CHIMERANEWS

Food for thought...



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Insight

Dear Readers, welcome to our Spring Issue of Chimera News. We are reaching the time of year when everyone is frantically trying to complete a variety of tasks before, hopefully, taking a break ahead of the onslaught of the following year.

This newsletter has articles on a variety of topics that can be misunderstood by those outside of the food industry, including food labelling, Food Safety Management Systems and the South African Food Regulatory environment.

We discuss the South African regulators who are responsible for different aspects of food safety and labelling. We hope this will be of help to clients when developing products, revising labelling and navigating import and export.

We also examine the reasons to implement a Food Safety Management System, as well as the resource considerations before beginning one. A FSMS is a valuable tool for managing product quality and safety, but is expensive and timeconsuming to run.

We are also fortunate to have a guest article from Catherine Robinson on whether South African Consumers find food labelling easy to understand and helpful in making choices.

Like many other organisations, we will be closing at the end of the year, on December 15th, and reopen on January 10th 2017. I will be returning in May, as I will be going on maternity leave, in the interim David will be handling all of my current projects and clients during my absence.

We wish all of our clients a restful Festive Season and a profitable New Year.

yes

Gillian de Villiers Director of Chimera Systems

Food for thought – How useful are nutrition labels to the average South Africa?

With escalating rates of lifestyle-related health issues globally, it has never been more important that consumers are aware of the factors which are under their control when they make food choices. Understanding and correctly interpreting food labels can enable consumers to make informed decisions about the foods they choose to purchase and provide to their families.

In the 2011 study Consumers' knowledge of food label information: an exploratory investigation in Potchefstroom, South Africa, some valuable insights were gained despite the limited scope.

The study was limited to a group of 299 participants, of which the largest component was Afrikaans-speaking females with a tertiary education and no children. However, 4% and 38% of respondents had below grade 12 or up to grade 12 levels of education respectively.

While information such as best before dates, storage instructions and identifying symbols such as Halaal or Heart Foundation endorsements were easily and accurately identified by the vast majority of respondents, only 53% of respondents were able to calculate how many serving sizes were included in a product. Since many food labels give nutritional information 'per serving' – this indicates a clear problem in correct application of the information, even if the values themselves are largely understood, and the participants are well educated. In addition, manufacturers are required to include nutritional values per 100g –

however whether this will be of benefit to a consumer making an instore decision under a time constraint is debatable.





While many consumers may be aware that is it recommended for them to cut back on saturated fat, only 3% of respondents could correctly identify a food as being low in saturated fat.

Under the current labelling regulations (R146/2010) the amount of saturated fat 'per serving' and 'per 100 g' are mandatory where nutritional information or claims are provided.

Even more importantly, as long as a food manufacturer does not make any nutritional claims about their product – it is not compulsory for them to publish these details at all. And this is not entirely negative – smaller manufacturers without the funds to have their product analysed by an accredited laboratory every 3 years should certainly not be prevented from entering the marketplace in the first place; and they will still be required to provide a list of ingredients, additives, allergens, storage information, etc.

But does reading and understanding food labels actually lead to improved choices?

According to Food and nutrition labelling: the past, present and the way forward (Koen et al., 2016), the short answer is yes. People who make use of food labels were found to be more likely to make informed food choices in practice – with their diets reflecting a reduced fat, cholesterol, sodium, and overall energy intake, and increased consumption of fibre, iron and vitamin C.

In light of this since the publication of the latest regulations relating to the labelling and advertising of foodstuffs, or R146/2010, we have certainly made some progress towards food labelling practices which are easier for the average consumer to understand, however there is still significant room for improvement.

Looking at the largest South African study to date conducted after the implementation of the new regulations, conducted by Bosman *et al.* with 1997 respondents across four ethnic groups – some general areas of interest were uncovered:

- Most consumers are able to locate the nutritional information on packaging, however some expressed uncertainty in their understanding of the information provided.
- Consumers who did not read labels on a frequent basis indicated lack of interest, habitual

purchasing, price concerns and time constraints as the main reasons.

