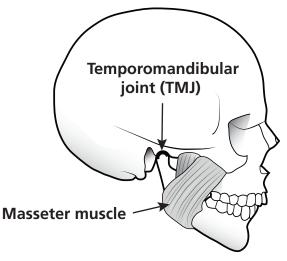
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# **Temporomandibular disorders**

# Information for patients Charles Clifford Dental Hospital

### What are temporomandibular disorders?

• Temporomandibular disorders **(TMDs)** are a group of conditions that cause **pain** and **dysfunction** in the **temporomandibular joint** (jaw joint) and the **muscles** that control jaw movement (see image below).



The Temporomandibular Joint (TMJ) and Muscles

- About **1 in 3** people are affected and these conditions appear to be more common in women than men.
- For the vast majority of people, pain in the area of the jaw joint or muscles **does not signal a serious problem**.
- Generally, discomfort from these conditions is **occasional** and **temporary**, often occurring in cycles. The pain eventually goes away with little or no treatment. About **1 in 20 people**, however, develop significant long-term symptoms.

## Where can I find further information about TMDs?

There is helpful information about TMDs on the following website:

### http://www.nidcr.nih.gov/OralHealth/Topics/TMJ/

Scroll down to 'Health Information' and click on 'TMJ Disorders'.

## How can I reduce stress / strain on my jaw joint and jaw muscles?

### Avoid oral habits

- Emotions can be translated into increased **muscle activity**, tension and pain.
- **Oral habits** are well-established patterns of inappropriate muscle activity. They increase strain on the temporomandibular joints and muscles and may contribute to your symptoms and may act as a barrier to your recovery.
- **Examples** of such oral habits include:
  - Tooth contact, clenching or grinding
  - Nail biting
  - Chewing chewing-gum
  - Pen chewing
  - Lip sucking
  - Habitual protrusion (movement of your lower jaw forwards)
- **Monitor** your oral habits and any related pain, and especially be aware of the circumstances in which these habits occur.
- Greater **awareness** of such habits and the circumstances in which they occur will help you to **avoid** this inappropriate muscular activity. This will help to reduce the strain on the temporomandibular joints and muscles and improve your symptoms.

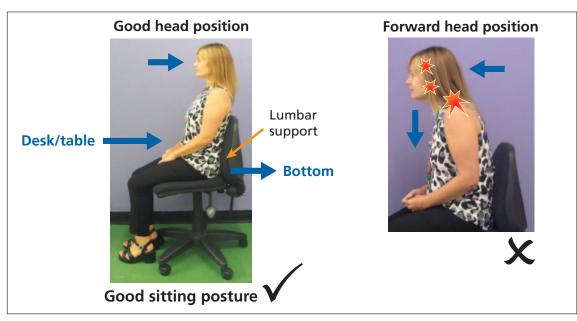
### Regularly check your 'relaxed' jaw rest position



- **Teeth apart**: Say 'Emma' so your jaw and mouth drop open slightly.
- **Tongue on the roof of your mouth**: Just behind your upper front teeth in the 'clucking' position make a 'cluck' noise with your tongue to find this position.
- **Regularly check** your jaw 'rest position' throughout the day, especially after eating, while working on your computer, driving etc.

### Remember - Keep your tongue up and teeth apart!

### Avoid a 'forward' head posture

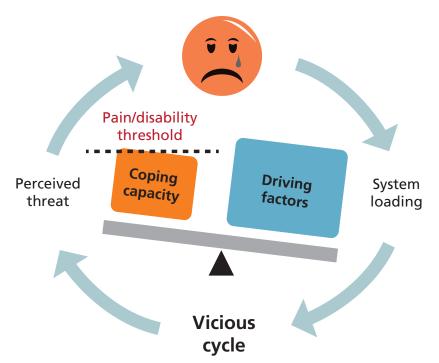


- Regularly check and **correct your sitting position** (see image above) to prevent a forward head posture. A prolonged forward head posture will increase stress on your joints and muscles.
- **Sit correctly** when working at a computer, driving, watching TV, reading, eating, knitting etc.
- Use chairs with **lumbar support** (or use a lumbar roll).
- Always push your bottom to the very back of the chair.
- When sitting at a desk or table **pull your chair in**, so your tummy makes contact with the desk or table.
- Position your keyboard and mouse within easy reach.
- Position your **monitor at eye level**.
- Use a document stand when inputting information to the computer.
- Don't sit for long periods without a **break** stand and stretch every 15 minutes.

