

TMD TEMPOROMANDIBULAR DISORDERS



Managing Problems in Your Jaw and Related Muscles

Finding Relief

Do you have pain in your face, jaw, or ear? Do you have trouble chewing? Does your jaw click or pop? These can be symptoms of **temporomandibular disorders (TMD)**. This term describes a group of problems related to the **temporomandibular joint (TMJ)** and nearby muscles. Symptoms may be painful and frustrating. The good news: Your healthcare team can help you manage TMD and prevent future problems.

What's Wrong?

TMD causes many kinds of symptoms. That's part of the reason why it can be hard to diagnose. Symptoms can include the following:

- Facial pain with jaw movement (may come and go or be constant)
- Trouble chewing
- Pain or soreness around the jaw
- Neck stiffness or pain
- Earaches or ear fullness
- Headaches or pain behind the eyes

What Can I Do?

If you are having TMD symptoms, call your dentist or physician right away. You don't have to live with pain or discomfort. TMD can be treated. A key part of treatment is learning to manage your condition at home.





Which Treatment Is Right for Me?

A goal of treatment is to rest the muscles and joint. This helps relieve symptoms and restore good jaw function. Depending on what type of problem you have, your treatment plan may include:

- Temporary changes in food choices and eating habits.
- New habits for managing stress and maintaining the health of your jaw.
- Medication to reduce pain and inflammation.
- Therapy to reduce pressure on the joint and restore function.
- Dental treatment to reduce pressure on the joint.

How Can I Avoid Future Problems?

Treatment can help relieve your current condition. But TMD symptoms may return over time. You can avoid future problems by maintaining the health of your jaw.

- Avoid foods and habits that trigger symptoms or make them worse.
- Take steps to reduce or manage your stress level.
- Follow your treatment plan.
- Pay attention to your body and get help if symptoms come back.

Understanding the TMJ

The temporomandibular joint (TMJ) is a ball-and-socket joint located where the lower jaw meets the base of the skull. There is one joint in front of each ear. These joints are part of a large group of muscles, ligaments, tendons, and bones that work together as a system.

When the System Works

A healthy TMJ allows comfortable talking, chewing, and yawning.

Muscles contract and relax to open and close the joint. The **disk** absorbs pressure in the joint. It also allows the jaw to open and close smoothly. **Ligaments** and **tendons** connect the lower jaw to the skull. They also support the joint.

The TMJ is where the lower jaw meets the skull.

The socket in the base of the skull holds the condyle.

The condyle is the round end of the lower jaw.

Jaw muscles open and close the jaw when you chew and talk.

A proper bite allows smooth and effective chewing.

Closed jaw

The disk fits in the socket when the jaw is closed.

Ligament

Tendon

The condyle fits in the socket when the jaw is closed.

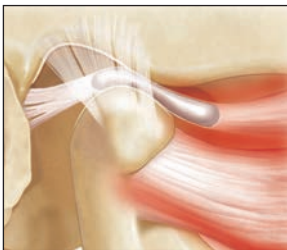
Open jaw

The disk slides forward as the jaw opens.

The condyle moves forward as the jaw opens.

When You Have TMD

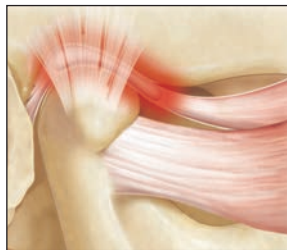
The TMJ and the nearby muscles of the jaw and face make up a closely connected system. A problem in one part of the system can affect the whole system. TMD often involves problems with muscles and other tissues in and around the TMJ.



Inflamed Tissues

Muscles can be tight, and other tissues surrounding the TMJ can be irritated. This can lead to pain.

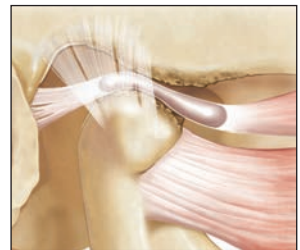
- **Myofascial pain** occurs in soft tissues, such as muscle. Trigger points in these tissues may cause pain that radiates out. Pain may be felt in the jaw, neck, or shoulders.
- **Referred pain** is pain felt in a part of the body away from the source of the problem. For example, TMJ problems can cause pain in the face, head, or ears.



