

Figure S1. Histograms illustrating the tested shapes for the distribution (X) of an ingredient's weight fraction between its upper and lower bounds: uniform (top), symmetric triangle (middle), and high-weighted triangle (bottom).

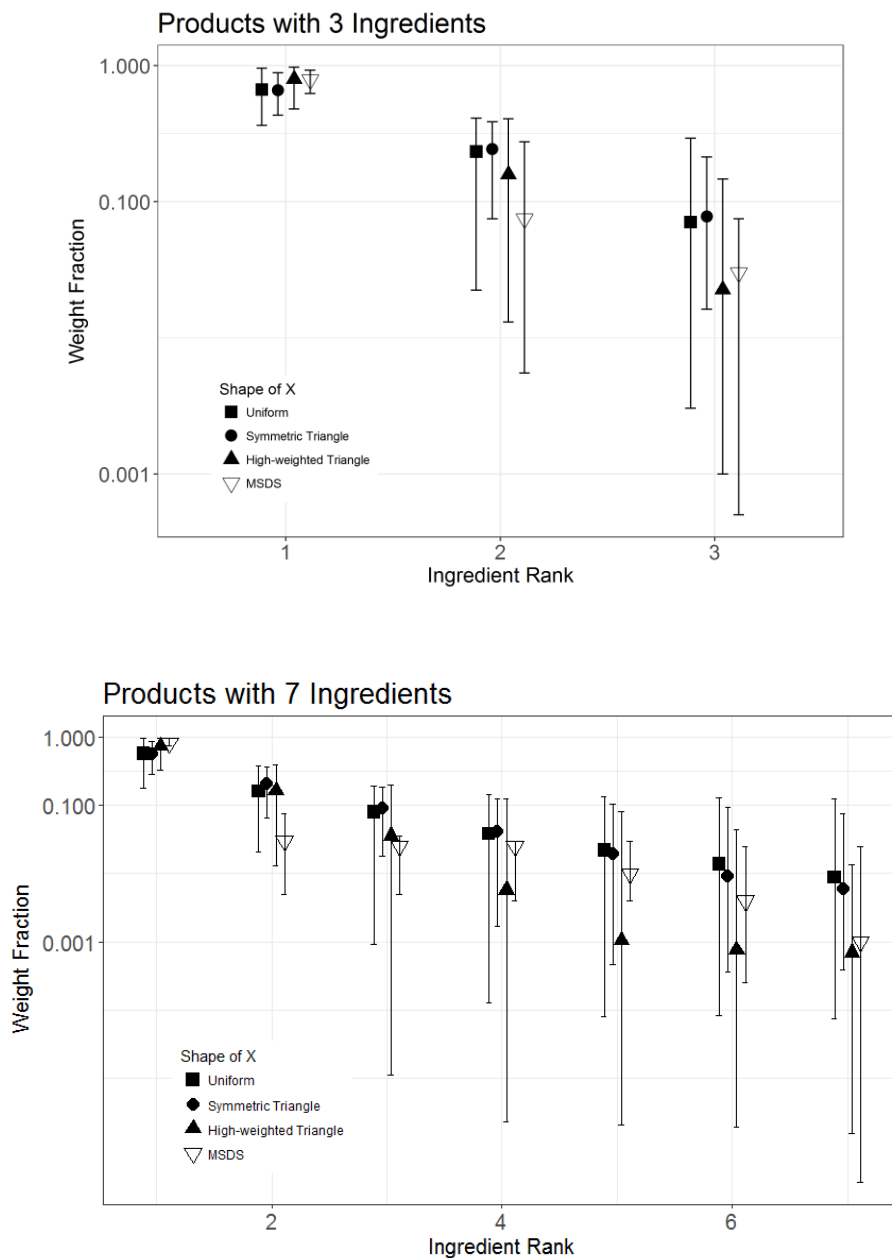


Figure S2. Comparison of predicted weight fractions from ingredient lists with WF values reported on Material Safety Data Sheets (MSDS) for products having 3 (N=89) and 7 (N=4) reported ingredients. Plotted points are means; bars extend to the 5th (LCL) and 95th (UCL) percentiles.

