



Food Safety Testing Services

Laboratory Advisory Agtech





Company Overview

Crop Nutrition Laboratory Services (**CROPNUTS**) is an **ISO/IEC 17025 accredited** private soil, water & food testing laboratory and advisory service company. For more than 20 years, we have been dedicated to the **highest quality analysis** and service delivery excellence, meeting the stringent needs of the food safety sector.

CROPNUTS' overall objective is to provide quality laboratory testing and trusted scientific advice on:

- 1) Better soil, fertilizer & crop management practices (Agronomy Services)
- 2) Certified safe drinking water & effluent water management practices (Water Services)
- 3) Food safety testing, nutritional testing & fresh produce handling (Food Safety Services)

CROPNUTS' Food Safety Testing Services help you ascertain the quality and safety of your produce. Our food safety testing service analyzes agricultural produce & processed foods for the following food safety concerns:

1. Harmful microorganisms such as *Listeria monocytogenes*, *Staphylococcus aureus*, *E.coli*, *Vibrio cholerae*, *Salmonella* spp, Total Coliforms & Food hygiene (Total plate count, Yeast & moulds)
2. Harmful contaminants such as Aflatoxin, Iron filings, & Heavy metals such as Arsenic, Cadmium, Lead, Nickel, Mercury, Chromium, Cobalt
3. Pesticide residue levels, including Glyphosate levels
4. Food nutritional composition

To serve our customers better, **CROPNUTS** has established a state-of-the-art ISO/IEC 17025 accredited Laboratory in Limuru Kenya. This ISO accreditation is the internationally recognized quality standard for testing and calibration laboratories. **CROPNUTS** has been accredited for close to 10 years now and we have an extensive scope of laboratory tests under the ISO/IEC 17025 accreditation.



Our Typical Food Safety Testing Customers

- Tea & Coffee Processing & Farms & Factories
- Commercial Farms (Fruit, Vegetables, Spices & Herbs Farms)
- Food Processing Companies (Salt, Grains, Flours, Nuts and Oils)
- Fresh Produce Exporters, Importers & International Buyers
- NGOs and Charitable Organizations

Why Choose Us


- **Trusted expertise**
- **Faster turnaround time and very competitive prices**
- **Independent, unbiased recommendations**
- **100% compliance to ISO 17025:2017 requirements**
- **Independent, competent support**
- **Traceable, precise, reproducible, proficient and confidential results**

Our Portfolio for Food Safety Testing Services:

- **Pesticide Residue Analysis**
- **Mycotoxins Analysis**
- **Heavy Metal Analysis**
- **Microbial Analysis**
- **Black Tea Analysis**
- **Nutritional Analysis**
- **Fortification Analysis**

Food safety Testing Services





Pesticide Residue Analysis

With more consumer awareness, testing your produce for pesticide residue contaminants is becoming increasingly important. Many countries, including those in the EU, have very stringent regulations which govern pesticide maximum residues levels (MRL) in exported produce.

Cropnuts offers a screening service, using gas chromatography to screen your produce for over 800 pesticides in a single multi-residue test. If required, we can also provide you with a QS (Qualitat und Sicherheit) label, demonstrating that your produce is fit for domestic sale as well as export to Europe, US or Asia.

Pesticide Residue Analysis Types:

GC-MS & LC-MS Screening
Glyphosate & other herbicides
Residue Testing

Foods Analyzed:

Fruits, juice, water, vegetables, herbs, milk,
drinking water, grains





Mycotoxins Analysis

Mycotoxins are a group of toxic compounds that are naturally produced by certain types of fungi. These fungi can be found in food such as maize, cereals, dried fruits, coffee, tea, nuts and spices. The fungi can colonize the food before or after harvest, and even during storage, if the food is stored in warm, damp conditions.

As they grow, the fungi produce mycotoxins which are chemically stable and can survive food processing. These mycotoxins can cause several different diseases and adverse health effects, including cancer if ingested for prolonged periods and even acute poisoning.

Several hundred different mycotoxins have been identified, but the most commonly observed mycotoxins that present a concern to human and livestock health are Aflatoxins, Ochratoxin A, Patulins, Fumonisin, Zearalenone and Nivalenol/Deoxynivalenol. Cropnuts can help you identify all these different mycotoxins and help you control them in your crops and storage facilities.

Chemical Parameters:

Total Aflatoxin (AFB1, AFB2, AFG1, AFG2)
Aflatoxin B1
Ochratoxin A,
Patulins 1, B1

Foods Analyzed:

Tea, maize flour, nuts, peanuts butter, animal feed





Heavy Metal Analysis

Heavy metals are highly toxic and should not be present in food. Even small amounts of heavy metals can have serious implications in livestock and human health. Many heavy metals are naturally present in the soil, air and water. They can also be found in farm inputs such as fertilizers, compost and pesticides, or accidental pollution of the ground water. These are all sources of contamination in your produce.

