

Early Childhood Teachers are great individuals to help form healthy and long-standing habits for children. It's recommended to discuss with them the child's health and behavioural patterns when no parent is around, and it's important to find the right teacher that is going to encourage healthy eating, social interaction and exercise in children.

Expert Contributor: *Andrew Awad, Accredited Exercise Physiologist and Centre Manager at Ignite Health & Fitness Centre.*


Encourage exercise that is fun and can be done in other unstructured environments such as bike riding, swimming or walking.

MENTAL HEALTH

Children and adolescents with good mental health allows them to think clearly, develop emotionally, learn healthy social skills and develop the resilience to cope with problems that may arise. Mentally healthy children experience a greater quality of life and can function and develop well at home, in school and in their communities.

Unfortunately, the Australian Child and Adolescent Survey of Mental Health and Wellbeing reported almost 1 in 7 children and adolescents aged 4-17 experienced a mental health disorder in the previous 12 months. The most common mental health disorders were attention deficit hyperactivity disorder or ADHD (7.4%), anxiety disorders (6.9%), major depressive disorder (2.8%) and conduct disorder (2.1%).

WHAT ARE THE BENEFITS OF EXERCISE?

As well as improving children's physical health (e.g., fitness and muscle strength), regular exercise also improves their cognition, brain development and function, and their mental health. Research in physical activity and brain health in children and adolescents indicates that exercise plays an important role in preventing and reducing symptoms of depression and anxiety, in helping with stress management, and in improving self-esteem. Additionally, there is some evidence that children who participate in regular exercise at a young age may experience decreased rates of anxiety and depression in childhood and adolescence.

Exercise benefits relating to mental health include:

- Improved focus, school performance, sleep and energy levels
- Improved relationships, social skills and more positive body image
- Decreasing symptoms of depression, anxiety, pain and loneliness
- Improved ability to cope with stress and have increased resilience
- Increased self-esteem and self-worth

THINGS TO REMEMBER

When encouraging children and adolescents to participate in exercise, remember:

- **Find something they enjoy.** Whether its swimming, playing football or running at the park, enjoyment of exercise is important to build a positive exercise experience and can help improve motivation.

- **Get the whole family involved.** Parents and guardians are great role models and provide the needed support for children to get involved in regular exercise. Organising active family outings such as a walk around the neighbourhood or a bike ride is a great way to increase physical activity levels and explore the local community.

- **Keep track of what works.** Different types of exercise can feel different to each child. Competitive sports may increase mental distress in some children, so involvement in non-competitive sports such as martial arts or skateboarding might be a better option. Other children may thrive in social situations so team sports that they enjoy are ideal to build fitness and friendships. Just remember every child is different and they change over time, but if they are not enjoying or engaging in physical activities then explore other strategies to get them moving.

ASK THE PROFESSIONALS

Exercise is effective for promoting positive mental health, brain development and function in children, and it is equally beneficial in the treatment of mental health disorders in children and adolescents. Finding and engaging with an Accredited Exercise Scientist (AES) or Accredited Exercise Physiologist (AEP) with experience in working with adolescents and mental health disorders can be helpful to improve exercise engagement and ensuring a positive exercise experience.

Parents and guardians: If you are concerned that your child is not getting enough physical activity to benefit their brain function and mental health, speak to an AES or AEP in your local area.

If you are concerned that your child may experiencing a mental health disorder, speak to your local GP who can refer you to the appropriate health professional.

Expert Contributor: *Kemi Wright, Accredited Exercise Physiologist and Director of Thriving Inc.*

PHYSICAL AND INTELLECTUAL DISABILITIES

It is important to encourage children to embrace their disability and participate in as many physical activities as possible. For children with physical and intellectual disabilities, exercise is safe, is important for quality of life, and is associated with a range of benefits. Providing opportunities for social interaction and role models (such as Paralympians) assists in building self-confidence and encouragement to exercise.

WHAT ARE THE BENEFITS?

Carefully supervised exercise can help any child with a disability in a number of ways including:

- Improved cognitive function and motor skills
- Improved cardiovascular health
- Stronger muscles and bones
- A reduction in the risk of chronic conditions (e.g., arthritis, osteoporosis, type 2 diabetes)
- Increased independence and helps to build self-confidence
- Better emotional and psychological health
- Improved social skills

THINGS TO REMEMBER

- Specific characteristics associated with some disabilities are important to consider when facilitating safe exercise participation. These could include atlantoaxial instability and heart conditions in down syndrome, or pain and epilepsy in cerebral palsy. Seeking advice from exercise professionals may be important in these instances.
- Children with intellectual disabilities often engage with routine and structure. Try to follow a consistent routine of engaging in exercise (e.g., swimming every Tuesday after school).
- Utilise communication methods that work best with your child (e.g., routine boards, visuals, verbal encouragement). School teachers can also provide insightful communication strategies to engage 'unwilling' participants.