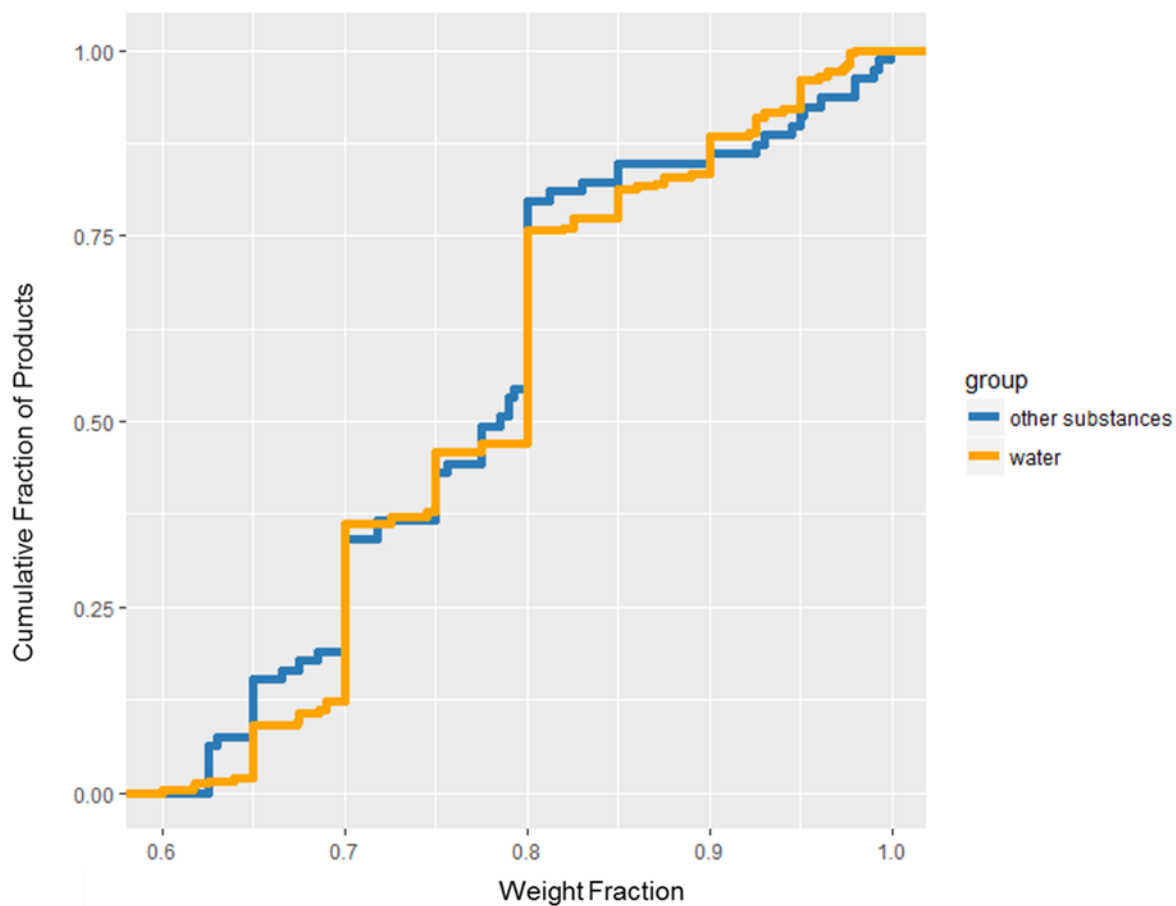


Figure S3. Cumulative distributions of the WF of the first ingredient for products in the MSDS dataset.

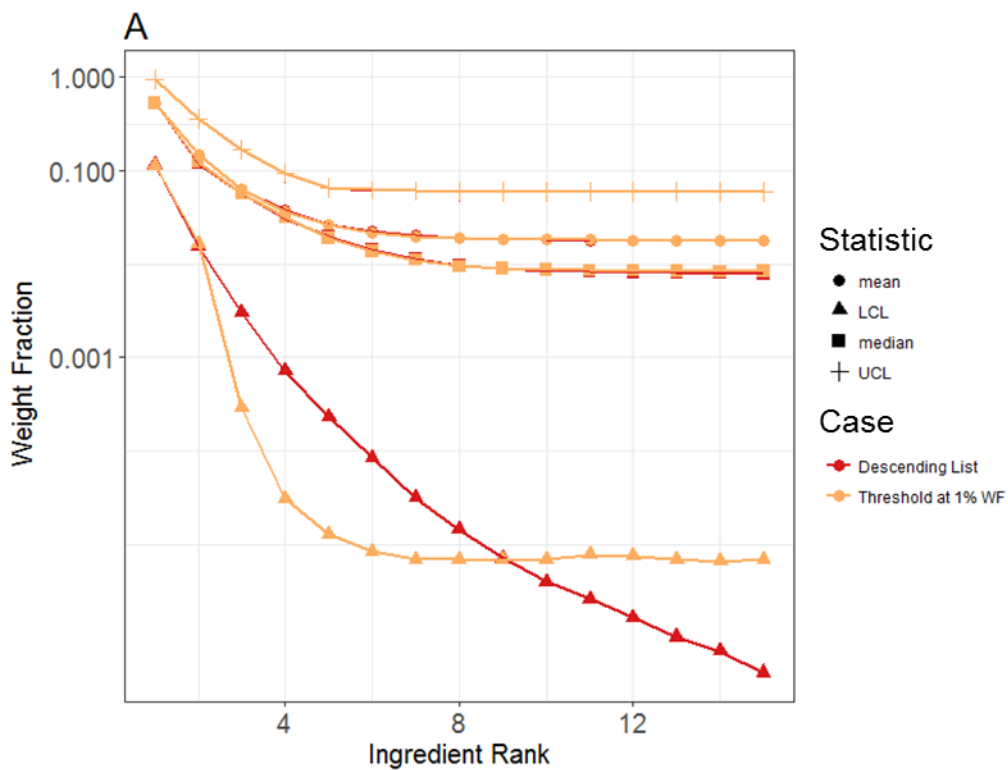


Figure S4. Predictions of range of weight fractions (F) for a list with 15 ingredients using a uniform distribution for X and labeling Case 1 (all ingredients reported in descending order) and Case 2 (ingredients with WF < 0.01 reported in any order).