"People who make use of food labels were found to be more likely to make informed food choices in practice"

Furthermore, in 2008, 41% of women and 21% of men in South Africa were classified as obese, with 32% of females and 35% of males with high blood pressure, which are considered to be diseases of lifestyle. (WHO, 2014). Between 2010 and 2011, the Department of Health enacted laws governing Trans-Fat and saturated fat in foods

and their labelling. Similarly, Sodium reduction laws, currently being revised, were published in 2013, for enforcement between 2016 and 2019.

In essence, many consumers still have difficulty putting their knowledge into action when making purchasing decisions, even with the current labelling systems. While there may be scope to improve the current R146 regulations and make them more accessible to the average consumer – a certain degree of accountability must be taken by individuals as well. Fine tuning the regulations and bringing them in line with global best practices is a goal we certainly need to strive towards, however the education of the public in making food choices is clearly just as vital.

Catherine Robinson

Engagement invitation: What are your thoughts?

Do you find nutritional labels hard to decipher?



Aiming for a Food Safety Management System

Why would one aim for a Food Safety
Certification? The basic South African legal
requirement for food production is that a food
facility must comply with R962/2012. If it
complies with this, and a Health inspector passes
the facility and awards a Certificate of
Acceptability, then food may be manufactured in
the facility. This is needed for all organisations,
from the smallest mobile coffee operator, to the
largest pre-packaged food manufacturer.

A Food Safety Management System (FSMS) is a tool to manage food safety, quality and legal requirements. While R962 covers the essential legal requirements for a facility, a FSMS assists in managing quality and safety. For many manufacturers the greatest reason to apply for a Food Safety Certification is because of customer demand, particularly from retailers.

All full Food Safety Certifications will require a Food Safety Management System to be implemented. This is essentially a documented Quality Management system that describes everything that is being done on the premises and allows production to conform with all aspects of Food Safety and legality. This includes such elements as "GMP/PRP" Good Manufacturing Practice and Pre-requisite programmes, which all facilities will have, such as cleaning, pest control programmes, allergen management, facility and

process layout, training needs, etc. In addition a FSMS will include an analysis of the specific needs and risks associated with your own production process, and how to manage this (HACCP - Hazard Analysis and Critical Control Points). Some more widely known certifications in South Africa are FSA (Food Safety Assessment), FSSC 22000 (ISO Food Safety System) and BRC (British Retail Consortium). FSA has recently become a stepping stone towards an FSSC22000 certification, while both FSSC22000 and BRC are internationally recognised GFSI-based Food Safety Certifications.

It typically takes a client between 6 months to a year to put a full food safety management system in place and be ready for an audit, depending on how available the quality manager/ Food technologist is and how much support they have. We would not recommend a client attempt to put a system in place in under 6 months. To be auditready it is necessary to have at least 3 months of documentation history, therefore, they have been manufacturing with most production documents in place for a period of 3 months. Likewise, these timelines also apply to clients going for the GMP basic and foundational level FSA audits. In addition, even once a system has been fully implemented, it will require considerable time and human resources to

manage it as with
most certifications
every document in the
system needs to be
revised annually, all
maintenance and
calibration managed,
monthly
microbiological testing
performed and
process and HACCP
documentation

"Certification may be a longer term process than manufacturers originally envision"

updated whenever a change is made to the production process, and this doesn't even cover the continuous improvement of the system required by the certification body to show due diligence in food safety.

If a potential client requires a certification before they are prepared to purchase the product, it would make sense to try to find other clients who can buy the product in the period that the organisation is manufacturing but not yet certificated, as it may be between 6 months and a year before certification, or even longer.

Because the Food Safety System is a living system, it is also not possible to audit before manufacture, as the audit needs to demonstrate that all the processes and procedures are being followed (including cleaning, pest control, and the appropriate manufacturing methods). The alternative, which some manufacturers have done, is to negotiate with their retailer to accept their product, while giving evidence that they are working towards a Food Safety Management System and certification. Depending on customer requirements, a manufacturer may manufacture for some time with only the Certificate of Acceptability, before choosing to implement a Management System and be certified. In the interim, to booste small business, some retailers have listed products of small manufacturers on the condition that they undergo and pass a GMP basic or foundational level audit.