Parents and guardians: There are opportunities to participate in both inclusive and adapted physical activities. Ensure that your child has the opportunity to engage in sports/activities that are appropriate for your child's ability. The type of exercise doesn't always matter, as long as the child is participating in regular physical activity.

ASK THE PROFESSIONALS

Every child comes with individual traits and abilities, hence the importance for children to exercise right for who they are.

Accredited Exercise Physiologists are qualified to understand the complexities around working with children living with a disability. They will work with doctors and other allied health professionals to ensure your child's safety and well-being. They also have the skills and knowledge to prescribe effective exercise interventions that are individualised to your child's specific needs.

Sports Ability provides inclusive activity cards designed to assist the delivery of sports-based activities that cater for all levels of ability.

Content provided by Exercise Right for Kids

> **Every child comes with individual traits and abilities, hence the importance for children to exercise right for who they are.**

THE IMPORTANCE OF SPORTS

Sport offers a wide range of physical, emotional and social benefits, as well as creates healthy habits that will last into adulthood. Whilst some children may meet the daily physical activity recommendations through incidental activity or at school, sport provides children with a greater opportunity to be active and experience personal growth.

WHEN CAN THEY START?

By about 6 years of age, most children have the basic motor skills for simple organised sports. However, they may still lack the hand-eye coordination needed to perform complex motor skills and may not yet be ready to understand and remember concepts like rules, teamwork and strategies. There is still a range of skills that can be adapted to create modified games, played at a basic level such as running, swimming and kicking a ball, allowing them to be involved until they're ready for more organised sports.

WHAT ARE THE BENEFITS?

The physical, emotional and social development of children are the most important contributors for why children should become involved in sport. Some benefits that may come from playing sports includes:

- Reduced risk of obesity
- Increased cardiovascular fitness
- Healthy growth of bones, muscles, ligaments and tendons
- Improved motor skills, including coordination and balance
- Greater ability to physically relax and, therefore, avoid the complications of chronic muscular tension (such as headache or back ache)
- Improved sleep
- Boosts brain development which includes increased academic learning
- Emotional health benefits, such as greater confidence and self-esteem
- Improved social skills enabling them to create friendships and have fun
- Improved personal skills, including cooperation, teamwork and leadership
- Reduced amount of screen-time and sedentary activities

WHICH SPORT SHOULD CHILDREN TAKE PART IN?

A recent survey found that the top team sports most popular with children aged 6+ are:


SOCCER


BASKETBALL


TENNIS


NETBALL


CRICKET


AUSTRALIAN FOOTBALL

However, there's no one sport better for children than another as long as they are having fun. If available, it's recommended that children try out a range of different sports to help them find the one that suits them. This then provides a child with plenty of opportunities to try activities out before settling on one as the risks of early sports specialisation include higher rates of injury, increased psychological stress, and quitting sports at a young age.

Parents and guardians: Children can find out about their local sporting teams through their school, sports centre, holiday program, before and after school care service, community/council Facebook page or the local newspaper.

SPORT SHOULD BE FOR EVERYONE

There is a wide range of sporting opportunities that are inclusive of children of all abilities.

Over the last 10-15 years, there has been increasing support for sporting opportunities that are inclusive of people living with a disability. With the growth of the Paralympic Games, a range of Paralympic and non-Paralympic sports have been adapted for people with disabilities and new events and sports developed.

Disability Sports Australia offers a list of organisations who may be able to support a child with a disability get involved in sport or become more active:

- Deaf Sports Australia
- Blind Sports Australia
- Disabled Wintersports Australia
- Riding for the Disabled
- Special Olympics
- Sport Inclusion Australia
- Transplant Australia

Another suggestion is to check out what the local community offers as exercise and sport businesses and centres can provide great opportunities for those living with a disability to become more active.

PREVENTING SPORTING INJURIES

Adolescents are more prone to injury during ages 15–17 years. There was an estimated 5,770 hospitalisations of adolescents in 2011-2012 as a result of a sporting injury. The most common sporting injuries occurred from football codes (such as soccer, AFL, rugby and touch), followed by hockey and cricket.

Adolescent boys also tend to experience more injuries than girls, with 55% of injuries occurring in boys compared to girls. This is due to a number of factors; more boys involved in contact sports, increased risk taking and larger body mass.