Inflamed Joints

Soft tissues in the joint can become **inflamed** (hot, swollen, and painful).

- **Synovitis** is inflammation of tissues surrounding the TMJ. It causes pain that worsens with jaw movement.
- **Inflamed ligaments** may be caused by strain or injury. Sore ligaments are less able to support the joint.
- **Rheumatoid arthritis** is a disease that leads to inflammation in joints, including the TMJ.



Damaged Joints

It is common for the jaw to click with movement. But painful clicking may be a sign of joint damage.

- **Displacement** is a disk slipping out of place. This causes the jaw to catch. A clicking sound may result.
- **Locked jaw** occurs when the disk is stuck in one position. The jaw is then frozen open or closed.
- **Osteoarthritis** is when a joint begins to wear away (degenerate). In the TMJ, it can cause pain with movement.

Other Problems

The mouth and jaw make up a single unit. So problems in one can be related to problems in the other. Teeth or bite problems associated with TMD include:

- **Bruxism**—grinding your teeth from side to side.
- **Clenching**—biting down on your teeth.
- **Malocclusion**—jaws or teeth out of alignment.

If you have been diagnosed with any of these, see pages 12 and 13.

Diagnosing Your Problem

You don't have to cope with TMD on your own. Your healthcare providers can help treat and relieve your symptoms. Your healthcare team may include a general dentist, physician, physical therapist, or other specialist. They will take your history, perform an exam, and guide your treatment.

Taking Your History

Your health history is the most important factor in diagnosing TMD. To help give your healthcare provider a clear picture of your health, check the boxes below that apply to you.

- | | |
|--|---|
| <input type="checkbox"/> Pain in the jaw joints or muscles when talking, yawning, or chewing | <input type="checkbox"/> Grinding or clenching your teeth |
| <input type="checkbox"/> Headaches or eye pain | <input type="checkbox"/> Recent change in your bite |
| <input type="checkbox"/> Ear pain or fullness | <input type="checkbox"/> Whiplash or an injury to your head, neck, or face |
| <input type="checkbox"/> Neck, shoulder, or back pain | <input type="checkbox"/> Increased stress in your life |
| <input type="checkbox"/> Clicking, grinding, or popping noises in the jaw | <input type="checkbox"/> History of arthritis or other medical conditions |
| <input type="checkbox"/> Catching feeling in the jaw | <input type="checkbox"/> Use of over-the-counter medications, herbal remedies, or supplements |
| <input type="checkbox"/> Problems opening or closing your mouth | |

Keeping Track of Symptoms

Your healthcare provider will look for patterns in your symptoms. You can help by keeping a log. Be sure to take this log with you to office visits. Use the sample below to get you started.

When	What I was doing	What it felt like	What helped
Monday morning	Waking up	Jaw felt very stiff and sore	Moist heat

During Your Exam

Your healthcare provider will examine your head and neck. This may include feeling (**palpating**) the muscles and jaw joint. He or she will check for pain, tension, and tenderness. In many cases, range-of-motion readings and imaging tests are also part of an exam.

Range of Motion

TMD can limit the jaw's movement (range of motion). Treatment can help increase this movement. Range of motion may be measured during your exam as well as during treatment to see if it improves.

- **Vertical readings** measure how wide you can open your mouth. A healthy range is usually between 45 and 55 mm (millimeters).
- **Lateral readings** measure how far you can move your lower jaw left and right. A healthy range is usually about 10 mm in each direction.



Imaging Tests

Tests help show parts of the mouth and head that can't be seen during an exam. These may include:

- **Panoramic x-ray**, one continuous x-ray of the teeth and jaws.
- **Tomogram**, a detailed image of the jaw joints.
- **Cephalometric x-ray**, an image of the whole head in profile.
- **Cone beam computed tomography (CBCT)**, a 3D scan of the teeth and jaws.
- **Other tests** to help check for swelling or joint noise.

