

Sodium reduction in foods in South Africa

How much progress has been made?



[Bianca van der Westhuizen](#)
([PhD Nutrition](#))



THE HEART
AND STROKE
FOUNDATION
SOUTH AFRICA

Introduction...

How big is the problem?



1

Heart disease and stroke
15.2 million deaths/year



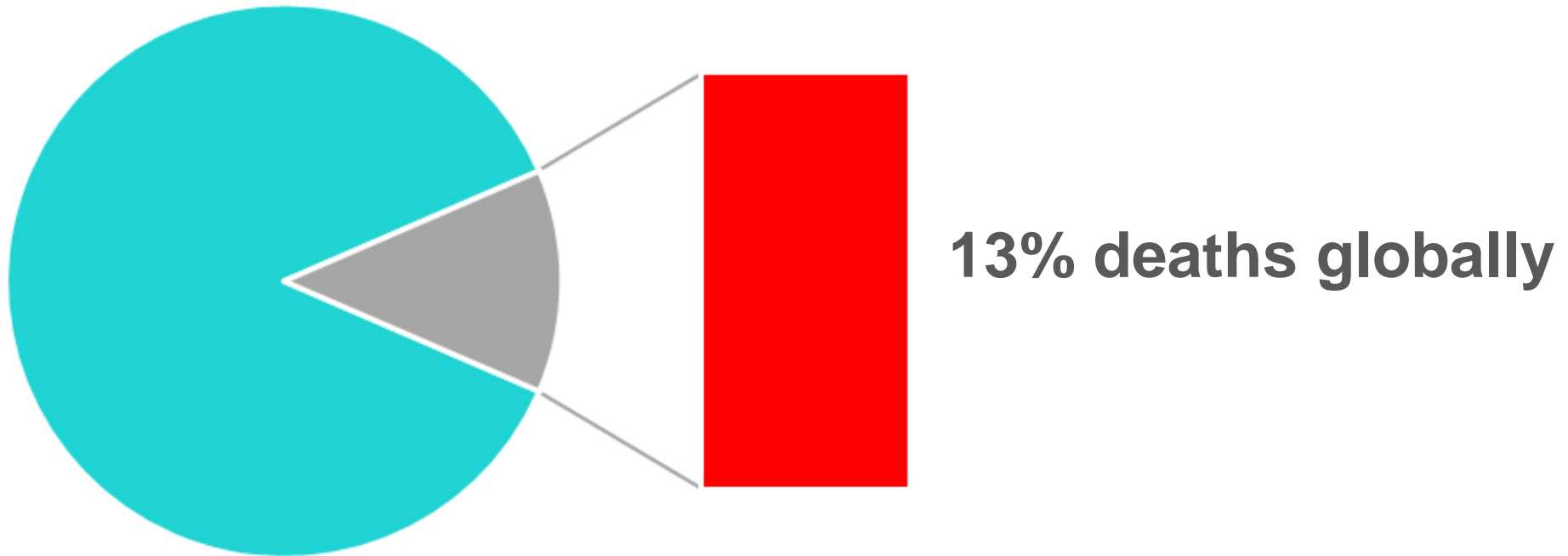
2nd

Heart disease and stroke
82 000 deaths/year

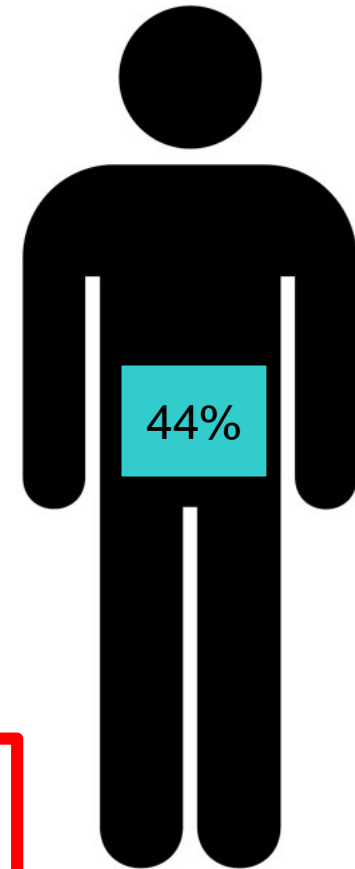
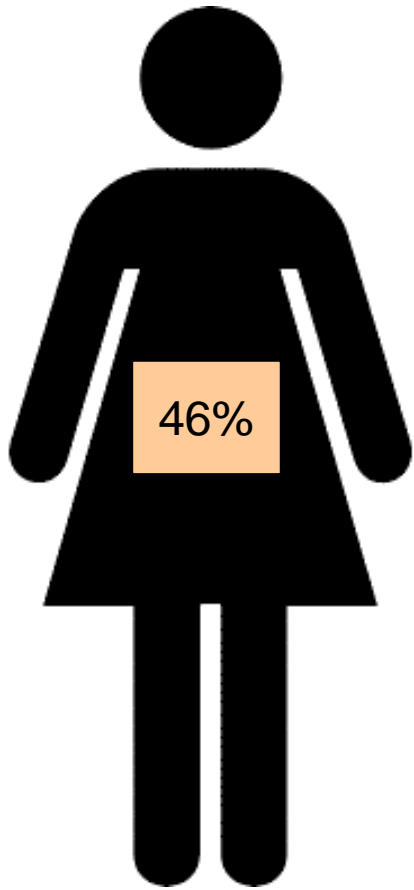


Introduction...