The good news is that tailored injury prevention programs that are included as part of a team's warm up can reduce up to 46% of injuries in youth sport. The focus of training programs should change from pre- to- in-season. Pre-season training should focus on strength, functional ability and balance training, whilst progressing to functional strengthening during the season. A structured warm up in pre-season should include proprioception, strength and technical skills, whilst ensuring alignment and control is maintained to reduce ankle and knee injuries.

ASK THE PROFESSIONALS

Accredited exercise professionals can help to prevent injury for children completing sports. They can provide individualised and tailored strengthening programs to reduce risk of injuries. They can assess your child's risk of injury by determining if there is muscle weakness or imbalances that could result in injury.

Some accredited exercise professionals specialise in injury rehabilitation and can assist in ensuring a successful return to sport as part of any rehabilitation program. They can help at a club level by incorporating pre-screening and "coaching the coaches" on how to implement injury prevention programs provided by their sporting code.

Accredited Sports Scientists also work in local communities and can help with children and adolescents who are participating in sport at a higher level. Contact your local Accredited Sports Scientist via the ESSA online directory: www.essa.org.au/find-aep.

Content provided by Exercise & Sports Science Australia

> **Sport offers a wide range of physical, emotional and social benefits, as well as creating healthy habits that will last into adulthood.**

STRENGTH TRAINING IN CHILDREN

Children and adolescents, whether they're athletes or not, can successfully and safely improve their overall health and function with strength training (i.e. resistance training or weight training). Whilst children lifting weights can be a hot topic among parents, exercise professionals are saying "yes, they should" in order to reap the wide range of physical health benefits it provides. However, it needs to be done correctly.

It's not uncommon for parents to have their reservations about their child lifting weights. Concerns about damage to growth plates, stunting their height, or becoming injured are usually at the forefront of their minds. However, as more research comes to light, these notions are being disproved and it's becoming increasingly necessary for children to lift weights and undertake strength training. Especially when they are supervised by an accredited exercise professional.

WHAT ARE THE BENEFITS?

Some of the more obvious benefits that come with children participating in safe weight training (or strength training) include improving their fitness, becoming stronger, they are less likely to become overweight and obese, and they will have better mental health.

Although active play and a range of sports are imperative for the physical and mental health of children up until the age of about 10 years old, after this age, there's merit in moving them into a more formalised strength training program.

Performing traditional strength exercises (starting with body weight and progressing slowly) is the perfect way to develop a base of good motor control and coordination. This is important, because it lays the foundation that underpins their ability to perform more complex movement tasks. Things like jumping, sprinting, bounding, and landing are all pre-determined by your ability to squat, lunge, and hip hinge well. For this reason, formalised weight training can really set your child up for success in any future athletic endeavours.

HOW SHOULD CHILDREN START LIFTING WEIGHTS?

The key is to start *gradually*. Children first need to become competent at performing those key fundamental movement tasks mentioned above. Exercise professionals will engage your child in a range of exercises that develop muscle strength and fundamental movement skill abilities (e.g., bodyweight squatting, lunging, pressing and pulling movements).

When bodyweight technique is attained, children can be introduced to more complex exercises that challenge their coordination and require more speed and power. For weightlifting exercises, it has been suggested that early experiences use modified equipment and light resistance, and focus on technique.

Additionally, you want it to be *fun*. This might mean incorporating game-based play into your training sessions. It might involve some reactive agility tasks, some jumping and landing, or even some coordination activities.

STRENGTH TRAINING AT EVERY AGE

The Youth Physical Development model is a model of long-term athletic development. It emphasises the long-term development of all physical abilities (but especially strength) in children and adolescents (up to aged 21+). There are two versions; one for males and one for females.

It is important to note that it is advised against to only use chronological age when guiding strength training prescription. Rather, it is best to prescribe based on training age, motor skill competency, technical experience and existing strength levels. Basing strength training solely on chronological age can restrict optimal exercise prescription for children and adolescents of different maturational stages.