Taking the Next Step

Your healthcare provider will tailor a treatment plan to your needs. You may be referred to one or more specialists in TMD treatment. If your TMD doesn't respond right away, don't worry. It may need more time, or you may need to try another option. Your team will work with you to help you find relief.

Helping Your Body Heal

Have you ever had a sprained ankle? If so, then you know that keeping weight off the ankle helps it to heal. When injured, the TMJ and related muscles need the same treatment. That's why self-care is so important. You can learn how to reduce pressure on the TMJ and help it heal.

Eating with Care

Chewing strains the TMJ. When symptoms are bad, you may not be able to chew at all. To get you through times when your symptoms are worst, try these tips:

- **Choose soft foods.** Try eggs, oatmeal, yogurt, tofu, soup, smoothies, pasta, fish, mashed potatoes, milkshakes, bananas, applesauce, gelatin, or ice cream.
- **Avoid biting into hard foods** such as whole apples, carrots, and corn on the cob. Instead, cut foods into bite-sized pieces.
- **Grind or finely chop** meats and other tough foods. Try hamburger meat instead of steak.



Using Ice and Heat

Your healthcare provider may suggest using ice or heat. In some cases, you may be told to alternate using cold and heat.

- **Cold therapy** helps reduce swelling and pain. Use a cold pack or ice. Be sure the cold source is wrapped in a thin towel. Apply it over the joint as directed, often for 10 to 15 minutes. Repeat as often as instructed.
- **Heat therapy** helps relax muscles, increasing blood flow and reducing pain. Apply a moist, hot towel to sore muscles for 10 to 20 minutes. Repeat as needed.

Avoiding Triggers

Certain activities (called triggers) strain the TMJ, making symptoms worse. The tips below can help you avoid common triggers and limit strain.

- **Avoid hard or chewy foods** such as nuts, pretzels, popcorn, chips, granola, carrots, whole apples, dried fruits, hard breads, gum, chewy candies, and ice.
- **Reschedule routine dental visits**, such as cleanings, for times when your jaw aches less. If you have severe pain, call your healthcare provider.
- **Support your jaw** when yawning. When you feel a yawn coming on, put a fist under your jaw. Apply gentle pressure. This helps prevent wide, painful yawns.
- **Avoid any activity that hurts.** These may include yelling, singing, and nail biting.

Maintaining Good Posture

Work at improving your posture during the day and when you sleep. Good posture can help your body heal. Try these tips:

- **Use a headset** when on the telephone. Don't cradle the phone with your shoulder.
- **Keep ergonomics in mind.** This includes making sure your workstation fits your body. Support your lower back. Take frequent breaks to stretch and rest. If you use a computer, keep the monitor at eye level. If you need to move your head often, have a chair that swivels.
- **Keep your head in a neutral position**, with your ears in line with your shoulders. Don't slouch or crane your head forward.
- **Use an orthopaedic pillow** to support your head and neck during sleep.



A Note About Intimacy

TMD can disrupt your life in unexpected ways.

Many people with TMD feel pain during kissing or other forms of intimacy. If this happens to you, don't be afraid to tell your partner. Then try a different form of intimacy until your symptoms improve.

Using Medications

Medications can help treat TMD. These often include pain medications. They also include medications that work in other ways to help manage your symptoms. If you are prescribed medications, be sure you know how to take them. Know their benefits and risks and any side effects they might have.

Types of Medications

The medication type and dosage will depend on the problem you have. Common medications used to treat TMD are described below.

Anti-Inflammatories

Nonsteroidal anti-inflammatories (NSAIDs) help relieve pain and inflammation. They are often available over the counter.

