

Is soya sufficient in the NSNP?

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The South African National School Nutrition Programme (NSNP) was introduced in 1994 by the government as part of the Reconstruction and Development Programme to feed primary school children.

In 2006 a survey conducted by the Fiscal and Finance Committee confirmed that a need existed to extend the programme to secondary schools. Subsequently, in 2008, the minister of finance announced a budget for the inclusion of secondary schools in the programme. Currently, the NSNP reaches more than nine million pupils in around 20 000 schools all over South Africa. Soya plays a cardinal role in this programme as it features at least once a week on the menu across all nine provinces.

A research study funded by the Oil and Protein Seeds Development Trust (OPDT) in 2018 titled 'The role of soya in the South African National School Nutrition Programme' delivered some concerning results regarding soya consumption in the NSNP. A follow-up study titled 'Building an evidence base for soya served in the National School Nutrition Programme' was conducted to further investigate the causes of a dislike of soya within the NSNP.

Results from these studies found that prepacked bags of soya delivered by suppliers contain large amounts of additives that were assumed to be maize meal and flavouring. Results showed that up to 60% of a bag of soya, as supplied by registered accredited vendors to schools, was powder and not soya chunks.

This raises the question whether the supplied soya mince is compliant with the specifications stipulated by the Department of Basic Education (DBE). (This product of lower quality leads to the final cooked product being an unappealing mush that pupils are not willing to

consume and which does not comply with the guidelines as set out by the DBE.)

Involvement of the DBE

Research studies led to various consultations with the DBE. During these consultations, numerous concerns were raised by the DBE on how to either improve soya meals within the NSNP or remove soya from the menu. The valuable data presented by the researchers motivated the DBE to keep soya in the NSNP and rather investigate options on how to improve the product offering and decrease the likelihood of lower quality soya products being supplied.

As a point of departure, the guidelines set out for soya in the NSNP need to be revised. It is recommended that the guidelines to soya suppliers within the NSNP be more specific, stringent and better implemented.

Soya guidelines

Current DBE guidelines state the following regarding soya mince in terms of composition per 100g dry product:

- Moisture content shall not exceed 9g.
- Protein content shall be at least 24g from soya protein.*
- Energy content should not be less than 1 365kJ.
- Sodium content shall not exceed 1 500mg.
- Calcium content shall be 150mg.
- Iron content shall be 13,3mg.
- Zinc content shall be 3,7mg.
- Dietary fibre should be 4g.
- Product should not contain more than 10% fat from other sources than soya protein product (SPP) or polyunsaturated vegetable oil.

**Protein content is currently under review and is recommended to be increased to 30g per 100g dry product.*

The guidelines also state that the SPP shall remain the main ingredient of the final product. This statement is open for interpretation as to what percentage can be referred to. More specific and enforceable guidelines are required that state exactly what the ratio of soya chunks to powder and additives can be. This should be accompanied by anonymous audits conducted in respect of suppliers and submitted to the NSNP.

Practical solutions

This research presented to the DBE caught the attention of the nutrition fraternity and the researchers presented on the topic at the biennial Nutrition Congress, co-hosted in April 2023 by the Association for Dietetics in South Africa and the Nutrition Society of South Africa. This congress brings together nutrition and dietetic collaborators from South Africa, Africa and further afar to deliberate the nutrition-related challenges that impact heavily on the health and quality of life of so many, as well as to consider potential relevant and practical solutions.

A presentation titled 'Investigating soya as a crucial food in the South African National School Nutrition Programme' proved to be a thought-provoking presentation during the session on nutrition interventions. Valuable feedback was gained from conversations held during the session regarding the important role of soya as a source of protein in these children's diets, and the interventions required to ensure that high quality soya is served.

Overall, researchers as well as the DBE agree that soya plays a valuable role in the NSNP. Industry and other relevant role-players should work together to ensure that soya of the highest quality is served to pupils to ensure that children develop a taste for soya from a young age. 🌱

For more information, visit www.education.gov.za/Programmes/NationalSchoolNutritionProgramme.aspx or send an email to hettie.schoenfeldt@up.ac.za.