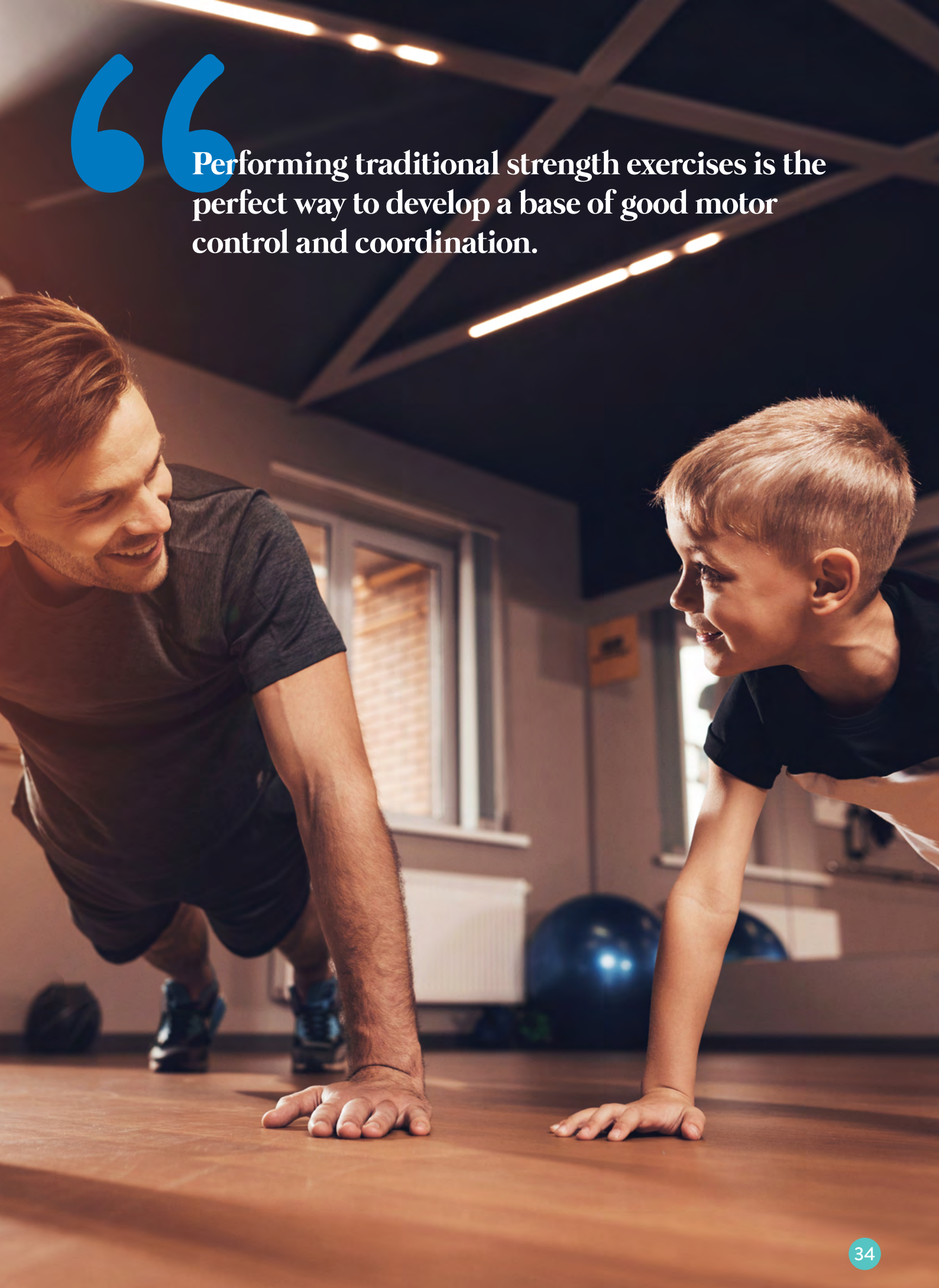
Accredited exercise professionals will take these considerations on board when working with a child or adolescent engaging in strength training.

THINGS TO CONSIDER

When implemented correctly, weight training can improve coordination, build strength and resilience, enhance mental health and self-esteem, boost sport performance, and reduce injury risk. Moreover, it can set them up for a lifetime of health success.

Parents and guardians: For those parents who want their child to start strength training safely, it's always important to get advice from an expert. You can find an accredited exercise professional near you by visiting the ESSA online directory.

Expert Contributor: *Dr Hunter Bennett, Accredited Exercise Scientist, Lecturer in Exercise Science at the University of South Australia, and coach at BUILT Strength and Conditioning.*



> **Performing traditional strength exercises is the perfect way to develop a base of good motor control and coordination.**

EXERCISING AS A TEEN

Research by the World Health Organization (WHO) found that 80% of teenagers around the world aren't getting enough exercise and are growing increasingly inactive world-wide. Worse still is the fact that Australia, a nation that prides itself on its outdoor culture, is doing particularly poorly. We're currently ranked 140 out of 146 countries for teenage exercise levels.

There's also a trend that girls are less active than boys. The data shows that 85% of girls are physically inactive compared to 78% of boys. This was consistent in all but four countries around the world. In Australia, less than 1 in 10 adolescents aged 12 to 18 are meeting the recommended levels of physical activity.

THE RISKS OF INACTIVITY IN ADOLESCENCE

Not being sufficiently active can cause a range of health conditions leading into early adulthood and beyond. Adolescents may have decreased bone and cardiometabolic health which leaves them at an increased risk of chronic disease in later life, including type 2 diabetes, heart disease, and high cholesterol.

