A recipe for friendship: Similar food consumption promotes trust and cooperation

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Abstract

This research examines the consequences of incidental food consumption for trust and cooperation. We find that strangers who are assigned to eat similar (vs. dissimilar) foods are more trusting of each other in a trust game (Study 1). Food consumption further influences conflict resolution, with strangers who are assigned to eat similar foods cooperating more in a labor negotiation, and therefore earning more money (Study 2). The role of incidental food similarity on increased trust extends to the product domain. Consumers are more trusting of information about non-food products (e.g., a software product) when the advertiser in the product testimonial eats similar food to them (Study 3). Lastly, we find evidence that food serves as a particularly strong cue of trust compared with other incidental similarity. People perceive that pairs eating similar foods, but not pairs wearing similar colored shirts, are more trusting of one another (Study 4). We discuss theoretical and practical implications of this work for improving interactions between strangers, and for marketing products.

Keywords: Food consumption; Motivation; Trust; Cooperation

Introduction

Imagine meeting for coffee with a colleague that you just met. Is it possible that eating the same snack as this new acquaintance could increase your trust in that person? Similarly, could eating the same snack as a salesperson increase your trust in information about a product? The present research examines these questions, looking at the consequences of incidental food consumption for increasing trust and cooperation between strangers.

Food brings people together and eating is deeply engrained into social and cultural life (Rozin, 2005). People prefer to gather to share in a meal with others rather than eat alone, cultures define themselves partially through shared tastes and cooking traditions, and religions impose food regulations and restrictions meant to increase bonding among in-group members, while keeping others outside of the meal and the bond (Goode, Curtis, & Theophano, 1984; Kittler, Sucher, & Nelms, 2012; Mintz & Du Bois, 2002). For example, Holy Communion in Christian churches brings people together through a shared consumption experience, and in Islam and Judaism, the presence of pork signals the meal as “sinful,” thus separating self from other through food.

Some prior work has examined the relationship between food consumption and social connection. Developmental research finds that attraction increases similarity in food preference, and also that similarity in food preference increases attraction. For example, 16-month-olds match the food preferences of a prosocial puppet more than an antisocial puppet (Hamlin & Wynn, 2012), and 3-year-olds prefer puppets whose food preferences match their own (Fawcett & Markson, 2010). This trend of using food preference to signal or create bonds continues through adulthood; for example, socially excluded Asian-Americans choose American foods to signal belonging to the American group (Guendelman, Cheryan, & Monin, 2011). In
addition to type of food, people also model the amount of food that others choose (Johnston, 2002), particularly for in-group members (Cruwys, Bevelander, & Hermans, 2015; Cruwys et al., 2012; Hermans, Engels, Larsen, & Herman, 2009; McFerran, Dahl, Fitzsimons, & Morales, 2010).

Whereas past research focused on the outcome of affiliation goals for food choice and behavior (Lakin & Chartrand, 2003; Lakin, Chartrand, & Arkin, 2008; Mead, Baumeister, Stillman, Rawn, & Vohs, 2011), we explore the opposite pathway: the consequences that food consumption has for connection. Initial evidence for this pathway comes from research demonstrating enhanced prosocial emotions and behaviors from mimicry. Mirroring another person’s behavior increases helping and prosociality (Stel, van Baaren, & Vonk, 2008; van Baaren, Holland, Kawakami, & van Knippenberg, 2004), interpersonal trust (Maddux, Mullen, & Galinsky, 2008; Swaab, Maddux, & Sinaceur, 2011), and compliance with a salesperson’s recommendations (Jacob, Guéguen, Martin, & Bouliby, 2011; Tanner, Ferraro, Chartrand, Bettman, & Van Baaren, 2008). It is further possible that mimicking another person’s food consumption results in social connection, as mimicry increases liking and smoother interactions, presumably leading to interpersonal closeness (Chartrand & Bargh, 1999, Study 2). Note, however, that mimicry does not always increase rapport (Bernieri, 1988; La France & Ikes, 1981) and similarity does not always increase liking (Amodio & Showers, 2005).

Moving beyond mimicry, we examine outcomes of incidental similar food consumption. We define incidental similar food consumption as consumption that is assigned and unrevealing of either preferences or prosocial intentions. We explore whether similarity in food consumption breeds closeness and trust for people who do not choose preferred foods, nor strategically try to consume similarly to another person (consciously or not), but rather, are assigned similar food.

We further test the powerful influence of food consumption relative to other cues. Generally speaking, the relationship between similarity and liking is not unique to food as people like and feel closer to others whose preferences and behaviors align with their own (Chartrand & Bargh, 1999; Fawcett & Markson, 2010; Jiang, Hoegg, Dahl, & Chattopadhyay, 2010; van Baaren, Holland, Steenaert, & van Knippenberg, 2003) and earlier research identified a host of minimal cues resulting in perceived affiliation (e.g., sharing a birth date, Burger, Messian, Patel, del Prado, & Anderson, 2004; Jiang et al., 2010; Miller, Downs, & Prentice, 1998). However, eating holds a special role for social relationships (Kniffin & Wansink, 2012) because it is a consumption activity in which people bring outside substances into contact with the body and enter them into the body (Rozin, Fischler, Imada, Sarubin, & Wrezsienowski, 1999). Indeed, the word “companion” comes from the Latin words “cum pane” meaning the person you share bread with. Further, the idea behind commensality is that sharing a meal can produce bonding (Fischler, 2011), such that people eating together could become closer and more similar (Fischler, 1988; Murcott, 1986; Rozin, Millman, & Nemeroff, 1986), with benefits for work performance (Kniffin, Wansink, Devine, & Sobal, 2015). Eating may thus serve as a strong cue for signaling liking and closeness, and more importantly, trust and cooperation.

