

# ***Fish & Meat***



**Eurofins Vitamin Competence Centre**

## Fish & Meat



Food safety is always a high priority topic. Many countries have strict legislation regarding this subject to secure the health of their citizens.

Fresh fish and meat products are very healthy for you and contain a lot of healthy nutrients like proteins, vitamins and amino acids, just to mention a few.

Most common vitamins found naturally in fish and meat products:

- D-vitamin
- B12-vitamin
- K-vitamin

Poor quality fish and meat products have caused many outbreaks of severe illnesses over the years. The reason behind these outbreaks is often caused by the development of biogenic amines. Fish and meat products are high risk products concerning biogenic amines and should be treated with the utmost respect.

We at the Eurofins Vitamin Competence Centre can offer you a proactive choice, and analyse your products before risking the health of your consumers.

### Enriched fish and meat

Adding vitamins to food products in the correct amounts can be very healthy but too much of certain vitamins is not; therefore Recommended Dietary Allowances (RDA) has been defined and used worldwide as guidance, when adding vitamins. Enriching fish and meat products with vitamins is only allowed in processed fish and meat and only in certain amounts, according to EF 1925/2006.

To make sure your finished products does not exceed the allowed amount of vitamins, we recommend you to analyse your product(s). We can help you determine the total amount of vitamins and thereby making sure your declarations are correct.

### Food safety

Biogenic amines can be found in a variety of foods for example fish, meat, and other fermented food products. The biogenic amines are produced in foods by decarboxylation reactions of the corresponding amino acid.

The most common biogenic amines are:

- Histamine
- Tyramine
- Cadaverine
- Phenylethylamine
- Spermine
- Spermidine
- Putresine
- Tryptamine

Our histamine analysis in fish products is performed according to the method described in EC No 2073/2005.

By proactively analysing for biogenic amines The Eurofins Vitamin Competence Centre can help you minimize the risk of providing unsafe products.

### Amino Acids

Amino acids are the building blocks to all cells of the body. The Amino acids form long polypeptide chains, which folds into proteins.

Because the human body cannot produce some amino acids by itself, we rely on our diet to contain these missing amino acids.

The eight essential amino acids are:

- Isoleucine
- Leucine
- Lysine
- Methionine
- Phenylalanine
- Threonine
- Tryptophane
- Valine

Some amino acids are especially essential for infants and children:

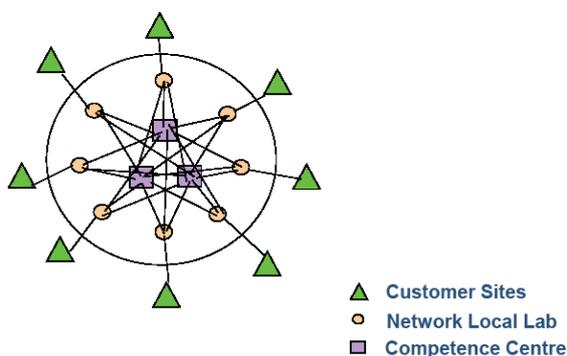
- Tyrosine
- Arginine
- Histidine
- Cysteine/Cystine

As a Competence Centre we are able to determine the content of total amino acids by either acid- or oxidative hydrolysis. We can also determine the content of free amino acids; here we do not use hydrolysis.

## Consider using the Eurofins Vitamin Competence Centre

By developing competence centres the Eurofins group has secured highly specialized laboratories all over the world. The competence centres are devoted to specialise in matrices, methods and knowledge.

The Eurofins laboratory network is well working strategy and looks as following:



The Eurofins Vitamin Competence Centre is dedicated to analyse vitamins, amino acids and biogenic amines. This narrow and highly specialized focus enables us to provide "State of the art" service for our customers helping them to:

- Ensure a safe product
- Improve quality
- Reduce costs
- Enhance/secure branding

## Facts

The Eurofins Vitamin Competence Centre can offer you a proactive choice, and analyse your products before risking the health of the consumers and the name of your brand.

We can assist you in ensuring that your product is:

- Safe for consumption
- Of high quality
- Declared in respect of the legislation.

This all done by state of the art equipment, specialized knowledge, devoted staff and last but not least low turn-around times and competitive prices.

By concentrating vitamin, amino acid and biogenic amine analyses at one single location it enables us to provide reliable certification based on internationally recognised reference methods. In addition to standard test we also offer customer specific testing. Any customer request will be taken serious and we will do our utmost to deliver the question asked. Even if this means new matrices or methods, we will try to develop new or optimize already known methods to accomplish the goal. This is, of course, also done with turn-around time and competitive prices in mind.

## Important information

### Sample packaging

Because these products are easy fermentable we recommend that you send your samples in air-tight, cooled containers.

We offer to make temperature check in our sample reception if you are not sure the samples are okay at arrival.

### Import of samples to Denmark

#### Outside EU:

When sending fish and meat samples to our laboratory in Denmark, you should be aware of the "import permit". Please contact your local Eurofins Laboratory for further help in this regard.

#### Within EU:

There are no legal restrictions regarding import of fish and meat products in Denmark.

### **Turn Around Time (TAT)**

As a Competence Centre we are devoted to analyse different matrices for vitamins, amino acids and biogenic amines. We always offer low turn-around times and we are proud to say that we are capable of delivering within promised turn-around time.

Depending on the amount of samples and parameters we can negotiate customer specific turn-around times if needed. If you are interested in specific turn-around times we recommend you to contact your local Eurofins Laboratory.

### **What we can offer you**

We provide high quality and supreme services to you. Our quality system is based on DS EN ISO IEC 17025. We use daily control including use of reference materials. We participate in proficiency tests being FAPAS, BIPEA, NIST, company specific trials etc. We are always open to customer visits

and audits. We have up-to-date equipment and very good facilities and we use semi-automatic and separate production lines.

### **We have highly qualified staff**

Our Business Manager and Quality Manager are highly experienced and we have experienced chemists designated to ensure that the highest quality standards are being met. We have enthusiastic employees in our customer support that takes care of customer contact and we have approximately 40 highly skilled laboratory technicians. We are always willing to make customer specific packages to be able to provide you with the analyses you need for your products. For any queries or questions please contact your local Eurofins Laboratory or our Customer Centre at:

*vitamins@eurofins.dk*

