

Science
 AAAS Magazine News Signaling Careers Multimedia Collections

Current Issue Previous Issues Science Express Science Products My Science
 About the Journal [Home](#) > [Science Magazine](#) > [5 July](#)

[1991](#) > Lenhardt et al. , pp. 82 – 85

Science 5 July 1991:
 Vol. 253. no. 5015, pp. 82 – 85
 DOI: 10.1126/science.2063208

ARTICLES

Science, Vol 253, Issue 5015, 82–85
 Copyright © 1991 by American Association for the Advancement of Science

ARTICLES

Human ultrasonic speech perception

ML Lenhardt, R Skellett, P Wang, and AM Clarke

Department of Otolaryngology, Medical College of Virginia, Virginia
 Commonwealth University, Richmond 23298.

Bone-conducted ultrasonic hearing has been found capable of supporting frequency discrimination and speech detection in normal, older hearing-impaired, and profoundly deaf human subjects. When speech signals were modulated into the ultrasonic range, listening to words resulted in the clear perception of the speech stimuli and not a sense of high-frequency vibration. These data suggest that ultrasonic bone conduction hearing has potential as an alternative communication channel in the rehabilitation of hearing disorders.

THIS ARTICLE HAS BEEN CITED BY OTHER ARTICLES:

Inaudible High-Frequency Sounds Affect Brain Activity: Hypersonic Effect.
 T. Oohashi, E. Nishina, M. Honda, Y. Yonekura, Y. Fuwamoto, N. Kawai, T. Maekawa, S. Nakamura, H. Fukuyama, and H. Shibasaki (2000)
J Neurophysiol **83**, 3548–3558
[Abstract](#) » [Full Text](#) » [PDF](#) »

ADVERTISEMENT

AAAS
Policy Alert
 SEE SAMPLE ISSUE

ADVERTISEMENT

2009 AAAS
 Annual Meeting
 Science
 Our Planet and Its Life:
 Origins and Futures
 Chicago
 12-16 February
 New understanding
 of the universe
 starts here.
 Preview the Program
 and Register at:
[www.aaas.org/](#)



[To Advertise](#) [Find Products](#)

Science. ISSN 0036-8075 (print), 1095-9203 (online)

[Magazine](#) | [News](#) | [Signaling](#) | [Careers](#) | [Multimedia](#) | [Collections](#) | [Help](#) | [Site Map](#) | [RSS](#)

[Subscribe](#) | [Feedback](#) | [Privacy / Legal](#) | [About Us](#) | [Advertise With Us](#) | [Contact Us](#)

© 1991 American Association for the Advancement of Science. All Rights Reserved.

AAAS is a partner of [HINARI](#), [AGORA](#), [PatientInform](#), [CrossRef](#), and [COUNTER](#).