Notably, similar consumption can also signal shared identity or group membership (Tajfel, Billig, Bundy, & Flament, 1971; Tajfel & Turner, 2004), which is associated with a preference for, and perceived interdependence with, one’s group (Brewer, 1979; Diehl, 1990; Platow, Grace, & Smithson, 2012; Tajfel, 1970). However, whereas signals of shared group membership often rely on the presence of an out-group, such that a group consuming similarly is aware of another group where people consume differently (Diehl, 1990, p. 265), we explore mundane (i.e., non-diagnostic) food similarity, absent of an out-group. We specifically explore whether similar consumption increases perceptions of closeness through incidental similarity, rather than perceived group identity.

Trust and cooperation

Our main focus is on understanding how food can be used as a connecting device that increases consumers’ cooperation and trust. We define trust as “a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another” (Rousseau, Sitkin, Burt, & Camerer, 1998, p. 395). To the extent that similar food consumption promotes closeness and liking, it follows that it would increase trust and cooperation, and that this would be particularly true for strangers who cannot rely on past behavior to establish trust. In the initial phases of trust building, where information about the other person is limited, such as when interacting with a new acquaintance, people search for cues to determine the right level of trust to place in this person (McKnight, Cummings, & Chervany, 1998). Feelings of closeness that arise from consuming similar food are especially likely to factor into a person’s decision to trust a stranger (including an advertiser providing product information) or not.

Unlike preferences such as taste in music or political beliefs, we suggest that the role of food consumption on trust and cooperation is neither normative nor conscious. For example, whereas a person may correctly feel she can trust a stranger who voted for the same presidential candidate she did, this person may not realize that she will also trust a stranger who eats the same, incidental food that she does.

We further suggest that if brought to awareness, food choice can serve as a strategically useful tool for trust, as it is something consumers frequently engage in together and where they can easily and flexibly match each other (in contrast, for example, with matching another person’s clothes, which requires advanced coordination). Thus, consumers can be strategic in the food they consume, utilizing food as a social lubricant when eating dinner on a date or when out for lunch with a colleague. Similarly, marketers can use incidental, similar food consumption to increase trust in product information when advertising a non-food product.

We operationalize trust in our research as investing one’s resources in and relying on another person (Kollock, 1994; Zand, 1972) and as reporting trust in product information. Specifically, we study interactions where participants increase their vulnerability to another person who is outside of their own control. Because trust enables cooperation (Tyler, 2003; Yamagishi & Cook, 1993), we further predict that increases in trust from
similar food consumption lead to increases in cooperative behavior such that those who consume similarly will be better at resolving a negotiation conflict than those consuming dissimilarly. Additionally, we examine consequences of similar consumption for trust in product information. We predict consumers assigned to eat similar food as a product advertiser will like the advertiser more, which will translate into increased trust in the information presented about the product.

To summarize, incidental similar food consumption should increase closeness and liking, and we expect this to occur in the absence of choice, when people are assigned to consume similar food. Then, because closeness is associated with trust (Kramer & Brewer, 1984; Tyler, 2012), the increase in closeness and liking should subsequently lead to an increase in trust and cooperation for those who consume similarly. We predict similarity in food consumption serves as a stronger cue of trust compared with other incidental similarity and is therefore an important domain for examining implications of similar consumption. Based on the aforementioned analysis, we test the following hypotheses:

H1. Similar food consumption increases trust and cooperation between strangers.

H2. An increase in closeness and liking mediate the effect of consuming similar foods on increased trust and cooperation.

H3. Similar food consumption serves as a stronger cue of trust compared with other incidental similarity.

Present research
We present four studies that examine whether incidental, similar food consumption increases closeness and liking, which in turn promote trust and cooperation. In Study 1, we test whether assigned, similar food consumption, increases closeness (H2) and therefore trust in a stranger in a trust game (H1). Study 2 tests the hypothesis that incidental similarity in food consumption increases cooperation between strangers in a conflict resolution situation involving a labor negotiation (H1) as a result of increased closeness (H2). In Study 3, we examine an implication of similar food consumption for increased trust. We test whether consumers who eat the same food as product advertisers will trust information about the product more than those eating dissimilarly or not eating (H1), predicting that this increase in trust is driven by consumers’ increased liking of advertisers who eat similar food (H2). Finally, moving to third-party evaluations, we test whether incidental similar food consumption serves as a stronger cue of trust to observers compared with other incidental similarity (Study 4; H3).

Study 1: Similar food consumption increases trust
We predict that incidental similar food consumption can increase closeness and trust, and that this occurs when people do not choose their food and hence, consumption cannot signal similar preference or strategic mimicry (H1). Accordingly, in Study 1 we assigned participants to eat similar or dissimilar food as their partner. We then used an investment game to measure trust in a partner, predicting that pairs of strangers assigned to consume similarly (vs. dissimilarly), would trust each other more. We further assessed interpersonal closeness, predicting that the effect of food consumption on increased trust is mediated by closeness (H2).