Croprnuts tests your produce for all these heavy metals, and help you ensure they are within the strict legal limits

defined by Codex, WHO, FAO, EU and at national government standards level.

Chemical Parameters:

Lead, Nickel, Chromium, Cobalt, Cadmium, Mercury, Arsenic, Tin

Foods Analyzed:

Fruits, juices, vegetables, fish, maize flour





Microbial Analysis



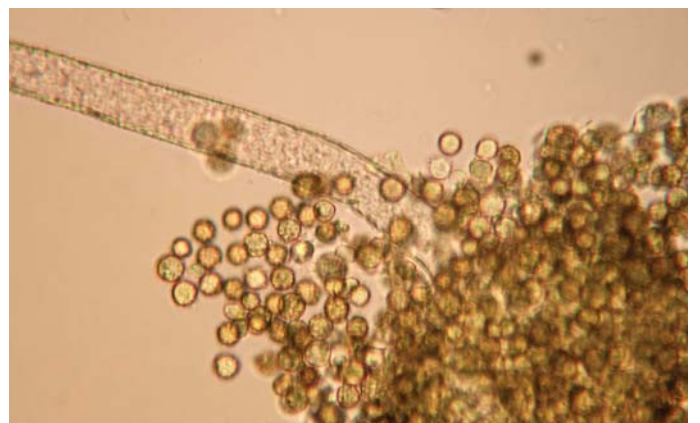
Our microbial analysis covers all the food pathogenic & indicator microorganisms - bacteria and fungi. With our tests we can help you ensure that your produce is free from all the major food-borne disease that pose a human health risk, including E. Coli, Vibrio cholerae, Listeria, Salmonella and many more.

Microbial Parameters:

Salmonella spp, Yeast & Moulds, Listeria, Staphylococcus, Total Coliforms, Escherichia coli, Total Viable Count (TVC)

Foods Analyzed:

Fresh fruits & vegetables, milk, fruit juice, drinking water





Black Tea Analysis

Black Tea testing helps everyone in the tea value chain including manufacturers, importers and exporters. In the long run it aids the final consumer since the quality of the product being consumed is assured.

Black Tea Analysis is carried out on the loose leaves, or at any point during production depending on the parameters being observed and also during new product development. Black Tea testing is done on the final product both for compliance (to local and international market standards).



Parameters:

Microbial Parameters:

Yeast & Mould, Staphylococcus aureus, E.coli, Salmonella spp.

Chemical Parameters:

Total Aflatoxin, Heavy Metals (Arsenic, Copper, Boron, Cadmium, Chromium, Cobalt, Nickel, Lead and Zinc), Fluorides, Aluminum, Pesticide Residue levels, Total polyphenols, and Iron filings

Compositional Quality Requirements:

Moisture, Water extract, Total ash, Water soluble ash, Acid insoluble ash, Crude fibre





Nutritional Analysis

Adequate food labelling is a legal requirement in most countries, and we provide most of the nutritional value tests you need to accurately label your produce. This includes the "Big Four" (energy, protein, carbohydrates and fats), the "Big Eight" (moisture, ash, dietary fibre, protein, fat, fatty acids, carbohydrates, sugars, salt and energy) as well as vitamins and minerals.

We also do additional testing for Sulphites, Bromide, Nitrates and specific sugars as well as organic food acids, classification of fruit juice and stevia. For specialist health products we also quantify Quercetin, Lycopene, Glucosinolates and Carotenoids.

Nutritional Analysis Types:

Wet Chemistry Analysis
Proximate Analysis

Foods Analyzed:

Beans, grains and flours





Fortification Analysis

Fortification refers to the process of adding essential vitamins and minerals to foods to prevent nutritional deficiencies. Vitamins and minerals prevent diseases, strengthen immune systems and improve productivity and cognitive development.

Food fortification is considered by the World Health Organization, the Food and Agriculture Organization, and other global bodies as one of the top four strategies for decreasing micronutrient malnutrition at the global level.

Our Fortification Analysis helps you to accurately determine whether your maize, wheat flour or vegetable oil has met the ideal fortification standards.

Micronutrients & Foods Analyzed:

Salt – Iodine

Wheat flour - Zinc, Iron, Vitamin B1, Vitamin B2, Vitamin B3, Vitamin B6, Vitamin B12, Folic acid

Maize flour - Zinc, Iron, Vitamin B1, Vitamin B2, Vitamin B3, Vitamin B6, Vitamin B12, Folic Acid

Vegetable oil and fats - Vitamin A



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Get in touch with us and we will put you in contact with our nearest
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