

Speech and language therapy

Biting and chewing

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Syndrome

Learning to bite and chew is an essential stage of eating development and also leads to more typical dental patterns. Chewing skills are highly associated with improved speech clarity.

Babies often begin using their fingers and teething toys for oral exploration, using a 'bite and release' pattern.

This is the beginning of the development of biting and chewing skills.



Over time, the baby gradually 'refines' movements of the lips, palate, tongue and jaw. Many children who have Down's syndrome will have difficulties with low muscle tone and motor planning, and this can make it difficult to develop adequate biting and chewing skills.

The suggestions below will help your child to develop these skills:

Provide the opportunity for your child to put oral-motor chewy toys (chewy tubes, grabbers, etc.) in his/her mouth.

These toys are specifically designed to increase oral awareness, to provide stimulation and tactile sensation, and to exercise the lips, cheeks, palate, tongue and jaw. Thorough oral exploration, your child may learn to bite, and you can then progress to chewing.

Demonstrate how to bite, so that your child can see and learn what the word 'bite' means.

Knowing the vocabulary can help to encourage your child to bite and chew. You can exaggerate the movement to help your child to understand the concept. Use real food to demonstrate/show your child. You can also use puppets with mouths to demonstrate biting (and later, chewing). Take turns with your child to 'feed' the puppet. Make it fun and playful! Make a bite sound or a 'yum'/'mmm' sound. Let your child try to feed you.

A vertical chewing pattern (an up and down opening and closing of the mouth) will begin to develop first.

Place a chewy tube or grabber in the molar area and place your hand on your child's jaw. Help

your child to open and close her/his jaw. Use the word 'bite' as you help your child to close her/his jaw on the tool. Use a mirror so that your child can watch herself/himself 'biting', with your help.

When your child understands the word 'bite' and can use the skill, add the word 'chew'.

Put your child's hands on your jaw to feel you bite and chew. This gives visual and tactile feedback, to help your child understand the concept. You can put your hands over your child's hands to help keep them in place.

When your child understands the concept of chewing, you can start practising with her/him, using non-food items.

Place a chewy tube or grabber between your child's premolar teeth, and ask your child to chew. You may have to guide your child to open and close the jaw. Work up to 20 or more chews in a row on each side of your child's mouth.

If you are using a grabber, ask your child to bite and chew on the loop.

This helps your child to use both sides of the mouth at the same time, for bilateral chewing and jaw strength and stability.

Alternate sides of your child's mouth, to promote the development of a rotary chewing movement.

Ask your child to bite and chew 3 times on one side of the mouth, and then switch to the other side. Remember to always place the chewy toys to the side of your child's mouth, in the premolar area. As your child progresses, move the chewy tool to the back molar area, where food is typically chewed. If your child gags, stop immediately, and bring the chewy tool forward to the premolars the next time you try.

When you are confident about your child's ability to bite and chew, you can dip the chewy tools into puréed or sticky foods and continue the biting and chewing exercises.

Pairing the tools with real foods helps to progress from practising chewing to actually chewing real foods. When your child bites, he/she will be 'rewarded' with a taste of food to help connect the concept of chewing to getting food.

To help your child accept different textures, you can progress from the smooth chewy tube or grabber to a textured version.

Then dip the textured chewy toy into puréed or sticky foods as above, and continue with biting and chewing exercises.

Have a drink close by in case your child needs to take a sip between exercises!

- Your child should never be forced to mouth, bite or chew. Learning these skills can take lots of time, practise and patience!
- It is important to remember that some children who have Down's syndrome may be frightened to eat because they know they do not have the oral-motor skills needed to safely bite, chew and swallow food. **This is a very real and serious fear** your child is not just refusing to eat!
 - In this instance, you may need to work on bolus formation, tongue awareness and tongue lateralisation first. Other children may refuse to eat because of oral sensitivities. In both of these instances, you should take advice from a specialist speech and

language therapist and occupational therapist who can provide specific advice based on your individual child's needs.

- Talk about the chewy toys, and let your child feel them on her/his hands and arms first. Then progress to face, cheeks, lips, and finally into the mouth.
- **Remember:** PRAISE, PRAISE!! Celebrate all your child's efforts, no matter how small.

You can purchase chewy tubes and grabbers here:

https://sensoryneeds.co.uk/collections/chewy-tubes

https://www.amazon.co.uk/CHEWY-TUBE-COMBO-4-PACK/dp/B001DILU66

https://www.cheapdisabilityaids.co.uk/chewubbles-chew-tubes-27507-p.asp

https://www.tinknstink.co.uk/hand-held-chews

If you would like to discuss your child's individual needs, please email: training@downs-syndrome.org.uk.