

Passage II

SOCIAL SCIENCE: This passage is adapted from the article “The Trouble with Fries” by Malcolm Gladwell (©2001 by The Condé Nast Publications Inc.).

It is entirely possible, right now, to make a delicious French fry that does not carry with it a death sentence. A French fry can be much more than a delivery vehicle for fat.

5 Is it really that simple, though? Consider the cautionary tale of the efforts of a group of food scientists at Auburn University more than a decade ago to come up with a better hamburger. The Auburn team wanted to create a leaner beef that tasted as good as regular
10 ground beef. They couldn’t just remove the fat, because that would leave the meat dry and mealy. They wanted to replace the fat. The goal of the Auburn scientists was to cut about two-thirds of the fat from normal ground beef, which meant that they needed to find something
15 to add to the beef that would hold an equivalent amount of water—and continue to retain that water even as the beef was being grilled. Their choice? Seaweed, or, more precisely, carrageenan. They also selected some basic flavor enhancers, designed to make up for the lost
20 fat “taste.” The result was a beef patty that was roughly three-quarters water, twenty per cent protein, five per cent or so fat, and a quarter of a per cent seaweed. They called it AU Lean.

It didn’t take the Auburn scientists long to realize
25 that they had created something special. They began doing blind taste comparisons of AU Lean burgers and traditional twenty-per-cent-fat burgers. Time after time, the AU Lean burgers won. Next, they took their invention into the field. They recruited a hundred families
30 and supplied them with three kinds of ground beef for home cooking over consecutive three-week intervals—regular “market” ground beef with twenty per cent fat, ground beef with five per cent fat, and AU Lean. The families were asked to rate the different kinds of beef,
35 without knowing which was which. Again, the AU Lean won hands down.

What the Auburn team showed was that, even though people love the taste and feel of fat—and naturally gravitate toward high-fat food—they can be
40 fooled into thinking there is a lot of fat in something when there isn’t. When the group tried to lower the fat in AU Lean below five per cent, people didn’t like it anymore. But, within the relatively broad range of between five and twenty-five per cent, you can add
45 water and some flavoring and most people can’t tell the difference.

What’s more, people appear to be more sensitive to the volume of food they consume than to its calorie content. Barbara Rolls, a nutritionist at Penn State, has
50 demonstrated this principle with satiety studies. She feeds one group of people a high-volume snack and another group a low-volume snack. Even though the two snacks have the same calorie count, she finds that

people who eat the high-volume snack feel more satisfied. Eating AU Lean, in short, isn’t going to leave you
55 with a craving for more calories; you’ll feel just as full.

For anyone looking to improve the quality of fast food, all this is heartening news. It means that you should be able to put low-fat cheese and low-fat mayonnaise in a fast-food hamburger without anyone’s
60 complaining. It also means that there’s no particular reason to use twenty-per-cent-fat ground beef in a fast-food burger. In 1990, using just this argument, the Auburn team suggested to McDonald’s that it make a
65 hamburger out of AU Lean. Shortly thereafter, McDonald’s came out with the McLean Deluxe. Other fast-food houses scrambled to follow suit. Nutritionists were delighted. And fast food appeared on the verge of a revolution.

70 Only, it wasn’t. The McLean was a flop, and four years later it was off the market. What happened? Part of the problem appears to have been that McDonald’s rushed the burger to market before many of the production kinks had been worked out. More important,
75 though, was the psychological handicap the burger faced. People liked AU Lean in blind taste tests because they didn’t know it was AU Lean; they were fooled into thinking it was regular ground beef. But nobody was fooled when it came to the McLean Deluxe. It was sold
80 as the healthy choice—and who goes to McDonald’s for health food?

This is sobering news for those interested in improving the American diet. For years, the nutrition movement in this country has made transparency one of
85 its principal goals: it has assumed that the best way to help people improve their diets is to tell them precisely what’s in their food, to label certain foods good and certain foods bad. But transparency can backfire, because sometimes nothing is more deadly for our taste
90 buds than the knowledge that what we are eating is good for us.

11. The author most nearly portrays the Auburn scientists as:
- A. severe critics of the fast-food industry’s practices.
 - B. enthusiastic promoters of their promising work.
 - C. diligent researchers uninterested in the practical application of their work.
 - D. clever innovators more interested in nutrition than in how food tastes.

12. It can reasonably be inferred from the passage that changing which of the following conditions of the experiment described in lines 28–36 would have had the biggest effect on the outcome?
- F. Altering the order in which the families received the three kinds of ground beef
 - G. Using two hundred families instead of one hundred in the study
 - H. Telling the families which kind of ground beef they were getting each time
 - J. Lengthening the time the families used each type of ground beef
13. The statement in lines 61–63 most likely represents the view of all of the following groups EXCEPT:
- A. McDonald’s officials introducing the McLean Deluxe to the public.
 - B. the Auburn scientists, who had research to support these conclusions.
 - C. nutritionists who saw the potential health benefits of AU Lean.
 - D. fast-food company executives at the time this article was published.
14. According to the passage, carrageenan’s role in AU Lean was as a:
- F. flavor enhancer.
 - G. substitute for fat.
 - H. source of protein.
 - J. replacement for seaweed.
15. The author implies that for an AU Lean hamburger to seem as satisfying as a hamburger made from regular ground beef, the most important factor would be keeping which of the following the same?
- A. Volume
 - B. Calorie content
 - C. Percent of fat
 - D. Method of cooking
16. The author indicates that the main cause of the failure of the McLean Deluxe was that:
- F. McDonald’s failed to promote it through advertising.
 - G. it was rushed to market before production problems were solved.
 - H. people believed that it was made from “market” hamburger.
 - J. people knew that it was supposed to be good for them.
17. The author most likely intends the question in lines 80–81 to be read:
- A. rhetorically; he believes the answer is self-evident and negative.
 - B. ironically; he finds it surprising that people really wanted the healthy choice.
 - C. genuinely; he is unsure about whether people enjoy healthy fast food.
 - D. critically; he objects to fast-food restaurants selling AU Lean.
18. It can reasonably be inferred from the last paragraph that the author thinks that, in the future, the nutrition movement should:
- F. make its goals more transparent.
 - G. reconsider its goal of transparency.
 - H. label foods as either good or bad.
 - J. tell people exactly what is in their food.
19. According to the passage, which of the following elements makes up the highest percent of AU Lean?
- A. Fat
 - B. Seaweed
 - C. Water
 - D. Protein
20. According to information in the fourth paragraph (lines 37–46), which of the following comparisons between a 20-percent-fat hamburger and an 8-percent-fat hamburger with added water and flavorings would most people make?
- F. The 20-percent-fat hamburger would taste slightly better.
 - G. The 8-percent-fat hamburger would taste slightly better.
 - H. The 8-percent-fat hamburger would taste significantly better.
 - J. The two hamburgers would taste the same.