

Nutrient profiling: The story behind this useful tool

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More healthy vs less healthy foods



More healthy



Less healthy

Are these food more or less healthy foods?



Uncertain about certain processed foods

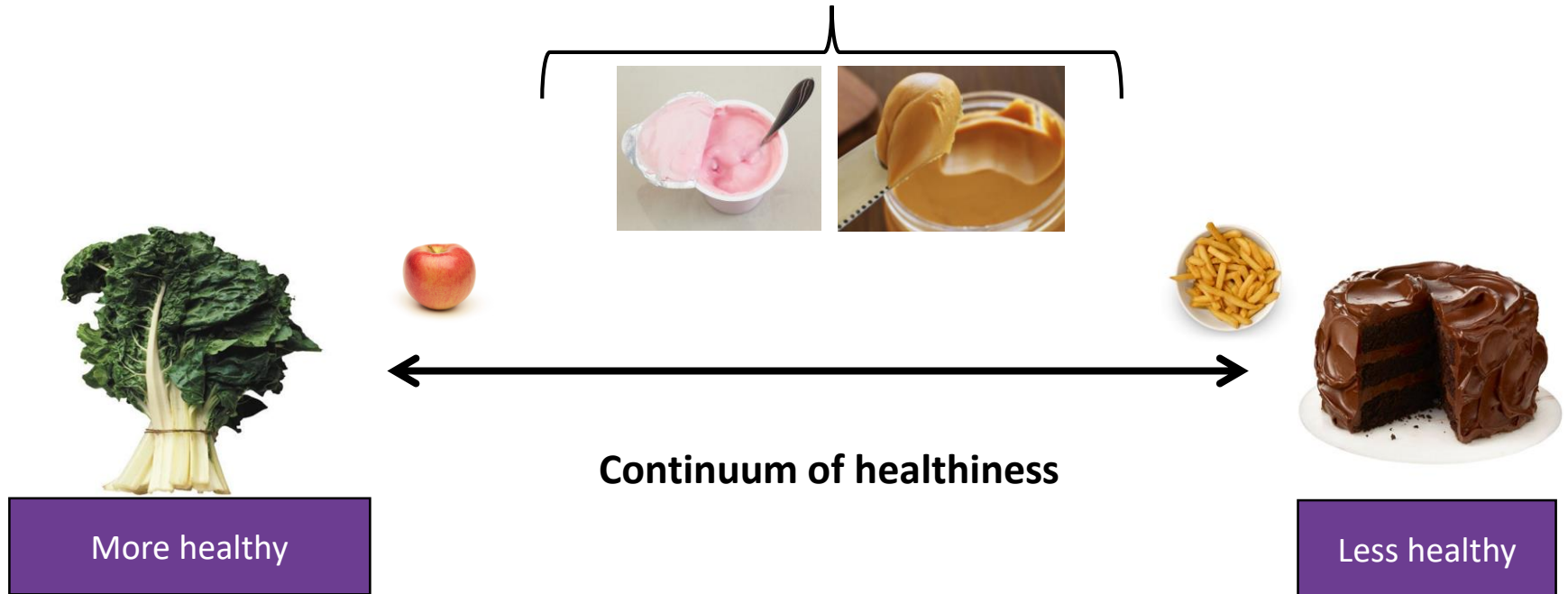


More healthy

VS

Less healthy

Uncertainty about certain processed foods





How do you define the healthiness of foods?

Nutrient Profiling

“The science of classifying or ranking foods according to their nutritional composition for reasons related to preventing disease and promoting health”

WHO, 2017

Nutrient Profiling

“The science of classifying or ranking foods according to their nutritional composition for reasons related to preventing disease and promoting health”

Nutrients to limit

sfat, free sugar and/or sodium

Nutrients/components to encourage

Fibre, prot, fruits & vegs, unsaturated fats, ca, iron, potassium, zinc, vitamins

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South Africa facing the double burden of malnutrition



Why is it important to classify the healthiness of foods?





