

3. Try to avoid finishing sentences or saying what you think he or she might be trying to get across.
4. Speak a little slower yourself—this gives a model for the child or adult with Down's syndrome to follow.
5. Try not to use too many long and complicated sentences.
6. Give positive encouragement for the message rather than the style of delivery.

Working to increase their abilities:

1. For children, helping the language to develop and the vocabulary to expand may reduce the amount of disfluency. Rhymes and jingles that have a strong rhythm and can be moved to or clapped out are particularly useful. However, it is important not to make too many demands for speech—this can have a negative effect.
2. Encouraging the use of sign language and other aids (such as pointing to pictures, etc.) reduces the pressure on children or adults who are disfluent and difficult to understand.
3. Encouraging the development of good social and communication skills (such as knowing when to speak and when not to speak, looking at people when talking to them, listening carefully, smiling and nodding, taking turns to speak) helps build confidence. Speaking is only a small part of communicating.

Most children with Down's syndrome will be particularly disfluent while their language is developing and their vocabulary is expanding. The disfluencies may pass or reduce as they become better at planning and organizing their language. However, for some, language and speech may always be difficult.

As adults, a number of people with Down's syndrome will be quite difficult to understand at times, and they may have bouts of disfluency varying from mild hesitations to more severe struggling to get words out. The most important thing is that they should still feel that what they say has value and that others want to listen to them. Attempts to make people imitate sentences or practice speaking in different ways are unlikely to produce more fluent, clearer speech in the long run, and this might make them feel that the payoffs for speaking are not worth the effort.

CONCLUSION

Do talk about the problems of disfluency among yourselves and with people who can help. Don't feel you can not or must not say anything. By avoiding talking about the issue you could be making yourself and the person who has the problem feel worse about it.

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INTRODUCTION

This leaflet is designed to help people who have Down's syndrome, and those who care for and work with people who have Down's syndrome to understand the problem of dysfluency in speech. People with Down's syndrome are born with an extra chromosome as a result of a genetic accident before or around the time of conception⁽¹⁾. This results in a certain degree of learning difficulty which can affect the ability to understand and produce speech and language. One of the biggest problems for many people with Down's syndrome is the unintelligibility of their speech to others. Unintelligibility and disfluency often go hand-in-hand.

THE EFFECT OF DOWN'S SYNDROME ON LANGUAGE AND FLUENCY.

It has been suggested by some experts⁽²⁾, that the process of producing language goes something like this:



The idea is formed



The idea is converted into a language program



The language program is converted into a speech muscle movement program



The idea is spoken



The message is heard



The message is understood

At any time we may notice and correct mistakes —this is called FEEDBACK

People with Down's syndrome may find some or all of these steps particularly difficult. Ideas may not be clearly formed; the language plan and/or the speech movement plan may not be well established; the actual process of speech may be a problem. As well as this, hearing loss, which is quite common in people with Down's syndrome, makes learning and understanding language difficult. Also, the individual may lack the social awareness needed to know when or where it is appropriate to say what is being thought.

For all of us it is common to find that, as the pressure to speak and speak well builds, a breakdown in fluency may occur. Imagine that you are trying to plan what to say in a foreign language—one where you only know a few words! You are likely to have long pauses when you are thinking of words; you might start a word, realize it's wrong and try another word; you may repeat a word a number of times while you are trying to plan the sentence. In fact you may appear very disfluent!



Photo: SARAH HANNANT

For a person with Down's syndrome, wanting to convey messages through a system that does not always work perfectly may lead to:

1. Repeating whole words or parts of words while trying to think of the next bit of the sentence (it's...it's...it's big).
2. Long pauses in the middle of the sentence when he or she can't think of what to say next (it's a.....ball).
3. Pauses in unusual places in sentences, often followed by two or three words in a sudden rush that may be hard to understand (I'm going swim.....mint'omorrow). This stop- and start speech can be caused by problems in the language program or in the conversion of the language into a speech muscle program. The effect is as if the "bottled up" air is escaping from the lungs in a rather uncontrolled fashion. Fluent speech is dependent on a steady flow of air.
4. Emphasis being placed on the wrong word in a sentence or on the wrong part of the word. This may occur because the language program is not precisely planned or the control of movements of the speech muscles is not sufficiently well organized (I like to eat apples).

5. Some struggling to find the right speech sounds to start the word off (a...er...er.i...er...um...over there). Sometimes it may be difficult for the person to start the voice working leading to sudden high pitched or loud sounds.
6. Possible problems with hearing others and/or with noticing that what has been heard has not been understood. This may lead to hesitant and unsure speech and to communication between the person with Down's syndrome and the listener breaking down.

It is possible that fluency depends on an equal balance between demands made on the language system and the abilities of the individual to meet these demands⁽³⁾. Stuttering may occur when demands exceed one's abilities.

Demands made on the child or adult	VS	Abilities of the child or adult
<ul style="list-style-type: none"> • Expectations of parents or others for good speech or good behavior, etc. • Asking child or adult with language difficulties to say certain things • Child or adult's desire to please • Need to communicate 		<ul style="list-style-type: none"> • General ability to understand • Level of language ability • Hearing ability • Speech motor ability • Desire to communicate

These are just a few of the demands made upon speakers and the abilities that a speaker needs to have in order to manage well. There are many others that could be added.

HOW CAN PEOPLE WITH DOWN'S SYNDROME BE HELPED?

From the chart above, we can see how our aim is to try to decrease demands and increase abilities.

Working to decrease demands:

1. Give the person with Down's syndrome plenty of time. Planning what to say and saying it may be slower than you might expect.
2. Take a slightly longer pause between what he or she has said and your reply—this slows the overall speed of the conversation down. Encourage the adult or child to also take longer pauses. This allows thinking time before speaking.