



**3M** Science.  
Applied to Life.™

3M™ Food Safety

**What you need to  
know about the AOAC®**

# Background information: What is the AOAC®?

Founded in 1884, AOAC INTERNATIONAL is an independent, third-party international association comprised of government agencies, industry organizations, research institutions, and individual scientists.

What they do:

- Deliver *Official Methods of Analysis*<sup>SM</sup> (OMA),
- Provide *Performance Tested Methods*<sup>SM</sup> (PTM) certifications,
- Complete rigorous laboratory testing and accreditation programs and criteria, and
- Develop scientific information that spans from global industry, government agencies, and academic and research institutions.

The AOAC Research Institute, incorporated in 1991 serves as an “independent, third-party, nongovernment administrator of both the AOAC PTM and OMA programs for alternative and sole source methods”.

## Why is it important to have either of these validations/certifications?

We followed up with Lisa Monteroso, Senior Regulatory Affairs in 3M Food Safety for her thoughts on why an independent lab evaluation and completing these validations is so important:

*“As 3M, it’s important for our methods to perform as expected in the hands of wide variety of users, and independent testing ensures just that. We’re dealing with food safety – foodborne pathogens can cause serious illness or even death – and accuracy of results is critical. The rigorous testing that’s conducted in these certification programs reaffirms our products’ high level of performance and provides our customers with additional data to support method implementation.”*

Lisa has a total of a combined 15 PTM’s and OMA’s, two NF VALIDATIONS following the industry standard of ISO 16140-2, and is on the Board of Directors for the Food Allergy Research and Resource Program (FARRP). She supports 3M Food Safety across our microbiology and chemical platforms.

## Why would a lab choose to undergo the extra step of a collaborative study?

Laboratories choose to commit to the time and the resources this requires to ensure and externally prove their product or method is of an exceptional quality, and most importantly, that it isn’t going to fail as soon as it leaves controlled environments. Lisa added:

*“In science, you hear about repeatability, and that’s extremely important to us. A method needs to stand up against every sort of deviation – personnel, equipment, location, laboratory set up. This is how you double check the robustness of your method. It’s a very strict study design.”*



# What is the difference between AOAC® INTERNATIONAL PTM and AOAC® INTERNATIONAL OMA?

Major differences lie in the process of approvals for these methods, though they start the same. Both begin with an application to the AOAC Research Institute. Following this, both will undergo an independent lab evaluation for the purposes of verifying performance claims and method applicability.

From here, different processes are taken. Those applying for a **PTM Certificate** will then go through a peer review of data, compiling both the original method and independent laboratory study into a manuscript and submit to AOAC RI for review. If no issues are found the AOAC *Performance Tested*<sup>SM</sup> Certification will be granted, and will need to be reviewed and renewed each year.

For companies and laboratories that wish to complete the *Official Methods of Analysis*<sup>SM</sup> (OMA) program, an additional step is needed. Along with more rigorous reviews within an Expert Review Panel (ERP) meeting, those wishing to qualify must also undergo a multi-laboratory, or collaborative, study.



## How can I tell the difference between these two methods of analysis?

It's not always easy to quickly distinguish the type of AOAC method a product carries if you don't know what you're looking for. Fortunately, we have two ways for you to easily find out.

- 1 Check online for PTM certifications. For OMA certifications, you have to be a member to see this information.
- 2 Note the wording: if something says AOAC® R.I. Certified, that means it's undergone a Performance Tested Method (PTM). If it says AOAC® INTERNATIONAL Validated – this means it either has Official Methods of Analysis (OMA), or both OMA & PTM.

## What role does 3M play in this?

3M Food Safety takes these programs very seriously. Within our 3M™ Petrifilm™ Plates and 3M™ Molecular Detection Assays, we have completed:

- 20 AOAC INTERNATIONAL Official Methods of Analysis (OMA) Validations
- 14 AOAC Performance Tested Method (PTM) Certifications
- 19 NF VALIDATION by AFNOR Certifications

More recently, the 3M™ Petrifilm™ Rapid Yeast and Mold Count Plate earned its Official Methods of Analysis (OMA). This product features a new indicator technology that makes colonies easier to interpret. This sample-ready-culture-medium system provides results in as little as 48 hours of incubation time.

## Which one is right for me?

There are differences in each AOAC program, familiarizing yourself with both may be beneficial.

Depending on your product and facility the alternative method should firstly be fit for purpose. Local regulations along with those of countries to which your products are being exported may also influence the choice of alternative method e.g. FSANZ requires alternative methods to be validated according to ISO 16140 while the US FDA does not recognize the *Performance Tested Method (PTM)* as an alternative method to OMA because there is no collaborative study completed as part of the PTM.

All methods tested under the OMA framework undergo “rigorous scientific and systematic scrutiny” to ensure that the results are credible and defensible. Lisa added:

*“Global experts in regulatory, research, reference labs, as well as end users all got together and created the study design schematics. You’ve got the voice of industry when you’re validating your method through the AOAC Appendix J study design.”*

OMA certifications also don’t expire (unless your methods or materials do). They’re truly a lifetime achievement.

3M Food Safety has also completed two PTMs for our Allergen Tests, and has additional product validations, certifications, and recognitions in Australia, Brazil, Canada, Chile, Columbia, El Salvador, Japan, Korea, Mexico, New Zealand, the Republic of South Africa, Venezuela, and Vietnam.



**Need more information on the total 3M Food Safety testing solution? Simply reach out and we'll be happy to help you with any questions you have.**

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