



WHAT YOU NEED TO KNOW ABOUT **FOOD SAFETY**

FOR CONSUMER PRODUCTS, WE ARE ALL YOU NEED TO KNOW

SGS is the world's leading inspection, verification, testing and certification company. Recognized as the global benchmark for quality and integrity, we employ 64,000 people and operate a network of more than 1,250 offices and laboratories around the world.

Our core capabilities build trust between consumers, companies and governments. When there is trust throughout supply chains, transactions are simpler and more efficient, margins are higher and brand reputations are protected.

Our complete range of services put you at the cornerstone of constant improvement by helping to reduce risk, improve efficiency and ensure compliance to contractual or regulatory requirements. They enhance productivity and in a competitive business environment help to get safer products to your consumers, faster.

As quality expectations and the range of safety requirements become increasingly more complex for all types of consumer goods, SGS Consumer Testing Services supports consumer product manufacturers, importers, exporters and retailers with the following types of services:

- Testing
- Verification
- Product Certification
- Technical Assistance
- Product Inspection
- Process Assessment

We strive to deliver outstanding value and at every step in your project we are committed to add value to your work by providing:

- rapid turnaround time
- value-based pricing
- technical assistance
- key account management
- accurate timely reporting

SGS services can help improve your product's quality and in long term partnerships our input will increase your return on your investment.



WHAT IS FOOD SAFETY?

Ask anyone on the street for their definition and they will probably answer that it means food that is safe to eat.

Consumers are no longer just aware, they are becoming far more critical about potential hazards; essentially they are demanding that the food they eat is harmless. At the end of supply chain, it is retailers who make the final sale and, in the consumer's perception, are seen as most responsible for ensuring that food on the shelf is safe.

Controlling the entire food system is no easy task. It is a complex, competitive, multi-level system embracing legal, political, social and economic forces. From farm to table, the volume of food-borne diseases and chemical, microbiological and physical food hazards are increasing and evolving.

An intricate mix of local and national legislation and voluntary agreements regulate permitted quantities of chemical residues, control of allergenic ingredients and stipulation for pathogenic bacteria in food products. It's a full time job identifying and detecting these hazards, helping to reduce their presence and meet increasing strict guidelines. Additional surveillance of suppliers through auditing, rigorous testing and product inspection are vital techniques to running a transparent food supply system. These steps can help to build a comprehensive traceability system, support due diligence and ensure suppliers and products are properly certified.

The challenges of maintaining a pace of development that is sustainable require innovative approaches to invest in greener solutions. The retail sector is already making a huge contribution to sustainability through their own operations, through their supply chains and by making the products they sell more sustainable across their whole lifecycle. The food industry does, however, need to remember the vital



role it plays in informing the public on green issues. Consumers look to the owners of their favourite brands and to their regular supermarkets for guidance on the environment.

SGS has pioneered a proprietary global hygiene standard, the Hygiene Monitored approval scheme that provides a corrective framework and independent global benchmark for food businesses focused on delivering measurable improvements in food hygiene operating standards.

SGS Private Label Services are tools to help organizations manage risk not only throughout the supply chain, but also at product and regulatory levels. Our

renowned global network of field, laboratory and project management staff work as an integral part of your Private Label team to provide a range of Private Label services.

SGS's measures and practices for food quality and safety involve intricate analytical testing, product and hygiene inspection activities and product & process audits. These services assist companies to deliver food products that constantly meet their high quality standards as well the increasing complex regulatory standards of health, safety and environmental compliance.

SUPPLIER AUDITS



Globalization of the food supply chain and consumer's tastes have changed the way that food is produced, processed, packaged, transported and consumed. How these changes are regulated by governments, or managed by industry leaders will continue to present all stakeholders with new challenges for auditing and certification in the food industry.

SGS implements a holistic and integrated approach to assist the food industry to identify and manage risks across food safety, quality, sustainability and social compliance dimensions.

