The press service of the Ministry of Education and Science of the Russian Federation reported that scientists have created a new way to assess the quality of vegetable oils, which does not require preliminary preparation of samples. The method was developed by specialists of the Geokha RAS together with the Institute of General Physics. A. M. Prokhorova RAS.

The technology is based on mass spectrometry with laser-induced plasma at atmospheric pressure (APLPI). The analysis is carried out quickly-an oil sample is placed in a test tube, where volatile substances are ionized and entered in the mass spectrometer.

The method has already been tested on olive, rapeseed, sunflower and linseed oils. In combination with machine learning algorithms, it allows you to not only determine the type of oil, but also to detect a falsify.

According to developers, the technology is especially in demand for operational product quality control. It excludes the time -consuming stage of sampling, which is necessary in traditional methods of analysis.