

AVAILABLE METHODS OF ANALYSIS FOR FOLATES

Available method of analysis	Limitations	Application
Microbiological*	Response to different vitamers may not be equal; total values only	Applicable to all foods
HPLC	Can be used to determine individual vitamers (tetrahydrofolate, 5-methyltetrahydrofolate, 5-formyltetrahydrofolate, 10-formylfolic acid, 10-formyldihydrofolate and folic acid), but does not capture all of them. Therefore, the HPLC method results in significant lower total folate values compared to the microbiological assay. It has a high cost and not all vitamers are measured properly	Applicable to all foods
LC-MS	Very expensive method, but it is able to quantify the different isomers of folates	Applicable to all foods

* = recommended method