

SUPPLEMENTARY ONLINE MATERIALS

Why do we eat cereal but not lamb chops at breakfast? Investigating Americans' beliefs about breakfast foods

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Table S1*The Prescriptive Judgment Measure Used in Studies 1–3*

- Is it good to have orange juice for breakfast?
 - Should people have orange juice for breakfast?
 - Is it right or wrong for people to have orange juice for breakfast?
-

Note. The questions were randomly ordered. We used orange juice as an example here, but the questions were adapted for each food item.

Table S2

The Intervention Essay Used in Study 2

Can you name some good breakfast foods? At the top of the list for many Americans would be orange juice and cereal because people have been led to believe that these foods are light and easy to digest, and thus they are particularly well suited for breakfast. But in fact, there is no nutritional profile of these foods that make them especially appropriate for the first meal of the day. Americans have been misled to believe these foods are breakfast foods because of intensive marketing campaigns launched generations ago.

Take orange juice for example. Orange juice was not always a breakfast drink. In the mid 1910s, citrus fruits were overproduced in California. The growers did not know what to do with the fruit except to destroy 30% of the trees. However, at the same time, pasteurization was discovered and the national railway system was completed. So citrus growers became able to juice their oranges, pasteurize the juice for longer storage, and ship it anywhere in the country. They then set to create an advertising campaign to convince Americans to start their days with a glass of orange juice.

Orange juice is not an isolated case. Even more extensive marketing campaigns have been conducted to persuade Americans to eat boxed cereal for breakfast. Even worse, sweetened cereals such as Froot Loops are marketed directly to children, engaging them with animated mascots and interactive games. According to Dr. Marion Nestle, a professor of nutrition at New York University, “Most of the marketing dollars are aimed at pushing sugary cereals at kids. Companies use TV and the Internet to push the least nutritious cereals.”

Therefore, the fact that some foods are perceived as the American’s default breakfast foods is a remarkable achievement of marketing campaigns. These foods are not especially healthier to eat at breakfast than any other foods are. In fact, there is no reason not to include any other healthy foods that you typically enjoy for lunch or dinner in your breakfast menu.

Indeed, breakfast traditions from around the world focus on quality more than the issue of timing. For example, traditional Japanese breakfasts are nutritious and consist of multiple components that are very similar to traditional Japanese dinner food, such as a bowl of miso soup, a bowl of rice, fish, pickled vegetables and tofu. To take another example, in Egypt, a traditional stew filled with fava beans, chickpeas, lentils, olive oil, lemon juice and garlic, is usually eaten for breakfast. “Many cultures eat what Americans view as dinner foods for their first meal of the day,” says Mary Hartley, R.D., an online nutritionist from New York City. Historically, even American breakfast was not very different from other meals. In mid-1800s, Americans often included foods such as oysters, boiled chickens, and beefsteak at breakfast.

Despite what many Americans believe then, there is no real health reason why some foods are better suited for breakfast than other foods are. Americans are convinced of this because of successful marketing campaigns. In fact, people should choose what they eat at breakfast based on the nutritional value, not on what has become traditional to eat at this time. Just like many other cultures, a lot of healthier alternatives we eat at other times of the day, such as beans and salad, could be added to your repertoire to improve variety and nutrition.

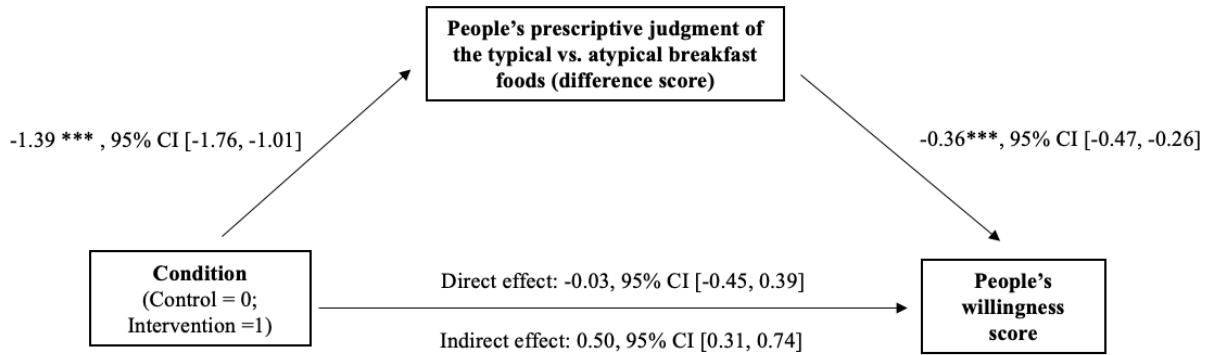


Figure S2. The mediation analyses using PROCESS Model 4 in Study 2, testing the indirect pathway between condition and willingness via prescriptive judgments of typical vs. atypical breakfast foods. We report unstandardized coefficients confidence intervals. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table S3

The Intervention Essays Used in Study 3

Culture condition

Can you name some good breakfast foods? At the top of the list for many Americans would be orange juice and cereal that people believe are particularly well suited for breakfast because they are light and easy to digest. The truth is, however, that there is no nutritional profile of these foods that make them especially appropriate for the first meal of the day. In fact, when you think about it, some of today's breakfast staples such as bacon and ham are as substantial as some dinner food. Aylin Erman, the founder and CEO of the healthy foods company JÜS, wrote in her blog, "Before you think about when you should be eating your largest meal in the day, your focus should be on what to eat in any given day."