Global Obesity Pandemic



Need for nutrition policies aimed at obesity prevention

Creating healthy food environments for all

Regulating nutrient and health claims

Front of Pack labelling

Restrict marketing of unhealthy foods to children

Setting food standards (e.g. Schools)

Fiscal policies (food taxes)

Nutrient profiling used as the science behind all of these policies

The science behind nutrient profiling

The science of Nutrient Profiling (NP)

- NP = Method to assess nutritional quality of foods
 - Objective, Transparent, Reproducible
 - Algorithms considering amount/presence of certain nutrients or food compounds to characterize “healthiness” of foods
 - Based on dietary guidelines to specific foods (GDAs/ WHO guidelines)
- Provides the science base for classifying foods
- Recognised by WHO to support food policies



NP and government-led nutrition policies

- Recent proliferation in NP models
- Recent systematic review: ↑ x 3 in past 6 years
 - All of the NP models include nutrients to limit (sfat, total sugar & sodium)
 - 86% models also considered nutrients or components to encourage (fiber, fruits & vegs etc.)
 - Limited information regarding validity testing of models
 - Motivate adopt or adapt existing model developed by authoritative body
 - Recommend validation of NP model before implementation

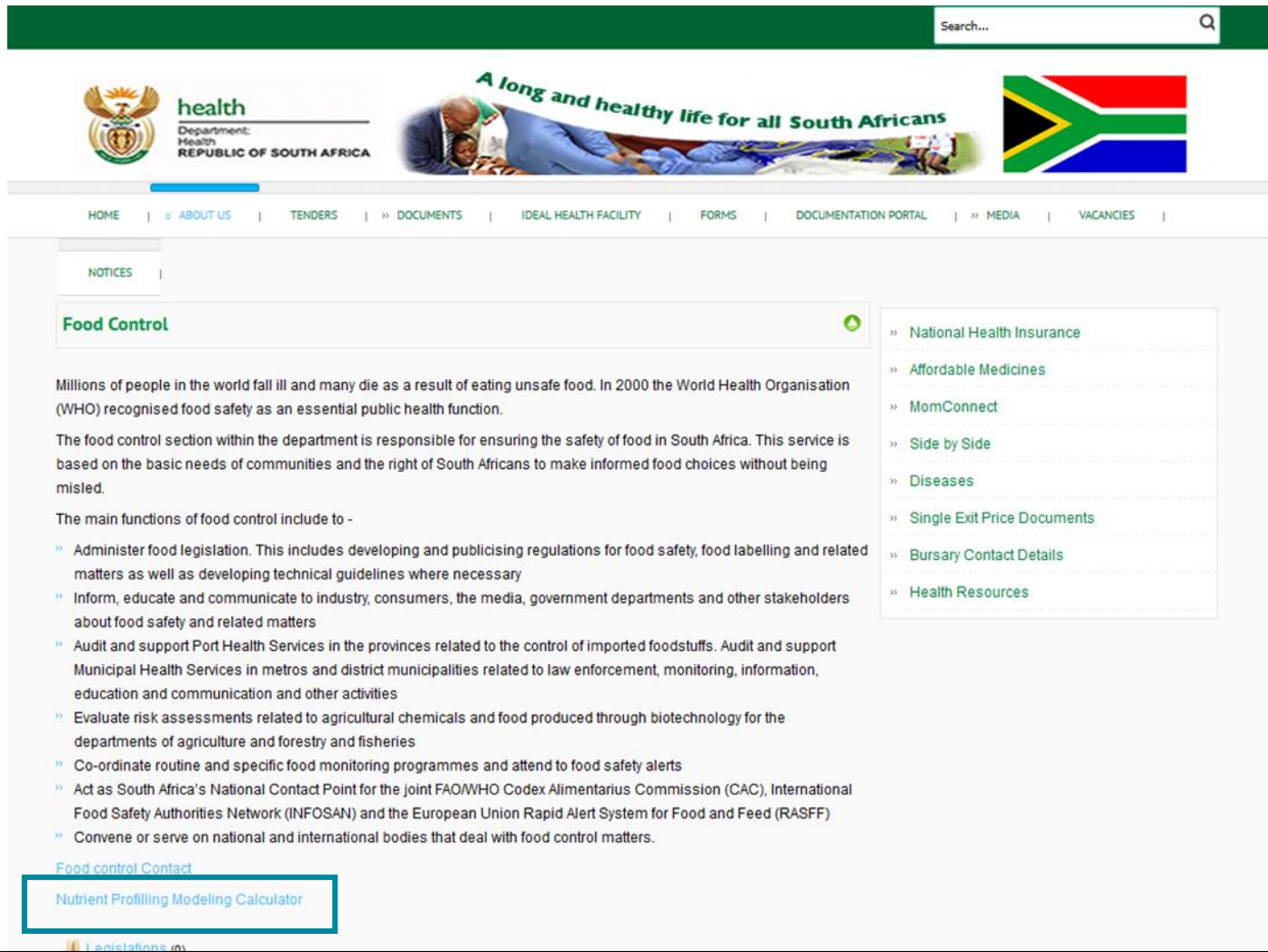
Labonté *et al.*, 2018

Use a of NP model in South Africa



NP model validated before recommend for implementation

South African Nutrient Profiling Model



The screenshot shows the official website of the South African Department of Health. At the top, there is a green header with a search bar. Below the header, the department's logo and name are displayed on the left, and a banner with the slogan "A long and healthy life for all South Africans" and the South African flag is on the right. A navigation menu is located below the banner, containing links to HOME, ABOUT US, TENDERS, DOCUMENTS, IDEAL HEALTH FACILITY, FORMS, DOCUMENTATION PORTAL, MEDIA, and VACANCIES. The main content area is titled "Food Control" and contains a paragraph about food safety, a list of functions, and a list of related topics. A "Nutrient Profiling Modeling Calculator" link is highlighted in a blue box.

health
Department:
REPUBLIC OF SOUTH AFRICA

A long and healthy life for all South Africans

HOME | ABOUT US | TENDERS | DOCUMENTS | IDEAL HEALTH FACILITY | FORMS | DOCUMENTATION PORTAL | MEDIA | VACANCIES

NOTICES

Food Control

