Review

Improving street food vending in South Africa: Achievements and lessons learned

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Abstract

Until the late 1990s there were limited scientific data on the microbiological quality and safety of street-vended foods in South Africa, while information was already available in other developing countries, including those within the African region. At that time street-vended foods were perceived as unsafe and street food vending in South Africa was regarded as a practice, which should be outlawed. The first comprehensively documented scientific research into the safety of street-vended foods in South Africa was carried out through university-based research. This research found that street food vendors in South Africa were capable of producing relatively safe foods, with low bacterial counts, although there was still a need for proper hygiene conditions and access to basic sanitary facilities. The Department of Health of South Africa, when coordinating an FAO Technical Cooperation Programme (TCP) project on Improving Street Foods in South Africa, drew similar conclusions. This article provides information of the efforts by universities and health authorities in South Africa towards improving the safety and promoting the sale of street-vended foods. It is shown that a successful transition from street food vending being perceived as a nuisance by health authorities can be made to these authorities promoting and improving street food vending instead.

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Contents

1. Introduction ............................................................... 89
2. Initiatives by universities to determine the microbiological safety of street-vended foods ................................................. 90
3. Initiatives by food control authorities to improve street food vending in South Africa. ..................................................... 90
4. Conclusions ................................................................ 92
Acknowledgements ............................................................. 92
References .................................................................. 92

1. Introduction

Street-vended foods are defined as foods and beverages prepared and/or sold by vendors in streets and other public places for immediate consumption or consumption at a later time without further processing or preparation (Anon., 1996; Mosupye and von Holy, 1999). Street foods are said to provide a source of readily
available, inexpensive, nutritional meals, while providing a source of income for the vendors, although several concerns were raised over their safety and quality (Bryan et al., 1988; Dawson and Canet, 1991; Bryan et al., 1997; Moy et al., 1997; Mosupye and von Holy, 1999). However, despite the concerns raised and the fact that in many countries street food vending was regarded as illegal, the sector experienced significant growth during the past few decades, due to socio-economic changes in many countries, including South Africa. Today, street food vending in South Africa is probably the single largest employer in the informal sector and possibly one of the major contributors to the South African economy. This article aims to provide information on the efforts made by universities and health authorities in South Africa to document and improve the microbiological safety and promote the sale of street-vended foods in various South African cities.

2. Initiatives by universities to determine the microbiological safety of street-vended foods

Until the late 1990s there was limited scientific data on the microbiological quality and safety of street-vended foods in South Africa, while information was already available in other developing countries such as Zambia, Nigeria, Pakistan and the Dominican Republic (Bryan et al., 1992, 1997; Ekanem, 1998; Umoh and Odaba, 1999). As a result, it was generally perceived, in South Africa, that food produced and sold on the street in an informal setting was unsafe. Studies by Mosupye and von Holy (1999, 2000) were possibly the first comprehensive scientific research into the safety of street-vended foods in South Africa. Initial work comprised a study conducted to gain an overall indication of the microbiological safety of ready-to-eat street-vended foods sold in the typical South African setting of a major taxi rank in the Johannesburg Central Business District (Mosupye and von Holy, 1999). This study was a survey during which random samples of ready-to-eat salads, meat dishes and gravies were collected and analysed for, amongst others, aerobic bacterial counts, coliform counts and the presence of foodborne bacterial pathogens. The results obtained from this survey were compared to the results reported in similar studies conducted in other countries (Bryan et al., 1988, 1997; Ekanem, 1998; Umoh and Odaba, 1999).

The results were also considered in comparison to environmental conditions under which the street food vendors were noted to operate in Johannesburg (Mosupye and von Holy, 1999). This study concluded that the production of relatively safe street-vended foods, with low bacterial counts, was possible even under improper hygiene conditions and a lack of basic sanitary facilities.