Muscle Relaxants

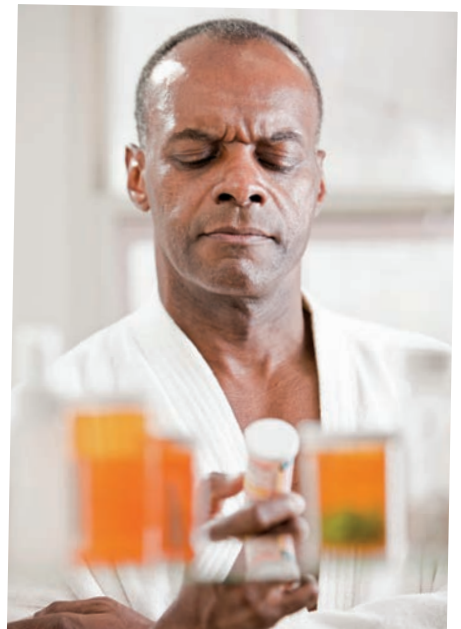
Prescription muscle relaxants help ease muscle tension. This reduces pressure on the TMJ from tight jaw muscles.

Antidepressants

At low dosages, antidepressants can help relieve TMD symptoms. They can reduce muscle pain. They may also help decrease teeth grinding during the night. In some cases, antianxiety medications may also help.

For Your Safety

- Tell your doctor about all prescription or over-the-counter medications you already take. Also mention any herbal remedies or supplements you are using.
- You will likely be given detailed instructions for when and how to take the medications. Follow these carefully.
- Don't stop taking any medication without talking to your healthcare provider first. Some need to be stopped slowly.



Reducing Pain, Restoring Function

Massage, ultrasound, or gentle exercise may be used to help relieve pain and restore function. The therapy you receive will depend on how much pain you feel. The cause and severity of your problem will also affect the choice of therapy.

Treating Painful Muscles

A **trigger point** is a painful spot in a tight muscle. It is often tender to the touch. It may refer pain to other places. Your healthcare provider may address trigger points using one or more of the following:

- **Massage** inside and outside the mouth
- **Palpation** (pressure with the fingers) to points on the jaw and face
- **Stretching** the muscles
- **Numbing injections or spray** to the area

Treating the Joint

Therapy may also focus directly on the TMJ. This may include:

- **A self-care program** to help you manage symptoms on your own. This program may include exercises. It may also include using ice to relieve pain and swelling and heat for relaxation and circulation.
- **Gentle manipulation** to reduce pain and restore range of motion. The healthcare provider uses his or her hands to relax muscles and ligaments around the joint.
- **Exercises** to strengthen muscles in the jaw and face.
- **Ultrasound** (sound waves) to improve blood flow. This also warms the area and can help reduce pain and swelling.

Treating Inflammation

An inflamed joint can be difficult and painful to move. Treatment may include:

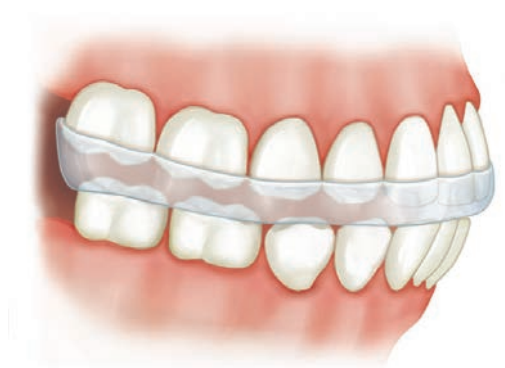
- **Rest and gentle exercise** to increase the jaw's range of motion. You may be given some exercises to do regularly.
- **A cold pack or ice wrapped in a thin towel** applied for 10 to 20 minutes. This helps ease swelling and reduce pain.
- **Massage and gentle manipulation** as described above.

Dental Treatment

Because the TMJ and the teeth work together, a problem with your teeth or bite can be linked to TMD. If you grind or clench your teeth or have a bad bite, your dentist may be able to help. If your bite needs significant adjustment, you may be referred to an orthodontist.

If You Grind or Clench Your Teeth

Teeth grinding or clenching strains the TMJ system. If you have these habits during the day, doing self-checks can help you stop (see page 14). But it's hard to control these habits when you're asleep. That's when an **appliance** can help. An appliance fits in the mouth over the teeth. There are different kinds of appliances for different needs. It can keep the upper and lower teeth apart. This helps protect tooth surfaces from grinding. It can also reduce strain to the jaw joints and allow soft tissues to heal. The appliance may be called a splint, orthotic, bite guard, or night guard.



