

It should be noted that these percentages are applicable to each product category under specific TARIC codes.

The 10 %, 20 or 50 % frequency of controls must be organised by the competent authorities in such a way that these control frequency percentages are achieved within a given period of time. The frequency of controls is to be considered as a minimum in the sense that competent authorities can decide to increase the frequency of controls when **frequent** non-compliance is found and indicates that an increase of frequency of controls is necessary in order to safeguard public health. Such an increase of controls is not necessary and appropriate in case of isolated/few findings of non-compliance.

In case of a consignment consists of a mixture of nuts and dried fruits, the frequency of control is the frequency of the ingredient with the highest frequency of control.

Care must be taken that the selection of consignments is random, ensuring a proportionate treatment of the operators concerned. Nevertheless, the frequency of control can depend on the food business operator taking into account the history of compliance/non-compliance in conjunction with the requirements of the products placed on the market by a food business operator.

**Sampling must be representative and incremental samples must be taken throughout the batch. It is therefore necessary in almost all cases to unload the truck or container for the sampling. Unloading should not expose the product to adverse weather conditions or excessive moisture.**

Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules<sup>5</sup>, provides in Article 4(2) (g) that feed and food business operators (responsible operator) shall be obliged to undergo any inspection carried out in accordance with the Regulation and to assist staff of the competent authority in the accomplishment of their tasks.

**This means that the food business operator must make available sufficient human resources and logistics to unload the consignment so as to enable representative sampling to be undertaken.**

**Also in the case of special transport and/or specific packaging forms the operator/responsible food business operator must make available to the official inspector the appropriate sampling equipment insofar as the sampling cannot be representatively performed with the usual sampling equipment.**

## **II.5. Sampling provisions for a batch/lot/consignment.**

Commission Regulation (EC) 401/2006 provides that each lot must be sampled separately. A lot is an identifiable quantity of a food commodity delivered at one time and determined by the official to have common characteristics, such as origin, variety, type of packing, packer, consignor or markings.

NB: The Commission Regulation (EC) 1152/2009 specifies that, for example 20 % of consignments of Chinese peanuts must be sampled, and not 20 % of containers within a consignment

### **II.5.1. Consignment/lot consisting of several containers**

If a consignment of peanuts (for example) consists of 10 containers, each of 22 tonnes, resulting in a consignment of 220 tonnes with the same batch identification code, the legislation provides that the consignment has to be split into five sublots of 44 tonnes (two containers). Representative sampling must be performed on sublots of two containers each. However, if the inspector decides to control only two containers out of the 10, the analytical result is only valid for the two containers sampled and, in the event of non-compliance, any official measures can only be applied immediately (with respect of the right of the operator for a second opinion) to the two containers sampled.

However, Article 14(6) of Regulation (EC) 178/2002 provides that "*where any food which is unsafe is part of a batch, lot or consignment of food of the same class or description, it shall be presumed that all the food in that batch, lot or consignment is also unsafe, unless following a detailed assessment there is no evidence that the rest of the batch, lot or consignment is unsafe*". However this article is not detrimental to the right of a second opinion for the operator as provided for in Article 11(5) of Regulation (EC) 882/2004.

This means that when on the basis of an official control, and after the operator has been given the right for a second opinion as foreseen in Article 11(5) of Regulation 882/2004, the controlled part of a consignment has been found to be non-compliant, accordingly the other containers from the consignment/lot/batch should be presumed to be also non-compliant unless the food business operator can demonstrate following a detailed assessment that the other parts of the consignment are safe (i.e. compliant with EU legislation as regards aflatoxins). This can be done e.g. by performing a representative sampling of all containers, in accordance with Regulation (EC) 401/2006.

It should be noted that where the safeguard measure requires a 100 % control on import, all consignments and all containers (sublots) of a consignment must be sampled.

### **II.5.2. Two or more consignments/lots in one container/truck**

If a container or truck contains two lots of peanuts (for example), one lot of 8 tonnes and another of 15 tonnes, each with a separate batch/lot identification code, then the two batches/lots must be sampled separately, in accordance with the provisions of Regulation (EC) 401/2006 even if the product is identical (in this particular case from the 8 tonnes, 80 incremental samples of 200 g resulting in a sample of 16 kg and, from the batch of 15 tonnes, 100 incremental samples of 200g resulting in a sample of 20 kg). It is important that for each batch/lot a separate Common Entry Document (CED) and a separate health certificate is issued and that each batch/lot has undergone sampling and analysis in the country of origin.

<sup>5</sup> OJ, L 165, 30.04.2004, p. 1. Corrigendum published in OJ L191, 28.5.2004, p. 1

## II.6. General Sampling requirements

As mentioned above, sampling must be representative and therefore it is necessary that the incremental samples are taken throughout the batch. In almost every case the truck or container will have to be unloaded for the sampling. Unloading should not expose the product to adverse weather conditions or excessive moisture. The area designated for sampling and storage of a consignment should not expose it to any risk of contamination or degradation. Food hygiene provisions are applicable.

Care should be taken to use clean sampling equipment and sample bags and containers free of contamination to avoid any cross-contamination.

