



HEALTHY AGEING



JOINT PAIN VS MUSCLE PAIN



PREVENTING TENNIS INJURIES



PLANT-BASED 'MEAT'

## OUR CENTRE LOCATIONS

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## NEWS

Dr Darren on leave 20th Feb-12th Mar

EASTER - Friday, 3rd Apr-Monday 6th Apr

ANZAC Day 25th Apr

## Dr Darren J Gray

Chiropractor, Certified Rehab Therapist

BSc, MChiro, MClinRehabNeuro (MCAA, ClinFellAAFN)

## Dr Melinda Burke

Chiropractor

BChiropractic, MastChiropractic

**Port Macquarie** Monday–Saturday

**Wauchope** Monday, Tuesday, Wednesday  
and Friday

*We attempt to cater for same day*

*appointments, however forward booking*

*your appointments is always recommended*

*to avoid disappointment.*

## What is neuromusculoskeletal rehabilitation and how does it help?

If you've had ongoing back discomfort, recurring injuries, or stiffness, you know how frustrating it is when your body doesn't move as it should. Neuromusculoskeletal rehabilitation can help by improving how well your brain, nerves, joints, and muscles work together after injury, pain, or long-standing issues.

### What does "neuromusculoskeletal" mean?

The term sounds technical, but simply means how your nervous system, muscles, and joints work together to keep you moving efficiently. "Neuromuscular" focuses on nerves and muscles, but the overall process is similar. When this communication is disrupted, movement can become less efficient.

### How and why movement patterns change

After an injury, like a sprained ankle or strained back, your body naturally protects the affected area. This can alter how you move to limit pain. This short-term strategy helps you cope and feel safer while the area is sensitive, but if these patterns continue after healing, new problems can arise.

Pain can affect how your brain and nervous system "talk" with your body. Muscles may activate differently, movements may be less coordinated, and joints may be loaded unevenly. Over time, this can contribute to flare-ups, discomfort in other areas, or recurring injuries.

### Retraining movement correctly

Neuromusculoskeletal rehabilitation aims to retrain these patterns so that your body moves confidently and efficiently again. Rather than focusing on one aspect, like strength alone, it combines several key elements:

- **Joint mobility:** gentle, controlled movements can help restore normal motion.
- **Muscle strengthening:** rebuilding strength, especially in muscles that stabilise joints and core, supports coordinated movement.
- **Balance and coordination:** targeted exercises improve proprioception – your body's sense of position in space, – which can be disrupted by injury.
- **Motor control training:** task-oriented exercises help your nervous system relearn healthy movement and reduce protective patterns.

For example, someone recovering from a sprained ankle might start with balance and range-of-motion exercises before progressing to walking or agility activities.

A person with neck or shoulder problems might rebuild strength while retraining posture and movement for everyday tasks.

### Why this matters

Recovery isn't just about reducing pain; it's about restoring confident, natural movement. This rehabilitation works by re-educating the nervous system, improving joint function, and building muscle control. It helps your body move more smoothly, supports muscles and joints, and can help reduce the risk of future injuries.

Many people notice positive changes even before discomfort fully disappears. Movements may feel smoother, balance and coordination improve, and tasks that used to feel difficult – like climbing stairs, lifting groceries, or bending to tie shoes – become easier. Over time, these small improvements add up, helping you move more comfortably and confidently.

Whether you're dealing with chronic aches, stiffness from long-standing habits, or the lingering effects of an injury, this approach can help your body function the way it's designed to: strong, adaptable, and as comfortable as possible.



**Neuromusculoskeletal rehabilitation can help your body move more naturally, with strength, balance, and confidence.**

*Our newsletter is free - please take a copy with you*

# Joint pain or muscle pain? How to tell the difference



Your body is good at sending signals when something isn't right, often through discomfort or pain. Knowing whether these signals are coming from your joints or muscles can help you decide what steps to take next.

## Joint discomfort: sharp and specific

Joint pain typically feels sharp during movement and may also ache when you're resting. You might notice warmth, redness, swelling or stiffness, particularly early morning or after periods of inactivity. Some people feel clicking, popping, or a grinding sensation when the joint moves. Joint issues commonly arise from injury or arthritis.

As an example, your knee may feel stiff and swollen when you get out of bed. Standing up triggers a sharp pain in the joint, walking downstairs makes it worse, and you notice some clicking. These signs suggest joint-related discomfort.