An appliance can be made to cover either the lower or upper teeth.

Wearing and Caring for Your Appliance

To make an appliance, your dentist or orthodontist may take impressions of your teeth. Then the appliance is made to fit your mouth.

- The appliance may be worn all the time, or only during the day or night. Be sure to ask when and how often you should wear it.
- Clean the appliance regularly. Ask your dentist or orthodontist how to clean it.
- When you're not wearing it, keep the appliance in a protective case, out of the reach of children and pets. This helps keep it from getting dirty or broken.

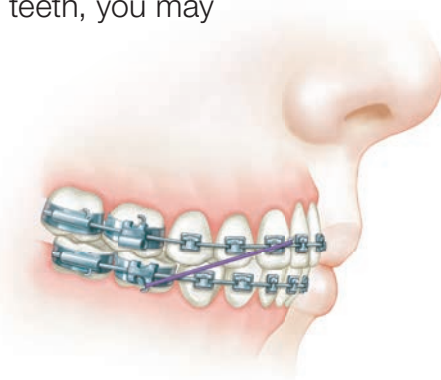


If Your Bite Is Incorrect

Malocclusion means the jaws or teeth don't fit together properly. This can result in pain and problems with jaw function. If your jaws or teeth are out of alignment, orthodontic treatment may help. If your bite problem is due to missing or damaged teeth, you may receive restorative treatment.

Orthodontic Treatment

Sometimes the upper and lower jaws are out of alignment. Or teeth are out of line, turned, crowded, or spaced too far apart. Your orthodontist can align teeth with braces and other devices. This helps provide a more comfortable bite.



Braces can help bring the teeth and bite back into alignment.

Restorative Treatment

A bad bite can be caused by missing or damaged teeth. A dentist can restore teeth in many ways:

- **A crown** is a porcelain or metal cap. It is cemented in place to repair a broken or damaged tooth.
- **A bridge** is an artificial tooth fused between two crowns.
- **A dental implant** is an artificial tooth root. It is attached to the jaw as a base for an artificial tooth.



If Surgery Is Needed

Surgery is rarely needed for TMD problems. However, if other treatments haven't worked, you may be referred to an oral and maxillofacial surgeon. You and your healthcare provider can discuss whether surgery might be right for you.

Maintaining Jaw Health

Treatment will get you back to normal function. But your care doesn't end there. Once you've had TMD, it's important to avoid reinjury. Be aware of your body and take note if symptoms recur. Also, some lifestyle changes to treat TMD can become healthy lifelong habits. Start by managing your stress and staying active. These changes are healthy for your jaw and your whole body.

Do Self-Checks

Get in the habit of doing self-checks. These help you be aware of any symptoms that come back so you can take action right away. When doing a self-check, ask yourself:

- Do I feel stressed?
- Are my muscles tense?
- Am I grinding or clenching my teeth?
- Does my posture strain any part of my body?
- Is there anything I can do to make myself more comfortable?

If you answer “yes” to any of the questions above, you need to take action. Adjusting your posture or taking a short break can help prevent or relieve TMD symptoms.



Listen to Your Body

Many people get used to ignoring pain. But pain is a signal that your body needs care. To maintain your jaw health:

- Avoid hard or chewy foods. Even if you feel fine, eating such foods can trigger symptoms to return.
- Be aware of your body. Don't ignore TMD symptoms. The nagging pain in your neck or jaw may indicate that you need care.
- Be sure to keep follow-up appointments with your healthcare team.