### II.6.1 Incremental sample for lots in retail packing

For lots in retail packing, the weight of the incremental sample may depend on the weight of the retail packing. Therefore, an element of judgement has to be employed. For example:

1. If retail packs, each weighing more than the required incremental sample, are to be sampled and individual packs are taken as incremental samples so that the aggregate sample sent to the laboratory weighs more than 10/20/30 kg, an incremental sample shall be taken from each individual retail pack to make up the 10/20/30 kg aggregate sample in the laboratory.
2. If the retail packs are large and option 1 would cause an unacceptable economic damage, then a number of individual samples should be collected to correspond to the required weight of the aggregate sample referred to in the respective tables in the sections below.
3. Where the retail pack weight is less than the required incremental sample weight and if the difference is not very large, one retail pack shall be considered as one incremental sample, resulting in an aggregate sample of less than the required weight.
4. If the weight of the retail pack is much less than the required incremental sample, one incremental sample shall consist of two or more retail packs, whereby the required incremental sample weight is approximated as closely as possible.

### II.6.2 Impossibility to carry out the prescribed method of sampling

If it is not possible to carry out the method of sampling set in legislation because of the commercial consequences resulting from damage to the lot (because of packaging forms, means of transport, or the number of retail packs is unavailable etc.), an alternative method of sampling may be applied, provided that it is as representative as possible and is fully described and documented. **An alternative method other than the one described in legislation (see II.12) may also be applied in case the individual vacuum packings are larger than 10 kg.**

## II.7. Sampling procedure for dried figs

### II.7.1 General survey of the method of sampling

Table 1 Subdivision of lots into sublots depending on product and lot weight

| Commodity  | Lot weight (tonne) | Weight or number of sublots | N° of incremental samples | Aggregate sample weight (kg) |
|------------|--------------------|-----------------------------|---------------------------|------------------------------|
| Dried figs | ≥ 15               | 15-30 tonnes                | 100                       | 30                           |
|            | < 15               | --                          | 10-100 (table 2)          | ≤ 30                         |

### II.7.2 Method of sampling for lots ≥ 15 tonnes

- On condition that the subplot can be separated physically, each lot must be subdivided into sublots following Table 1. Taking into account that the weight of the lot is not always an exact multiple of the weight of the sublots, the weight of the subplot may vary from the mentioned weight by a maximum of 20 %. (If, after the division of a lot into sublots, the weight of the subplot exceeds the weight of the subplot as indicated in Table 1 by more than 20 %, the number of sublots has to be increased, even if by so doing the weight of the subplot is lower than the weight indicated in Table 1).
- Each subplot must be sampled separately.
- Number of incremental samples: 100. Each incremental sample weighs 300 grams.
- **Weight of the aggregate sample = 30 kg which has to be mixed thoroughly (to avoid e.g. the incremental samples taken from the front of the consignment being at the bottom of the aggregate sample and the samples taken from the back of the consignment being at the top) and only afterwards to be divided into three equal laboratory samples of 10 kg before grinding and homogenisation.** This division into three laboratory samples is not necessary in the case of dried figs to be subjected to sorting, or other physical treatment before human consumption or use as an ingredient in foodstuffs (and where clearly labelled and treated as such – see point I 1; of the guidance) and in case the equipment to homogenise 30 kg samples is available.
- Each laboratory sample must be separately ground finely to achieve complete homogenisation, in accordance with the provisions laid down in Commission Regulation (EC) 401/2006.

### II.7.3 Method of sampling for lots < 15 tonnes

- In the case of lots less than 15 tonnes, the number of incremental samples to be taken depends on the weight of the lot, with a minimum of 10 and a maximum of 100 (see table 2).

Table 2: Number of incremental samples to be taken from dried figs for consignments of less than 15 tonnes

| Lot weight (tonnes) | N° of incremental samples | Aggregate sample weight (kg) (in case of retail packages, weight of aggregate sample can diverge) | No of laboratory samples from aggregate sample |
|---------------------|---------------------------|---|--|
| ≤ 0.1               | 10                        | 3   | 1 (no division)                                |
| > 0.1 - ≤ 0.2       | 15                        | 4.5   | 1 (no division)                                |
| > 0.2 - ≤ 0.5       | 20                        | 6   | 1 (no division)                                |
| > 0.5 - ≤ 1.0       | 30                        | 9 (- < 12 kg)   | 1 (no division)                                |
| > 1.0 - ≤ 2.0       | 40                        | 12  | 2  |
| > 2.0 - ≤ 5.0       | 60                        | 18 (- < 24 kg)  | 2  |
| > 5.0 - ≤ 10.0      | 80                        | 24  | 3  |
| > 10.0 - ≤ 15.0     | 100                       | 30  | 3  |

- **Weight of the aggregate sample = 30 kg** which has to be **mixed thoroughly** (to avoid e.g. the incremental samples taken from the front of the consignment being at the bottom of the aggregate sample and the samples taken from the back of the consignment being at the top) and **only afterwards** to be divided into three equal laboratory samples of 10 kg before grinding and homogenisation. This division into three laboratory samples is not necessary in the case of dried figs to be subjected to sorting, or other physical treatment before human consumption or use as an ingredient in foodstuffs (and where clearly labelled and treated as such – see point I 1. of the guidance) and in case the equipment to homogenise 30 kg samples is available.

In cases where the aggregate sample weights are less than 30 kg, the aggregate sample must be divided into laboratory samples according to the following guidance:

- \* < 12 kg: no division into laboratory samples
- \* ≥ 12 and < 24 kg: division into two laboratory samples
- \* ≥ 24 kg: division into three laboratory samples

- Each laboratory sample must be separately ground finely to achieve complete homogenisation, in accordance with the provisions laid down in Commission Regulation (EC) 401/2006.

### II.7.4. Sampling of derived products and compound foods

#### II.7.4.1. Compound and derived products with very small particle size (homogeneous distribution of aflatoxin contamination)

- Attention! the aflatoxin contamination in fig paste is in many cases not homogeneously distributed. Therefore the sampling procedure as mentioned in this point is not applicable in fig paste and the sampling procedure as described for dried figs in II.7.1, II.7.2. and II.7.3. applies.

- Number of incremental samples: 100. For lots of less than 50 tonnes the number of incremental samples should be 10 to 100, depending on the lot weight: see table 3)
- The weight of the incremental sample is about 100 grams.
- Weight of the aggregate sample = 1-10 kg sufficiently mixed
- For very large consignments the consignment has to be divided into sublots of 100 tonnes for consignments between 50 and 300 tonnes, into three sublots for consignments between 300 and 1500 tonnes and into sublots of 500 tonnes for consignments more than 1500 tonnes.

Table 3: Number of incremental samples

| Lot weight (tonnes) | N° of incremental samples | Aggregate sample weight (kg) |
|---------------------|---------------------------|------------------------------|
| ≤ 1                 | 10                        | 1                            |
| > 1 - ≤ 3           | 20                        | 2                            |
| > 3 - ≤ 10          | 40                        | 4                            |
| > 10 - ≤ 20         | 60                        | 6                            |
| > 20 - ≤ 50         | 100                       | 10                           |

#### II.7.4.2. Compound and derived products with a relatively large particle size (heterogeneous distribution of aflatoxin contamination)

Sampling procedure and acceptance as laid down for dried figs. (II.7.1, II.7.2. and II.7.3). This applies also to fig paste in which the aflatoxin contamination is in many cases not homogeneously distributed.

#### II.7.5. Sampling of dried figs and derived products in vacuum packings<sup>6</sup>

##### II.7.5.1. Dried figs

For lots equal to or more than 15 tonnes at least 50 incremental samples resulting in a 30 kg aggregate sample shall be taken and for lots of less than 15 tonnes, 50 % of the number of incremental samples mentioned in Table 2 shall be taken resulting in an aggregate sample of which the weight is the weight of the aggregate sample as foreseen in function of the size of the sampled lot (see Table 2).

<sup>6</sup> Because of the possible significant economic damage, an alternative method other than the one described in this section may be applied in case the individual vacuum packings are larger than 10 kg.

#### II.7.5.2. Products derived from or containing figs with small particle size

For lots equal to or more than 50 tonnes at least 25 incremental samples resulting in a 10 kg aggregate sample shall be taken and for lots less than 50 tonnes, 25 % of the number of incremental samples mentioned in Table 3 shall be taken resulting in an aggregate sample of which the weight is the weight of the aggregate sample as foreseen in function of the size of the sampled lot (see Table 3)..

#### II.8. Sampling procedure for groundnuts, other oilseeds, apricot kernels and tree nuts (e.g. hazelnuts, pistachios, Brazil nuts and almonds)

##### II.8.1 General survey of the method of sampling

Table 4 Subdivision of lots into sublots depending on product and lot weight

| Commodity   | Lot weight (tonne) | Weight or number of sublots | N° of incremental samples | Aggregate sample weight (kg) |
|---|--------------------|-----------------------------|---------------------------|------------------------------|
| Groundnuts, other oilseeds, apricot kernels and tree nuts | ≥ 500              | 100 tonnes                  | 100                       | 20                           |
|   | >125 and <500      | 5 sublots                   | 100                       | 20                           |
|   | ≥ 15 and ≤ 125     | 25 tonnes                   | 100                       | 20                           |
|   | < 15               | --                          | 10-100 (table 5)          | ≤ 20                         |

##### II.8.2 Method of sampling for lots ≥ 15 tonnes

- On condition that the subplot can be separated physically, each lot must be subdivided into sublots following **Table 4**. Taking into account that the weight of the lot is not always an exact multiple of the weight of the sublots, the weight of the subplot may vary from the mentioned weight by a maximum of 20 %. (If, after the division of a lot into sublots, the weight of the subplot exceeds the weight of the subplot as indicated in Table 4 by more than 20 %, the number of sublots has to be increased, even if by so doing the weight of the subplot is lower than the weight indicated in Table 4).
- Each subplot must be sampled separately.
- Number of incremental samples: **100**. Each incremental sample weighs 200 grams.
- **Weight of the aggregate sample = 20 kg** which has to be **mixed thoroughly** (to avoid e.g. the incremental samples taken from the front of the consignment being at the bottom of the aggregate sample and the samples taken from the back of the consignment being at the top) and **only afterwards to be divided into two equal laboratory samples of 10 kg before grinding and homogenisation**. This division into two laboratory samples is not necessary in the case of groundnuts, other oilseeds, apricot kernels and tree nuts to be subjected to sorting, or other physical treatment before human consumption or use as an ingredient in foodstuffs (and where clearly labelled and treated as such – see point I 1. of the guidance) and in case the equipment to homogenise 20 kg samples is available.
- Each laboratory sample must be separately ground finely to achieve complete homogenisation, in accordance with the provisions laid down in Commission Regulation (EC) 401/2006.

