

Distribution of Capsaicin in Chili Peppers

Capsaicin ($C_{18}H_{27}NO_3$) is the molecule that causes the hot, burning sensation when you eat chili peppers. Capsaicin, dihydrocapsaicin ($C_{18}H_{29}NO_3$), and a related compound, nonivamide ($C_{17}H_{27}NO_3$) are found in different concentrations in different parts of the pepper pod.

We examined different parts of a hot pepper to determine which part of the pepper contains the highest

concentration of capsaicin. Different sections of the pepper were placed between the DART and the AccuTOF orifice. Little capsaicin was found in the fleshy part of the pepper; higher concentrations were found in the pepper seeds. The highest concentration of capsaicin was found in the membrane inside the pepper pod onto which the seeds are attached.

