



TRUST



QUALITY

PET FOOD PROXIMATE ANALYSIS

MAKING THE DIFFERENCE

INNOVATIVE ANALYTICAL SERVICES FOR PET FOOD



EXPERTISE



The SGS laboratory in Brookings, South Dakota, is equipped with cutting edge technology and the latest testing methods to provide you with complete analytical testing for pet foods. Our proximate analysis provides you with a series of tests that determines the amounts of protein, fat, moisture, ash, and fiber in pet food products. Using this information, the nutritional value of your pet food can be appropriately determined. SGS uses wet chemistry methods to determine the amount of protein, fat, moisture, ash, and fiber in pet foods.

PROTEIN ANALYSIS

Carbon and nitrogen percentages are determined in pet foods by combustion followed by chromatographic separation of components. The samples are dried, weighed, and assessed in an Organic Elemental Analyzer for combustion and quantification. The percent protein can be calculated from the percentage of nitrogen present.

FAT ANALYSIS

The amount of crude fat present in pet foods can be determined by extracting a dried sample using an automated Soxhlet unit (Soxtherm). The percent crude fat is reported by calculating the ratio of fat extracted to the original sample weight.

MOISTURE ANALYSIS

The percentage of moisture present is determined by drying the sample. The ratio between the final and original weight of the sample indicates the level of moisture present.

ASH ANALYSIS

The degree of inorganic residual material present in pet foods is determined by burning the sample at a high temperature. The percentage of ash is determined by the difference in weight between the starting and final weights of the sample.

MICROBIAL ANALYSIS

Testing for bacterial contamination is an important part of a pet food safety monitoring program. The presence of *E. coli*, *E. coli* O1:157; *Salmonella*, or *Listeria* can be determined within a standardized Polymerase Chain Reaction (PCR) protocol. Traditional plate testing and culture identification is also available.

FIBER ANALYSIS

The percentage of crude fiber, ADF, and NDF present can be determined by dissolving soluble components such as cellulose, hemi-celluloses, and lignin with sulfuric acid and potassium hydroxide. The undigested material is dried, weighed, and then incinerated. The difference between the content of ash and undigested material is the crude fiber.

CONTAMINANTS

Melamine, mycotoxins, veterinary drug residues (such as antibiotics) and hormones may be concentrated in products after processing. These contaminants may harm animals and humans in concentrated levels. To prevent fatal health consequences, specific contaminants need to be identified prior to products entering the animal and human food supply chains. These contaminants may be analyzed with use of the LC/MSMS, GC/MS, or PCR technologies.

TECHNOLOGY AND INNOVATION

Innovation is at the heart of our business. New technologies deliver knowledge, insight, transparency, and efficiency for our customers.

All Species ID

Analyze food for the presence of meat, fish, seafood, plants and microbes. All Species ID is a powerful DNA Next Generation Sequencing tool for food analysis, authenticity testing and the identification of ingredients, pathogens, allergens and adulteration.

SGS Digicomply

Simplify compliance with SGS Digicomply, which is a regulatory intelligence network that transforms compliance data into user-friendly actionable knowledge. Information overload makes it difficult to identify and process the important content, impacting understanding of issues and decision making. Our powerful knowledge management platform combines high technology with human expertise to sort and classify multiple data sources into one coherent data feed.



SGS BENEFITS

Recognized as the global benchmark for quality and integrity, SGS is the world's leading inspection, verification, testing and certification company. With more than 97,000 employees, SGS operates a network of over 2,600 offices and laboratories around the world. We are a leading independent third-party service provider and offer efficient solutions to help safeguard quality, safety and sustainability throughout all stages of the food supply chain. We strive to deliver outstanding value at every step in your project by providing:

- Rapid turnaround time
- ISO 17025 Accredited and GMP+ B11 Certified
- Latest technologies
- Technical assistance
- Customized service

CONTACT US

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WHEN YOU NEED TO BE SURE

SGS