Manage Stress

Stress can cause you to clench your muscles or grind your teeth. It can also affect your sleep, reducing your body's ability to heal. Here are a few tips to manage stress:

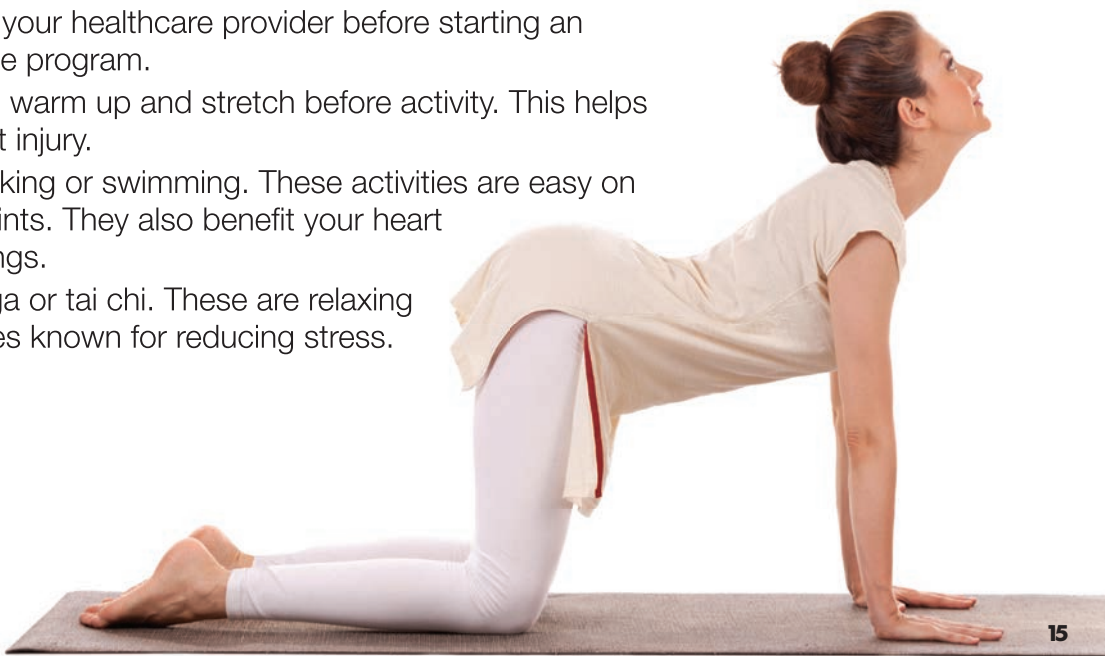
- Learn ways to relax. Try listening to music or gently stretching. Take a few slow, deep breaths. Or, close your eyes and imagine a place or object that is calming.
- Get plenty of rest and sleep.
- Set goals you know you can attain.
- Make time for people and things you enjoy.
- Ask for help if you need it. Friends and family can run errands and cook meals for you. They can also join you for walks or other types of exercise.



Stay Active

Activity helps the body in many ways. It helps you stay looser and more relaxed. It also helps keep muscles and tissues conditioned. That way, you can heal faster and make reinjury less likely. Here are some tips to get you started:

- Talk to your healthcare provider before starting an exercise program.
- Always warm up and stretch before activity. This helps prevent injury.
- Try walking or swimming. These activities are easy on your joints. They also benefit your heart and lungs.
- Try yoga or tai chi. These are relaxing activities known for reducing stress.



Feeling Better

Self-care is an ongoing process. Now that you have made changes to treat TMD, you'll start feeling better. Some changes become lifelong habits. Others can be used as needed. If symptoms start again, you'll know what to do. Once you understand your problem, you'll have the power to manage it.

Resources

- **American Academy of Craniofacial Pain**
www.aacfp.org/resources/patients.cfm
- **American Academy of Orofacial Pain**
www.aaop.org
- **American Association of Orthodontists**
www.mylifemysmile.org
- **American Dental Association**
www.ada.org
- **National Institute of Dental and Craniofacial Research**
www.nidcr.nih.gov/OralHealth/Topics/TMJ/



Also available in Spanish



TAKE OUR PATIENT SURVEY. Help us help other patients.
Please visit www.kramesurvey.com to provide your feedback on this booklet.

This booklet is not intended as a substitute for professional medical care.
Only your doctor can diagnose and treat a medical problem.

©2015 The StayWell Company, LLC.

www.kramesstore.com 800.333.3032 All rights reserved. Made in the USA.

KRAMES
PATIENT EDUCATION

A PRODUCT OF  STAYWELL.