A virtual head that produces realistic lip movements – this is the aim of SYNFACE, a European-funded project, in partnership with RNID. When combined with what is heard, it should help people with hearing loss to understand speech.

Using lip movements is a normal part of understanding what is said for all of us – hearing or not. We all tend to find face to face conversation easier than talking on the phone, especially if it’s noisy.

Within the project, the researchers hope to develop a system which could help communication over the telephone. People with a hearing loss could use an ordinary voice telephone but would also have a screen showing lip movements on the synthetic head to help them understand what the other person is saying. Using the synthetic head (rather than just transmitting a video of the other person) has one main advantage. Special equipment would only be required for the telephone of the deaf person. The lip movements would be created from the speech coming down an ordinary telephone line. By the end of the three-year project (late 2004), the aim is to have a prototype system which people have already tested in their own homes.

If the technology is successful, there is scope to use it in a number of scenarios. For example, to help people hear announcements in airports, or railway stations. Such places are generally noisy and the sound of the announcements is often not of good quality, so it’s especially hard for people with hearing loss to recognise what’s being said. Synthetic lip movements could be created from the announcements and displayed on screens around the site.

Early trials conducted at University College London (UCL) have presented these synthesised lip movements to people with normal hearing. They found them very useful for understanding muffled speech. The synthesised lip movements did not help as much as seeing a video of the person speaking, but were better than just hearing the speech alone.

The researchers at UCL now want volunteers with hearing loss to test out the system – ideally, people who have difficulty understanding what is said over a voice telephone but can hear something with hearing aid(s) or an assistive device. To take part, you would need to attend one session of about two hours at UCL (near Euston station, London). Travel costs from the London area are paid as well as a small honorarium for taking part.

For more information on how to volunteer for UCL’s SYNFACE trials, please contact RNID’s Information Line on: 0808 808 0123 (tel); 0808 808 9000 (textphone). We’ll let you know how it develops in a future issue.

MORE HELP WANTED

Digital phone interference with hearing aids
If you have a digital hearing aid which is less than 12 months old and you use a digital cordless (DECT) or mobile phone, we would like to hear whether you get interference on your new hearing aid and, if so, how you overcome it. We may use your real life stories to form part of a forthcoming One in Seven article.

Domestic alerting systems with pagers
We are currently testing paging systems which alert people to three or more different sounds around the home for One in Seven. We would like to hear about your experiences with these products – both success stories and any problems you might have had – which can be used as case studies in our article.

If you can help, write to Technology, RNID, 19-23 Featherstone Street, London EC1Y 8SL or e-mail us at: technology@rnid.org.uk

We regret that we are unable to enter into correspondence about any issues raised.