

EFFECTIVE DATE	N P Analytical Laboratories	METHOD CODE
REVISED: 07/18/25	LABORATORY TEST METHOD SUMMARY	FTAH, FTTHS, FEEW
REPLACES: 12/08/24	Fat, Acid Hydrolysis	PAGE 1 OF 1
KEY WORDS: Crude fat, acid hydrolysis fat, Mojonnier fat		

1. SCOPE AND PURPOSE:

This method measures total crude fat in foods, feeds, ingredients, and biological samples. This is a proximate method in which the test result is determined by the conditions of the test. Other crude fat methods may give different results. There is no assurance that matrices other than those listed can be assayed using this method.

2. PRINCIPLE:

- 2.1. The sample is hydrolyzed with concentrated or dilute hydrochloric acid to free heat-bound fats and oils. The fat is then extracted with a mixture of ethyl and petroleum ether, which is subsequently volatilized, leaving the fat. The fat is dried, weighed, and quantitated as percent fat.
- 2.2. The FTTHS test code is used for samples containing more than 20% sugar. For samples suspected of containing more than 20% sugar, fat is re-extracted from the sugar residue, dried, weighed, and quantitated as percent fat.
- 2.3. The FEEW test code is used for measures of total fat in cheese, cheese products, eggs, egg products, salad dressings and preparations, fish, and other seafood. It is not applicable to cheese and cheese products containing whey.
- 2.4. The FTAH test code is used for all other samples that include foods, feeds, ingredients, and biological samples.
- 2.5. Using a 5 gram sample, the lowest confidence level of this method is 0.1% fat.
- 2.6. Samples containing appreciable amounts of carbohydrates may yield high analytical results.

3. PRECISION:

Records of method precision based on Method Validation and/or known control summaries are located in the QA Master file for this test method. Assay precision may vary with test matrix and analyte level. Terms used to describe method precision are defined in NPSOP3000, *Validation of Quantitative Chemical Tests*.

4. REFERENCES:

- 4.1. Official Methods of Analysis of the AOAC International Method 954.02, 922.06 (Modified), 933.05, 925.32, 950.54, 948.15