Method
Participants
Participants were recruited individually and run in pairs in a campus lab. We had planned to exclude pairs who would accidently partner acquaintances and therefore set data collection to stop at the end of the week in which we had at least 45 participants per cell. We collected data from 184 undergraduate and graduate students and excluded 4 pairs who were acquaintances (1 from the similar and 3 from the dissimilar condition), for a sample of 176 (74 female; M_age = 23.14, SD = 5.94). Participants were paid based on performance (between $0.00 and $6.00, M = $2.57, SD = $1.06).

Procedure
This study used a 2 (food: similar vs. dissimilar) × 2 (role: investor vs. fund-manager) between-subjects design. Participants were paired with another same-gender participant and completed two supposedly unrelated studies. First, they ate and evaluated the same candy or different candy (depending on condition) under the cover story that they were participating in a market research project. Specifically, participants sat at a table adjacent to each other and saw four bowls containing four different candies (Butterfingers, Sour Patch, Peppermint Patties, and Airheads). They were each assigned to eat and evaluate one candy (see web appendix for more details on all studies).

In the second part of the study, participants were moved into separate rooms and randomly assigned to the role of investor or fund-manager in a trust game (adapted from Berg, Dickhaut, & McCabe, 1995; see also Glaeser, Laibson, Scheinkman, & Soutter, 2000). The investors received $3 in bills and chose which proportion of this amount they would ‘invest’ in the fund-manager (they kept the remainder for themselves). The amount invested was always doubled when it reached the fund-manager, at which point the fund-manager decided how to divide the new amount between him or herself and the investor (fund managers could take everything, nothing, or any proportion of the new amount). In this game, investors should only give something to fund managers if they expect a return that is equal to or higher than what they invested. Trust was operationalized as the amount of money investors invested in fund managers. We note that the amount fund managers returned to investors was largely constrained by how much money fund managers received.

We measured interpersonal closeness (α = .77): (1) “How close do you feel to your partner?” (2) “How likable was your partner?” (0 = not at all, 6 = extremely), (3) “I would spend more time with the person I was paired with”, and (4) “I do not see myself being friends with that person” (item 4 was reverse coded; −3 = disagree, 3 = agree).

For exploratory purposes, we also assessed interpersonal closeness using the inclusion-of-other-in-self (IOS) scale (0 =
completely separate circles, 6 = very overlapped circles; Aron, Aron, & Smollan, 1992). This scale is usually measured in the context of a salient relationship, rather than with strangers, and did not load onto our primary measure of closeness (4-item scale) in a factor analysis (see web appendix); hence, we report it separately. We assessed how close investors felt to fund managers before investors learned how much money fund managers returned to them. Fund managers answered these questions only after they received money from the investors; thus, their responses were affected by how much money they received rather than the manipulation, and we did not analyze them.

Results and discussion

We summarize the results for Study 1 in Table 1. As predicted, investors invested (i.e., trusted) more when fund managers were assigned similar (vs. dissimilar) food (\(M_{\text{same}} = \$2.40, \ SD = \$0.75; M_{\text{different}} = \$1.86, SD = \$0.99\)), \(t(86) = 2.89, p = .005\). Consequently, fund managers reciprocated investors’ actions (\(M_{\text{same}} = \$2.56, \ SD = \$1.32; M_{\text{different}} = \$1.74, SD = \$1.20\)), \(t(86) = 3.01, p = .003\). Also as predicted, investors felt closer to fund managers consuming the same food (\(M = 3.16, SD = 1.08\)) than different food (\(M = 2.70, SD = 1.07\)), \(t(86) = 1.99, p = .049\). We find a marginal effect of food similarity on the IOS scale (\(M_{\text{same}} = 2.62, SD = 1.71; M_{\text{different}} = 1.95, SD = 1.63\)), \(t(86) = 1.88, p = .06\). Including participant gender in our analysis does not meaningfully change the results across Studies 1–4, and we find no consistent effect of participant gender.

Mediation analysis

As predicted, the increase in closeness mediated the effect of food similarity on trust for investors (\(\beta = .05, SE = .03, 95\% \ CI [.002, .14]\); based on 10,000 bootstrap samples, Preacher & Hayes, 2004). Similar (vs. dissimilar) food consumption positively predicted trust (\(\beta = .27, p = .005\)) and closeness (\(\beta = .23, p = .049\)). Closeness positively predicted trust in fund managers (\(\beta = .26, p = .004\)). Controlling for closeness reduced the effect of food similarity on trust (\(\beta = .22, p = .02\)), whereas closeness remained a significant predictor of trust (\(\beta = .21, p = .01\)). These results suggest that similar food consumption could have increased trust by inducing closeness.

Together, the results of Study 1 support our theory that similar food consumption increases closeness and trust between strangers, and that this occurs when similarity is incidental and does not imply similar preferences. A possible alternative explanation for these results is that participants simultaneously attended to the same food, and that shared attention increased social connection (Shteynberg, 2015). We believe this is less likely because effects of shared attention often involve several people (typically group members; Shteynberg et al., 2014) attending to a single item, whereas we had strangers eat from different (not shared) plates and they attended to the focal task rather than to their food. To further address this alternative, in the next study we gave participants a selection of similar or dissimilar items to eat. Thus, people in the similar condition ate similar foods, but not necessarily at the same time.

