

RULES OF THUMB FOR DATABASE NUTRITION ANALYSIS

Accounting for Missing Data

When supplier, production or laboratory data is not available for analysis, you will need to account for this missing data to get accurate results. The process for determining the necessary values involves interpolation and assumptions. The following guidelines developed over the past 20 years by Food Consulting Company have been used reliably for thousands of products. Please know that the use of these guidelines requires deep knowledge of food composition and extensive experience with database nutrition analysis.

- Trans Fat for dairy: Consider 3.0% of total dairy fat (from butter, milk, cheese, etc.) is in the *trans* configuration and the other 97% is in the *cis* configuration.
- Trans Fat for beef: Consider 4.4% of total beef fat is in the *trans* configuration and the remaining 95.6% is in the *cis* configuration.
- Marinade absorption: $\frac{1}{2}$ to 1 tsp marinade per ounce. Using $\frac{3}{4}$ tsp as the midpoint, this equates to 1 Tbsp per 4 oz or $\frac{1}{4}$ cup per pound.
- Oil absorption with deep frying: 10% substrate weight. That is, 100 grams of product will gain 10 grams of oil and lose 10 grams of water so that the start and finish weight are the same. Please note that oil absorption is greater with higher moisture foods. As an example, eggplant absorbs more oil and loses more water than mozzarella cheese sticks.
- Oil absorption with pan frying: 5% substrate weight (half the amount absorbed from deep frying). See notes above.
- Vitamin A retention during cooking (heat) or long shelf life (storage): 75% of Vitamin A is retained.
- Vitamin C retention during cooking (heat) or long shelf life (storage): 50% of Vitamin C is retained. Note that up to 90% may be lost during a drying process.
- Alcohol burnoff during cooking: 50% removal. Note there may be up to 90% removal with very high heat or prolonged cooking times.