### Other ways you can reduce stress / strain on your jaw

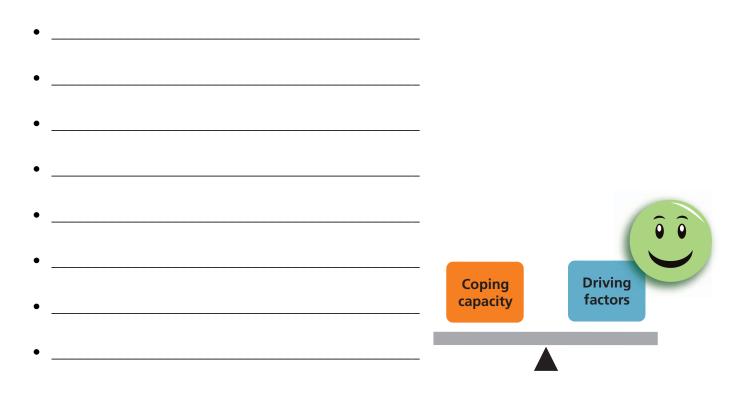
- Eat a **soft diet**, avoid hard crunchy foods, and cut food into small pieces.
- **Chew slowly**. Chew on both sides or alternate sides.
- Avoid caffeine. Caffeine can cause increased muscle activity.
- Avoid repeated or prolonged wide mouth opening.
- Keep the tip of your tongue on the roof of your mouth when **yawning** to prevent excessive mouth opening.
- Do not rest your **chin in your hands**.
- Avoid **sleeping** on your front.
- If your dentist has provided you with a **bite appliance**, use it as directed.
- Use simple **analgesics** or **non-steroidal anti-inflammatory medication** as directed by your GP or Pharmacist.
- Regular **daily exercise** such as walking is beneficial for your general health.

## Persistent cycle of pain



Persistent temporomandibular disorder is often associated with a complex combination of driving factors that can coexist to maintain a persistent cycle of pain and disability.

## Your driving factors?





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# How to reduce unhelpful jaw habits

'Oral Behaviour Checklist' & 'No Clenching App'



### What is 'oral behaviour'?

- Any activity that involves the jaw (mouth).
- It can include unhelpful **jaw habits** such as holding the teeth together and tensing the jaw muscles. Jaw habits increase **stress and strain** on the jaw joints and jaw muscles, resulting in **jaw pain**.

## What is the 'Oral Behaviour Checklist'?

- A checklist that can help you to become **more aware** of your own jaw habits.
- It should be used **daily for a week** to familiarise yourself with the list of possible jaw habits (**see page 2** for the checklist).
- At the end of the week it should be **completed** to indicate how often you do each of the jaw habits.

## What is the 'No Clenching App'?

- It is a freely downloadable app for your **iPhone** (itunes.apple.com) or **android mobile** (play.google.com/store/app).
- The app can be used to set regular alerts (at least every hour) to allow you to closely monitor your jaw habits and to improve your jaw rest position (teeth apart and tongue up).



Using the 'Oral Behaviour Checklist' and the 'No Clenching App' will help you to reduce your unhelpful jaw habits, to improve your jaw rest position and to better **control your jaw pain**.

#### The Oral Behavior Checklist

Look at this list once daily for a week. Then tick the relevant boxes.

How often do you do each of the following activities, based on the last month? If the frequency of the activity varies, choose the higher option. Please place a ( $\checkmark$ ) response for each item and do not skip any items.

	Activities During Sleep	None of the time	< 1 Night /Month	1-3 Nights /Month	1-3 Nights /Week	4-7 Nights/ Week
1	Clench or grind teeth <b>when asleep</b> , based on any information you may ha∨e					
2	Sleep in a position that puts pressure on the jaw (for example, on stomach )					
	Activities During Waking Hours	None of the time	A little of the time	Some of the time	Most of the time	All of the time
3	Grind teeth together during waking hours					
4	Clench teeth together during waking hours					
5	Press, touch, or hold teeth together other than while eating (that is, contact between upper and lower teeth)					
6	Hold, tighten, or tense muscles without clenching or bringing teeth together					
7	Hold or jut jaw forward or to the side					
8	Press tongue forcibly against teeth					
9	Place tongue between teeth					
10	Bite, chew, or play with your tongue, cheeks or lips					
11	Hold jaw in rigid or tense position, such as to brace or protect the jaw					
12	Hold between the teeth or bite objects such as hair, pipe, pencil, pens, fingers, fingernails, etc					
13	Use chewing gum					
14	Play musical instrument that involves use of mouth or jaw (for example, woodwind, brass, string instruments)					
15	Lean with your hand on the jaw, such as cupping or resting the chin in the hand					
16	Chew food on one side only					
17	Eating between meals (that is, food that requires chewing)					
18	Sustained talking (for example, teaching, sales, customer service)					
19	Singing					
20	Yawning					
21	Hold telephone between your head and shoulders					