Study 2: Similar food consumption improves negotiation outcomes

Study 2 examined whether consuming similar foods increases cooperation, resulting in a faster resolution of a labor conflict and more beneficial outcomes to both parties, compared with those consuming dissimilar foods (H1). To test this, we used a bargaining dilemma where participants assumed the role of manager or union leader, exchanging bids for an hourly wage over the course of a strike period (modeled after Lax & Weeks, 1985). Whereas pairs had opposing interests for the wage rate, they both wanted to end the conflict quickly to prevent losing money on the strike. The outcome score was such that the strike was costly for both sides (though more so for management) and successful negotiators ended the strike early (i.e., have fewer negotiation rounds) through collaborative and mutual concessions. We further measured closeness between pairs, predicting that increased closeness would mediate the influence of similar food consumption on increased cooperation (H2).

Method

Participants

Participants were run in pairs of strangers in a campus lab. Data collection stopped at the end of the week in which we had at least 30 participants per cell; there were no exclusions. A total of 124 (52 female; \(M_{\text{age}} = 21.52, SD = 6.05\)) undergraduate and graduate students completed this study and were paid based on performance ($3.00–$6.00, \(M = $4.31, SD = $0.78\)).

Procedure

The study used a 2 (food: similar vs. dissimilar) × 2 (role: union vs. management) between-subjects design. Participants simultaneously took part in a wage negotiation (from Sheldon & Fishbach, 2011; modeled after Lax & Weeks, 1985) and a taste test.

For the negotiation, participants were randomly assigned a role—union leader versus manager—and negotiated an hourly wage for the union members, between $10 and $11. They learned they would silently exchange up to 22 wage rate bids (i.e., offers) to reach an agreement, and that a costly strike was set to initiate if a deal were not reached by round 2. Union leaders learned they wanted a higher wage for themselves ($11 maximum) and managers learned they wanted a lower wage for the union ($10 minimum). Both parties learned that an agreement...
would be reached on the round in which the management offered an equal or higher wage than what the union offered, and that they wanted a short strike (i.e., minimize rounds).

Scores for each participant were a function of the wage rate agreed upon and the total number of strike days (i.e., negotiation rounds minus 2). Minimizing strike days (i.e., rounds) was equally important as maximizing wage for union leaders and considerably more important than minimizing wage for managers. Specifically, management received a negative score for every $0.01 above a wage of $10: \(-[50,0000 \times (X \text{ cents}) – \text{strike cost}].\) The union received a positive score for every $0.01 above $10 that was agreed to, and the only cost came from the strike: \([40,0000 \times (X \text{ cents}) – \text{strike cost}.\) Participants’ payment ranged from $3 to $6 as a function of their negotiation outcome.

For the taste test, participants were assigned to sample three of the same foods (both ate sweet food: cookie, Kit Kat, tootsie rolls or both ate salty food: potato chips, pretzels, Cheez-Its) or three different foods (one person ate three sweet foods, the other ate three salty foods) while negotiating. Participants sat next to each other and received individual plates of food. Before the negotiation began, an experimenter explained the cover story, that the study was about how eating similar (or, alternatively, dissimilar) foods as another person impacts enjoyment and taste of food over time; thus, participants would evaluate their foods at the end of the negotiation. Since similarity was manipulated through multiple food items consumed over time, to ensure participants were aware of the manipulation the experimenter indicated, “You’ll both be eating and evaluating the same (different) food items today. You will both be eating sweet/salty foods (One of you will be eating sweet food and one salty food).” Drawing attention to the assigned, incidental similarity in this way highlighted that food consumption did not indicate preference. After completing their tasks, participants answered filler questions about the negotiation and the food items. Closeness (4-items; \(\alpha = .63\)) and inclusion-of-other-in-self (IOS) scale were assessed with the partner evaluation form from Study 1.

### Results and discussion

We first analyzed strike days (total rounds minus 2) as a function of food assignment at the pair level. If eating similarly increases cooperation, this should lead to a faster resolution of the negotiation with fewer costs due to a strike. As predicted, pairs consuming similar foods went into fewer strike days (Mean = 3.63, SD = 4.05) than pairs consuming different foods (Mean = 7.33, SD = 6.69), \(t(60) = 2.66, p = .01\) (Table 2). We find pairs come to a similar agreement over wage, regardless of food similarity (Mean \(_{\text{same}} = \$10.59, \text{Mean}_{\text{different}} = \$10.58\), \(t < 1\), suggesting that participants tend to meet in the middle independent of the number of rounds they take, however they come to an agreement much faster when eating the same food.

We next analyzed performance outcome scores at the role level. Management eating the same food as the union had lower costs (Mean = \(-\$3.75\text{MM, SD = $1.68}\text{MM}\)) than management eating different food (Mean = \(-\$5.13\text{MM, SD = $2.41}\text{MM}\)), \(t(41.73) = 1.93, p = .06\). Further, union leaders eating the same food as managers had marginally better outcome scores (Mean = \$2.04\text{MM, SD = $0.68}\text{MM}\) than union leaders eating differently (Mean = \$1.50\text{MM, SD = $1.38}\text{MM}, \(t(41.73) = 1.93, p = .06\).