ENGAGED WITH GOVERNMENTS

Within the food safety and quality industry, SGS closely monitors the influence of tighter regulations and controls that already exist or that will be enforced by governments at a later date. When Governments look at the use of 3rd Parties and external programs to monitor the food supply chain, SGS is one of the first Certification Bodies to whom they turn to.

ENGAGED WITH INDUSTRY

From its origins in the agriculture industry in the late 1800's to its participation in the Global Food Safety Initiative (GFSI) Technical Committees, SGS has always listened to and represented the interests of thousands of food industry clients. SGS endorses the GFSI efforts to improve cost efficiency throughout the food supply chain through the common acceptance of recognized standards (i.e. SQF, BRC, IFS, Dutch HACCP, FSSC 22000) by retailers around the world. We are active contributors to this international stakeholder platform for networking, knowledge exchange and sharing of best food safety practices and information.

In addition, SGS collaborates with other certification bodies to define and develop: guidelines for managing second party audit schemes, career paths and training for auditors, and ways to reduce redundant certification scheme costs.

SGS has developed and/or implemented GMP/HACCP audit standards, and addendums to third party standards for specific food segments. With particular respect to managing the pre-certification audit requirements of smaller, organic or emerging markets' food processors, our clients rely on our ability to both train, and audit against GMP and HACCP audit standards in a consistent and rapid manner.

Thousands of small, medium and international companies have chosen SGS to audit their food safety management system against the IFS, SQF and BRC standard requirements, confirming SGS as the world's preferred certifying body for these standards.

ENGAGED IN CONTINUOUS IMPROVEMENT

Maintaining accreditation to global audit standards in multiple food categories, or industry specific standards such as the Marine Stewardship Council, (MSC) requires dedicated product managers, internal quality management systems and procedures, and continuous improvement efforts. With both industry and government attention focused on auditor qualifications, SGS invests heavily in ongoing auditor training and monitoring. We are also committed to developing our auditor's technical skills and will continue to invest in their knowledge of information technology that improves accuracy and consistency, and timely delivery of audit results.

SGS supports global businesses to monitor their suppliers for compliance to Social Responsibility standards. Audits provide the base-line information on what is happening in your supply chain. SGS anticipates the convergence of Social Responsibility and food industry standards and is in a unique position to offer combined audits for food security, food safety and social accountability.

CHEMICAL AND ANTIBIOTIC RESIDUES

The large amount of chemicals used in farming today means that even the old adage “an apple a day keeps the doctor away” may be challenged.

In all types of agricultural and aquacultural practices, pesticides, herbicide, fungicides, veterinary drugs etc., are applied to keep pests at bay and protect animals from disease. For the caterpillar in an orchard today, it only takes a short journey across an apple for the insecticides on the surface to kill it. What of the effect of these agri-chemicals on human health and the environment?

Since 1950 pesticide use has increased 50-fold and 2.5 million tons of industrial pesticides are now used each year. Pesticide over-use can lead to dangerous levels of hazardous chemicals entering the food supply chain. Most pesticides break down quickly in the environment, but some may be present in food products as a residue of the original chemical applied. As diets have become healthier less processed foods and more fruit and vegetables are consumed in ever greater quantities. It is this fresh produce which is most susceptible to pesticide residues and thus prone to scrutiny.

For consumer protection the use of chemicals and maximum residue levels (MRL's) permitted in food products are regulated by food safety legislation in many countries. In the US the responsibility of monitoring for residues is shared by three separate agencies - the Environmental Protection Agency, The Food and Drug Administration and the US Department of Agriculture.

The presence of animal drug residues is also under strict regulation worldwide. In Europe, MRLs are set by European Community under Regulation (EC) No 396/2005 to protect consumers from exposure to unacceptable levels of pesticide residues in food and feed. Regional and international organizations such as the Codex Alimentarius Commission are working towards the harmonization of national legislations on chemical residues in food, through the introduction of specific statutory limitations.

In response to growing consumer concerns about the hazards posed by chemicals to consumers, farmers and

the environment, many supermarket chains and food manufacturers are implementing policies and processes to reduce residues.