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Despite what many Americans believe then, there is no real health reason why some foods are better suited for breakfast than other foods are. In fact, many healthier alternatives we eat at other times of the day, such as beans and salad, could be added to your repertoire to improve variety and nutrition.

Marketing condition

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Despite what many Americans believe then, there is no real health reason why some foods are better suited for breakfast than other foods are. In fact, their position as Americans’ default breakfast food is a remarkable achievement of marketing campaigns. Many healthier alternatives we eat at other times of the day, such as beans and salad, could be added to your repertoire to improve variety and nutrition.

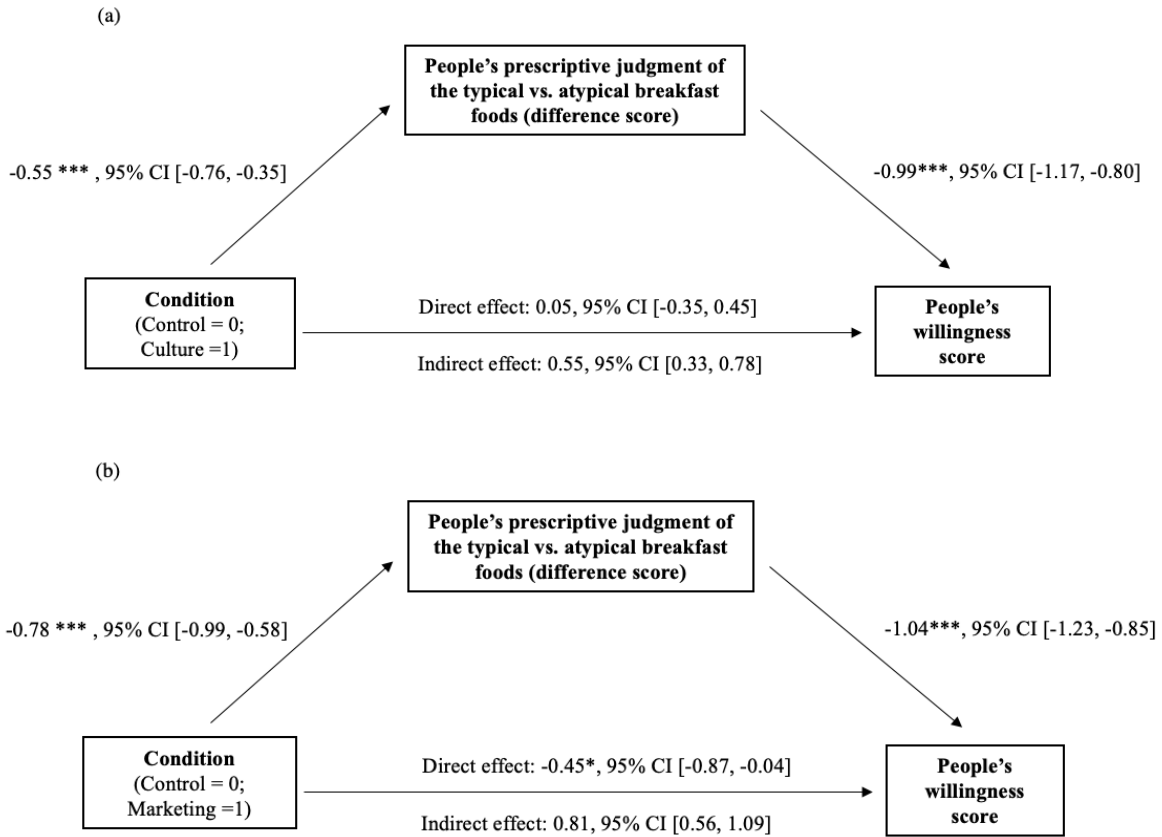


Figure S3. The mediation analyses using PROCESS Model 4 in Study 3, testing the indirect pathway between condition (a: control vs. culture; b: control vs. marketing) and willingness via prescriptive judgments of typical vs. atypical breakfast foods. We report unstandardized coefficients confidence intervals. * $p < .05$. ** $p < .01$. *** $p < .001$.