Because participants were paid based on performance, those who ate similar foods earned more (Mean = \$4.52, SD = $0.63\)) than those assigned different foods (Mean = \$4.08, SD = $0.86\)), \(t(122) = 3.32, p < .001\). We find a significant effect of food similarity on closeness, \(F(1, 120) = 3.97, p = .049\), with no interaction or effect of role, \(F_s < 1, p > .48\). Those consuming similar foods felt closer (Mean = 3.25, SD = 1.02) than those consuming differently (Mean = 2.90, SD = .94). However, there was no effect of food similarity, role, or interaction on inclusion-of-other-in-self (IOS) scale, \(ps > .11\).

### Mediation analysis

As predicted, an increase in closeness mediated the effect of food similarity on cooperation (\(\beta = -.30, SE = .20, 95\% \text{ CI} [-.90, -.04]\); based on 10,000 bootstrap samples). Similar (vs. dissimilar) food consumption negatively predicted the number of strike days (\(\beta = -.85, p = .01\)) and positively predicted closeness between negotiators (\(\beta = .18, p = .049\)). Increased closeness negatively predicted total strike days (\(\beta = -.2.26, p = .03\)). Controlling for closeness reduced the effect of food similarity on total strike days (\(\beta = -.155, p = .03\)) and closeness marginally predicted fewer strike days (\(\beta = -.70, p = .096\)).

We find that when negotiators on separate sides of an argument consumed similarly, they felt closer and were able to come to a faster resolution that was beneficial for both parties. Negotiations by nature contain incentives that could foster competition. Our research suggests one way to establish a positive connection and increase cooperation between negotiating parties is to have them consume similar foods.

In our next study, we examine direct marketing implications of increased trust from similar food consumption. We predict that when consumers eat similar food as an advertiser giving a product testimonial, they are more likely to trust the information

### Table 2

Results of Study 2: Consuming similar food led people on opposite sides of a negotiation to come to a faster resolution of the conflict.

<table>
<thead>
<tr>
<th></th>
<th>Similar</th>
<th>Dissimilar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total strike days</td>
<td>3.63 (4.05)*</td>
<td>7.33 (6.69)</td>
</tr>
<tr>
<td>Money earned</td>
<td>$4.52 ($0.63)**</td>
<td>$4.08 ($0.86)</td>
</tr>
<tr>
<td>Performance outcome (manager)</td>
<td>(-$3.75\text{MM ($1.68}\text{MM)*} )</td>
<td>(-$5.13\text{MM ($2.41}\text{MM)) }</td>
</tr>
<tr>
<td>Performance outcome (union)</td>
<td>$2.04\text{MM ($0.68}\text{MM)}</td>
<td>$1.50\text{MM ($1.38}\text{MM))</td>
</tr>
<tr>
<td>Closeness to partner scale</td>
<td>3.25 (1.02)*</td>
<td>2.90 (.94)</td>
</tr>
<tr>
<td>Inclusion-of-other-in-self scale</td>
<td>1.80 (1.21)</td>
<td>1.83 (1.46)</td>
</tr>
</tbody>
</table>

*Note: Standard deviations in parentheses. In each row, asterisk indicates a significant difference between similar and dissimilar conditions (*p < .05, **p < .001).
being conveyed about the product, compared with when the product advertiser either consumes different or no food.

**Study 3: Similar food consumption increases trust in a product testimonial**

In the previous studies, it is not clear whether similar food consumption increases trust, or dissimilar consumption reduces trust. To examine this, in the current study we added a no food condition, predicting that similar food consumption increases trust compared with two control conditions: dissimilar and no food consumption.

We further predict similar food consumption can bring closeness and increase trust not only in a person, but also in information that a person provides. Accordingly, we assigned all participants to eat a snack while watching product testimonials. We manipulated whether the advertisers in the testimonials consumed the same food as participants, different food, or did not consume any food before measuring participants’ trust in the product information being conveyed. We expected that participants would trust information about a product more when they ate similar food as the product advertisers, compared with advertisers eating dissimilar and no food (H1), and that liking of the advertiser would mediate this effect (H2).

**Method**

**Participants**

Participants completed the study in a campus lab in return for $1.00. Data collection for Study 3 stopped at the end of the week in which we had at least 30 participants per cell. We collected data from 96 undergraduate and graduate students (53 females; \( M_{\text{age}} = 22.50, SD = 8.17 \)). Participants who recognized the advertisers (the two research assistants) in the product testimonial were not eligible to participate.

**Procedure**

This study employed a 3 (food: similar vs. control–dissimilar vs. control–no food; between-subjects) \( \times 2 \) (product type: SC Johnson Shout Spray vs. HP Agile Manager Software; within-subjects) mixed-model design. Participants learned they would be reading about two different products and listening to testimonials about customers’ experience with the products. All participants received and ate a piece of chocolate candy (Kit Kat) under the cover story that we were pretesting snack preferences for another study.