A follow-up study was conducted to determine the potential microbiological hazards associated with food preparation and holding by some of the street food vendors that were involved in the initial study (Mosupye and von Holy, 1999). This study also aimed to identify potential critical control points that resulted in the acceptable microbiological quality and safety of street-vended foods in Johannesburg (Mosupye and von Holy, 2000). A total of 132 samples of beef, chicken, salad and gravy were collected over 11 replicate surveys. As in the previous study, water and surface swab samples were also collected. For each food type, samples were collected during preparation (i.e. raw materials and during cooking) and holding. The same microbiological analyses as in the initial survey were conducted (Mosupye and von Holy, 1999). In this study, cooking at temperatures exceeding 65 °C and short holding times were identified as the critical control points, which resulted in lower bacterial counts and lower incidences of foodborne pathogens in comparison to other studies. The study documented common practices among the street food vendors in Johannesburg that enacted those critical control points. According to the study, vendors prepared their meals fresh every day. Raw materials were always purchased from formal retailers each morning and only in amounts that would be prepared and sold on that same day. The food would be prepared and sold within 6 h, at which point the vendors would wash up and go home. In the event that food was left over that food would either be given to the homeless on the street or taken home for consumption by the family. Very few vendors re-sold leftovers and those that did produced food that was microbiologically less acceptable. The study, however, also revealed a potential risk of preparing unsafe foods due to cross contamination and recontamination of cooked products. Re-contamination of ready-to-eat foods resulted, in most cases, from the use of cooking utensils that were not thoroughly cleaned. The study indicated that these utensils may have been contaminated by the dishwater when they were washed. By the time food was ready to be served the dishwater was highly contaminated, because it was not regularly changed (Mosupye and von Holy, 2000). This study revealed that although street vendors could produce and sell relatively safe food, there was still a need for basic sanitary facilities, such as running water and toilets.

The most recent work conducted on street food vending in South Africa was conducted in the Free State Province, in the city of Bloemfontein (Lues et al., in press). In this study the microbiological quality of the food sold and the hygienic conditions under which vendors operated were assessed. The microbiological quality of the foods sampled was compared to existing food safety guidelines. This study found that, overall, the microbiological quality of foods from which samples were taken was within acceptable safety limits, but that the presence of Escherichia coli, Staphylococcus aureus and Salmonella was indicative of a degree of ignorance of the foodhandlers (at the vending sites) and a cause for concern. The study therefore concluded that even though the bacterial levels detected in the food were below the set guideline limits, it was still required that the local authority in that area intervene through health education actions to preclude problems developing, and to ensure that the standard of safety of street-vended foods is the best attainable at the time of sale and consumption.

3. Initiatives by food control authorities to improve street food vending in South Africa

The data produced in the studies by Mosupye and von Holy (1999, 2000) and Kubheka et al. (2001) were also used as relevant information by the Department of Health when coordinating an FAO Technical Cooperation Programme (TCP) project on Improving Street Foods in South Africa (Martins and Anelich, 2000).
The research on the economic impact of street food vending in South Africa conducted as part of the TCP project revealed that street food vending in South Africa contributes greatly to the economy of the country. This research revealed that in 1994 an estimated 44.7 million Rand was spent on street food outlets in the Gauteng Province, while in the Western Cape over 8 million Rand was spent. In addition in 1998, over 18 million Rand was spent on street-vended foods in the Durban metropolitan area (Martins and Anelich, 2000). Furthermore, in 1999 private households in South Africa spent around 4.3 million Rand on food bought for consumption away from home and more than 47% of that amount was spent on meals and snacks bought from hotels, restaurants and street vendors (Martins and Anelich, 2000).

Microbiological analyses conducted in this TCP project on street-vended foods collected in Johannesburg, Germiston and Pretoria revealed similar results to those reported by Mosupye and von Holy (Martins and Anelich, 2000; Mosupye and von Holy, 2000). This project also reported similar behaviour among the street food vendors as that reported in the studies by Mosupye and von Holy, proving that this was not just a common practice in Johannesburg City, but throughout the Province (Martins and Anelich, 2000). Taking into account the different cultures found in the Gauteng Province, one could extrapolate that similar behavioural patterns may be found elsewhere in the country. Following the research, workshops were conducted to present to various local authorities the findings of the research with the aim of encouraging them to address street food safety through health education, rather than outlaw street food vending (Martins and Anelich, 2000).

Some local authorities took the initiative to improve street food vending in their areas of jurisdiction, even prior to the TCP project. One such local authority is the Ethekwini Metropolitan Council (formerly called Durban Unicity), in the KwaZulu-Natal Province (Anon., 2000). After some research into the impact of street food vending within Durban City, the Metro made the decision to integrate the informal economy into its long-term plan to promote its economic development. Some of the benefits of the informal economy that were identified were that the informal sector makes an important contribution to job creation; that it provides convenience to its customers; and that, due to its diverse nature, is able to meet the cultural and religious needs of the people in the Metro. The Durban Informal Economy Policy, which was developed as a result provides a strategy that the Metro has aimed to follow in achieving its economic development goals. Today in the Ethekwini Metro street food vendors operate in allocated areas, thus minimising the problem of public nuisance in Durban City and surrounding towns. The Metro ensures that prior to receiving the certificate of acceptability that allows them to operate, street food vendors receive essential food hygiene training, which enables them to comply with minimum hygiene regulations. Certification of vendors, in terms of national food hygiene regulations, allows for better control and coordination of the sector within the Metro (Anon., 2000).

