

# Engineered rice protects against rotavirus infection

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For children and immune compromised adults in developing countries, diarrheal disease induced by rotavirus can be life threatening. Current rotaviral vaccines are highly effective in the Western world, but are not as effective in developing countries. Additionally, these vaccines are not appropriate for use outside of a very narrow age window or in immune compromised individuals.

In the current issue of the *Journal of Clinical Investigation* Yoshikazu Yuki and colleagues at the University of Tokyo report the development of a strain of rice that produces a rotavirus-specific antibody. Both normal and immune deficient mice fed the engineered rice were protected against rotavirus. The researchers also report that the rice maintains its efficacy even after long-term storage and heat exposure.

This study provides a low cost, efficient strategy for prevention of rotavirus infection.

**More information:** Rice-based oral antibody fragment prophylaxis and therapy against rotavirus infection, *J Clin Invest.* [DOI: 10.1172/JCI70266](https://doi.org/10.1172/JCI70266)

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