Hypertension / high blood pressure is the leading **risk factor** for death from CVD



Introduction...

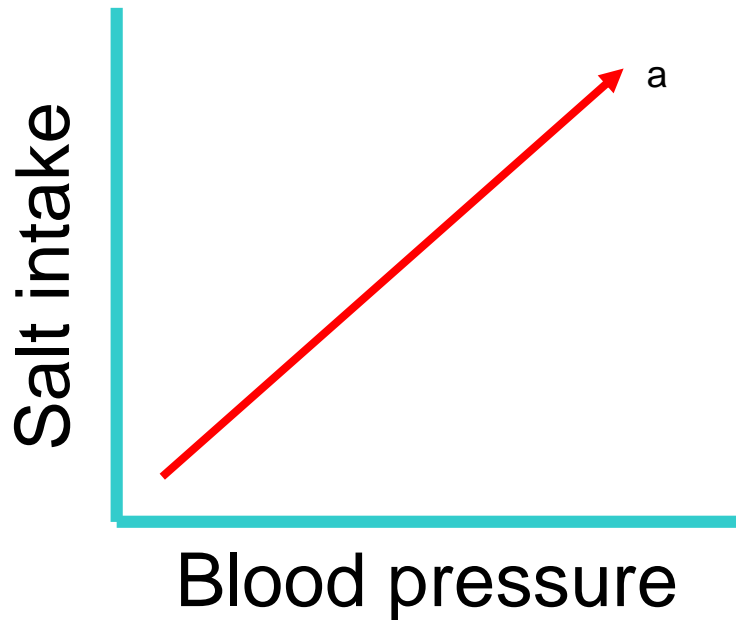


High blood pressure



Introduction...

Salt and blood pressure



9 – 12 g/day ^b



7,2 g/day
30% > 10g/day ^c

The recommended intake = 5g/day



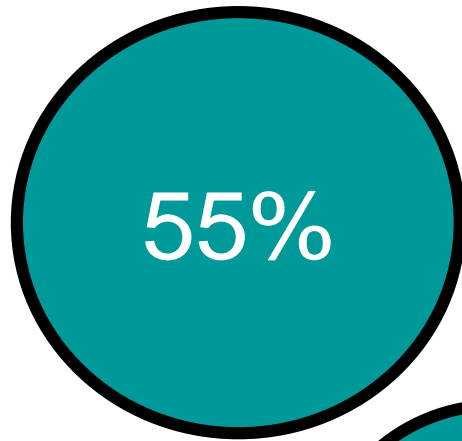
a He & MacGregor. J Hum Hypertens 2008;23:363–84.

b WHO, Salt and Potassium intakes

c Swanepoel et al. / Journal of the American Society of Hypertension 10(11) (2016) 829–837

Introduction...