Millions of people in the world fall ill and many die as a result of eating unsafe food. In 2000 the World Health Organisation (WHO) recognised food safety as an essential public health function.

The food control section within the department is responsible for ensuring the safety of food in South Africa. This service is based on the basic needs of communities and the right of South Africans to make informed food choices without being misled.

The main functions of food control include to -

- » Administer food legislation. This includes developing and publicising regulations for food safety, food labelling and related matters as well as developing technical guidelines where necessary
- » Inform, educate and communicate to industry, consumers, the media, government departments and other stakeholders about food safety and related matters
- » Audit and support Port Health Services in the provinces related to the control of imported foodstuffs. Audit and support Municipal Health Services in metros and district municipalities related to law enforcement, monitoring, information, education and communication and other activities
- » Evaluate risk assessments related to agricultural chemicals and food produced through biotechnology for the departments of agriculture and forestry and fisheries
- » Co-ordinate routine and specific food monitoring programmes and attend to food safety alerts
- » Act as South Africa's National Contact Point for the joint FAO/WHO Codex Alimentarius Commission (CAC), International Food Safety Authorities Network (INFOSAN) and the European Union Rapid Alert System for Food and Feed (RASFF)
- » Convene or serve on national and international bodies that deal with food control matters.

Food control Contact

Nutrient Profiling Modeling Calculator

Legislations (0)

» National Health Insurance

» Affordable Medicines

» MomConnect

» Side by Side

» Diseases

» Single Exit Price Documents

» Bursary Contact Details

» Health Resources

http://www.health.gov.za/phocadownload/FoodInfor/NPC_NWU.html

SANPM = Across-the-board Scoring Model

Points	Baseline Points Category 1 & 2 foods			
	Energy (kJ) 100g/ml	Saturated fat (g) 100g/ml	Total sugar (g) 100g/ml	Sodium (mg) 100g/ml
0	≤335	≤1.0	≤5.0	≤90
1	>335	>1.0	>5	>90
2	>670	>2.0	>9.0	>180
10	>3350	>10.0	>45	>900
Points	Modifying Points Category 1 & 2 foods			
	Protein (g) 100g/100ml	Fibre (g) 100g/100ml	% fvl 100g/100ml	% conc fvl
0	≤1.6	≤0.9	≤0.7	≤0.5
1	1.6	>0.9	>0.7	>0.5
2	≥3.2	>1.9	>1.4	>1.0
5	>8	4.7	>3.5	>2.5