Warning signs that require prompt attention include:

- Sudden, severe pain
- Visible changes in joint shape
- Rapid swelling, warmth, or redness
- Fever (may indicate infection)
- Numbness or tingling
- A joint that feels unstable or "gives way"
- Difficulty moving the joint normally

## Muscle discomfort: dull and spread out

Muscle pain presents differently. It's often harder to pinpoint a specific area. It's usually a dull ache or soreness rather than sharp pain and is most noticeable during or after activity. It commonly follows overexertion, tension, poor posture, or repetitive movements. Muscle pain isn't usually associated with visible swelling or redness.

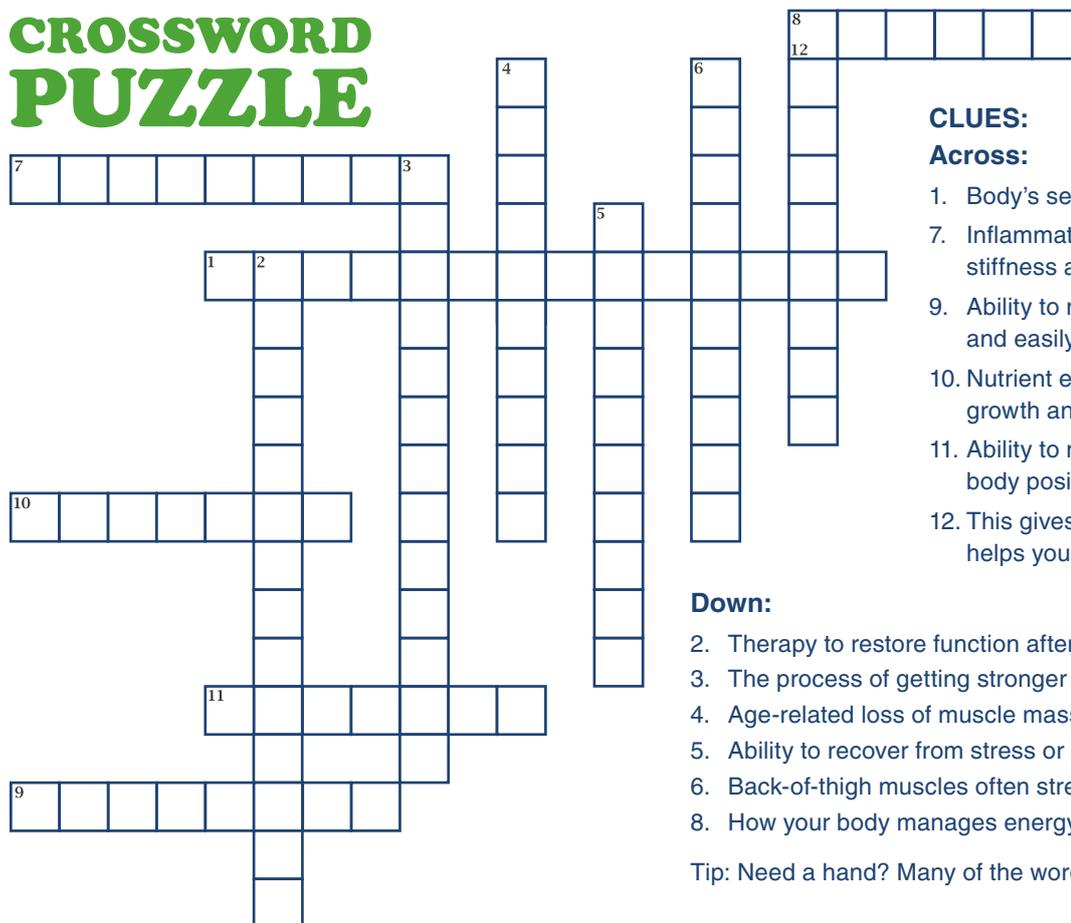
For example, after a weekend of gardening, your lower back and thighs may feel sore and tight. You feel discomfort over a broad area rather than one spot. Movement feels stiff and sore at first, but gentle stretching helps. This pattern is typical of muscle soreness.

## When to seek advice

Whether discomfort comes from a joint or muscle, mild symptoms may settle with rest and gentle movement. Simple measures such as ice for recent injuries or heat for muscle tension may help.

Seek professional advice if pain lasts more than a few days, limits daily activities, worsens over time, or if you notice any warning signs listed above.

