

Low Numeracy Skills and Health Literacy Can Make It Difficult for Some Patients to Derive Useful Information From Health Information

The average American reads at an 8th-grade level; most health content is targeted at a high school or college reading level¹

Use plain language:³

- Simplify content to the 8th-grade reading level
- Remove jargon
- Reduce complexity
- Structure content logically
- Use graphics and a simple layout
- Use subheadings and bolding

Low numeracy skills:

- Approximately half of US adults cannot calculate a tip¹
- About 20% of college-educated adults cannot determine which of these is a higher risk: 1%, 5%, or 10%²

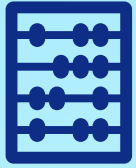
Communicating statistics:³

- Absolute risk: reduce risk from 4% to 3% ✓
- Relative risk: reduce risk by 25% ✗
- Number needed to treat: treat 20 patients to prevent 1 episode or disease ✗

1. National Center for Education Statistics (NCES). Published August 30, 1993. Accessed May 24, 2023. <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=93275>;

2. Lipkus IM et al. *Med Decis Making*. 2001;21:37-44; 3. Fagerlin A et al. *J Natl Cancer Inst*. 2011;103:1436-1443.

Presenting Risk to Allow for Informed Decision Making



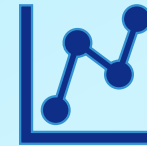
Use pictographs when communicating individual statistics¹



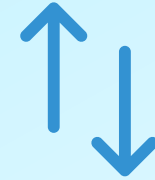
Choose the most appropriate graph to convey your message¹



If there are numerous risks and benefits, use a table¹



The research is inconsistent on whether frequencies or percentages are better understood. However, percentages may feel more abstract and, therefore, less real¹



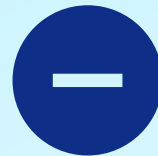
Order matters when presenting risks and benefits. People perceive the risks as more significant when presented after the benefits, the recency bias²



Repeatedly reinforce the time interval over which a risk occurs¹



Comparative risk information (the average person has a 12% lifetime risk of AD) is persuasive, not just informative¹



Presenting less information can be more effective in decision-making¹

The Unexpected Outcomes When Presenting Risk: Avoid Fatalism, False Reassurance, and Collateral Damage

False Reassurance

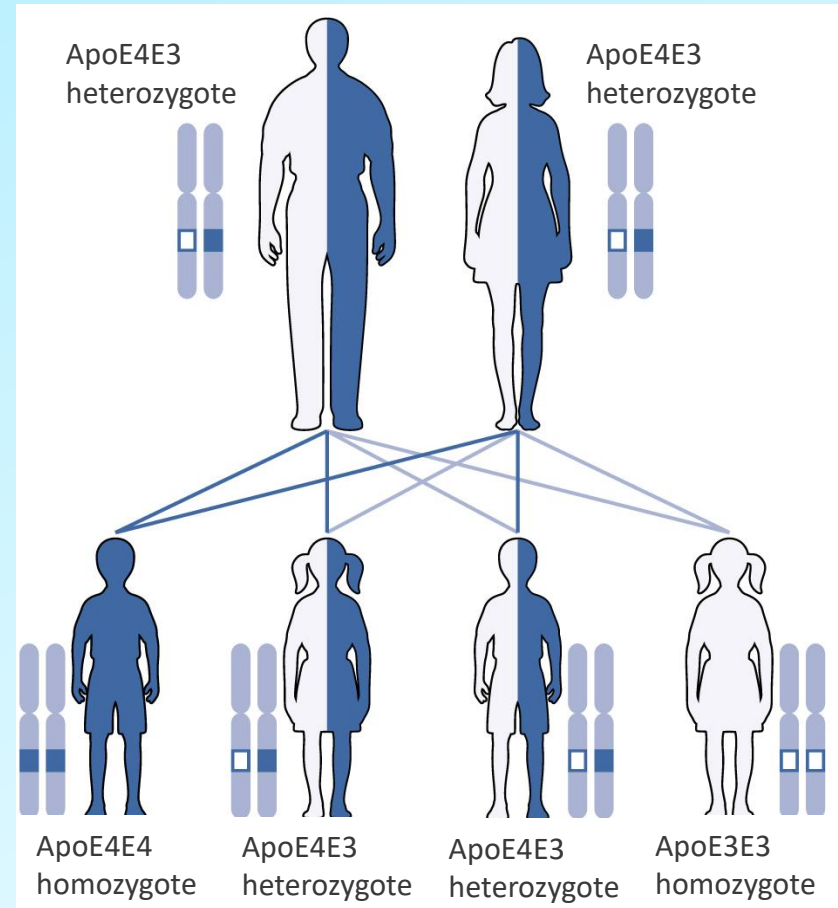
The REVEAL study found that when people were told they were not ApoE4 carriers, they¹

- Underestimated their risk for AD
- Were less likely to participate in clinical trials, change behaviors, or respond to other modifications

Fatalism

The belief that little can be done to change risk may cause individuals to²

- Lack motivation to schedule preventative care
- Be less likely to engage in risk-reducing behaviors



Openstax college, CC by 4.0 (modified)

Learning about ApoE4 carrier status has implications for an individual's parents and children