Both disqualifying & qualifying nutrients

Nutrient standards = GDA's

3 Food categories
Beverages, foods, fats & oils

Same definition of more or less healthy applied to all food groups

Across-the-board Scoring Model: SA Model

Points	Baseline Points Category 1 & 2 foods			
	Energy (kJ) 100g/ml	Saturated fat (g) 100g/ml	Total sugar (g) 100g/ml	Sodium (mg) 100g/ml
0	≤335	≤1.0	≤5.0	≤90
1	>335	>1.0	>5	>90
2	>670	>2.0	>9.0	>180
10	>3350	>10.0	>45	>900
Points	Modifying Points Category 1 & 2 foods			
	Protein (g) 100g/100 ml	Fibre (g) 100g/100ml	% fvlN	% concentrated fvlN
0	≤1.6	≤0.9	<25	≤40
1	1.6	>0.9	≥25	>40
2	≥3.2	>1.9	≥43	>60
5	>8	4.7	≥67	>80

Conditions

Baseline ≥ 13 NO
Prot points UNLESS
max points for fvlN

Baseline Points

$$4 + 0 + 9 + 0 = 15$$

Modifying Points

Fibre points only = 5

Final Points

$$\text{Baseline} - \text{Modifying} \\ 15 - 5 = 10$$

