

# Accepted Manuscript

Incorporating orange-fleshed sweet potato into the food system as a strategy for improved nutrition: The context of South Africa

Sunette M. Laurie, Mieke Faber, Nicole Claasen

PII: S0963-9969(17)30578-1

DOI: doi: [10.1016/j.foodres.2017.09.016](https://doi.org/10.1016/j.foodres.2017.09.016)

Reference: FRIN 6965

To appear in: *Food Research International*

Received date: 25 April 2017

Revised date: 4 September 2017

Accepted date: 8 September 2017

Please cite this article as: Sunette M. Laurie, Mieke Faber, Nicole Claasen , Incorporating orange-fleshed sweet potato into the food system as a strategy for improved nutrition: The context of South Africa, *Food Research International* (2017), doi: [10.1016/j.foodres.2017.09.016](https://doi.org/10.1016/j.foodres.2017.09.016)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



**Incorporating orange-fleshed sweet potato into the food system as a strategy for improved nutrition: the context of South Africa**

Sunette M Laurie<sup>a</sup>, Mieke Faber<sup>b,c</sup> & Nicole Claasen<sup>d</sup>

<sup>a</sup> Agricultural Research Council - Vegetable and Ornamental Plants (ARC-VOP), Pretoria, South Africa;

<sup>b</sup> Non-Communicable Diseases Research Unit, South African Medical Research Council, Cape Town, South Africa.

<sup>c</sup> Centre of Excellence for Nutrition, North-West University, Potchefstroom, South Africa.

<sup>d</sup> Africa Unit for Transdisciplinary Health Research, North-West University, Potchefstroom, South Africa

**Abstract**

Orange-fleshed sweet potato (OFSP) is considered the single most successful example of biofortification of a staple crop, and presents a feasible option to address vitamin A deficiency. Though initially promoted as part of a crop-based approach focusing on production and consumption at household level, it evolved into small-scale commercial production, predominantly in Sub-Saharan Africa. This paper reviews OFSP initiatives in relation to the South African food environment and food supply systems, also identifying opportunities for scaling out OFSP in a situation where sweet potato is not eaten as a staple. Current per capita consumption of sweet potato is low; the focus is thus on increasing consumption of OFSP, rather than replacing cream-fleshed varieties. For the major OFSP variety, Bophelo, 66 g consumption can be sufficient to meet the recommended daily allowance for 1-3 year old children (300  $\mu$ RE vitamin A). Despite a national Vitamin A supplementation programme and fortified staple foods in South Africa, 43.6% of children under 5 years of age were reported to be vitamin A deficient in 2012, indicating a stronger need to promote the consumption of Vitamin A-rich foods, such as OFSP. To increase availability of and access to OFSP, all aspects of the food supply system need to be considered, including agricultural production, trade, food transformation and food retail and provisioning. Currently, small-scale commercial OFSP producers in South Africa prefer to deliver their produce to local informal markets. To enter the formal market, small-scale producers often have difficulties to meet the high standards of the retailers' centralised procurement system in terms of food quality, quantity and safety. Large retailers may have the power to increase the demand of OFSP, not just by improving availability but also by developing marketing strategies to raise awareness of the health benefits of OFSP. However,

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات