

Position Paper

FOOD PRODUCT QUALITY

Food quality group

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1 – Purpose of this position paper

Quality control should naturally focus on all products delivered to the affected population: non-food items, drugs, seeds, water and food products.

The purpose of this paper is to specifically define ACF's position on the quality control of food products, since these are the most hazardous items regarding a direct negative impact on population health.

ACF has been working with food aid programmes for the last 25 years. Our commitment is to provide the beneficiaries with immediate and mid term assistance based on their needs and to always consider the quality of the services rendered.

One of ACF's first internal principles is that of "Do no harm"

The first concern for ACF is to be certain that a product is **not harmful to human health**. It must be free from bacteriological and chemical toxicity and hygienic measures must be respected to maintain the safety of the food.

Wherever the food is coming from, once it is in stock, it falls under the full responsibility of ACF (disappearance, traceability, ... and quality!) up to its final destination and even afterwards (post distribution monitoring).

ACF is definitively in charge of ensuring that the donated (or purchased) food is suitable for human consumption when distributed and for a reasonable time after distribution

ACF has to make sure that nobody will suffer from contaminated food in our programmes. This concerns the beneficiaries, yourself, your team and also the image of the association.

We can never be certain that no harm will occur, but in order to reduce the risks and to limit ACF's responsibility in case of incident or fatality, certain rules and procedures as described below, have to be followed.

With a bad quality food ration ACF may kill somebody

The section below explains how ACF can avoid or reduce this lethal risk

ACF has to ensure that the teams follow some basic quality principles : identification of food, inspection of the food (sensorial control, analyses...), storage conditions, consumers' food use. By endorsing and following these simple rules, the risks will be minimised, but they must be applied systematically.

Whenever a food contamination risk is identified, the team has to apply the principle of precaution and immediately suspend the distribution and refer the problem both orally and with written report to the upper levels of the chain of command (technical & logistics coordinator, head of mission, headquarters logisticians & Food Aid advisor & Nutritionist & Technical director). A food quality problem may have immediate and dramatic effects on the intervention site but may also affect programmes in other countries.

As all security incidents (shootings, kidnappings...) are systematically reported, a food incident also needs to be reported

The headquarters has to provide the field team with support on how to handle the crisis (to the local authorities, the population, the supplier, ...).

Different foodstuffs present very different risks to human health in both the short and in the long term. These risks range from being rather minor to very serious and life threatening. Some common problems encountered with different foodstuffs are outlined in the document "Possible Alterations" (Kitlog V2).

2 - OPERATIONAL PRINCIPLES

The food quality control protocols can be found in the *Quality Control Guidelines* of the Kitlog V2.

2.1 Responsibilities

Everybody on a mission - at various levels - must contribute to food quality:

- the requester (being the nutrition or food security department) in charge of determining the technical specifications
- the logistics in charge of the supplies (selecting and contracting reliable suppliers, ensuring storage, transportation and distribution). Logistics must ensure a quality approach all along the supply chain
- the administration, which will fund and authorise quality control expenses
- the head of mission because food quality problems can have dramatic effects or a negative impact on ACF operations (credibility, image, stakeholder confidence)

2.2 Training on food quality control

A general orientation on food quality control is given to all expatriates during the general pre-departure preparation.

In addition a specific quality control course on foodstuffs is given to each logistician before departure during the Logistics Pre Departure Training. This session is an introduction and aims to

explain the quality control process, to present the attitude towards quality control and the protocols and tools used for this purpose.

2.3 Pre-requisites

Quality control requires:

- Funds:
 - i. Four different kits have been defined in Paris, according to the type of food and control needed. These include 4 different kits for several tests (sampling, humidity of grains, humidity of flour, aflatoxin test preparation). These kits are relatively expensive, prices varying from 84 € to 460 €.
 - ii. Laboratory analysis is costly. The prices depend on the type of analysis required.
- Clear procedures: sampling, labelling of samples, packaging etc...
- Time: the elaboration of the technical specifications, sampling, laboratory analyses and interpretation are time-consuming. The timing varies between 7 to 15 days for Laboratory results.

Good planning (time and financial) will allow appropriate controls of the foodstuffs. The payment of the quality control should be included in the operational budget (direct donor or co-financing). If not, Paris Headquarters may exceptionally allocate a supplementary budget upon request. In case of major food quality problems, a food quality expert may be mobilised directly to deal efficiently with the issue.

2.4 Standard protocols

Standard protocols for routine quality control have been established in the Kitlog V2. They include:

- technical specifications: the minimal technical specifications required for the food items supplied to the programmes are compiled in a document. They are the food identity cards (ACF food items technical specifications) describing all the quality criteria.
- Selection of the supplier and modalities of quality control in the purchasing contract
- Inspection upon delivery through sensorial tests
- Monitoring of the stocks
- Protocols in case of suspicion
- Sampling methodologies
- Laboratory analyses

**Keep in mind that food quality control is the responsibility of ACF
Some foodstuffs present more risks than others
In case of doubt, the logistician on site and/or the headquarters must be contacted**

3 - METHODOLOGY

Any food may be suspect but some foods are potentially more dangerous than others. From the experiences gained, some suppliers will be more at risk than others, however no distinction needs to be made between donated foods (WFP, UNICEF, NGO) and those purchased.

It must be remembered however that when food is donated, it is rarely (even with UN agencies) following an initial defined specification by ACF : products delivered are generally whatever is available from the provider.

Several types of quality control are considered:

- Inspection upon delivery and reception, through sensorial tests (to be done all along the supply chain, from the supply source up to the beneficiary)
- Tests carried out with basic equipment (to test the temperature, humidity, toxin content..., tests done by logisticians) upon initial reception of the products, to determine if the food quality is suitable or not
- Laboratory analyses, in order to certify conformity to pre-defined specifications.
- Laboratory analyses, in order to confirm the inadequate quality of a product.

The logistician remains the person responsible for the implementation of these quality controls.

3.1 ACF quality control procedure towards suppliers

Any supplier at headquarters level must provide a Certificate of Conformity of Food. Random quality audits will be implemented yearly and new suppliers will have to demonstrate their quality control process capacity before approval.

At the field level, the quality control is an essential part of the procurement phase. The protocols to vouch for the quality of the supplied items are defined in the purchase contract. For important purchases, ACF usually requests the supplier to submit a Certificate of Conformity of Food issued by an independent company.

3.2 Identification of the food received

The first and essential step is to request the identification card of the food received, that means the minimum as follows:

- description of the food item (technical specifications)
- packaging
- production date and expiry date
- origin
- net weight

When no information is available, an official and written request has to be given to the providers at least for the first delivery. The aim here is to make the provider faces its responsibilities.

3.3 Routine control: the sensorial test

The second step is to maintain routine control through sensorial testing (taste, sight, smell, touch and sound) upon each reception from the supplier to the ACF warehouse, from warehouse to warehouse, from warehouse to distribution point or feeding centre.

Remark: at food preparation time for canteens, TFC and SFC (cooked or mixed food ration), all opened containers (bag, bottle, boxes) should be controlled through sensorial test.

Routine testing is also implemented every 3 months for products stored in an ACF warehouse. The number of units to be checked in the routine testing is taken randomly according to protocols defined in the kitlog V2.

In case of suspicion, the concerned batch must be isolated and a representative sample must be sent for laboratory testing. During this time, this suspected food cannot be distributed until a final decision is taken according to the test results.

3.4 Systematic control on Aflatoxin: field test on items at risk

Some food items present risks of contamination, which cannot be detected through such routine tests.

In this case, the main risk regarding the types of foods we are using through our projects are from Aflatoxin contamination.

Higher risk of aflatoxin presence is:

- Maize flour
- Soya flour
- Mixed flour such as CSB, UNIMIX etc...
- Nut derived product (groundnut oil for instance)

At the early stage of Aflatoxin development, the sensorial quality is not altered and therefore the problem cannot be detected by sight, taste or smell

Systematic controls will be performed on these food items using an initial field test to determine if the product is safe or suspicious.

This test needs to be done at each food delivery - considered as a batch - (refer to log HQ when batch definition remains problematic).

When field test results are positive (showing presence of Aflatoxin), the whole quantity represented by the tested sample should not be distributed until the final result of an additional laboratory test has been received.

If the final laboratory test result is negative, the green light will be given to distribute the suspected food, if it is positive the food has to be destroyed (or returned to the supplier, according to the contractual agreement)

Sampling is to be done on the whole batch following the methodology defined in the guideline (Kitlog V2).

Priority is given to implementing this quality control approach, before defining a laborious strategy through systematic laboratory tests for all types of food we have in stock