Participants read two product descriptions (for SC Johnson Shout Spray and HP Agile Manager Software; order counterbalanced). After each description, they watched a 1 min video clip of a person giving a product testimonial. The testimonials featured a supposed customer of the product (in reality, a research assistant). We formatted the clips to appear similar to home videos that customers sometimes post on shopping websites. Because these were intentionally unprofessional videos, it did not seem unusual for the featured advertisers/customers to be eating. The advertisers in the two testimonials read a script from an actual customer testimonial written online, while eating the same food as participants (Kit Kat), different food (grapes), or no food. In the conditions involving food, advertisers held the food in their hand and ate it twice during the testimonial.

After watching each testimonial, we measured participants’ trust in the product information: (1) “How much do you trust the information in the SC Johnson Shout [HP] testimonial you just learned?” (0 = not at all, 6 = very much) and (2) “The person in the SC Johnson Shout [HP] testimonial is communicating:” (0 = dishonestly, 6 = honestly). We also measured overall liking of the advertisers “The person in the SC Johnson Shout [HP] testimonial is (0 = not likeable, 6 = extremely likable). We assessed liking rather than closeness in this study because participants did not interact directly with the people giving the testimonial, and so it was less natural to ask about closeness. Additionally, consumer research suggests liking increases trust in buyer–seller relationships (Nicholson, Compeau, & Sethi, 2001).

We included an attention check, asking participants to report whether the people in the testimonial they watched were eating any food. We did not exclude anyone based on their response, as 97.9% (94/96) of participants answered correctly. Notably, although the food manipulation was much less subtle than in other studies, no participants voluntarily mentioned it when asked if anything was strange or unusual about the study.

**Results and discussion**

We collapsed the two items measuring trust for the SC Johnson product (\( r = .71, p < .001 \)) and the HP product (\( r = .79, p < .001 \)). We conducted a repeated-measures ANOVA of trust in information on food similarity and product type. As predicted, we find an effect of food similarity on trust, \( F(2, 93) = 4.38, p = .015 \) (Table 3). Participants trusted the information in the testimonials more when they ate the same food as advertisers (\( M_{\text{similar}} = 3.21, SD = 1.18 \)) than in the control conditions (\( M_{\text{no food}} = 2.28, SD = 1.35 \); \( M_{\text{different}} = 2.79, SD = 1.25 \)), \( t(93) = 2.48, p = .015 \). There was no difference in trust between the two control conditions, \( t(93) = 1.61, p = .11 \). We find no main effect of product type (SC Johnson vs. HP product) or interaction, \( F_S < 1 \).

Next, a repeated-measures ANOVA of liking on food similarity and product type yielded a marginal effect of food similarity, \( F(2, 93) = 2.42, p = .095 \). As predicted, participants liked advertisers more when they both ate the same food (\( M_{\text{same}} = 3.70, SD = 1.16 \)) than in the control conditions (\( M_{\text{no food}} = 3.22, SD = 1.30 \); \( M_{\text{different}} = 3.05, SD = 1.25 \)), \( t(93) = 2.13, p = .036 \).

**Table 3**

<table>
<thead>
<tr>
<th></th>
<th>Similar (dissimilar)</th>
<th>Control (dissimilar)</th>
<th>Control (no food)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust in product information</td>
<td>3.21 (1.18)*</td>
<td>2.79 (1.25)</td>
<td>2.28 (1.35)</td>
</tr>
<tr>
<td>Liking of advertisers</td>
<td>3.70 (1.16)*</td>
<td>3.05 (1.25)</td>
<td>3.22 (1.30)</td>
</tr>
</tbody>
</table>

*Note*: Standard deviations in parentheses. In each row, asterisk indicates a significant difference between similar and control (dissimilar and no-food) conditions (*\( p < .05 \)).
There was no difference in liking between the two control conditions (different vs. no food), \( t < 1, p = .580 \). We find no main effect of product type or interaction, \( F_s < 1 \).

**Mediation analysis**

We find evidence that the increase in liking mediated the effect of food similarity on participants’ increased trust in advertisers (\( \beta = .35, SE = .18 \), 95% CI [.05, .76]; based on 10,000 bootstrap samples). Similar consumption (vs. dissimilar and no food conditions, combined) positively predicted trust (\( \beta = .68, p = .016 \)) and liking (\( \beta = .57, p = .035 \)). Liking positively predicted trust in the testimonial (\( \beta = .64, p < .001 \)). Controlling for liking reduced the effect of food similarity on trust (\( \beta = .32, p = .156 \)) whereas liking remained a significant predictor of trust (\( \beta = .62, p < .001 \)).

We find initial evidence that advertisers can use the effect of similar food consumption on trust—when advertisers consumed similar food as participants, participants trusted the product information more, and this was mediated by increased liking of advertisers. This research suggests marketers who are advertising a non-food product can offer consumers food that the advertiser also eats to increase trust in product information.

One remaining question is whether incidental similarity increases trust in general, or whether there is something special about incidental food consumption. We address this question in our next and final study, examining the powerful status of food consumption for increasing perceptions of trust. We further move to third-party evaluations, and examine whether people infer trust between other individuals who eat similar foods. Previous research has shown people infer closeness between individuals who eat together (Miller, Rozin, & Fiske, 1998), and we suggest not only do people feel closer to and trust those who eat similar foods as they do (Studies 1–3), but that they perceive greater trust between people who eat similarly.