Where does the salt come from?



processed foods



discretionary salt



natural



Introduction...

Where does the salt come from?

Top contributors to daily salt intake are:

- Bread (all types)
- Processed meat products
- Soup/gravy powder
- Meat and vegetable extracts
- Hard/block margarine
- Savoury snacks (including crisps)
- Breakfast cereals



Introduction...

How many lives can be saved?

**Potential for
large public
health effects**

**Relieve pressure on
the overburdened
health system**

Preventing 7 400 CVD deaths/year



Introduction...

How many lives can be saved?

Direct costs of treating a stroke amount to R76 000

Total annual saving of R300 million due to the prevention of non-fatal strokes



South African strategy...

- SA has developed a *Strategic plan for the prevention and control of NCDs*
- Some of the goals include:
 - ✓ Reduce mean population salt intake to less than 5g/day by 2020
 - ✓ Reduce the prevalence of people with raised BP by 20% by 2020 (through lifestyle and medication)



South African strategy...

GOVERNMENT NOTICE

DEPARTMENT OF HEALTH

No. R. 214

20 March 2013

FOODSTUFFS, COSMETICS AND DISINFECTANTS ACT, 1972 (ACT 54 OF 1972)

**REGULATIONS RELATING TO THE REDUCTION OF SODIUM IN CERTAIN FOODSTUFFS AND
RELATED MATTERS.**



So what progress have been made?



Good
Work



Progress...

Is sodium reducing in the food supply chain?

Is discretionary salt use declining in the public?

Is blood pressure levels and CVD incidences decreasing in SA?



Progress?

Food supply chain

Journal of Food Composition and Analysis 63 (2017) 73–78



Contents lists available at ScienceDirect

Journal of Food Composition and Analysis

journal homepage: www.elsevier.com/locate/jfca



Original research article

Sodium content of foodstuffs included in the sodium reduction regulation of South Africa