### II.8.3 Method of sampling for lots < 15 tonnes

- In the case of lots less than 15 tonnes, the number of incremental samples to be taken depends on the weight of the lot, with a minimum of 10 and a maximum of 100 (see table 5).

**Table 5:** Number of incremental samples to be taken from groundnuts, other oilseeds, apricot kernels and tree nuts for consignments of less than 15 tonnes

| Lot weight (tonnes) | N° of incremental samples | Aggregate sample weight (kg) (in case of retail packages, weight of aggregate sample can diverge) | No of laboratory samples from aggregate sample |
|---------------------|---------------------------|---|--|
| ≤ 0.1               | 10                        | 2   | 1 (no division)                                |
| > 0.1 - ≤ 0.2       | 15                        | 3   | 1 (no division)                                |
| > 0.2 - ≤ 0.5       | 20                        | 4   | 1 (no division)                                |
| > 0.5 - ≤ 1.0       | 30                        | 6   | 1 (no division)                                |
| > 1.0 - ≤ 2.0       | 40                        | 8(- < 12 kg)  | 1 (no division)                                |
| > 2.0 - ≤ 5.0       | 60                        | 12  | 2  |
| > 5.0 - ≤ 10.0      | 80                        | 16  | 2  |
| > 10.0 - ≤ 15.0     | 100                       | 20  | 2  |

- **Weight of the aggregate sample = 20 kg** which has to be **mixed thoroughly** (to avoid e.g. the incremental samples taken from the front of the consignment being at the bottom of the aggregate sample and the samples taken from the back of the consignment being at the top) and **only afterwards to be divided into two equal laboratory samples of 10 kg before grinding and homogenisation**. This division into two laboratory samples is not necessary in the case of groundnuts, other oilseeds, apricot kernels and tree nuts to be subjected to sorting, or other physical treatment before human consumption or use as an ingredient in foodstuffs (and where clearly labelled and treated as such – see point I 1. of the guidance) and in case the equipment to homogenise 20 kg samples is available.

In cases where the aggregate sample weights are less than 20 kg, the aggregate sample must be divided into laboratory samples according to the following guidance:

- \* < 12 kg: no division into laboratory samples
- \* ≥ 12 kg: division into two laboratory samples

- Each laboratory sample must be separately ground finely to achieve complete homogenisation, in accordance with the provisions laid down in Commission Regulation (EC) 401/2006.

### II.8.4. Sampling of derived products and compound foods

#### II.8.4.1. Compound and derived products (other than vegetable oils) with very small particle size, i.e. flour, peanut butter (homogeneous distribution of aflatoxin contamination)

- Number of incremental samples: 100. For lots of less than 50 tonnes the number of incremental samples should be 10 to 100, depending on the lot weight: see table 6)
- The weight of the incremental sample is about 100 grams.
- Weight of the aggregate sample = 1-10 kg sufficiently mixed
- For very large consignments the consignment has to be divided into sublots of 100 tonnes for consignments between 50 and 300 tonnes, into three sublots for consignments between 300 and 1500 tonnes and into sublots of 500 tonnes for consignments more than 1500 tonnes.

Table 6: Number of incremental samples

| Lot weight (tonnes) | N° of incremental samples | Aggregate sample weight (kg) |
|---------------------|---------------------------|------------------------------|
| ≤ 1                 | 10                        | 1                            |
| > 1 - ≤ 3           | 20                        | 2                            |
| > 3 - ≤ 10          | 40                        | 4                            |
| > 10 - ≤ 20         | 60                        | 6                            |
| > 20 - ≤ 50         | 100                       | 10                           |

#### II.8.4.2. Compound and derived products with a relatively large particle size (heterogeneous distribution of aflatoxin contamination)

Sampling procedure and acceptance as laid down for the raw agricultural product.

#### II.8.5. Sampling of groundnuts, other oilseeds, apricot kernels, tree nuts and derived products in vacuum packs

##### II.8.5.1. Pistachios, groundnuts and Brazil nuts

For lots equal to or more than 15 tonnes at least 50 incremental samples resulting in a 20 kg aggregate sample shall be taken and for lots of less than 15 tonnes, 50 % of the number of incremental samples mentioned in Table 5 shall be taken resulting in an aggregate sample of which the weight is the weight of the aggregate sample as foreseen in function of the size of the sampled lot (see Table 5).

##### II.8.5.2. Apricot kernels, tree nuts other than pistachios and Brazil nuts, oilseeds other than peanuts

For lots equal to or more than 15 tonnes at least 25 incremental samples resulting in a 20 kg aggregate sample shall be taken and for lots less than 15 tonnes, 25 % of the number of incremental

<sup>7</sup> Because of the possible significant economic damage, an alternative method other than the one described in this section may be applied in case the individual vacuum packings are larger than 10 kg.

samples mentioned in Table 5 shall be taken resulting in an aggregate sample of which the weight is the weight of the aggregate sample as foreseen in function of the size of the sampled lot (see Table 5).

**II.8.5.3. Products derived from or containing tree nuts, apricot kernels, groundnuts and other oilseeds with small particle size**

For lots equal to or more than 50 tonnes at least 25 incremental samples resulting in a 10 kg aggregate sample shall be taken and for lots less than 50 tonnes, 25 % of the number of incremental samples mentioned in Table 6 shall be taken resulting in an aggregate sample of which the weight is the weight of the aggregate sample as foreseen in function of the size of the sampled lot (see Table 6).