If adolescents are not moving enough, they are also at an increased risk of being overweight or obese, with statistics already showing that 30% of teenagers (aged 14–17) are classified as overweight or obese.

There are also worrying signs that mental illness is becoming more prominent in teenagers. Adolescence is a time of significant psychological and physical change, involving major growth and social role transitions. Unfortunately, as children age, the amount of time spent in outdoor activity decreases, and the amount of time spent sitting increases. This can lead to an increased risk of depression. The good news is that just 60 minutes of light physical activity can help protect children against depression. Also, participating in physical activity for a longer duration could help improve overall emotional health.

HOW MUCH EXERCISE DO TEENS NEED?

The current guidelines and evidence state that adolescents should be accumulating at least 60 minutes of moderate-to-vigorous physical activity per day. This should include muscle and bone strengthening activities on at least 3 days per week, whilst limiting recreational screen-time to a maximum of 2 hours per day.

There are simple ways for a teenager to start exercising more:

1. Plan times in the day that will be spent being active – this is helpful around busy schedules.
2. Teenagers commonly enjoy being social, and being active can be a social occasion too, whether it be a walk with friends or joining a sports team.
3. Make it fun, enjoyable and ensure it is at an achievable level.
4. Shorter bursts of higher intensity physical activity may be easier and more engaging to reach the guidelines.
5. There is a range of easy-to-download apps for smart phones that encourage a healthy physical and mental health including Nike Training Club, Aaptiv, MapMyRun, headspace, and Zombies, Run! (for fun!).

WHY ARE TEENS NOT MOVING ENOUGH?

Children are generally more physically active in primary school. Lunchtime in primary school is dedicated to physical activity – there is a range of space to play, and playgrounds for climbing, and Physical Education (PE) class is mandatory for all. Once adolescents reach high school there is a decreased focus on outdoor physical activity, less time at lunch/break, and more sitting areas with less open spaces.

PE classes usually become more selective and there is an increased demand on activities that encourage sedentary behaviours, such as study. Unfortunately, just because a teenager participates in a sport, does not necessarily mean they are meeting the physical activity guidelines. This is because training is usually only 1 to 2 days per week with 1 day dedicated to game play where a child may or may not play the whole time.

Parents and guardians: You also have an important role to play, as active parents are associated with active kids. Therefore, parents can aim to dedicate 1 hour a day to moving more. This does not need to be 1 full hour and can be broken down into smaller bouts, such as 6 x 10 minute blocks, or 2 x 30-minute blocks.

The most important factor for parents is to identify their teenager's interests, level and needs surrounding their physical activity. Do they already play a sport and train twice a week? What is something you can do on the other days of the week that is similar or different?

DON'T BE AFRAID TO ASK FOR HELP

Teens shouldn't be afraid to ask for assistance in finding a safe and fun exercise program. An Accredited Exercise Physiologist or Accredited Exercise Scientist can help a family find a way for their teenager to become more active in a way that is suited to their needs, age of development and interests. To get in touch with an accredited exercise professional near you, click here.

Expert Contributor: *Nicole Emery, Accredited Exercise Physiologist at Optimum Allied Health.*

> 60 minutes of light physical activity can help protect children against depression.

8 tips FOR PARENTS ON GETTING KIDS MORE *Active*

1. **Keep it FUN!** If your child enjoys the activity, they will be more likely to stay involved in it.
2. Indigenous children may like to **engage in traditional Indigenous games** – this is a fantastic way to not only stay active but reconnect the kids with their culture and history. Search '***Yulunga Games***' online as a great Indigenous educational tool.
3. **Try physical activities together** or include kids in the activities you do already!
4. While aerobic activities, such as running, swimming and cycling, are important, **muscular fitness is equally as important** for children and time should be spent engaged in muscle and bone strengthening activities.
5. **Keep trying new things** – the variety is good for kids both mentally and physically.
6. **Get kids involved in chores at home** – gardening, sweeping up leaves, cleaning in the house are great ways to stay active.
7. If paying for expensive sports is an issue, **consider free or low-cost activities** like bush walks, frisbee, tag, kicking a soccer or footy ball around with your kids, etc.
8. **Use technology to your advantage** – Wii sports is a great option!