In summary, gaining a food safety certification is resource intensive both during the initial implementation, and in its upkeep. Applying for a certification may also be a longer term process than manufacturers originally envision, therefore this should be carefully considered as part of the business case.

Gillian de Villiers

But I didn't know :'(

A brief guide to Food Regulation in South Africa

When manufacturers think of "Food regulations", generally the first things that will pop to mind are the Labelling regulations (R146/2010). Furthermore, if they are asked who governs the food regulations in South Africa, I would imagine the first response you would get is the Department of Health. Although not incorrect, the Department of Health is only one of the bodies tasked with the regulation of food in South Africa. Likewise, the Labelling regulations are only a few of a plethora of regulations directed at the management of food safety and the rights and wellbeing of the consumer. Our aim with this article is to try and provide you with a brief overview of the regulatory landscape of food within South Africa.

There are three main government departments tasked with the management of Food Safety and Quality, namely the Department of Health (DoH), Department of Agriculture, Forestry and Fisheries (DAFF), and the Department of Trade and Industry (DTI) – See hierarchy on lefthand panel. These departments have very specific mandates.

The DoH is tasked with the management of food hygiene (certifying manufacturers – Certificate of Acceptability), developing food safety & quality standards, and managing the country's food labelling, nutrition and fortification requirements.

Under the DoH, Directorate: Food control is responsible for the administration and enforcement of the DoH food regulation, and to provide consumers with the power to make informed food choices without being



misguided.

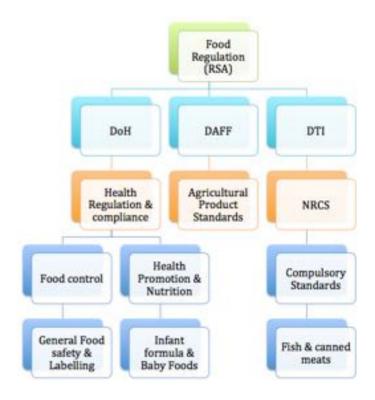
Similarly, the Chief Directorate: Health Promotion and Nutrition (previously, Directorate of Nutrition) is tasked with the development of a national nutrition programme and the administration of the baby foods and infant formula regulations.

DAFF is responsible for regulating agricultural products including traditional processed products such as jams, vinegars, pickles, honey and canned vegetables, through to dairy products, icecreams, meat and poultry. It is interesting that the scope of DAFF's administration does not only cover agronomy, agricultural practices and fresh produce, but extends also to agricultural product standards relating to labelling (grading and marking), import and export. DAFF regulations are promulgated at National level, but enforcement takes place at Provincial level. Thus always ensure that any agricultural products are passed by your local DAFF inspector before being placed on the shelf.

The other regulatory authority, the DTI regulates all canned meats, canned and frozen fish and seafood. Under the DTI, these products are regulated by the National Regulator for Compulsory Specifications (NRCS) through technical regulations known as compulsory specifications. All facilities that produce these products must abide by the strict requirements of these compulsory specifications (VC documents).

As you can see the food regulatory environment within South Africa is understandably quite complex, as different authorities regulate different aspects of labelling, food safety, facility design and product standards. For this reason it is imperative to ensure that all aspects around a product have been addressed before going to market. In many organisations this expertise is available in-house, however in other cases or with highly technical foods it can be well worthwhile to engage the services of a food safety and food labelling consultant.

David Scott



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Services

Food Safety Management: Food safety and the health of your product are at the core of every good food manufacturer. Let us assist you to implement pre-requisite programmes, good manufacturing practices and a robust food safety management system tailored to your certification needs.

Training: Let us assist you with your training needs, from basic food handler's and personnel hygiene to HACCP, internal auditor, and FSMS awareness. All group training packages include certificates.

Auditing: Whether it be pre-implementation or precertification, we conduct various audits to test or verify efficacy of your Food safety systems, or that of your supplier.

Food & nutritional labelling: We review client labels for conformance to the legal requirements of either the local or respective export markets.

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