SGS Food Services supports the identification and control of such hazards through farm audits, review of applications & withholding periods and regular sample testing at one of the largest networks of testing centres. Using state of the art equipment our laboratories develop best testing practices for according to numerous monitoring, inspection and regulatory requirements.



INSPECTION OF THE SUPPLY CHAIN

Since the second half of the twentieth century importers have used the services of independent inspection companies such as SGS to certify the quality and quantity of products they want to import.

WHY PRODUCT INSPECTION?

Independent pre-shipment inspection of goods helps identify potential product defects or inconsistencies in batch quality. It is a simple, highly effective way of safeguarding your company against costly import risks and expensive product recalls. Inspections can be performed on-site before, during and after production.

SGS INSPECTION SERVICES

- Can be performed on all consumer products.
- Cover the needs of the complete product Supply Chain.
- Involve visual evaluation of statistically representative samples at various stages of the production process: Assembly Check, Evaluation of Product Design and Packaging, Labeling Assessments.
- Are provided by the world's largest network of inspectors to meet your qualitative needs regardless of source.

1. BEFORE PRODUCTION / DURING PRODUCTION

- **INITIAL PRODUCTION CHECK**
Visual check on the quality of components, materials and finished products at the beginning of the production process (usually when 10% of the goods have been produced).

- **DURING PRODUCTION CHECK**
Visual check on the quality of components, materials and finished products during manufacturing (usually when 25-40% of the goods have been produced).

- **ADVANTAGES**
Corrective action for any non-conformities detected can be taken before completion of the whole consignment. This reduces the risk of production being jeopardized by a substandard supply of material and components.

2. AFTER PRODUCTION

- **FINAL RANDOM INSPECTION**
A detailed visual inspection of samples selected at random to check that the quality, quantity and packaging conform to your samples and specifications. Final Random Inspection deals with the Quality Assessment of the finished goods that are packed and ready to be shipped (at least 80% is packed ready for dispatch). Final Random Inspection covers the quality (product appearance, performance, workmanship), quantity, packaging, labeling and shipping marks, e.g. Bar Code Check (to be readable for compliance), Transportation Drop Check

- **ADVANTAGES**
SGS uses the standard criteria of ANSI/ASQC Z1.4 (ISO 2859-1) statistical sampling procedure or a similar standard and issues detailed inspection reports based on defined Acceptable Quality Levels. Inspection certificates are issued if stipulated in the letter of credit.

3. LOADING SUPERVISION

- A supervised loading of containers to ensure that the goods checked via a Final Random Inspection are those shipped to the intended recipient.
- **ADVANTAGES**
Containers are secured with SGS seals after loading to reduce the otherwise high risk of product substitution.





INSPECTION COVERS:

- Product Quality Inspection
- Quantity verification
- Traceability – verification of production codes, plant numbers and stock numbers against packing list/invoice.
- Verification of external and internal operating conditions of container
- Cleanliness inspection of trailer/ container for debris, insects, vermin etc.
- Temperature Monitoring Inspection for maintaining the cold chain of refrigerated and frozen products
- Packaging
- Labelling
- Shipping marks, e.g. Bar Code Check (to be readable for compliance)
- Document any damage observed during loading process
- Photographs of packing and loading process
- Documentation of container, vessel and seal number.

RETAIL STORE CHECK

Our retail store check services cover the visual collection of retail conditions of National Brand or Private Brand products as per client's specific requirements. These inspections include sample selection and examination of Retail Point of Sale factors such as:

SALES UNIT PRESENTATION

- Pack dress
- Labelling
- Stock level on shelf
- On pack promotional flashes
- Average age of product on shelf
- Sell by dates

SALES UNIT POSITIONING

- Where on the shelf
- Where in store
- Prominence of promotional and point of sale material

PRICE POINTS AND COMPETITOR PRICE POINTS

We may also look at competitor's products in stores and other specialized points of sales. This systematically collected data can improve the management of your products on-shelf, where they are born to real life and challenged by competitors.