TIP:

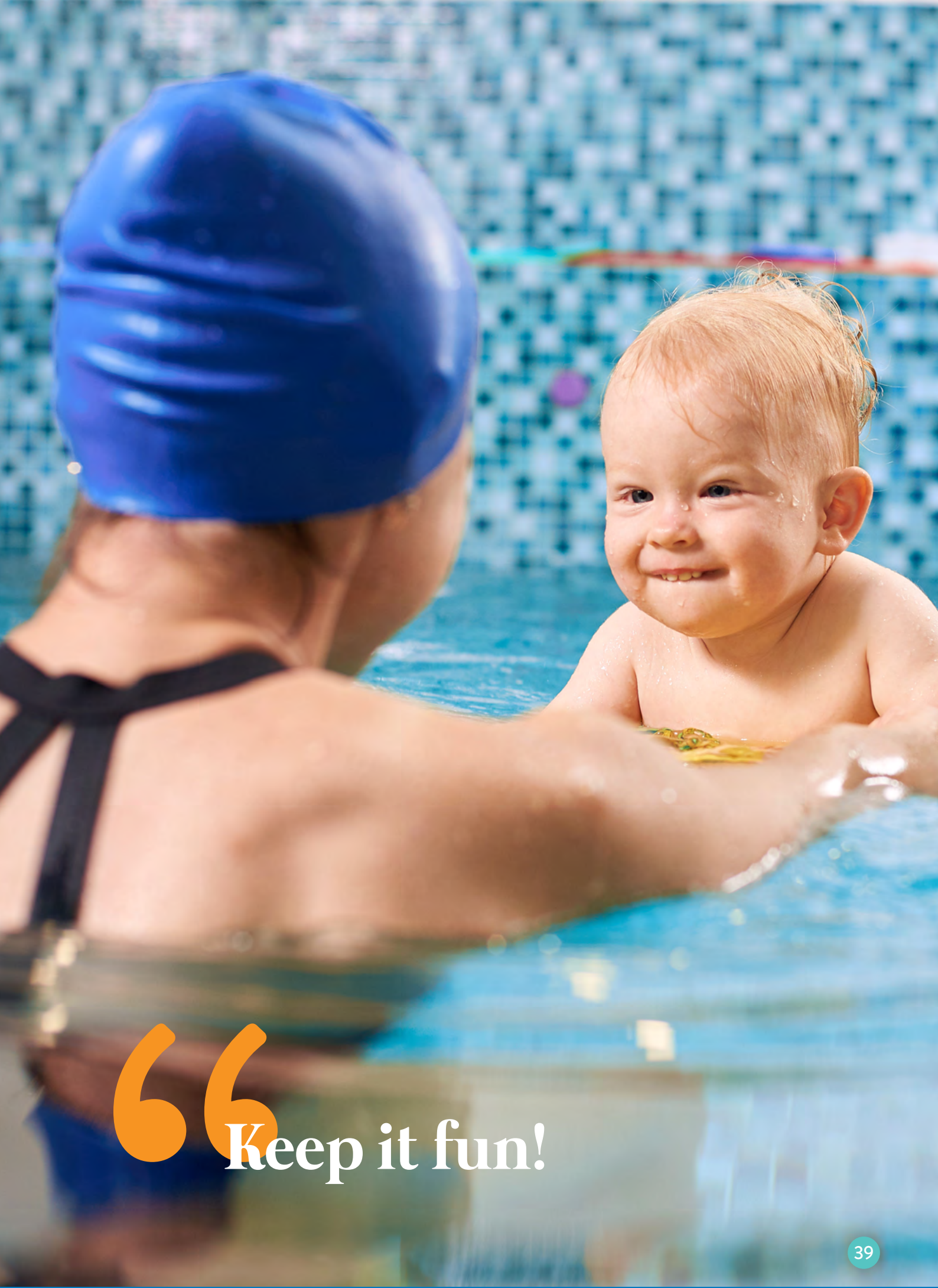
How can I identify the intensity of the exercise I am completing?

A quick way to test your exercise intensity is using the talk test. When exercising can you:

» Talk comfortably and sing comfortably? You're probably exercising at a **light intensity.**

» Talk comfortably but not sing? This is likely to be **moderate intensity** exercise.

» Neither talk nor sing comfortably? You're working hard at a **vigorous/high intensity**.



Keep it fun!

EXTRA SUPPORT

If you're a parent or guardian of a child or adolescent and need an extra hand to help them become more active and exercise right for their health and any conditions, then speak to a GP or an exercise professional first. You can find a local Accredited Exercise Physiologist or Accredited Exercise Scientist close to your home by looking at the online ESSA directory: www.essa.org.au/find-aep.