**II.9. Sampling procedure for spices**

This method of sampling is of application for the official control of the maximum levels established for ochratoxin A, aflatoxin B1 and total aflatoxins in spices. The weight of the incremental sample shall be about 100 grams

**II.9.1. General method of sampling for spices**

Table 7 Subdivision of lots into sublots depending on product and lot weight

| Commodity | Lot weight (ton) | Weight or number of sublots | N° incremental samples | Aggregate sample weight (kg) |
|-----------|------------------|-----------------------------|------------------------|------------------------------|
| Spices    | ≥ 15             | 25 tonnes                   | 100                    | 10                           |
|           | <15              | -                           | 5-100*                 | 0.5-10                       |

\* Depending on the lot weight - see table 8

**II.9.2 Method of sampling for spices (lots ≥ 15 tonnes)**

- On condition that the subplot can be separated physically, each lot shall be subdivided into sublots following table 7. Taking into account that the weight of the lot is not always an exact multiple of the weight of the sublots, the weight of the subplot may exceed the mentioned weight by a maximum of 20%.

- Each subplot shall be sampled separately.

- Number of incremental samples: 100. Weight of the incremental sample: 100 g

- Weight of the aggregate sample = 10 kg

- If it is not possible to carry out the method of sampling described above because of the unacceptable commercial consequences resulting from damage to the lot (because of packaging forms, means of transport, etc.) an alternative method of sampling may be applied provided that it is as representative as possible and is fully described and documented as discussed above.

**II.9.3. Method of sampling for spices (lots < 15 tonnes)**

For lots of spices less than 15 tonnes the sampling plan shall be 5 to 100 incremental samples, depending on the lot weight, resulting in an aggregate sample of 0.5 to 10 kg

The figures in the following table can be used to determine the number of incremental samples to be taken.

Table 8 Number of incremental samples to be taken depending on the weight of the lot of spices

| Lot weight (tonnes) | N° of incremental samples | Aggregate sample weight (kg) |
|---------------------|---------------------------|------------------------------|
| ≤ 0.01              | 5                         | 0.5                          |
| > 0.01 - ≤ 0.1      | 10                        | 1                            |
| > 0.1 - ≤ 0.2       | 15                        | 1.5                          |
| > 0.2 - ≤ 0.5       | 20                        | 2                            |
| > 0.5 - ≤ 1.0       | 30                        | 3                            |
| > 1.0 - ≤ 2.0       | 40                        | 4                            |
| > 2.0 - ≤ 5.0       | 60                        | 6                            |
| > 5.0 - ≤ 10.0      | 80                        | 8                            |
| > 10.0 - ≤ 15.0     | 100                       | 10                           |

**II.9.4. Sampling of spices traded in vacuum packings**

For lots equal to or more than 15 tonnes at least 25 incremental samples resulting in a 10 kg aggregate sample shall be taken and for lots less than 15 tonnes, 25 % of the number of incremental samples mentioned in Table 8 shall be taken resulting in an aggregate sample of which the weight is the weight of the aggregate sample as foreseen in function of the size of the sampled lot (see Table 8).

**II. 10. Sampling procedure for dried fruit other than dried figs**

This method of sampling is of application for the official control of the maximum levels established for aflatoxin B1 and total aflatoxins in dried fruit other than dried figs

**II.10.1. General method of sampling dried fruit, with the exception of figs**

Table 9: Subdivision of lots into sublots depending on product and lot weight

| Commodity                         | Lot weight (ton) | Weight or number of sublots | N° of incremental samples | Aggregate sample weight (kg) |
|-----------------------------------|------------------|-----------------------------|---------------------------|------------------------------|
| Dried fruit other than dried figs | ≥ 15             | 15-30 tonnes                | 100                       | 10                           |
|                                   | <15              | -                           | 10-100*                   | 1-10                         |

\* Depending on the lot weight - see table 10

**II.10.2. Method of sampling for dried fruit (lots ≥ 15 tonnes), with the exception of dried figs**

- On condition that the subplot can be separated physically, each lot shall be subdivided into sublots following Table 9. Taking into account that the weight of the lot is not always an exact multiple of the weight of the sublots, the weight of the subplot may exceed the mentioned weight by a maximum of 20 %.

- Each subplot shall be sampled separately.
- Number of incremental samples: 100.
- The weight of the incremental sample shall be about 100 grams
- Weight of the aggregate sample = 10 kg

**II.10.3. Method of sampling for dried fruit (lots < 15 tonnes), with the exception of dried figs**

For dried fruit lots, with the exception of dried figs, less than 15 tonnes the sampling plan shall be used with 10 to 100 incremental samples, depending on the lot weight, resulting in an aggregate sample of 1 to 10 kg. The weight of the incremental sample shall be about 100 grams.

The figures in the following Table 10 can be used to determine the number of incremental samples to be taken.

