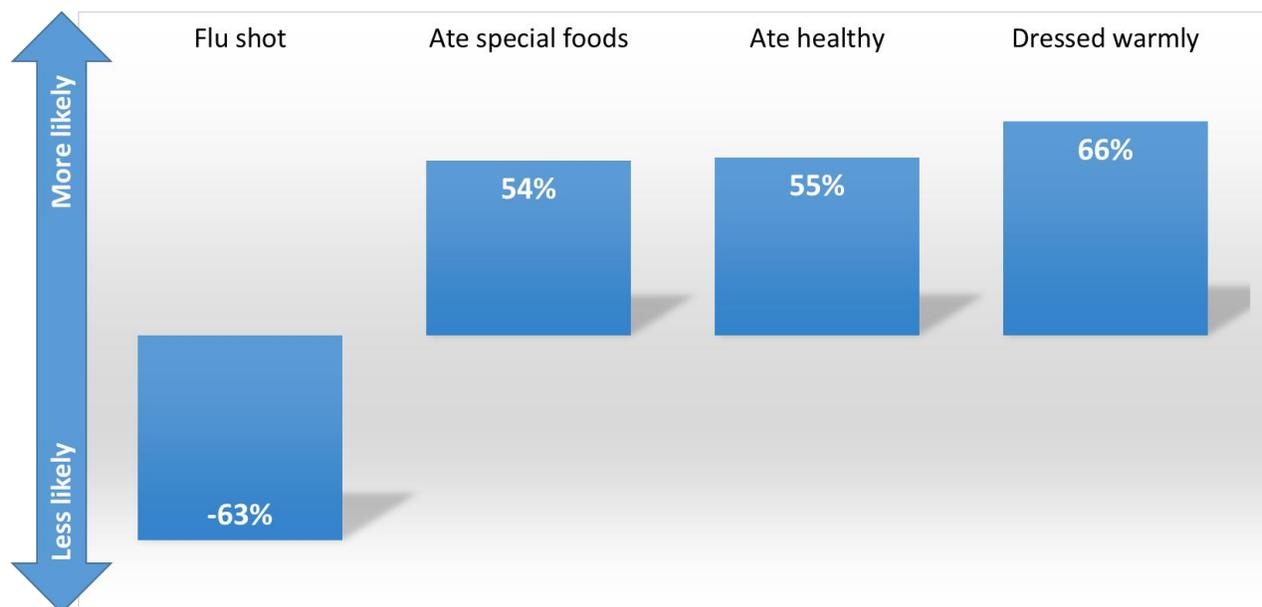


EurekaFacts Research Brief:

Beliefs in the Strong Immune System and Flu Prevention

Chances are you've heard a millennial say, "I don't get the flu vaccine because I've got a great immune system" as a reason for why they failed to get the seasonal flu vaccine. Previous research studies have noted that beliefs in a "strong immune system" or engaging in "immune boosting" strategies were among some of the most important barriers to flu vaccine uptake^{1,2}. Although a strong immune system is generally advantageous for one's health and wellbeing, relatively healthy adults can experience severe complications from flu, and can spread it to others. Furthermore, the flu virus behaves in unique ways--one of the ways flu kills is through a process called "cytokine storm." Cytokine storm is essentially an over-reaction by the immune system to a pathogen that leads to tissue damage of otherwise healthy organs. Cytokine storm partially explains why certain strains of influenza, like the 1918 Spanish Flu, had unusually high mortality rates among otherwise healthy 20 to 40 year olds³.

Likelihood of Self-reported Flu Prevention Strategies among Millennials Who Believe That a Strong Immune System Prevents Flu



Results are based on odds ratios from logistic regression, regressing belief in strong immune system on self-reported behaviors.

According to EurekaFacts' recent survey of millennials (ages 18-34), 68% of respondents believed that having a strong immune system would prevent them from getting the flu. Those who held that belief were *less* likely to get a flu shot and were *more* likely to engage in other preventive strategies, such as eating special foods, wearing warm clothing and eating a healthy diet. The juxtaposition of healthy millennials relying on "immune boosting" strategies while refusing flu vaccination may leave a population vulnerable in the case that a more virulent strain of flu reaches the U.S.

¹ Manuel, D., Henry, B., Hockin, J. & Naus, M. (2002). Health behavior associated with influenza vaccination among healthcare workers in long-term-care facilities. *Infection Control Hospital Epidemiology*, 23, 609-614.

² Steiner, M., Vermeulen, L., Mullahy, J. & Hayney, M. (2002). Factors influencing decisions regarding influenza vaccination and treatment: A survey of healthcare workers. *Infection Control and Hospital Epidemiology*, 24, 625-627.

³ Imonsen, L.; Clarke, M.; Schonberger, L.; Arden, N.; Cox, N.; Fukuda, K. (1998). "Pandemic versus Epidemic Influenza Mortality: A Pattern of Changing Age Distribution". *The Journal of Infectious Diseases* 178 (1): 53-60.

Belief in a “healthy immune system” as protection against flu presents a challenge for promoting flu vaccination. On one hand, we do not want to discourage healthy behaviors. We certainly *do* want millennials to eat healthy. Dressing warmly should be encouraged to prevent frostbite and even hypothermia. Those that hold beliefs about eating certain foods to prevent flu are on the right path, if their strategy involves essential vitamins and minerals found in a well-balanced diet. On the other hand, engaging in these “immune boosting” behaviors may come at the expense of getting a flu shot.

A solution to this public health conundrum may lie in a co-branding approach. After all, a flu shot is an “immune boosting” strategy, but it goes above and beyond the conventional aspects of what makes one “healthy.” Convincing millennials that a flu vaccine is both compatible and complementary to other behaviors they are already engaged in to prevent the flu may be the way to go. The strategy should also emphasize the unique features of flu vaccine as the only method that “trains” the immune system to attack the flu virus specifically. As one of the main tenants of social marketing proposes, this promotional strategy will meet the audience where they are at, and leverage their existing motivation to avoid the flu.

Methodology

The findings are based on a survey of millennials recruited from the EurekaFacts Millennial Panel conducted in November 2015. The EurekaFacts Millennial Panel is an opt-in panel of over 22,000 respondents, ages 18 to 34, recruited through a variety of outreach methods. The final sample size for the current survey was 1,181.

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About EurekaFacts

EurekaFacts is the full-service research and analysis firm that empower the organizations that work towards a better, safer world delivering the information needed to shape strategy and tactics, identify opportunities, monitor progress and reduce risk. Established in 2003, EurekaFacts has developed robust research infrastructure including a research call center, usability testing cognitive lab, focus group facilities, a research call center, established research panels, and a wide international network of fielding affiliates. EurekaFacts is a GSA schedule holder, SDB/MBE/DBE certified nationally and in multiple states, and a member of CASRO. Its Public Affairs division specializes in public health, communications research, public opinion polling and policy analyses.