More healthy Food < 4

More healthy Drink < 1

Less Healthy Food ≥ 4

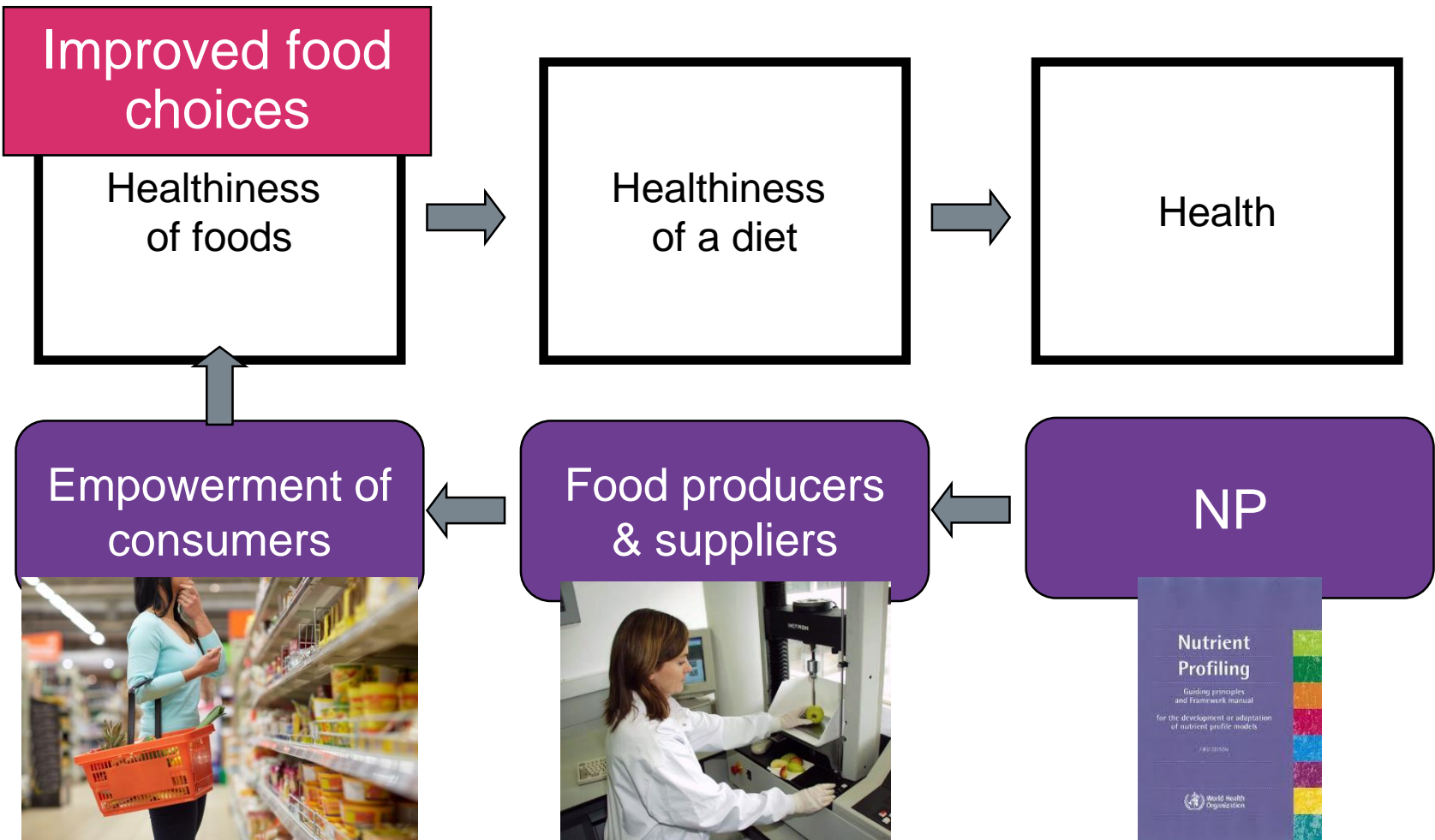
Less Healthy Drink ≥ 1

Uses of NP



How can a NP model aid in obesity prevention?

Actions to improve the human diet



Creating healthier foods

Product or meal reformulation



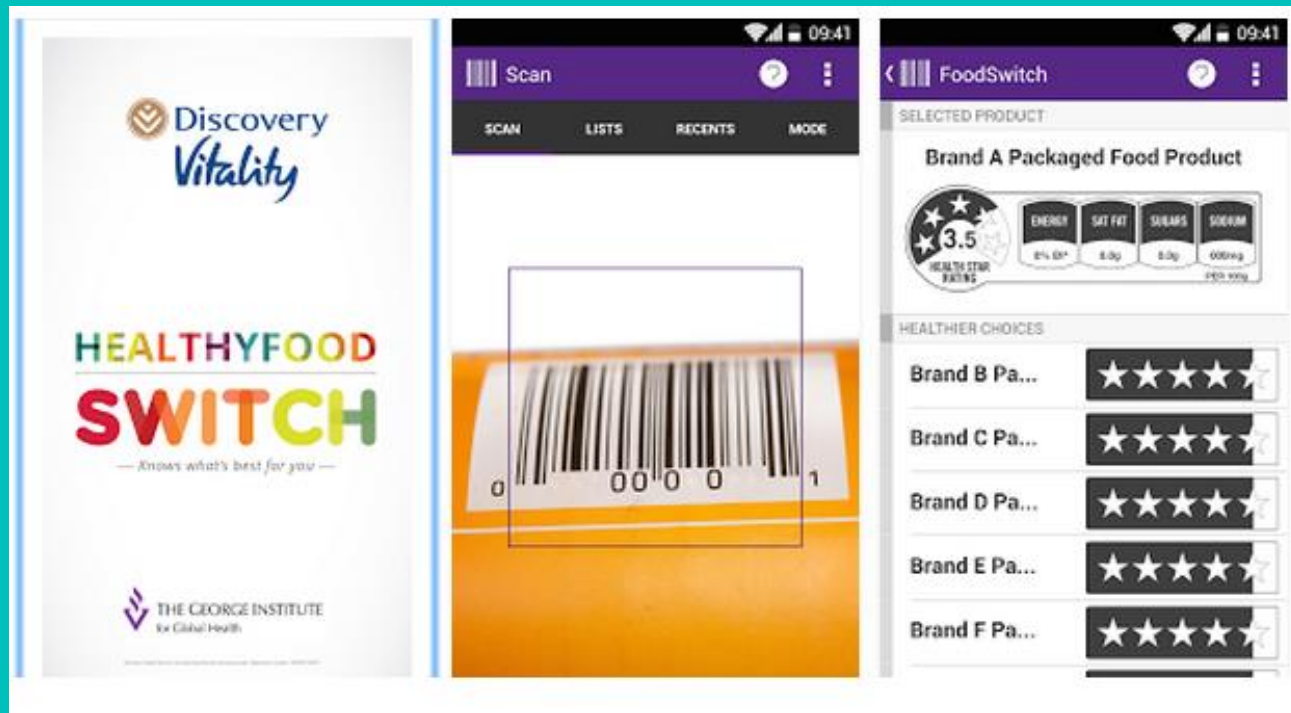
Important to create healthy food preferences

Education on healthier food choices



Education on healthier food choices

- Applications to assist with food selection



Food environments that support healthy food choices

School food
environment standards

Responsible marketing
of foods to children

Healthier foods:
affordable, available,
safe and desirable



Prevent disease but also Promote health



Meeting but not exceeding nutrient needs & correcting deficiencies



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