

High Fat Foods Can Lead To Brain Scarring

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The intimate link between what we eat and the chemistry of our bodies has been demonstrated once again in a provoking new study published in the *Journal of Clinical Investigation*.¹ This study found that high-fat foods, like hamburgers, onion rings, oily pizzas and other regularly consumed fatty foods, actually lead to brain scarring and damage to the hypothalamus- the area of the brain responsible for hunger, thirst and the body's natural rhythms and cycles. While the study was done on rodents, its findings remain insightful about what might happen to the human brain when we feed our bodies the unhealthy, high fat diets consumed by most Americans.

The most prominent finding of the study was that inflammation, or neuron injury, developed in rats and mice just three days after consuming fatty meats and refined oils. Additionally, when the rats remained on this diet long term, permanent damage to the neurons occurred. On



the long-term high fat diet, the brain's attempt to heal the injured neurons resulted in gliosis, a process that leads to scarring in the central nervous system. The brain's POMC cells, which play an important role in the body's fat control system, regulate appetite and prevent excess weight gain, were reduced by over 25 percent.

Given these findings, scientists on the team surmise that losing these critical brain cells is related to why most people who attempt to lose weight by simply reducing calories and exercising more fail to keep the pounds off- they are still consuming high fat American

fare that continues to damage the brain's receptor cells for appetite control and weight gain prevention.

There is much reason to believe that brain damage due to greasy, high fat diets occurs in humans as well as rats. When examining MRIs of obese and normal weight humans, obese individuals had significantly higher levels of gliosis (brain scarring) than those at healthy weights. Further studies need to be conducted to determine the connection between brain scarring, brain functioning and weight loss, but it's safe to say that it's a good idea to pass on the French fries and cheeseburger.

It's also worth noting that fat itself is not bad; it is the type of fat that counts. The rats in this study were not fed whole food, healthy fats in the form of nuts, seeds and avocados, but high fat animal products and fried foods, the deleterious processed types. As Dr. Fuhrman mentions in detail in his book, *Super Immunity*, low fat diets can lead to dry skin, thinning hair, muscle cramps, insomnia and poor exercise tolerance among other health problems.

The moral of this blog post is to avoid processed high fat foods and get enough healthy fats in the form of nuts, seeds, and avocados and from supplemental docosahexaenoic acid (DHA) to keep your brain healthy and in tip top shape.