FOOD SECTOR PRIVATE LABEL SERVICES

As private label brands evolve and take on specific product attributes they need to conform to a complex set of product safety and quality standards.

Some of the more dynamic brands on the shelf today may not be considered brands at all, yet they are becoming increasingly popular. In recessional times shoppers are quick to flock to private retail products as an alternative to pricier brands. Yet as economies start to rise in strength, the growth of private label products continues apace, creating strong opportunities for retailers.

Evolving from merely price-fighters, private label products are taking on the established brands and, in some categories, winning in the quality stakes. Once held as the responsibility of leading global brand manufacturers, the protection of brand image and development of brand loyalty is now critical to the private label retailer. Without effective supply chain

management relating to product safety and quality systems, a private label manufacturer and retailer is at risk of producing and/or selling defective and contaminated products which can lead to market scares, poisoning outbreaks, damaging product recalls, huge legal costs, and loss of both public image and market share.

As private label brands evolve, complexity replaces simplicity. The development of a single line now takes on corporate compliance and strategic financial and marketing directions involving data from multiple sources. At a minimum, the launch of new private label items will require compliance with single or global market standards across safety, quality, social, environmental, and regulatory guidelines. The task of repackaging existing lines has moved from a pure marketing or financial function to now requiring input from sustainability experts.

SGS Private Label Services are tools to help organizations manage risk not only throughout the supply chain, but also at product and regulatory levels. Our renowned global network of field, laboratory and project management staff work as an integral part of your Private Label team to provide the following Private Label Services:

NATIONAL BRAND EQUIVALENT PROGRAMS

Are the nutritional facts and information on your package accurate? How will consumers react to the information on your package versus the established brands in the category? To help you resolve these questions we offer consultative services including:

sampling, nutritional analysis testing, comparison and analysis of nutritional facts, organoleptic analysis, sensory panel testing, as well as marketing and competitive brand positioning review.

CATEGORY AND PRODUCT SPECIFIC TESTING PROTOCOLS

Changes in the daily operation of a production facility or change in raw material supplies may trigger a re-evaluation of the processing facility. Knowing what to test, and when to test based on the integration of all information sources is part of the risk management solutions that SGS regularly performs for its clients. The SGS Private Label team has developed a database of test protocols and market specific regulatory requirements that assists clients with pre-production and production, quality and safety verification.

SUPPLIER DATA MANAGEMENT & REPORTING

Whether part of a complete Supplier Scorecard system, or a particular project, the results of your private label services project should be stored in a secure location where stakeholders may gain access for comparison and analysis. SGS delivers your data and management reports in multiple format options and accordingly stakeholders are better positioned to evaluate high risk suppliers and high volume products.

PRIVATE LABEL SUSTAINABILITY SERVICES

See page 14 for a more detailed description of our sustainability services.



ALLERGENS, ARE YOU SURE YOUR BUSINESS IS IMMUNE?

Imagine yourself on holiday at the seaside; its lunchtime and you're hungry. Knowing that you're allergic to certain shellfish, at the restaurant you order a steak and fries. At first glance these items should be safe and wouldn't contain any kind of seafood. But what if cross contamination occurs during cooking? What if the restaurant uses the same oil to fry shrimp as they use to fry the french fries? People who suffer from severe allergies must be aware of these potentially disastrous possibilities, or suffer the consequences.



True food allergies are adverse reactions by the immune system to particular foods. Virtually all known food allergens are proteins, can subsist in large quantities and often survive food-processing conditions. Whilst almost any food protein can cause an allergic reaction in some people, the most common food allergens are listed in the EU's allergen labelling legislation; these are:

- cereals containing gluten - wheat, rye, barley, oats, spelt, kamut
- seafood crustaceans
- eggs
- fish
- peanuts
- milk
- nuts - almonds, hazelnuts, walnuts, cashews, pecan nuts, brazil nuts, pistachios, macadamia nuts and Queensland nuts
- soya
- sesame
- celery
- mustard
- sulphur dioxide and sulphites

In the US, the top 8 allergens from the list above are responsible for 90% of all food allergies. Approximately 30,000 individuals require emergency room treatment per year and as many as 150 actually die as a result of allergic reactions to what they have eaten. Constant vigilance is required to make sure that they are not accidentally exposed to a food item that can kill them.

