

Could a vegetarian diet undermine your mental health?

written by Dr. Ronald Hoffman | December 11, 2015

I saw it on Drudge: “The Scary Mental Health Risks of Going Meatless,” a story in *Women’s Health* magazine.

Predictably, this ignited a media feeding frenzy:

“Plant-Based Diets May Hike Mental Health Risks” – CNBC

“Vegetarian Diets Linked to Emotional, Mental Problems” – Latino Post

“Research Points To Mental Health Risks Associated With Meatless Diet” – CBS Philly

“Vegetarians More Likely to Suffer From a Mental Disorder, Study Finds” – Healthy Eating Harbor

And this, albeit from 2012: *“You’re a Vegetarian: Have You Lost Your Mind?” – Psychology Today*

The central contention of these stories is that studies show that vegetarians, on average, are more prone to depression, anxiety, bipolar disorder, and obsessive-compulsive disorder. The suggestion is that the limited nutrition provided by a vegetarian menu is inadequate to meet the needs of the brain.

A common theme of these stories is that, while vegetarians may be motivated to optimize their physical health, they may be inadvertently putting themselves at risk for mental problems.

What’s the truth of these assertions? Let’s take a deep dive and look at some of the studies that suggest a link between vegetarian diets and psychological disorders. Additionally, we’ll examine plausible reasons why vegetarian diets might undermine mental well-being.

This is not really “news”—it’s a rehash of previous studies. It all started in 2010, when an Australian survey of over 1000 women revealed that subjects who consumed a “traditional diet” comprised of vegetables, fruit, beef, lamb, fish, and whole grain foods were better off mentally than those who followed a “modern diet” consisting of fruits, salads, fish, tofu, beans, nuts, yogurt, and red wine.

The magnitude of the difference strongly suggested that a diet bereft of meat did no good for the emotional health of the women in the study. Those following the traditional diet with plentiful animal protein had 35% reduced odds for having major depression or dysthymia, and 32% reduced odds for anxiety disorders.

What gets lost in the reporting is that a third (junk) diet, a “western” diet of processed or fried foods, refined grains, sugary products, and beer was associated with the highest neuroses scores, scarcely an endorsement of modern omnivorous eating habits.

Another of the studies invoked by the authors of all these recent magazine articles is a 2012 survey of over 4000 Germans of both sexes entitled “Vegetarian diet and mental disorders: results from a representative community survey.”

The researchers reported, “On the whole, our analysis of food items indicates that avoidance of meat consumption is (positively) associated with mental disorders.”

But correlation does not necessarily imply causation. While it may be that avoidance of animal protein causes depression, anxiety, or a host of other mental problems associated with vegetarianism, there are two other possibilities:

1) *The relationship between mental disorders and low-intake of animal protein is simply coincidental, or*

2) Persons who gravitate toward vegetarianism might be more neurotic to begin with.

The latter possibility is what the authors of the German study seem to endorse. They concluded that there was no plausible biological mechanism to account for more mental problems due to a meat-free diet (more on that later).

As to possibility number 1), the researchers felt that they controlled adequately for outlier factors like education, income, or other socioeconomic and lifestyle factors that could skew their results.

So they agree with possibility 2) and conclude that “our results are more consistent with the view that the experience of a mental disorder increases the probability of choosing a vegetarian diet, or that psychological factors influence both the probability of choosing a vegetarian diet and the probability of developing a mental disorder.” Or, in less complimentary language, they suggest you have to be slightly nuts to follow a vegetarian diet.

The implication is that vegetarianism might appeal to those with a pre-existing high degree of emotional sensitivity, or with a tendency toward obsessiveness.

But, to my mind, this study does not slam the door on a biological explanation for why studies consistently find a strong relationship between depression, anxiety and other mental conditions and diets bereft of animal protein.

For one thing, fish are a major source of omega 3 fatty acids, known to suppress psychiatric symptoms. While it may be argued that careful

implementation of a vegan diet with ample amounts of linolenic acid from plant sources like flaxseed oil and nuts should fulfill omega 3 requirements, many individuals have trouble converting plant-based omega 3s to brain-healthy EPA and DHA.

Additionally, vegan diets may be low in essential amino acid precursors to serotonin and catecholamines, the “feel-good” neurotransmitters that sustain mood.

Also, without adequate protein and fats to stabilize blood sugar responses during meals, vegetarians may be prone to anxiety-provoking bouts of hypoglycemia.

And finally, deficiencies of iron and vitamin B12, common among strict vegans who don't supplement adequately, may impair brain function.

Is this the final word on vegetarianism and mental health? There are many who disagree.

One vegetarian advocate writes:

“Pure food enables one to feel light and fresh and the mind opens out to the pure life and beauty of the world. The mind becomes undisciplined, wild, agitated or fickle when the diet is exciting, intoxicating or inebriating (intoxicant), the character constantly declines and the result is tension, depression, sorrow and disquiet.” (Source)

And it was none other than Albert Einstein who wrote: “Nothing will benefit human health or increase the chances for survival of life on earth as the evolution to a vegetarian diet. It is my view that the vegetarian manner of living, by its purely physical effect on the human temperament, would most beneficially influence the lot of mankind.”

To complicate matters, another study reports that among Seventh-Day Adventists, those following a strict vegetarian diet demonstrated better control over their emotions than those following a mixed diet. But the authors admit these results might apply only to those following a vegetarian diet within the narrow circumstances of a religious community providing a high level of social support.

BOTTOM LINE: The lurid headlines are exaggerated. While indeed there's a higher prevalence of mental disorders among vegetarians, the vast majority experience no higher risk of psychological problems. A balanced selection of foods and adequate supplementation may help offset some of the liabilities of a restricted diet. And it's pretty likely that, from the standpoint of mental health, a vegetarian diet is way preferable to standard American junk food fare.