The Ehlanzeni District Municipality (formerly called the Nelspruit Municipality) in the Mpumalanga Province is one of the first local authorities that chose to adopt the recommendations of the TCP project and work towards improving street food vending in its area of jurisdiction. The Municipality compiled what was at the time referred to as the Nelspruit Street Trading By-laws. The aim at the time was to implement the By-laws within the area of the mentioned local authority and then later extend the implementation of the By-laws to the entire Ehlanzeni District. In implementing these By-laws, the municipality registered all street food vendors in its area of jurisdiction and identified and allocated specific sites to them strictly as food-vending sites. These food-vending sites are limited as a means of controlling the number of vendors per area, thus allowing for effective control and coordination of the street food vendors. At these sites the municipality has provided basic facilities for the vendors such as cleaning services, running water, wash basins, storage facilities and toilets. The maintenance of these facilities, as well as the upkeep of the food-vending sites is paid for by the vendors themselves. Vendors are required to comply to minimum requirements that have been based on the National Hygiene Regulations. The municipality continues to offer training to the vendors and conduct inspections as part of compliance monitoring.

The Gauteng Department of Health developed the Informal Food Trading Programme to promote safe food handling within the informal food-trading sector in the province, as part of the World Health Organisation’s initiative to promote Healthy Cities among the communities of Gauteng. The objectives of the programme include providing street food vendors with a general knowledge and awareness of good hygienic practices, regulations and by-laws; encouraging the street food vendors to become responsible and conscientious in providing safe food to their clients and thereby reducing the risk of food contamination and the incidence of foodborne disease outbreaks. In implementing this programme the Gauteng Department of Health developed a set of flip charts that are used to train street food vendors on basic food hygiene. As part of its implementation process of the policy, the Johannesburg Metropolitan Council took the initiative to register street food vendors in its area of jurisdiction and allocate space for them at which to operate. The Metro also provided the vendors with basic facilities such as shelter, running water, toilets and, in some cases, electricity. However, the Metro made it a policy not to allow any vendors to utilise cooling devices such as refrigerators. Having refrigerators would cause vendors to store their prepared meals for extended periods, thus eliminating the critical control point of short holding times identified as one of the vital critical control points in assuring the safety of street-vended foods (Mosupye and von Holy, 2000).

The North West province has also developed a policy that contains minimum requirements that street food vendors should comply to.

In the Western Cape local authorities do not as yet have a policy on this matter and street food vending is being regulated in terms of the National Hygiene Regulations (Anon., 1999). Street food vendors are required, in terms of these regulations, to be in possession of a Certificate of Acceptability. The City of Cape Town created a target for itself of 94% compliance by vendors to that requirement by end-2005. This target was met in June 2005. Some of the initiatives used for monitoring and controlling of street food vending include education of the vendors through the use of the flip charts that were developed by the Gauteng Province
and re-printed and re-distributed nationwide by the National Department of Health as part of the TCP project (Martins and Anelich, 2000). In addition, regular inspections of street food vending premises are conducted and food samples are collected for microbiological analysis.

4. Conclusions

Improving the safety of street-vended foods in any developing country poses great challenges. The experiences in South Africa have shown that prior to any efforts being made to improve street food vending, baseline research needs to be conducted to determine the safety and socio-economic importance of street-vended foods. One of the major driving forces towards efforts to improve street food vending is the contribution that street food vending makes to the country’s economy. For South Africa, however, the finding that the food produced and sold on the street was relatively safe despite the unfavourable conditions in which the vendors operated, played some part in motivating the local authorities to change their perception on street food vending and embark on strategies to effectively control this sector. South Africa’s experiences also proved that success in this regard can only be ensured where food control authorities, street food vendors and all other stakeholders, including academic structures, collaborate to improve the sector, with all stakeholders having a clear understanding of their roles and responsibilities.

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References