**Table 10:** Number of incremental samples to be taken depending on the weight of the lot of dried fruit other than dried figs

| Lot weight (tonnes) | N° of incremental samples | Aggregate sample weight (kg) |
|---------------------|---------------------------|------------------------------|
| ≤ 0.1               | 10                        | 1                            |
| > 0.1 - ≤ 0.2       | 15                        | 1.5                          |
| > 0.2 - ≤ 0.5       | 20                        | 2                            |
| > 0.5 - ≤ 1.0       | 30                        | 3                            |
| > 1.0 - ≤ 2.0       | 40                        | 4                            |
| > 2.0 - ≤ 5.0       | 60                        | 6                            |
| > 5.0 - ≤ 10.0      | 80                        | 8                            |
| > 10.0 - ≤ 15.0     | 100                       | 10                           |

**II.10.4 Sampling of dried fruit other than dried figs traded in vacuum packs**

For lots equal to or more than 15 tonnes at least 25 incremental samples resulting in a 10 kg aggregate sample shall be taken and for lots less than 15 tonnes, 25 % of the number of incremental samples mentioned in Table 10 shall be taken resulting in an aggregate sample of which the weight corresponds to the weight of the sampled lot (see table 10).

**II.11. Sampling procedure for vegetable oil**

This method of sampling is of application for the official control of the maximum levels established for mycotoxins, in particular aflatoxin B1, aflatoxin total and zearalenone in vegetable oils.

- The weight of the incremental sample shall be at least about 100 grams (ml) (depending of the nature of the consignment e.g. vegetable oil in bulk, at least 3 incremental samples of about 350 ml have to be taken ), resulting in an aggregate sample of at least 1 kg (litre).
- The minimum number of incremental samples to be taken from the lot shall be as given in Table 11. The lot shall be thoroughly mixed insofar possible by either manual or mechanical means immediately prior to sampling. In this case, a homogeneous distribution of aflatoxin/mycotoxin can be assumed within a given lot, it is therefore sufficient to take three incremental samples from a lot to form the aggregate sample.

**Table 11:** Minimum number of incremental samples to be taken from the lot

| Form of commercialisation | Weight of lot (in kg)<br>Volume of lot (in litres) | Minimum number of incremental samples to be taken |
|---------------------------|--|---|
| Bulk *                    | -  | 3   |
| packages                  | ≤ 50   | 3   |
| packages                  | > 50 to 500  | 5   |
| packages                  | > 500  | 10  |

\*. On condition that the subplot can be separated physically, large bulk consignments/lots of vegetable oils shall be subdivided into sublots as foreseen in table 12.

**Table 12:** Subdivision of lots into sublots depending on lot weight

| Commodity      | Lot weight (tonne) | Weight or number of sublots | Minimum N° incremental samples | Minimum aggregate sample weight (kg) |
|----------------|--------------------|-----------------------------|--------------------------------|--------------------------------------|
| Vegetable oils | ≥ 1500             | 500 tonnes                  | 3                              | 1                                    |
|                | >300 and <1500     | 3 sublots                   | 3                              | 1                                    |
|                | ≥ 50 and ≤ 300     | 100 tonnes                  | 3                              | 1                                    |
|                | < 50               | --                          | 3                              | 1                                    |

Method of sampling for vegetable oils at retail stage : Where the procedure of sampling as described above is not possible, other effective methods of sampling at retail stage may be used provided that they ensure that the aggregate sample is sufficiently representative of the sampled lot and is fully described and documented. In any case, the aggregate sample shall be at least 1 kg<sup>8</sup>.

**II.12. Sampling procedures other than those described in Regulation (EC) 401/2006 as referred to in II.6.2., which can be used for specific packing/trade forms of the products mentioned under II.7, II.8, II.9 II.10 and II.11**

Several specific packing/trading forms have been identified for which the normal sampling procedure is not applicable:

- large bags, large boxes
- wrapped pallets
- paste (hazelnut paste ...)
- packing under CO<sub>2</sub>
- ....

**RECOMMENDATION**

- To identify other common special forms of packing to which the normal sampling procedure appears not to be applicable and for which the establishment of a common specific sampling procedure (such as the one outlined for vacuum packs ) is appropriate.

For example, a consignment of 20 tonnes of hazelnut paste traded in 100 barrels, each of 200 kg. A sampling procedure applied by a Member State consists of taking incremental samples from 10 barrels (different layers within a barrel) resulting in an aggregate sample of 6 kg (10 x 600 g).

Furthermore, the sampling procedure should also take into account other legitimate factors such as hygiene. For example, the sampling of a paste carried out in tanker lorries with openings at the bottom and the top. Sampling from the bottom opening could cause hygiene problems due to plug-building, and therefore it is preferable in such cases to take samples from the top opening at three levels in the tank (bottom, middle and top).

Competent authorities and other bodies and organisations concerned are encouraged to provide Commission services with information on best practices of sampling procedures currently applied or applicable on these specific forms of packing accompanied where appropriate by reports of experience in applying this sampling procedure. Competent authorities and other bodies and organisations concerned are also encouraged to provide information and description of available sampling equipment.

The information should be provided to Frans Verstraete, European Commission, Health and Consumers DG, preferably by @mail ([Frans.Verstraete@ec.europa.eu](mailto:Frans.Verstraete@ec.europa.eu)) or by fax (+32-2 299.18.56), or by mail (European Commission – Office F101 04/56 – B-1049 Brussels)

<sup>8</sup> In case the portion to be sampled is so small that it is impossible to obtain an aggregate sample of 1 kg, the aggregate sample weight might be less than 1 kg.

After discussion of the information supplied in the competent Expert Committee, that information will be included in the guidance document under this chapter.