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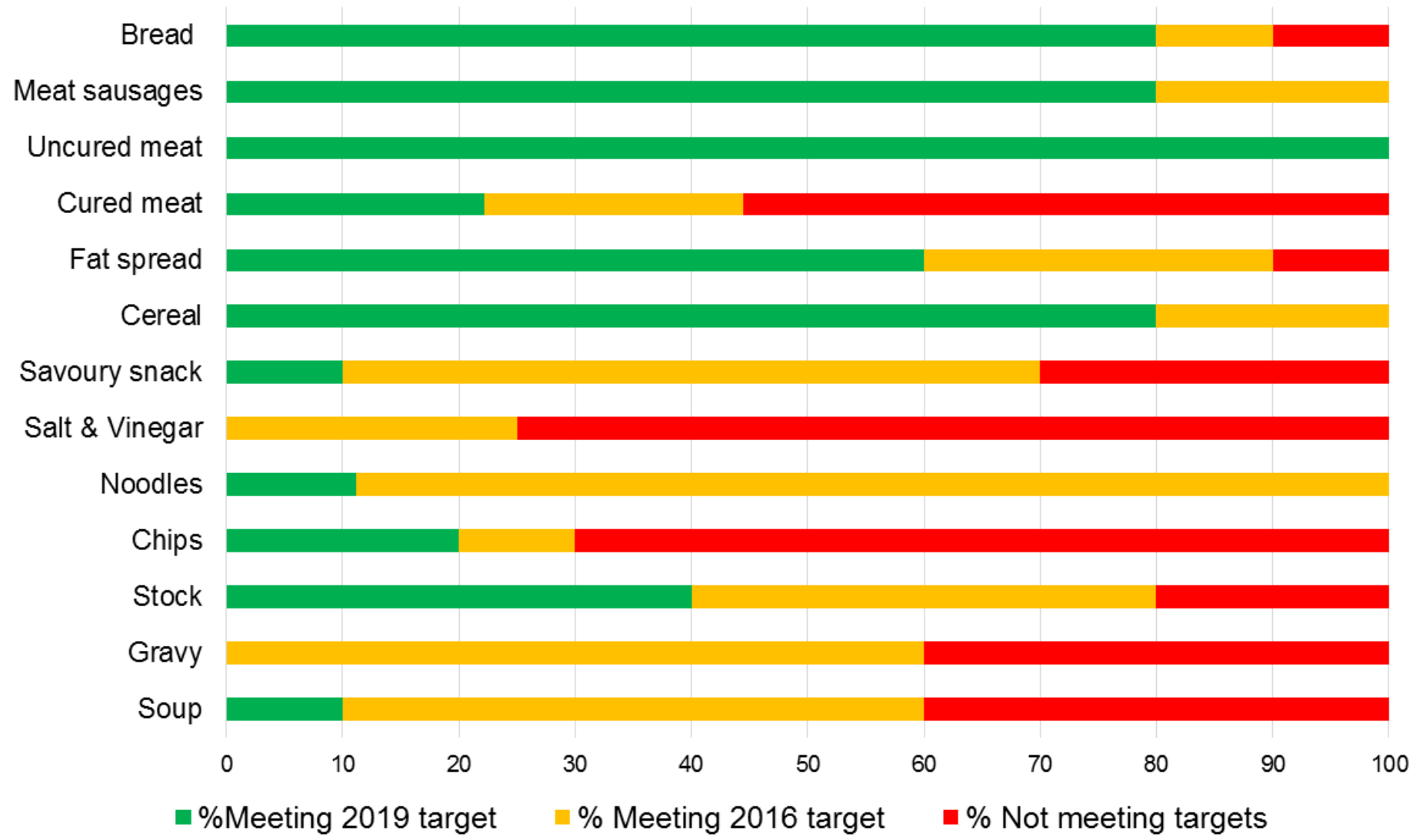
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^d Chronic Disease Initiative for Africa (CDIA), Department of Medicine, Faculty of Health Sciences, University of Cape Town, South Africa Barnard Fuller Building, Anzio Road, Observatory, Cape Town, 7935, South Africa



Progress...



Progress...