It is estimated that 2% of adults and about 6% of children suffer from food allergies. There is no permanent cure. The only known prevention is to avoid consuming the item. Clear labelling of both allergenic ingredients and identification of possible cross-contamination with allergens is vital in to make informed shopping decisions.

Although the number of global recalls due to undeclared allergens is on the rise, many efforts are being made to better understand the ways allergens can be unintentionally introduced into the food supply chain. Since January 1st 2006, the US FDA requires food labels to clearly state in plain English if the food products contain any ingredients that contain protein derived from the 8

major allergenic groups. These labelling requirements apply to both domestically produced and imported foods.

Many manufacturers have already implemented internal and external Allergen Control Programs, and have revisited and updated their labelling. But doubts do remain. What are the sources of unintentional cross contamination? Are Good Manufacturing Practices (GMP's) enough to control the risk of cross contamination? How effective are suppliers' preventive systems? What is the best method to validate these programs? What are the best methods to use for detection?

Through factory audits, label reviews and advanced testing methodologies, SGS Food Services works with all parts of the supply chain to monitor and test for allergens in food products destined for the supermarket shelf.

HYGIENE AUDITS

The huge volume and variety of food products that flow through a store on a typical day carry their own set of hazards before they are sold. At the final stage of the supply chain, it is the retailer who makes the final sale and is perceived by the consumer to be responsible for ensuring that the food sold is indeed safe. A food hygiene audit is a key component of a food safety management program to identify weaknesses in the retail operation.

Despite increased and more sophisticated monitoring, the incidence of pathogenic bacteria continues to increase due to changes in consumer lifestyles (more ready-to-eat meals), consumption tastes and diets (more fresh & natural produce) and food production economics (global distribution through longer supply chains). Businesses should conduct a risk assessment and apply precautions to deal with these risks, including: training and supervision, waste, pests and management controls

SGS provides a complete range of food safety management services that assist retailers to deliver food products that constantly meet their high quality standards as well the increasing complex regulatory standards of health, safety and environmental compliance. Retail hygiene audit is a fundamental procedure within a wider, integrated approach to food safety management.

A TYPICAL HYGIENE AUDIT WOULD INCLUDE:

- Food Deliveries
- Temperature control
- Storage areas & pallets
- Product handling
- Cleaning regime
- Personal hygiene
- Display of open foods
- Supervision, instruction and/or training
- Pest control
- Equipment and facilities
- Building structure
- Documentation, monitoring and records
- Emergency procedures

SGS has pioneered a proprietary global hygiene standard, the **Hygiene Monitored** approval scheme that provides a corrective framework and independent global benchmark for food businesses focused on delivering measurable improvements in food hygiene operating standards.

The Hygiene Monitored scheme can be tailored to most food operations including retail supermarkets,

convenience stores and other retail outlets. Robust and yet flexible, it encompasses all aspects of food hygiene and safety in these environments.

The scheme can be applied to operations of varying complexity and risk, allowing operations under the same ownership to be compared in a meaningful way. The aim of the scheme is to support companies to understand how to apply practical, 'hands-on' solutions to food safety & hygiene matters. These solutions and their methods are the keystone to fostering the principles that will build a positive food safety & hygiene culture within your organisation. Client corrective actions can be monitored and closed out by use of a real-time web-based system.

SGS has possibly the largest global network of food specialists to undertake Hygiene Monitored or other form of retail hygiene audits, operating to a documented system with strict quality control procedures applied in each country. SGS is the only global supplier of consistent and portable food safety/hygiene solutions, wherever your business is based.