EXERCISE RIGHT

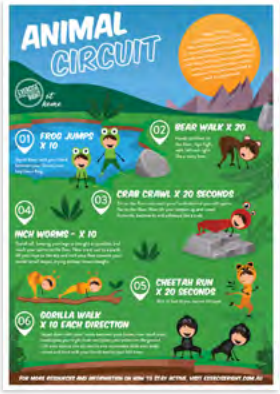
Exercise Right has a variety of online resources that anyone can access to help motivate children to get active:

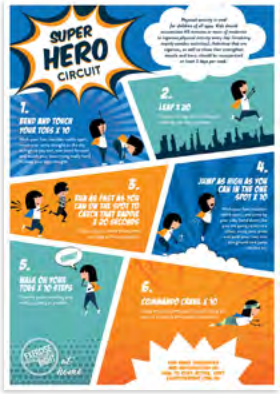
Videos for kids

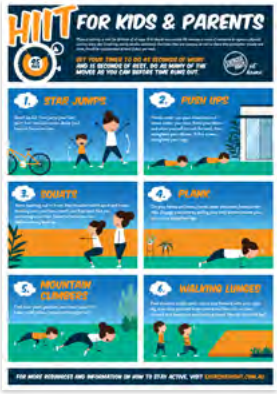
Available on the Exercise Right at Home page, check out the videos under the 'Kids' tab where ESSA accredited exercise professionals have put together a range of workouts that parents and children can do together in the safety of their home.

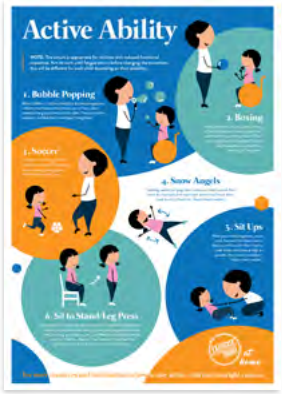
Downloadable posters

There is also range of posters available that highlight easy ideas to keep children active, as well as at-home exercise circuits that children can easily do with their parents or guardian. It includes a 'Superhero' and 'Animal' circuit, as well as a high intensity training work out.



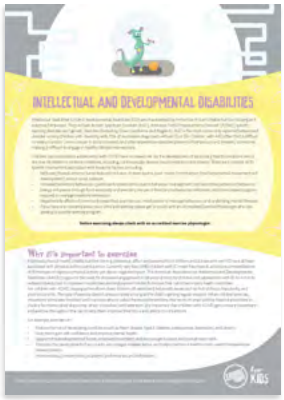


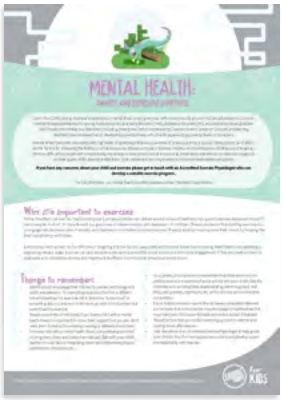


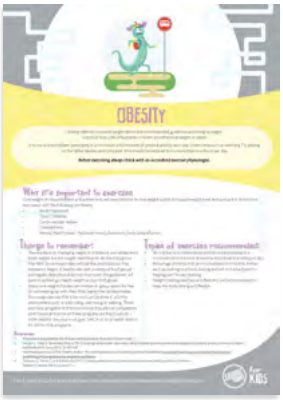


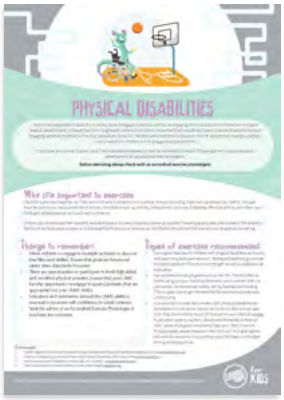
Fact sheets

Exercise Right for Kids has also published a range of fact sheets developed by Accredited Exercise Physiologists that are designed to educate parents about the benefits of exercise for a range of children's health conditions. The conditions range from asthma, cerebral palsy, diabetes, epilepsy, physical disabilities, and more.









SPORT AUSTRALIA

Sport Australia also offers a variety of 'Sporting Schools' programs that can help parents, guardians and teachers encourage exercise at school and home:

Tiny Trainer Challenges

Sport Australia previously launched their 'Find Your 30' campaign which includes their 'Tiny Trainer Challenges' which includes athletics obstacle course, makeshift volleyball, jog your walk, and more. These can all be undertaken by the whole family and the tiny trainers are there to help you all along your way.

Playing for Life

Playing for Life activity cards are designed for everyday use by teachers, coaches, out of school hours care staff and parents. Aligned with the Australian Curriculum and the Australian Physical Literacy Framework, these game-based activities are easily adapted to different sports and help create a safe, inclusive and challenging environment for children.

Sports Ability

Sports Ability provides inclusive activity cards designed to assist the delivery of sports-based activities that cater for all levels of ability, including a range of sports played at the Paralympics.

