

# Dioxin Binding With the Ah Receptor

1. Dioxin enters the body primarily in the food we eat.
2. The dioxin enters the blood stream and gets stored in fat and liver cells.
3. Inside of the cells dioxin binds to a protein called the aryl hydrocarbon (Ah)-receptor, which then binds to a second protein called the Ah-receptor-nuclear-translocator (Ah-rnt).
4. Ah-rnt carries the protein-dioxin complex into the cell nucleus.
5. Inside of the cell nucleus the protein-dioxin complex binds to strands of DNA, which can make certain genes switch on or off, and that can cause problems.
6. This turning on and off of genes is linked to cancer, reproductive problems, and decreased immune system function.
7. It can also result in endocrine disruption.