FOODBORNE PATHOGENS

A large batch of beef is suddenly recalled and destroyed. A child dies and others become very ill from drinking fresh apple juice. In one US mid-western city 400,000 people experience diarrhoea and vomiting symptoms. Such news stories of people getting sick from food make the headlines but are no longer new to us. Yet with continued advances in technology, and improved hygiene conditions and legislation, why do we continue to hear about food-borne illness today?

Improved diagnostic techniques permit the detection of disease outbreaks from pathogenic bacteria that would have been of unknown origin in the past. But the incidence of pathogenic bacteria continues to increase due to changes in demographics (an aging population), consumer lifestyles (more fresh & natural produce) and food production economics (global distribution through longer supply chains). More troublingly, as living organisms, pathogenic bacteria are constantly evolving and continue to elude detection through look, smell or taste by the even the most discerning consumer. With improved ability to trace outbreaks, scientists are discovering that some bacteria survive in environments previously thought safe.

The control of the three major food-borne pathogens *E. coli* 0157:H7, *Salmonella* spp and *Listeria monocytogenes*, remain at the forefront of well designed and implemented food safety programs. Infection with any one of these can have devastating long term effects including death. The food industry continues to spend millions developing detection techniques and strategies to control or eliminate their introduction to the food supply.

The difficulty lies in not only preventing them from entering the food supply through known methods of transmission, but in anticipating where or what will show up next. Originally a pathogen like

E. coli was called hamburger disease because of its presence in under cooked ground beef but in 2006 the US reported *E. coli* 0157:H7 outbreaks were most likely related to shredded lettuce and other leafy greens such as spinach. The indication of yet another potential source for this devastating pathogen to contaminate the food supply has companies all across the supply chain scrambling to determine ways to eliminate the latest problem.

The biggest achievements in pathogen control come from a proactive approach that encompasses the entire supply chain. Success is only as strong as the weakest link in the chain. Research into control and prevention tools and practices, commitment of resources and measurement of progress are critical to the success of a sound program. You need to ask yourself if your suppliers are committed as they should be and if sufficient and correct preventive measures are being taken.

There are other organisms with the potential to be added to the list, other vehicles of transmission we haven't seen yet. While testing is effective, many other factors contribute to the success of a complete program. Staying at the forefront on this issue is critical to staying in business and requires constant vigilance that often exceeds the individual resources of a company.

SGS Food services continues to invest in developing world class testing capabilities in the main sourcing and consuming countries. Our network of laboratories and capabilities are now structured to optimise cross-lab synergies, to create specialised competence centres, to share best practices and to develop new testing methods for client & network benefit.





TRACEABILITY, THE FOOD CHAIN

Globalization of the food supply chain means that distance between processors and farmers can often be many time zones apart. A spice sourced in one country may have undergone numerous compositional changes before being completely absorbed in processing. Without an accurate log of all the locations and the nature of processes that have occurred, if E.coli contamination is identified for instance, it's not much good to announce the recall of a whole batch of ready-to-eat meals when no one is sure where the contamination took place.

Traceability or trace-back is a combined system of methodologies to trace, follow and identify uniquely a raw material, product unit or batch through all or part of the steps of production, processing and distribution.

Food traceability is in the news in articles ranging from food safety and bioterrorism to the consumer's statutory right to know where something comes from. Some of the more common traceability applications have focused on tracking cattle from birth to finished product to control the risk of mad cow disease, on tracking food shipments to reduce the risk of tampering, improving supply chain efficiencies, and on traceability systems to inform consumers about food attributes like country of

origin, animal welfare, and genetic composition. Although traceability systems can have a variety of objectives depending on their purpose, more and more governments around the world are making traceability a mandatory condition to operate.

Firms have three primary objectives in using traceability systems: improve supply management; facilitate trace-back for food safety and quality (and to meet regulatory requirements); and differentiate and market foods with subtle or undetectable quality attributes. The benefits associated with these objectives include lower cost distribution systems, reduced recall expenses, and expanded sales of products with attributes that are difficult to discern. In

every case, the benefits of traceability translate into larger net revenues for the firm. These benefits are driving the widespread development of traceability systems across the U.S. food supply chain.