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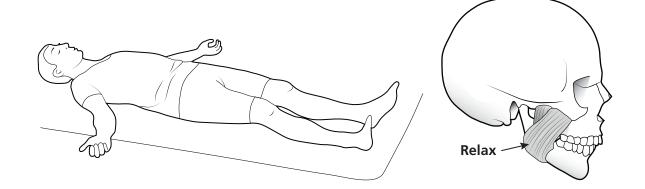
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# Jaw relaxation technique



## **Information for patients** Charles Clifford Dental Hospital



- 1. **Relax** and stop what you are doing (if possible lie down) and allow the tension in your body to release particularly any tension in the muscles around your jaw.
- 2. Close your eyes.
- 3. With your teeth apart say 'Emma' so your jaw and mouth drop open slightly.
- 4. **Gently rest your tongue just behind your upper front teeth** in the 'clucking' position make a 'cluck' noise with your tongue to find this position.
- 5. **Place one hand on your chest and the other on your tummy**. Breathe slowly and deeply in and out, breathing from your tummy imagine a balloon inflating in your tummy, not in your chest.
  - a. When you breathe in think about the tension in your cheek muscles
  - b. When you breathe out think about your cheek muscles relaxing / the tension 'melting away'
- 6. Continue for another 4 minutes to get complete relaxation of your jaw muscles.
- 7. To help regain a more relaxed jaw, perform this technique **at least once daily** (possibly just before you go to sleep at night).

# **PROUD** TO MAKE A DIFFERENCE



# Sleep hygiene

### Things to avoid...

- **Drinks containing caffeine** (stimulant): If absolutely necessary have one cup in the morning only, but try not to have any later in the day
- Smoking (stimulant): Try to stop
- Alcohol (stimulant): Try to abstain while trying to correct your sleep problem
- Exercise before bedtime (increases alertness
- Daytime naps (reduces the sleep debt)
- Discussing potentially stressful topics before bedtime (increases alertness)
- Exciting books or TV programs before bedtime (increases alertness)
- Work activities before bedtime (increases alertness)
- Office work in bed (increases alertness)
- Blue screens in the bedroom (interferes with melatonin): Avoid laptops, TVs, phones etc

### Things to try...

- **Strict routine:** Go to bed at the same time and get up at the same time including weekends.
- **Relaxing routine before bedtime** (helps to prepare your body for sleep): Calming activities such as a warm bath, soft music, relaxation CD.
- **Blackout blinds/curtains** (prevents a disturbed sleep pattern): A light outside the bedroom window or a bright morning can make you wake up early.
- **Turn off all lights** (prevents a disturbed sleep pattern): Such as lights in the bedroom including plug switch lights or just outside the bedroom door.
- **Create a comfortable room temperature:** Extremes of temperature can disrupt sleep or prevent you falling asleep.
- **Relaxation technique:** Rather than getting up if you cannot sleep, as this causes alertness, it is better to use a relaxation technique to let go of muscle tension and surrender to sleep again. Also consider taking meditation classes.
- **Regular mild exercise** during the day: Such as walking, tai chi or yoga.
- Keep a pen and paper by the bed: If you worry about what you have to do the next day it is best to make a list that way you are more likely to relax instead of worrying that you will forget.
- If you live in a noisy house it may be useful to use earplugs or have a fan to act as white noise
- **Review your diet:** A balanced diet during the day can give you energy when you most need it (to improve alertness) and reduce your energy levels (when you need to relax). Try having a main meal earlier in the day which includes proteins and complex carbohydrates to give you energy and something lighter in the evening. Some herbal teas can be beneficial in calming the mind. Avoid drinks containing citrus, spice or caffeine (these are stimulants).
- **Be patient:** For most people, it will take 4-6 weeks to implement these skills.

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# Quick jaw relaxation exercise

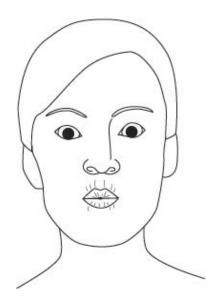


**Information for patients** MSK Outpatients (Therapy)

Do not do this exercise until your therapist has explained it

### How can I relax my jaw muscles and help reduce my facial pain?

- Take a slow **deep** 'tummy' breath in through your nose.
- Let the air blow out **slowly** through your lips so that your cheeks bulge out.
- Repeat 3 times.
- Do this exercise **regularly** throughout the day, about every hour.





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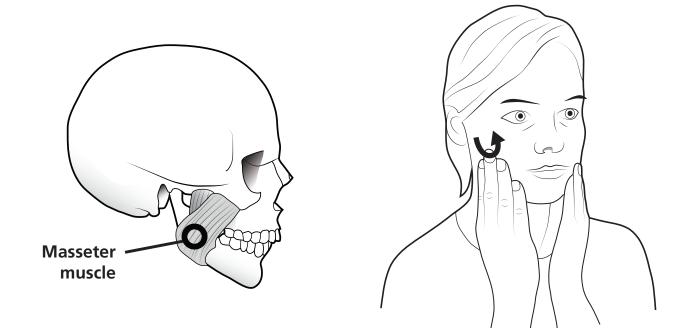
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# Masseter massage



## How can I promote muscle relaxation and help reduce my facial pain?



### Gentle kneading massage

- Gently massage your jaw muscles in a slow circular motion for 5 minutes using your fingers.
- As you become more confident, gradually increase the depth of massage.