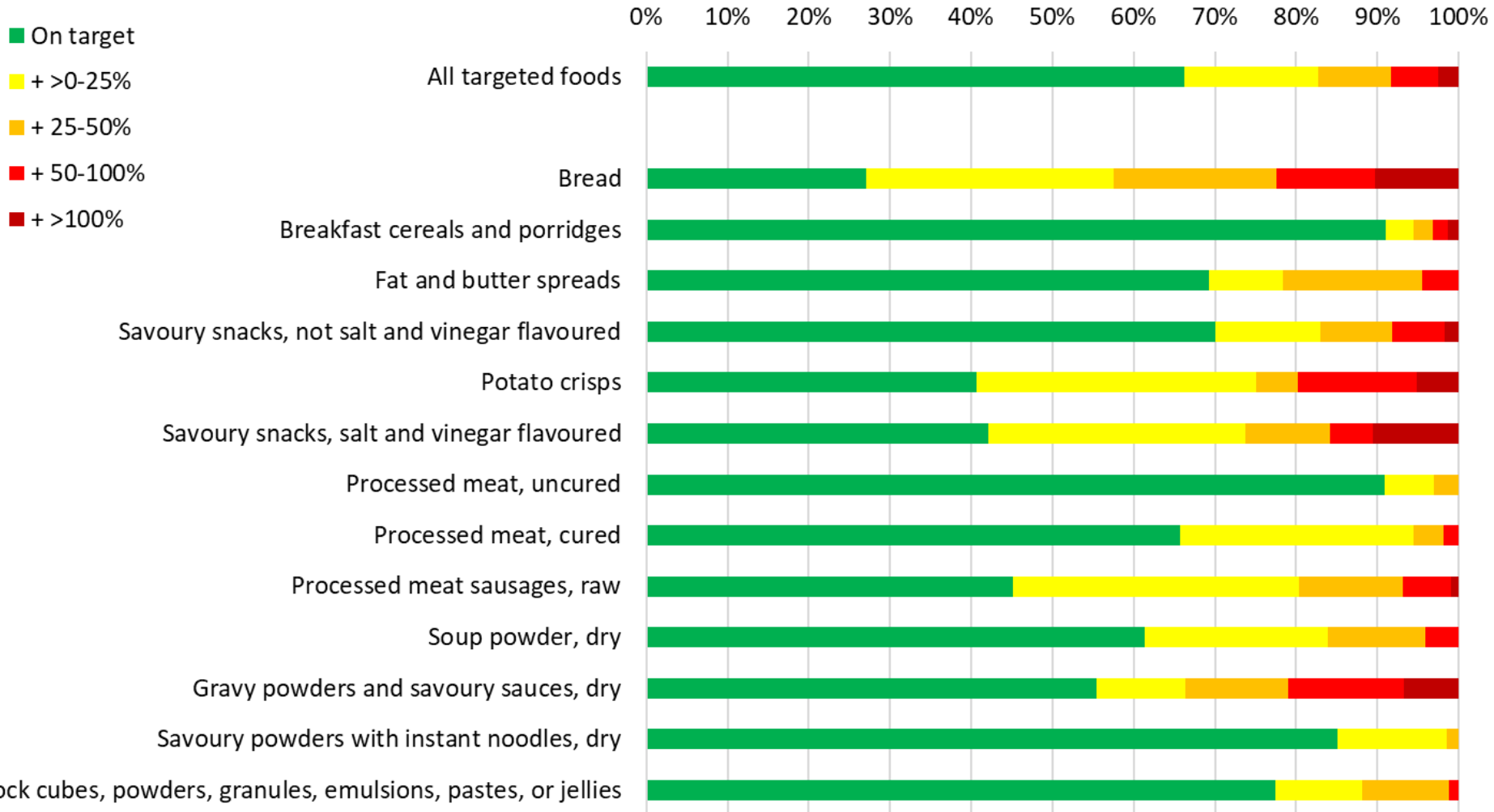
Article

The Sodium Content of Processed Foods in South Africa during the Introduction of Mandatory Sodium Limits

Sanne A. E. Peters ^{1,*}, Elizabeth Dunford ^{2,3}, Lisa J. Ware ⁴, Teresa Harris ⁵, Adele Walker ⁵, Mariaan Wicks ⁶, Tertia van Zyl ⁶, Bianca Swanepoel ⁶, Karen E. Charlton ⁷, Mark Woodward ^{1,3,8}, Jacqui Webster ³ and Bruce Neal ^{3,9,10,11}



Progress...



Challenges...

Progress should be measured in house, as part of research (Universities) or by government (DoH)

Chemical testing:

- *Expensive
- *Issues with method

Labs to undergo proficiency testing

Nutrition Facts	
Serving Size 2/3 cup (55g)	
Servings Per Container About 8	
Amount Per Serving	
Calories 230	Calories from Fat 40
% Daily Value*	
Total Fat 8g	12%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 160mg	7%
Total Carbohydrate 37g	12%
Dietary Fiber 4g	16%
Sugars 1g	
Protein 3g	

Using label information:

- *Cheaper option
- *Only covers foods with NIP





Progress...

Discretionary salt use



Article

Evaluation of a Mass-Media Campaign to Increase the Awareness of the Need to Reduce Discretionary Salt Use in the South African Population

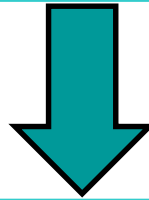
Edelweiss Wentzel-Viljoen ^{1,*} , Krisela Steyn ², Carl Lombard ³, Anniza De Villiers ⁴, Karen Charlton ^{5,6} , Sabine Frielinghaus ⁷, Christelle Crickmore ⁸ and Vash Mungal-Singh ⁸



Progress...

Discretionary salt use

Salt Watch, that was formed in 2014 and funded, in part, by DoH through the HSFSA ran a mass-media campaign to ↑ public awareness



More participants reported that they were taking steps to **control salt intake** (38% increased to **59.5%**).

