



Obesity Policy Report

Researchers say 'addiction' claims misrepresent their work

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A flurry of articles appeared in British newspapers in mid-July claiming researchers had uncovered evidence that fast food can be as addictive as hard drugs. The stories — written in advance of a July 15 news documentary on BBC-2 entitled “Big Macs Under Attack” — were quickly picked up and redistributed by public interest lawyer John Banzhaf, who said the studies will strengthen efforts to file obesity-related lawsuits against fast-food companies.

There’s just one problem: researchers who conducted two of the studies told OPR the Brits got it all wrong.

Take the case of Rockefeller University, a prominent research school in New York. Stories in the British newspapers Daily Mail, Sunday Times and The Independent all cited a Rockefeller study that purportedly found regular consumption of high-fat, high sugar foods “could reconfigure the body’s hormonal system to want yet more fat,” as the Daily Mail put it.

“Whoever did the story has exaggerated the research being done by our scientists,” said a spokesperson for Rockefeller University. “There’s research being done by [Dr.] Sara Leibowitz, who’s looking at the effects of dietary fat on the brain. Apparently she was at a meeting in Great Britain over the weekend” and spoke to a reporter, the spokesperson said. But her research “has nothing to do with addiction...her research does not show that dietary fat is addictive. There’s been a misunderstanding somewhere,” the spokesperson added. The university was working on an official statement, but it was not ready by press time.

Researchers at the University of Wisconsin had a similar reaction when they learned that at least two British newspapers claimed the scientists had discovered that rats behaved like drug addicts once their high-fat diet was taken away.

“Not quite,” said postdoctoral fellow Matthew Will, a co-author of the yet-to-be-published study. While he said he was correctly quoted as saying that the research “suggests that a high-fat diet alters brain biochemistry with effects similar to those of powerful opiates such as morphine,” the conclusion the story draws from that statement — that fatty foods are addictive — wasn’t even a focus of the study.

“We gave rats a chronic diet of a high-fat chocolate drink for two weeks and then looked at their brains

afterwards,” Will said. They found that a certain gene in the striatum of the brain was “down-regulated,” or operating at a lower level of activity than it had previously. The same down-regulation was found after rats were given morphine for two weeks, as well.

But a less active brain gene doesn’t necessarily equal addiction, Will stressed.

“Addiction is kind of a vague term, and we obviously can’t say that we’ve proven that you can become addicted to food,” he told OPR. “All we found is that there are similar findings between this high-fat diet we gave the rats and what you see after similar schedules of morphine in rats.

“We have no idea what it does to their behavior necessarily,” he added. “We’re exploring that in the future. All we have right now are the parallel changes in the biochemistry.”

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