



Eating refined carbs could reduce perceived facial attractiveness, study says

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NEW YORK, March 6 (UPI) -- Immediate and chronic consumption of refined carbohydrates may impact how attractive a man or woman's face appears to a heterosexual person of the opposite gender, new research from France suggests.

The study, conducted at the University of Montpellier, was [published Wednesday](#) in PLOS ONE.

Facial attractiveness is an important factor in social interactions, the study's authors noted.

They pointed out that the Western diet contains high amounts of refined carbohydrates -- processed foods largely stripped of their nutritional value. This includes white flour and table sugar in many packaged snacks.

Previous research has associated increased consumption of refined carbohydrates with adverse health effects, including obesity, type 2 diabetes and cardiovascular diseases. Meanwhile, preliminary evidence has suggested that high levels of refined carbohydrate intake also may affect nonmedical traits, such as a person's attractiveness.

To delve deeper into the likelihood of this happening, the researchers undertook a study involving 104 French male and female adults.

"The possibility of uncovering a previously unexplored connection between refined carbohydrate consumption -- immediate and chronic -- and attractiveness was highly

appealing," the study's senior author, Claire Berticat, a research engineer at the National Center for Scientific Research in Montpellier, told UPI via email.

The study was performed in collaboration with the University of Montpellier, which conducted the research.

Dietary habits assessed

Some participants received a high-glycemic breakfast -- one with refined carbohydrates known to boost blood sugar levels -- while others ate a low-glycemic breakfast. The individuals also filled out a questionnaire to assess their typical dietary habits involving refined carbohydrates.

Researchers requested that heterosexual volunteers rate the facial attractiveness of opposite-sex participants as they looked in photographs taken two hours after the served breakfast. To limit cultural heterogeneity, they only included participants and volunteers with four grandparents of European origin.

The statistical analysis revealed that ingesting the high-glycemic breakfast was linked to lower subsequent facial attractiveness ratings for both men and women.

Chronic consumption of refined carbohydrates during breakfast, between-meal snacks and afternoon snacks ("goûter" in France) also was associated with lower attractiveness ratings. However, eating high-energy foods at these times was linked to higher attractiveness ratings.

"The significance of our findings lies in highlighting the potential influence of dietary choices not only on health, but also on nonmedical traits having particular social importance, such as facial attractiveness," Berticat said. "These results underscore the broader societal implications of dietary habits."

Some sex differences

Researchers observed some sex differences. For afternoon snacking in men specifically, high-energy intake was instead associated with lower attractiveness, while high-glycemic intake was linked to higher attractiveness.

All results held true after statistically accounting for other variables that could play a role in attractiveness, such as actual age, perceived age, body mass index, smoking habits and facial hairiness.

Additional research incorporating larger and more diverse sample sizes would be necessary to deepen knowledge of precisely how refined carbohydrates may be connected to attractiveness and other social traits.

"This was a very intriguing study because it addresses how the foods we consume have the potential to impact subconscious views of people," Dr. Thomas Holland, an assistant professor in the division of digestive diseases and nutrition at Rush University Medical Center in Chicago, told UPI via email.

"Diet can impact a slew of disease processes and organ systems. We know that poor diets have been linked to diabetes, hypertension and other heart diseases, as well as brain health like dementia," Holland said.

"This research adds another layer to the onion that a healthy and nutritious diet rich in colorful fruits and vegetables and lean proteins is going to be beneficial for not only physical and cognitive functioning, but potentially how we are perceived in the world."

As the researchers pointed out, however, the findings are not generalizable. In fact, the authors strived for a homogeneous sample, so different social, environmental, ethnic factors and other variables may be at work, impacting perceived attraction, Holland said.

Emerging area of research

Even so, Erica LaFata, a clinical psychologist, told UPI via email that "these findings add to an emerging area of research demonstrating that high-glycemic load foods affect our brains and hormones in ways that influence our thoughts, feelings and behaviors."

The observations stand in contrast to the popular public message that "a calorie is just a calorie," said LaFata, an assistant research professor at the Drexel University

Center for Weight, Eating and Lifestyle Science (WELL Center) in Philadelphia.

"More research is needed to systematically explore the potential explanations for these findings, such as their evolutionary basis, especially the differences for men versus women and by the timing of the meal," she added.

Debbie Then, a San Francisco Bay-area consulting psychologist for fashion and beauty and consumer-related products, told UPI in a phone interview that she's not surprised by the findings.

"Some of the foods that have more preservatives and sodium in them might give people a little more bloat," Then said, explaining that a fuller face may be rated as less attractive.

By the time researchers took photos of the participants two hours after the high-glycemic breakfast, individuals could experience low blood sugar. In this state, blood flow to the brain increases, possibly causing a rosy glow in the face, Beverly Palmer, a professor emeritus in the psychology department at California State University Dominguez Hills, told UPI via email.

"When men assess women's attractiveness, rosy cheeks are considered attractive and a sign of sexual arousal," Palmer said. "That is why women in generations past used to pinch their cheeks to increase blood flow and, hence, increase their rosy color. Today, women use blusher to create the same effect."

As the article mentioned, Palmer noted that men consider women who look younger to be more attractive, while women don't apply the same criteria to men. A woman's ovulation cycle also may affect her attractiveness to males, and it may play a role in her assessment of male attractiveness.

"In short, it is different factors that men and women apply to the opposite sex to assess facial attractiveness that are more influential than immediate effects of one high-glycemic meal," she said.