In particular, adding salt while cooking and at the table occurred significantly less frequently.



Progress...

Discretionary salt use

Direct Quantitative Methods

- Lithium tagging of household salt
- Weighed household salt
- Using simulated meals
- Observing cooking practices

Qualitative Methods

- FFQ
- 24-hour dietary recalls
- Salt use Q



Progress...

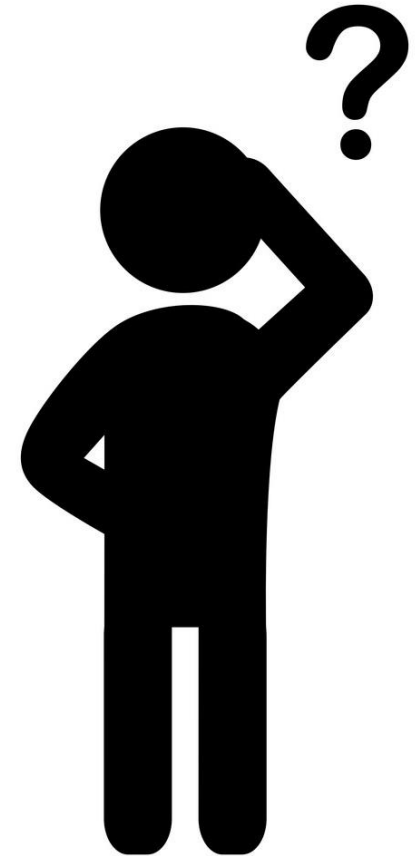
Blood pressure levels

In terms of blood pressure /
health data....

This will take time and will need
constant monitoring

SANHANES follow up

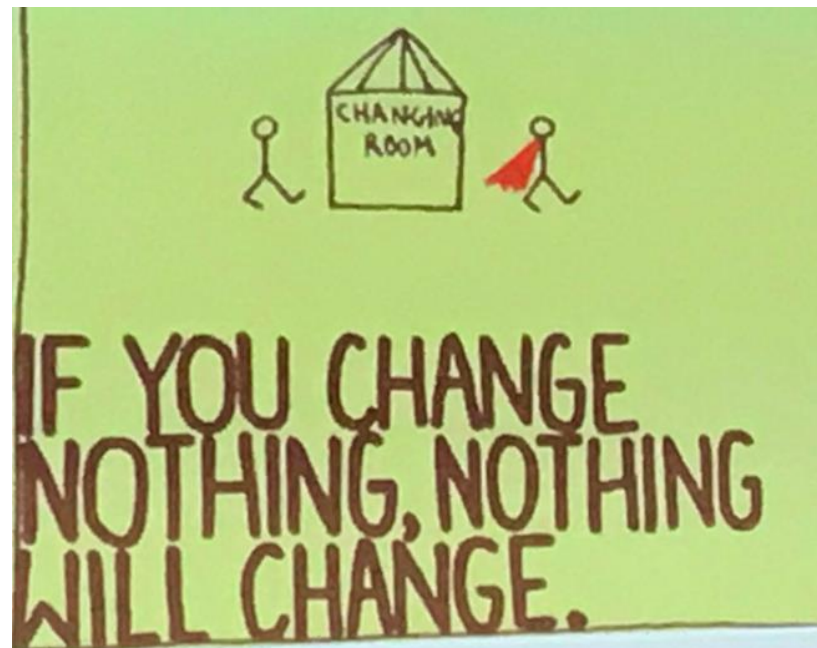
Big prospective research studies



Take home message...

Important for us to control the salt intake

- ✓ Economic implications
- ✓ Healthy workforce + increased productivity
- ✓ Consumers are more aware of their health...



Take home message...

This is a HUGE team effort

- ✓ Industry
- ✓ Government
- ✓ Academia

Monitoring and constant
feedback is crucial!



Take home message...

Keep doing the right thing because it's the right thing to do!



Thank you for your attention!



THE HEART
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