Perform this massage technique 3 times daily (possibly after each meal).

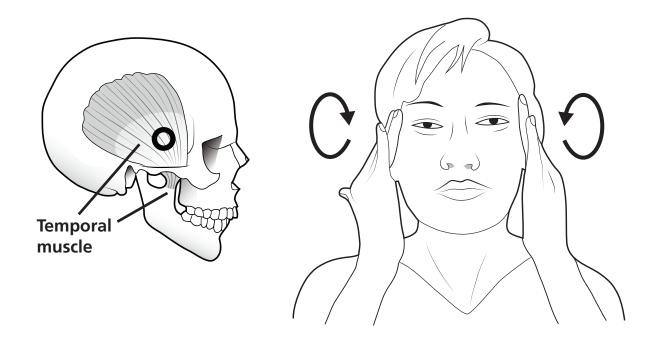


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# **Temporalis massage**



## How can I promote muscle relaxation and help reduce my facial pain?



### Gentle kneading massage

- Gently massage your jaw muscles in a slow circular motion for 5 minutes using your fingers.
- As you become more confident, gradually increase the depth of massage.

Perform this massage technique 3 times daily (possibly after each meal).



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# **Exercises to improve jaw control**

# Information for patients Charles Clifford Dental Hospital

## How can I improve the way my jaw moves?

### Exercise to improve jaw control

Keep your tongue in the "**clucking" position** throughout this exercise. This will reduce any forward movement of your lower jaw and prevent excessive opening.



- 1. One index finger on your temporomandibular joint to check there is **no clicking!**
- 2. Other index finger and thumb on your chin to **guide your jaw**.
- 3. **Slowly** drop your lower jaw down and back with guidance. As you drop your jaw, use your index finger and thumb to apply a **gentle** pressure on your chin in a direction towards your neck. This will prevent excessive forward movement of your lower jaw.
- 4. Then **slowly** close your jaw with the same **gentle** guidance.
- 5. Look in a mirror to ensure a **straight opening** of your jaw.
- 6. Repeat this jaw movement **10 times** slowly and gently.

Perform this exercise **3 times daily** (possibly after each meal).



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# **Patient Information**

### TMD Information

- <u>https://www.nidcr.nih.gov/sites/default/files/2017-12/tmj-disorders.pdf</u>
- <u>https://www.nhs.uk/conditions/temporomandibular-disorder-tmd/</u>
- <u>http://www.acptmd.co.uk/how-physiotherapy-can-help-with-tmd/</u>

### TMD Self-treatment (Bob & Brad)

- <u>https://www.youtube.com/watch?v=7b73yE0U2t0</u>
- <u>https://www.youtube.com/watch?v=QwhD5UTUW60</u>
- <u>https://www.youtube.com/watch?v=UATtg\_fLyBs</u>
- <u>https://www.youtube.com/watch?v=kpBc6wiEkQU</u>
- <u>https://www.youtube.com/watch?v=7puZ0iW7uaw</u>

# **Clinician Information**

### TMD Organizations

- <u>https://aaop.clubexpress.com/</u>
- <u>https://www.eaopd.org/</u>
- <u>http://www.acptmd.co.uk/</u>

### TMD Diagnosis

- http://www.iadr.org/INfORM/DC-TMD
- https://www.ihs-headache.org/binary\_data/3860\_international-classification-of-orofacial-pain-1st-ed-icop-cha.pdf

### **TMD Management**

- <u>https://www.youtube.com/watch?v=MJV9QpScHPs</u>
- <u>https://www.physio-pedia.com/Temporomandibular\_Disorders</u>
- <u>https://www.youtube.com/watch?v=EAH-afUHUbs</u>

### **TMD Anatomy**

- <u>https://www.youtube.com/watch?v=VgNZ46IPnmI</u>
- <u>https://www.youtube.com/watch?v=nH8KG3floBM</u>
- <u>https://www.youtube.com/watch?v=MLtvtmwKR-w</u>
- <u>https://www.youtube.com/watch?v=Hmlxk9\_CtFI</u>
- <u>https://www.youtube.com/watch?v=\_TJd7IKC064</u>

### **Persistent Pain**

- <u>https://www.youtube.com/watch?v=ICF1\_Fs00nM</u>
- <u>https://www.youtube.com/watch?v=B14\_2TS7RHM</u>