To better control food products, more information concerning the sourcing, processing, transport or storage of the products needs to be recorded and communicated throughout the supply chain. This is a key input to a food traceability system. To contribute effectively to risk mitigation a traceability system should be linked with withdrawal and recall systems. Traceability then becomes an effective management tool, providing a mechanism by which prompt reaction to a crisis in the food supply chain is possible.

SGS Food Services recognises that not one traceability system fits all. Before implementing a traceability system, you need to ask yourselves some probing questions: What is traceability for my company? What is my company's definition and scope of traceability? Which information must be available for tracing? Which regulations do I need to comply with? SGS can provide a range of audits to make sure production records are being properly monitored. Customised packages are available to support retailers implement robust traceability systems from technology (e.g. RFID), database management systems to practice withdrawals.

NUTRITIONAL LABELING

In 2009 an imported fruit drink claimed on its packaging to be fortified in Vitamin C content. When checked by a US government agency it was found that the drink actually had less than 5% of the declared claim.



Under US nutritional labelling requirements, the product was automatically detained. In another scenario, a random check at the port of entry discovered that a foreign baby cereal failed to list all of the required nutritional information on the box. The product was seized by the authorities.

These are just a couple of the common occurrences of food products being withdrawn from the market because of inadequate Nutritional Analysis and/or lack of compliance with local Nutritional Labelling Regulations.

Around the world at least 74 countries and trading blocks have some of sort of nutritional labelling regulations, or they are in the process of enacting nutritional labelling regulations. But there is no consistency of regulation or standard. While some countries have mandatory nutritional labelling regulations for most food products, others have only voluntary nutritional labelling requirements unless a nutritional claim is made on the product.

Diets vary from country to country and what may be commonly consumed in say Indonesia without nutritional guidance would need detailed clarification to be sold in Japan.

Because of the variances in nutritional labelling regulations around the world, there are also differences in approved and/or recommended testing methods to perform Nutritional Analysis. Even with AOAC International, ISO and other reputable organisations certifying methodologies it is a challenge for a single laboratory to know how to properly perform nutritional analysis to meet nutritional labelling conditions for each specific country that the product will be shipped to.

For full compliance, since each country or area has their own nutrition labelling regulations, the label must be reviewed by experts who understand the specific labelling regulations of the country into which the product will be imported.

These experts must be competent and knowledgeable of the ever-changing regulation in the country.

This is why suppliers, importers and retailers have come to rely on the expertise of SGS through its vast global network of laboratories and labelling specialists, keeping food products safe and meeting nutritional labelling requirements. Technicians within SGS's testing laboratories are knowledgeable in specific labelling requirements and can conduct Nutritional Labelling Reviews, including particular product claims, against local regulations, making methodology recommendations that will ensure the analysis is compliant with the intended market.

SUSTAINABILITY AND SOCI

The challenges of maintaining development that is sustainable require innovative approaches that inspire, and call businesses, governments and people to action.

Sustainability is a big buzzword in the green movement which means, in its simplest form, that what is used is replenished. Much of our impact on the planet is through the purchase and consumption of products. Products, and the total 'footprint' they create, are therefore key to reconciling the twin objectives of sustainable development, a strong, healthy and just society 'and living within environmental limits'. The retail sector can make a huge contribution to sustainability through their own operations, through their supply chains and by making the products they sell more sustainable across their whole lifecycle.

ECO-PACKAGING

Society considers packaging a source of waste; over-packaged products leave a negative impression with eco-conscious consumers. As a result, retailers are pressured to find the most environmentally efficient form of packaging while at the same time reducing costs and improving performance. Well designed packaging can improve a product's positioning in the market and simultaneously optimise logistics, materials and energy.

SGS has developed customized tools that integrate packaging efficiency with environmental impacts using ecodesign principles. We can help you with packaging design, select environmentally preferable materials, and incorporate end of life considerations such as recyclability to ensure a complete packaging solution. Finally, our Paper and Packaging labs can measure the performance of the new designs against corporate standards.

