

## EDITORIAL

This has been a busy 6 months for myself and Aurelia Van Wyk, who has taken over the work of SAFOI full time from the beginning of this year. As always our objectives remain:

## SAFOI OBJECTIVES

To terminate the consumption of unhealthy abused oils and fats especially by our poor communities.

To develop and promote effective oil waste management procedures.

To terminate misrepresentation practices.

To promote the Steward's Principle.

## 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 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 December 2015. The percentage of samples above South African regulatory limits based on polymerised triglycerides (PTG) is included.

Drawn by:	No. samples analysed	% Samples above PTG limits
Health Departments North West	56	43
Industry*	91	0.0
<b>TOTAL</b>	<b>174</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. The worst oil had a PTG content of 33% and was drawn in the North West province.

Table 2

Quality of fresh unused oil since December 2015 (based on fatty acid composition).

Oil type:	No. samples analysed	No. of samples not complying with the particular Codex Standards
Palm	30	0
Sunflower	14	0
Soybean	6	0
HO sunflower	13	0
Vegetable	3	0
<b>TOTAL</b>	<b>66</b>	<b>0</b>

### 2 OIL ANALYSES FOR INDUSTRY

Analyses were performed on various products for Rossgro Feeds, Precision Oils, Southern Oils, Epol, Quantum Foods, Christo Strydom Nutrition, Kemin Industries, SGS Agri Food Laboratory, Supa Oils, AJ Oils, Wilson's Food, Wilmar, 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 ANALYSES DONE BY SAFOI

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
- 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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