**Study 4: The powerful role of similar food consumption on inferred trust**

In Study 4, we measured inferred trust when evaluating pairs consuming the same (vs. different) food, or wearing the same (vs. different) colored shirt. This study serves two primary purposes. First, we tested whether similar (vs. dissimilar) food consumption increases perceived trust between pairs of individuals. Building on our earlier studies showing similar food consumption increases trust by increasing closeness and liking, we predicted that people would infer greater trust between pairs that consume the same food than pairs that consume different food. This study further examined the role similar food consumption has for increasing trust compared with other incidental similarity. We predicted that since food consumption is an intimate activity that involves bringing something into the self, people would infer greater trust between pairs consuming similar food than pairs engaging in other incidental similarity (i.e., wearing the same shirt color). We argue that whether any incidental similarity could increase trust, food similarity may be a particularly strong cue (H3).

**Pretest**

We conducted a pretest to confirm the food and shirt color similarity manipulations were noticeable. We created stimuli by pairing 20 unique photos to create 10 trials that included 2 photos each, either featuring college students with food (in the food consumption condition), or with no food (in the colored shirt condition), in which we varied shirt color using Photoshop. Each trial matched the two photos on gender, race, and hair color (half the trials featured women). We manipulated food similarity by matching food items (i.e., both ate M&Ms or both ate pretzels) or not (i.e., one ate M&Ms and one ate pretzels). We manipulated shirt color similarity by matching shirt color (e.g., both wore blue colored shirts) or not (e.g., one wore blue and one wore red).

We collected data from 160 MTurk workers (49 female; \( M_{age} = 34.49, SD = 19.35 \); 3 participants dropped the survey after being assigned to the shirt condition, see Zhou & Fishbach, in press) who rated for each trial “How similar do these individuals seem?" (0 = not similar, 6 = very similar), in return for $0.50. A repeated-measures ANOVA of perceived similarity on similarity condition (similar vs. dissimilar) and item (food vs. clothing) yielded a main effect of similarity, \( F(1, 158) = 9.02, p = .003 \). Pairs were more similar in the similar (\( M = 4.06, SD = 1.03 \)) than dissimilar condition (\( M = 3.85, SD = .98 \)). There was no main effect of item (food vs. shirt), \( F(1, 158) = 1.59, p = .209 \), or interaction, \( F(1, 158) = 2.43, p = .121 \). The absence of an interaction suggests a similar effect for shirt and food similarity, as we predicted. We note, however, that whereas perceived similarity differed significantly for food (\( M_{similar} = 4.20, SD = .89 \); \( M_{dissimilar} = 3.88, SD = .92 \)), \( F(1, 158) = 10.68, p = .001 \), this effect was directional, but nonsignificant for shirt color (\( M_{similar} = 3.91, SD = 1.15 \); \( M_{dissimilar} = 3.81, SD = 1.05 \)), \( F(1, 158) = 1.02, p = .315 \). Possibly, because incidental similarity in food is more meaningful, it is also more noticeable than other incidental similarity. We next tested our main prediction that similarity in food consumption is a stronger signal of trust than other incidental similarity.

**Method**

**Participants**

We collected data from 161 MTurk workers (104 female; \( M_{age} = 33.73, SD = 10.17 \); 3 participants dropped from the survey after being assigned to the food condition) who completed the study in return for $0.50.

**Procedure**

The study employed a 2 (item: food consumption vs. colored shirt; between-subjects) \( \times \) 2 (similarity: similar vs. dissimilar; within-subjects) mixed-model design. As part of our cover story, all participants read that they would be presented with photos of two individuals who had been assigned to work together on a task. They learned that these individuals did not know each other before being assigned to work together, and that their task involved both working together and working independently on different sections, but that their total pay was determined by both individuals’ effort. Participants further read that each person in
the pair answered how much they trusted their partner to pull his or her weight in completing the task. Pairs where both individuals trusted each other were labeled “high trust pairs” and pairs where one or both individuals did not trust their partner were labeled “low trust pairs.” Participants learned half of the pairs were high trust pairs and the other half were low trust pairs. Participants’ job was to guess whether pairs trusted each other (high level of trust) or not (low level of trust). We described the photos as being taken during lunch and on different days, eliminating the possibility that participants believed pairs with similar foods were having lunch together.

We presented the same 10 trials from the pretest (5 similar pairs; 5 dissimilar pairs) with item (food vs. shirt color) manipulated between subjects. For each trial, participants guessed “Did this pair indicate experiencing a high or low level of trust” by selecting either the “high level of trust” option or the “low level of trust” option (binary choice).

Results and discussion

We summed the number of “high level of trust” choices to create a measure of trust for similar pairs and dissimilar pairs (between 0 and 5). We conducted a repeated-measures ANOVA of perceived trust on similarity (similar vs. dissimilar; within) and item (food vs. shirt color; between), which resulted in the predicted interaction, $F(1, 159) = 5.90, p = .016$ (Fig. 1). Pairs eating similarly were perceived to trust more often ($M = 3.11$, $SD = .88$) than pairs eating dissimilarly ($M = 2.63, SD = 1.11$), $F(1, 159) = 7.18, p = .008$, with no effect of shirt color similarity ($M_{\text{same}} = 2.70, SD = 1.07; M_{\text{different}} = 2.84, SD = .89$), $F < 1$.