CARBON FOOTPRINT

A carbon footprint analysis measures and quantifies the total amount of carbon dioxide (CO₂) and other greenhouse gas emissions caused by an activity, individual, organization or product. Food, the essential consumer product, is increasingly under the spotlight as we debate the impacts of global supply chains including agriculture, food miles, processing of food and food waste. The aim of the process is to decrease the carbon footprint following the assessment by identifying areas for improvement.

As a food manufacturer, your priority

may be to conduct an internal site assessment to understand the carbon footprint of your operations; you might then assess the emissions further up the supply chain. Food retailers may go even further and assess the full carbon footprint of a food product or product range using a life cycle assessment approach, either cradle to gate or cradle to grave. Providing consumers and buyers with meaningful information on a food product's carbon footprint not only allows them to make more informed purchasing decisions but can positively influence consumer perception of the brand name.

Carbon footprint analysis can be a good starting point to increasing the long-term sustainability of a business, ensuring a competitive advantage, protecting your brand and being ready for the increase in initiatives, standards and even regulations on sustainable products. and sourcing of sustainable raw materials.



AL RESPONSIBILITY

GREEN PROCUREMENT

Due to growing public awareness on environmental issues, consumers are increasingly including environmental criteria in their purchasing trends. They are willing to buy food products from companies that:

- Manufacture with minimal inputs; raw materials, water and energy;
- Purchase food products from responsibly produced sources;
- Produce organic foods;
- Process foods with minimal or zero waste
- Use minimal packaging;
- Use lower energy consuming agricultural products;
- Minimize the content of animal products and ingredients;
- Help the development of small producers (fair trade);
- Ensure fair labor practices are in place for their employees;
- Ensure the welfare and humane treatment of animals;
- Transport food efficiently, avoiding air travel;
- Minimize the overall carbon footprint.

However, green purchasing managers report a lack of tools and clear performance indicators. They also lack internal expertise to assess and monitor sustainability performance of products and services. Even though many ecolabels have been developed to respond to this demand and identify products that are more "eco-friendly" and guarantee a level of environmental performance, the consumer can be still confused in front of all the diverse information. Buyers may make uninformed green purchasing decisions, which may be highlighted by NGOs who are active to expose green washing and bad environmental practices of companies. SGS has developed tools and methods to support companies to implement sustainability practices in their procurement policy.

ENERGY EFFICIENCY

Not only does poor energy efficiency make it difficult for food manufacturers to remain economically competitive, it is the cause of many ecological problems. Therefore, it is important to reinforce energy management, and to improve the level of energy efficiency. SGS Energy Efficiency Services are based on this concept. Our services include:

- Energy audit and evaluation of energy consumption;
- Energy savings Measurement & Verification (M&V);
- Energy management system services;
- Operational tests on major energy consuming equipment, energy project supervision;
- Energy management training

ENERGY AUDIT AND EVALUATION OF ENERGY CONSUMPTION

In coping with increasing demands for professional energy management services, the dedicated energy services team of SGS provides energy audit services to energy consumers. We believe that a good energy management strategy will positively contribute to the long term economical and environmental benefits of any operation.

SOCIAL RESPONSIBILITY

Companies that practice social accountability lower the risk of contributing to social and environmental harm by committing to standards that address their stakeholders' concerns. Effective social accountability programs are characterized by transparency, engagement with stakeholders, and a long-term, systematic approach. The aim of social accountability audit/monitoring is to ensure that your business partners are meeting your company's commitment to corporate social responsibility. To validate transparency, consistency and integrity,



many companies rely on SGS to monitor compliance issues and provide them with the assurance they need.

The key to sustainable improvement is to build capacity in the factories themselves. SGS offers a range of training for suppliers ranging from briefing sessions to explain client requirements to training on specific issues for management and supervisory levels. In addition, SGS partners with NGOs and other interest groups to arrange training for workers on labour rights and other issues. SGS works with companies to understand, provide suggested enhancements and fully adopt and deploy existing compliance programs, or to create a new one specifically tailored to their business needs.

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