

Why novel dsRNA molecules in GM food are of little to no concern

Recently, concerns were raised about the potential risks of dietary double stranded RNA (dsRNA) and microRNA (miRNA) molecules silencing human genes, after research by Zhang et al. showed the presence of plant miRNA in human blood plasma, as well as providing evidence that this plant miRNA enters the system by dietary uptake in mice. The group then demonstrated that this plant miRNA could silence genes in the mice, leading other researchers to separately raise concerns that diets consisting of genetically modified organisms could lead to the uptake of novel dsRNA molecules that could silence human genes. Uptake of dsRNA or miRNA at levels that would lead to gene silencing would therefore be an important consideration in food safety, including the safety of GMOs.

However, recent studies have failed to reproduce these results and questioned the likelihood of dietary uptake of plant miRNA molecules in mammals.

Read the full, original story here: [Why novel dsRNA molecules in GM food are of little to no concern](#)

Additional Resources:

- [“Genetic engineering: Do the differences make a difference?”](#) Grist
- [“The Very Real Paranoia Over Genetically Modified Foods,”](#) Slate