## CROSSWORD PUZZLE



### CLUES:

#### Across:

1. Body's sense of position in space (14)
7. Inflammation of a joint causing stiffness and discomfort (9)
9. Ability to move your body freely and easily (8)
10. Nutrient essential for tissue growth and repair (7)
11. Ability to maintain a stable body position (7)
12. This gives your body strength and helps you move (6)

#### Down:

2. Therapy to restore function after injury or illness (14)
3. The process of getting stronger (13)
4. Age-related loss of muscle mass and strength (10)
5. Ability to recover from stress or strain (10)
6. Back-of-thigh muscles often stretched before running (10)
8. How your body manages energy (related to metabolism) (9)

Tip: Need a hand? Many of the words are found in this newsletter

ANSWERS AT THE BACK

# Enjoy your tennis game and protect your body

Tennis is great for your body and mind, offering fitness, focus, competition, and fun. But repetitive swings, quick sprints and direction changes can stress your joints and muscles.

Understanding some common tennis-related injuries and simple prevention strategies can help you stay on the court and enjoy the game.

## Common tennis injuries

Tennis injuries can affect your back and core, but more commonly involve limbs.

Tennis elbow is a well-known issue. Gripping the racquet and repeated ball hitting can irritate the tendons on your outer elbow, causing pain or aching in that area.

Your wrist absorbs impact with each shot and may also become sore or strained.

Shoulders are also vulnerable. Rotator cuff injuries can develop, particularly with serving and overhead shots, causing pain and weakness when lifting your arm.

Lower-limb injuries are often more sudden than gradual. Stopping quickly, lunging and pivoting can stress ankles and knees. Ankle sprains and knee ligament strains are common.

## Prevention: play smart, stay strong

Prevention begins before you step onto the court. Many injuries are linked to overuse, poor technique, or inadequate preparation.

- Warm up: Prepare your muscles and joints with gentle, movement-based stretches targeting your shoulders, hips, and hamstrings.
- Technique matters: Work with a coach to refine your grip, swing, and footwork to reduce joint stress.

- Strength matters: Strong legs support quick movements, a stable core improves control and balance, and well-conditioned shoulders help protect vulnerable joints.
- Respect your limits: Lingering soreness, stiffness after play, or a drop in performance can signal that your body needs rest. Having recovery days and avoiding overtraining reduce injury risk.
- Choose the right gear: A suitable racquet, correct string tension, and tennis shoes suited to your feet can make a big difference.

## When to get help

Pain, weakness, or discomfort that persists or affects your game shouldn't be ignored. Seeking appropriate healthcare advice early can help identify problems and prevent them from getting worse.

## With smart preparation, tennis can be rewarding and enjoyable at any age.



## EASY BLACK BEAN BALLS AND TOMATO SAUCE

Packed with protein, fibre, and vegetables, these black bean and nut balls make a quick, nutritious meal.



### INGREDIENTS

#### Balls:

- 1 can (400g) black beans, drained and rinsed
- ½ cup walnuts or cashews, roughly chopped
- 1 small carrot, grated
- 1 small zucchini, grated
- ½ cup rolled oats
- 1 egg
- 1 clove garlic, crushed
- 1 tsp smoked paprika
- 2 tsp olive oil

*Serve with rice, pasta, or a fresh salad.*

#### Quick sauce:

- 1 can Italian-flavoured chopped tomatoes
- 1 Tbsp tomato paste
- 1 tsp dried oregano
- Pinch of salt and pepper

#### METHOD

1. Mash black beans in a bowl. Add nuts, grated vegetables, garlic, oats, egg, and paprika. Mix well.
2. Form into small balls (8–10).
3. Heat olive oil in a non-stick pan over medium heat.
4. Cook the balls, turning gently, for 5–6 minutes until golden on all sides.
5. In a pot, combine chopped tomatoes, tomato paste, herbs, salt, and pepper. Simmer for 5 minutes.
6. Add the cooked balls to the sauce and heat through for 2–3 minutes.

## What are plant-based meat alternatives?



Plant-based food products designed to resemble meat have grown in popularity, offering an alternative to traditional meat.

They are made from ingredients such as soy, peas, lentils, wheat gluten, and grains. They're designed to replicate the flavour, texture, and appearance of meat. Common examples include plant-based burger patties, sausages, and mince.

## Nutrition check: meat vs plant options

The food group that includes meat, fish, eggs, tofu, nuts, seeds, and legumes is an important source of protein and a range of nutrients. These include iron, zinc, vitamin B12, iodine, and essential fatty acids.

Lean red meat is a rich source of iron, zinc, and B12, with iron and zinc generally more easily absorbed than those found in plant foods. Pairing plant-based iron sources with vitamin C-rich foods can help improve absorption.

Plant-based meat alternatives can provide many of the same nutrients as animal foods, but don't naturally contain vitamin B12 unless fortified. Diets that exclude meat but include foods such as milk, eggs, legumes, nuts, tofu, nuts and seeds can meet most nutrient needs when well planned.