Overall, we find that people perceive incidental similarity in food consumption as sending a stronger signal of trust than similarity in shirt color. This suggests food similarity is a powerful cue for inferring trust, even among third-party observers.

General discussion

We find incidental, similar food consumption brings consumers closer and increases liking, leading to increased trust and cooperation. Study 1 demonstrated that incidental, similar consumption increases closeness and trust, even though food was assigned and could not reflect preference. Study 2 found that similar consumption increases closeness and cooperation in labor negotiation. Studies 1–2 further consistently found similar consumption increases closeness. It appears complete strangers (as in our experiments) or possibly even people from rival groups can become more trusting of each other when they consume similarly.

In Study 3, we tested for trust in the context of advertising products. When advertisers delivering a (non-food) product testimonial ate the same food as participants, participants liked them more and trusted the product information more than when they ate different or no food. Study 4 demonstrated that similarity in food consumption increased perceived trust between pairs more than another form of incidental similarity: shirt color. This finding suggests there may be something special about similar food consumption for increasing trust and cooperation.

Although we find incidental, similar food consumption increases closeness and trust, people do not always prefer to consume similar foods as others. People may choose to consume dissimilar foods to increase group variety (Ariely & Levav, 2000), signal unique identities (Berger & Heath, 2008), or because they believe others will evaluate them more positively than had they chosen more similar foods (Ratner & Kahn, 2002).

The current work suggests choosing different foods from a new acquaintance could have negative consequences for closeness and trust. One possible solution is for people to consume similar, yet different foods (e.g., pizza with different toppings). In the same way that clothing can signal both group membership and uniqueness (Chan, Berger, & van Boven, 2012), people may be able to signal closeness through similar food consumption, while also preserving their individual identities.

Those who seek to implement the effect of incidental food similarity should consider two potential boundary conditions. First, there could be too much similarity when consuming food with a stranger. For example, whereas food sharing and feeding another person is common among romantic couples (Miller, Rozin, & Fiske, 1998), this degree of food similarity (i.e., sharing the same plate) is likely to induce disgust if it occurs between strangers, which would outweigh any benefit from similar food consumption and result in negative outcomes (Moretti & di Pellegrino, 2010). Second, the current studies used common foods that participants were familiar with. If, however, people were assigned to consume disliked food, it is less likely similar consumption would increase closeness and trust between strangers.

Implications and future directions

We find that incidental similar food consumption increases trust in information about a product. One suggestion for marketers advertising non-food products is to also include people in their promotional videos consuming popular foods. To the extent that consumers eat what the product advertisers eat, we would expect an increase in liking of the product advertiser, which would increase trust in information about the product.

Marketers can further harness these findings when designing and selling food products. For example, services that provide food directly to consumers can use these results in shaping the food they offer. While consumers may hold the intuition that
more variety in food options is better, it may actually be the case that having less variety, and therefore constraining people to eat more similarly, could increase the connection between these individuals. Thus for example, a conference planner could offer attendees a limited number of food choices, which would lead them to consume more similarly. Our research predicts that conference attendees who eat similar foods will trust and cooperate more than those who eat different foods. Additionally, speed-dating events or dating services can serve a single type of food, rather than offer several different options, leading people to consume similarly, feel closer, and potentially let their guard down more easily. Offering fewer food options, while increasing trust and cooperation between individuals, also has the added benefit that it is often cheaper than providing a variety of options.

Our research also has implications for consumers, and highlights an area where informing people of our results can help them be strategic in their food consumption in order to connect with another person or in the food they serve to others they wish to connect together. Specifically, our work suggests that for new acquaintances, one way to break the ice and increase trust and cooperation is to consume similar foods together. Importantly, whereas similarity in other domains (e.g., music taste) may also serve to connect individuals, food similarity is easier to coordinate on compared with other incidental variables (e.g., clothing) or consequential characteristics (e.g., religious affiliation). This implies that for salespeople interacting with customers, people in a business meeting, those selecting food to serve at a conference, or those out to eat on a first date, one way to speed up the process of getting to like and trust another person could be to eat more similarly to them. This further holds for people with a specific goal to boost trust and cooperation with one another. Thus, for example, a job candidate out to dinner with a potential employer can be strategic in what she orders to match the other person’s food consumption. We would expect her future employer to trust her more if the two ate similar foods than if they ordered different items, and this could translate into a possible job offer.

One remaining question is whether people can experience increased trust and cooperation from consuming partially similar foods. We expect that the level at which the similarity is encoded will influence whether consumption fosters trust and cooperation. Individuals consuming different foods from the same brand may encode this as similar consumption. We expect that this would confer benefits for closeness and trust as we find in the current research when people consume similarly, and could allow for those who wish to draw closer, but do not necessarily like the same foods, to experience increased trust and cooperation.

Conclusion

Although similarity in food consumption is not indicative of whether two people will get along or whether someone is trustworthy, we find consumers treat this as such, feeling closer to and more trusting of those who consume as they do. In this way, food serves as a social lubricant and is especially beneficial for new relationships where people have limited information about the other person and are forming first impressions. In consuming similarly, people can immediately begin to feel camaraderie and develop a bond, leading to smoother transactions from the start.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at http://dx.doi.org/10.1016/j.jcps.2016.06.003.

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