

# South African Fryer Oil Initiative

Newsletter No 62

January 2018

## **EDITORIAL**

As the beginning of this new year, we wish all our stake holders a prosperous 2018. As always our objectives are:

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### **SAFOI OBJECTIVES:**

- 1) *To terminate the consumption of unhealthy abused oils and fats especially by our poor communities.*
  - 2) *To develop and promote effective oil waste management procedures.*
  - 3) *To terminate misrepresentation practices.*
  - 4) *To promote the Steward's Principle.*
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## **PROGRESS**

The following progress was made in various aspects of our set objectives.

### **1. FRYING OIL & FAT ANALYSIS**

Our analytical section steered by Prof. Carlien Pohl and Mrs. Andri Van Wyk and Miss Aurelia Van Wyk has analyzed various frying oil samples from different industries.

### **SUMMARY OF RESULTS**

**Table 1** Quality of used frying oils and fats since January 2017. The percentage of samples above South African regulatory limits based on polymerised triglycerides (PTG) is included.

| <b>Drawn by:</b> | <b>No. samples analysed</b> | <b>% Samples above PTG limits</b> |
|------------------|-----------------------------|-----------------------------------|
| Industry*        | 210                         | 2                                 |
| <b>TOTAL</b>     | <b>210</b>                  | <b>2</b>                          |

According to The Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act no. 54 of 1972) published on 16 August 1996 in S.A., oil is deemed to be harmful or injurious to human health, unless they contain less than 16% PTGs and/or 25% PCs.

\*Some practicing the Steward's Principle

Please note that it is assumed that the used oil samples have not been cleaned by any means that may lead to colour changes and that the natural progression of oil breakdown has not been tampered with.

**Table 2** Quality of fresh unused oil since January 2017 (based on fatty acid composition).

| <b>Oil type:</b> | <b>No. samples analysed</b> | <b>No. of samples not complying with the particular Codex Standards</b> |
|------------------|-----------------------------|---|
| Palm             | 14                          | 0   |
| Sunflower        | 14                          | 0   |
| Soybean          | 5                           | 0   |
| HO Sunflower     | 17                          | 0   |
| Vegetable        | 0                           | 0   |
| Canola           | 2                           | 0   |
| Maize            | 1                           | 0   |
| <b>TOTAL</b>     | <b>53</b>                   | <b>0</b>  |

## **2. OIL ANALYSES FOR INDUSTRY**

Analyses were performed on various products for Precision Oils, Christo Strydom Nutrition, Kemin Industries, Supa Oils, Nativa, Quantum Foods, Southern Oil, LTL group of Companies and Willowton Oil. We would like to urge all members of the oil industry to use our services if there are any questions regarding the quality or authenticity of oil.

## **3. LIST OF AVAILABLE SERVICES**

Here is a list of the analyses that we currently perform:

- Polymerised triglycerides
- Fatty acids
- Total lipid percentage
- Peroxide Value
- Moisture
- Impurities
- Free fatty acids/Acid Value
- Iodine Value
- Density
- Refractive Index
- Oil extraction from solids
- P-Anisidine
- TBA (Malondialdehyde content)
- Rancimat
- Refractive Index
- Omega 3 & 6
- Solvent extraction (Soxhlet)
- Shelflife

## **CONTACT**

If you need more information on any topic presented in this newsletter please use the following contact address:

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