Smoked, salted, and preserved foods such as sausages and bacon can be high in saturated fat, salt, and additives, and should be eaten only occasionally. Some plant-based alternatives may also be highly processed and high in salt or added sugars. **Checking nutrition labels can help support a balanced intake.**

For health information, recommended serve sizes and daily intake, see [www.eatforhealth.gov.au](http://www.eatforhealth.gov.au)

## Environmental impact

Some studies suggest plant-based meat alternatives may have a lower environmental impact than conventional red meat production, though this varies by product and how it's made.

## Finding the right balance

Whether you choose meat, plant-based options, or a mix of both, focus on a varied, balanced diet to support long-term health. If you reduce meat intake, make sure key nutrients such as iron and vitamin B12 stay at healthy levels.

# Ageing well: strength, bones, and mobility matter

Ageing is inevitable, but *how* you age is strongly influenced by daily habits. Maintaining muscle strength, bone health, and mobility isn't about turning back time — it's about supporting your body's natural resilience and helping you stay active, independent, and confident for life.

## Muscle strength and mobility matter

Muscle mass and quality naturally decline with age, a process known as sarcopenia, particularly from midlife onwards if muscles aren't regularly used. Weaker muscles increase the risk of falls, injury, and loss of independence.

But this decline is not inevitable — staying active and eating well can slow this process and, in many cases, improve muscle strength.

Strong muscles support balance and coordination, making everyday tasks such as climbing stairs, carrying groceries, or getting out of a chair easier and safer.

Muscles also help protect bones and play an important role in metabolic health — including how your body uses energy and regulates blood sugar.

## Protein: supporting muscles as we age

Protein is made up of amino acids, which the body uses to build and repair muscles and bones. As muscle mass declines with age, protein needs increase.

Good protein sources include lean meats, fish, eggs, dairy, legumes, soy-based foods, nuts, seeds, and whey protein. Adequate calcium and vitamin D are also important for bone health, working alongside protein to support skeletal strength.

## Movement for strength and balance

As the saying goes, "use it or lose it."

Regular movement is one of the most effective ways to maintain muscle, bone strength, and balance. Resistance training — using weights, bands, or bodyweight exercises — helps preserve muscle and bone density. Just two to three sessions each week can make a meaningful difference.

Balance and functional exercises are just as important. Activities that challenge stability, such as heel-to-toe walking, standing on one leg, or Tai Chi, improve coordination and help reduce fall risk. Even simple activities like brisk walking support joint health and mobility when done consistently.

## Building lifelong habits

Healthy ageing isn't about rehabilitation — it's about prevention and maintenance. Regular movement, a healthy balanced diet, and tuning into your body support strength, independence, and quality of life. Small, consistent habits add up!

### Did you know?

**Muscles can still get stronger well into your 70s and 80s with regular strength training. It also helps maintain bone health and may be more effective than walking.**



## ON ARRIVAL AT THE PRACTICE

Please see the receptionist upon arrival.

This eliminates the possibility of you being overlooked and enables us to have your information ready.

## APPOINTMENTS

Your appointment schedule is designed specifically to obtain the best possible results. Should you wish to change an appointment, we would appreciate as much notice as possible so that other patients can be offered your time.

## ONLINE BOOKINGS

We have online booking available. Make your appointment with your favourite chiropractor by booking through

[coastlinechiropractic.com.au](http://coastlinechiropractic.com.au)

## PAYMENT FOR SERVICES

Prompt payment of your account will help us keep the fees down. However if you are experiencing difficulties with payment at any time please arrange a confidential meeting with our accounts person.

## OUR COMMITMENT

This practice is committed to providing the best possible care to all patients. Our staff regularly attend short continuing professional education courses to update their knowledge and techniques.

## APPOINTMENT REMINDER

Your next appointment is on \_\_\_\_\_ at \_\_\_\_\_  
Date Time

### Crossword Answers:

- |                   |               |             |
|-------------------|---------------|-------------|
| 1. Proprioception | 5. Resilience | 9. Mobility |
| 2. Rehabilitation | 6. Hamstrings | 10. Protein |
| 3. Strengthening  | 7. Arthritis  | 11. Balance |
| 4. Sarcopenia     | 8. Metabolic  | 12. Muscle  |

Disclaimer: The information in this newsletter is not intended to be a substitute for professional health advice, diagnosis or treatment. Decisions relating to your health should always be made in consultation with your health care provider.

Talk to your chiropractor first.

*Our newsletter is free - please take a copy with you*