**II.13. Period of detention**

Any consignment of a commodity covered by the safeguard measure that is to be subjected to sampling and analysis may be detained from the moment the consignment is offered for import and physically available for sampling (physically available for sampling means that the consignment is physically available and can be sampled without danger for the sampling official. **In case the consignment has been fumigated, then the consignment is considered as being physically available for sampling only after it has been aired/ventilated and officially found safe for sampling**) until release onto the market from the designated point of import into the Union for a maximum of 15 working days (3 weeks of calendar days). This maximum period of 15 days is only applicable to the official sampling and does not include the additional time needed when a second analysis is required by the operator.

In the Member States where the procedure for right for second opinion includes the possibility of analysing a reference sample (see point II.21.(2)), the analysis of this reference sample should be performed within 15 working days after the favourable result of the defence sample is known by the competent authority.

During the period of detention, necessary guarantees are to be taken to ensure that consignments are kept in appropriate storage conditions (low humidity and temperatures), preventing thereby a secondary aflatoxin formation and quality deterioration.

For some specific derived and compound foodstuffs covered by the provisions of Commission Regulation (EC) 1152/2009 the shelf life is so short that the maximum detention period should be shortened. Member States take the necessary measures to ensure that the control on foodstuffs with a short expiry date is performed in such a way that the consignment needs only to be blocked for a very limited period so that the foodstuff remains marketable after control and having been found compliant (expiry date not passed)

It concerns in particular the derived and compound foodstuffs, mentioned in Annex XI of this Guidance document

**II.14. Sample preparation // for direct human consumption // to be subjected to sorting and/or other physical treatment (see above)**

**II.14.1 Mixing of the sample**

The sample must be thoroughly mixed but not ground before dividing the sample into laboratory sample(s) in the case of products intended for direct human consumption. (This can be done when the sample is collected or in the laboratory).

At the place of sampling the sample is clearly labelled and the aggregate sample or the laboratory sample(s) are sealed. This subdivision into laboratory sample(s) can also be performed in the laboratory.



#### **II.14.2. Treatment of the sample as received in the laboratory**

The aggregate sample or the laboratory sample(s) must arrive **sealed** at the laboratory in an opaque bag/container (as aflatoxins break down under the influence of ultra-violet light/daylight).

It must be clearly mentioned on the document accompanying the sample if the consignment is intended for direct human consumption or to be subjected to sorting and/or other physical treatment before human consumption.

Where the consignment is intended for direct human consumption:

- sample arrived at the laboratory as laboratory sample(s): proceed with homogenisation procedure;
- sample arrived at the laboratory as aggregate sample: aggregate sample must be first divided into separate laboratory sample(s) before proceeding with the homogenisation procedure

#### **II.14.3. Homogenisation procedure**

Finely grind each entire laboratory sample completely (and **not** only a part of it) using a process that has been demonstrated to achieve complete homogenisation<sup>9</sup> (see below).

The wet grinding and homogenisation process, which results in most cases in slurry, which is more homogeneous than can be obtained by a dry grinding and homogenisation process, is recommended.

As the homogenisation procedure might result in a slurry which is subject to microbial degradation, it is appropriate that the homogenised laboratory samples as well the analytical samples taken from the homogenised sample are stored and transported in such conditions that microbial contamination and growth is excluded.

#### **II.14.4. Accreditation – standard operation procedure:**

The sample preparation must be available at the laboratory as a Standard Operation Procedure (SOP) and must be covered by the accreditation. The laboratory must be able to demonstrate that the homogenisation procedure used achieves complete homogenisation. This can be demonstrated by taking different analytical samples at different locations in the homogenised laboratory sample and analyse for the aflatoxin content. The levels of aflatoxins analysed in the different analytical samples from one homogenised laboratory sample should be within the range of the variability of the method.

### **II.15. Samples for defence and reference purposes**

#### **II.15.1. Defence and reference samples taken from the homogenised laboratory sample**

Samples for defence and reference purposes are taken from the homogenised laboratory samples – see provisions in Commission Regulation (EC) 401/2006 – Annex I, point A.3.6.

<sup>9</sup> The grinding step for homogenization as part of sample preparation can be performed outside the laboratory, but the premise where the grinding is performed must have the appropriate grinding equipment, environment and protocol for homogenization.

In the case of products intended for direct human consumption, one analytical sample, one defence sample and one reference sample (in quantities needed according to GLP) are taken of each laboratory sample.

So, for every aggregate sample taken from a batch of nuts intended for direct human consumption, nine samples in total are obtained from the homogenised laboratory samples, that are three analytical samples, three defence samples, three reference samples.

**Since the defence and the reference samples are obtained from the homogenised sub-samples they can only be obtained from the laboratory.**

Different rules are applicable in the Member States regarding the obligatory presence in the laboratory of an official inspector and the food business operator when the defence and reference samples are taken.