Yulunga Traditional Indigenous Games

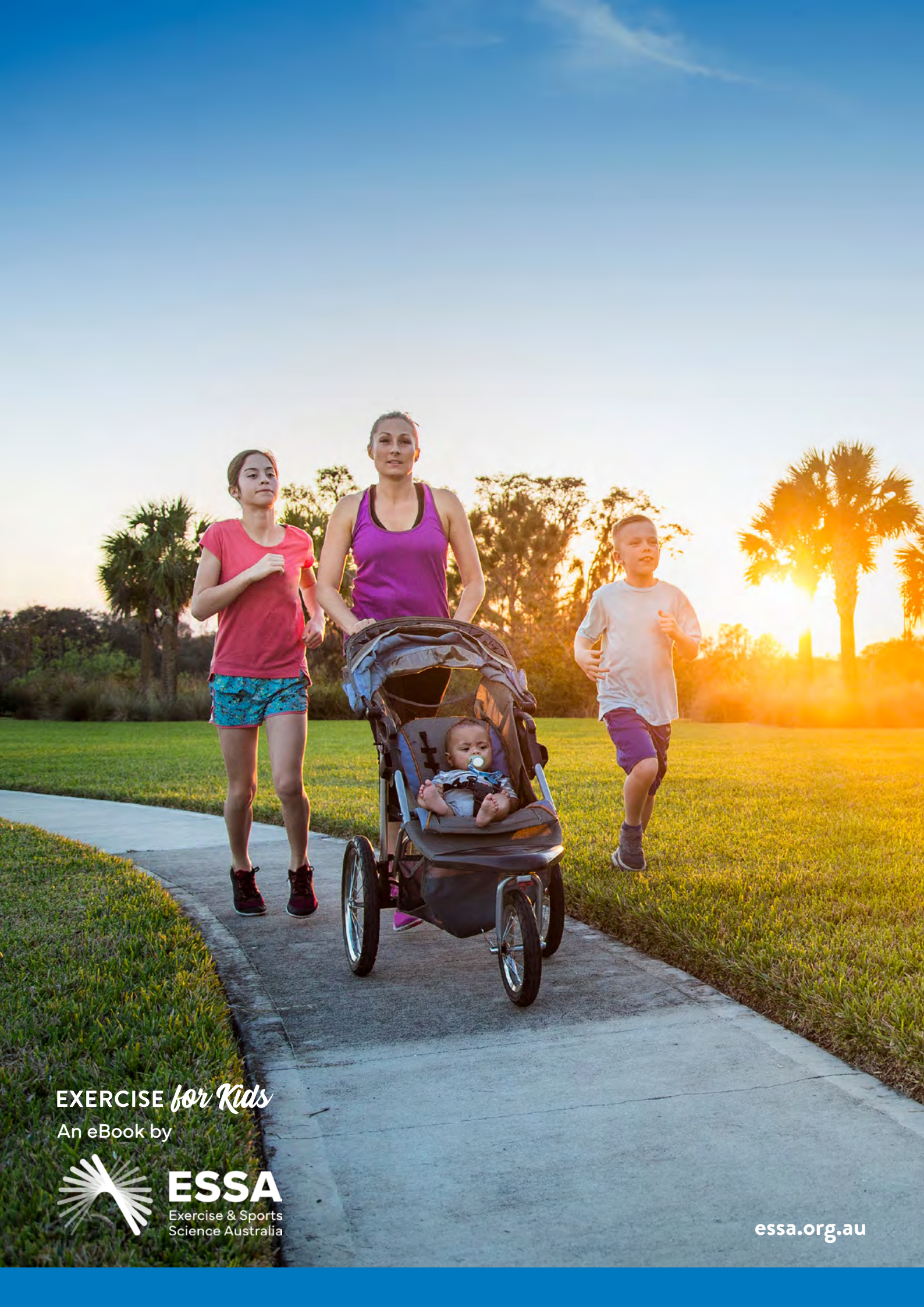
The Yulunga Games were created to provide all Australians with an opportunity to learn about, appreciate and experience aspects of Aboriginal and Torres Strait Islander Cultures. Suitable for children and adults of all ages, abilities and backgrounds, Yulunga can be used in schools around Australia as an educational resource and as a guide to inclusive, structured sport within communities.

PLAYSPORT

PlaySport is a handy, online directory that allows you to search for sporting experiences near you. It's inclusive of all abilities, ages and 300+ sport and activity types from Abseiling to Zumba.

IMPORTANT TIP:

Remember that any information found online in videos, fact sheets and other resources should be viewed as just a guide. Each child is different, and their exercise prescription should be individualised by an accredited exercise professional. If you have any concerns, talk to your local GP or accredited exercise professional where possible.



EXERCISE *for Kids*

An eBook by

ESSA
Exercise & Sports Science Australia

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