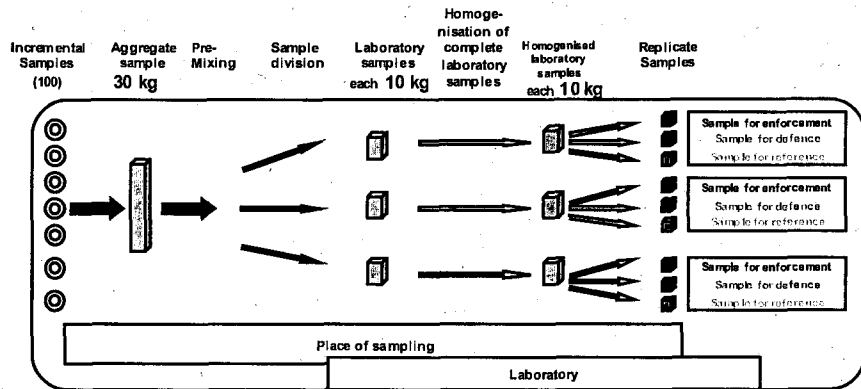
As the homogenisation procedure might result in a slurry, which is subject to microbial degradation, it is appropriate that the homogenised laboratory samples as well the replicate samples taken from the homogenised sample are stored and transported in such conditions that microbial contamination and growth is excluded.

The following papers, the first of which was produced by the European Committee for Standardisation (CEN) provide further information:

- “Sample comminution for mycotoxin analysis: Dry milling or slurry mixing?”  
M.C. Spanjer *et al.* (2006) Food Additives and Contaminants, **23**, 73 – 83.
- “Use of water slurries in aflatoxin analysis”  
J. Velsaco and S. L. Morris (1976) J. Agric. Food Chem., **24**, 86 – 88.

**\* Sampling of dried figs for direct human consumption**

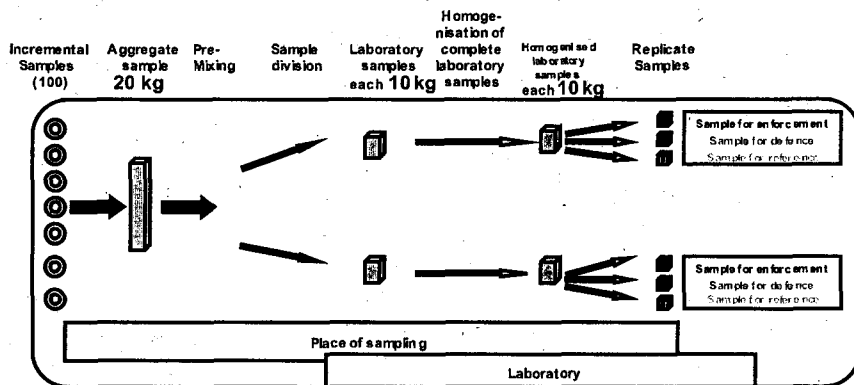
**Samples for enforcement, defence and reference taken from homogenised laboratory or subsamples**



NB: Each of the 3 enforcement samples have to be compliant for a consignment to be accepted

**\* Sampling of groundnuts, other oilseeds, apricot kernels and tree nuts for direct human consumption**

**Samples for enforcement, defence and reference taken from homogenised laboratory or sub samples**



Each of the 2 enforcement samples has to be compliant for a consignment to be accepted

**II.15.2. Defence and reference samples are taken at the place of sampling**

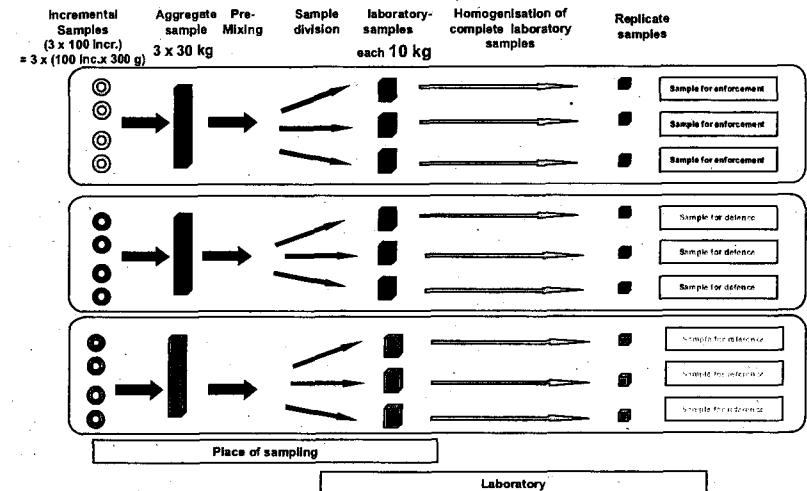
In two Member States (Spain and Germany because of their additional national legislation as regards the rights of the operator which is not overruled by Commission Regulation (EC) 401/2006), it is stipulated that the defence and reference samples have to be taken from the consignment in the presence of the operator, including in the case of sampling for aflatoxin analysis. Commission Regulation (EC) 401/2006 provides for that possibility.

If this is the case then the sampling procedure as outlined in II.7 and II.8 must be applied, on the understanding that, for example, 2 x 100 (for official + defence sample) or 3 x 100 (for official + defence + reference sample) incremental samples must be taken, resulting in two or three aggregate samples of 20 or 30 kg. Each aggregate sample must be further processed as outlined above.

As the homogenisation procedure might result in a slurry, which is subject to microbial degradation, it is appropriate that the homogenised laboratory samples as well the analytical samples taken from the homogenised sample are stored and transported in such conditions that microbial contamination and growth are excluded

**\* Sampling of dried figs for direct human consumption**

**Samples for enforcement, defence and reference taken parallel from the consignment**



NB: Each of the 3 enforcement samples has to be compliant for a consignment to be accepted