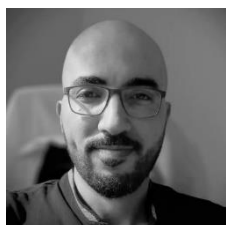




UNIVERSITÉ MOHAMMED VI
DES SCIENCES DE LA SANTÉ
CASABLANCA

Changing food environments to prevent NCDs in Morocco: Initiatives to lower sodium intake



Dr. JAFRI Ali

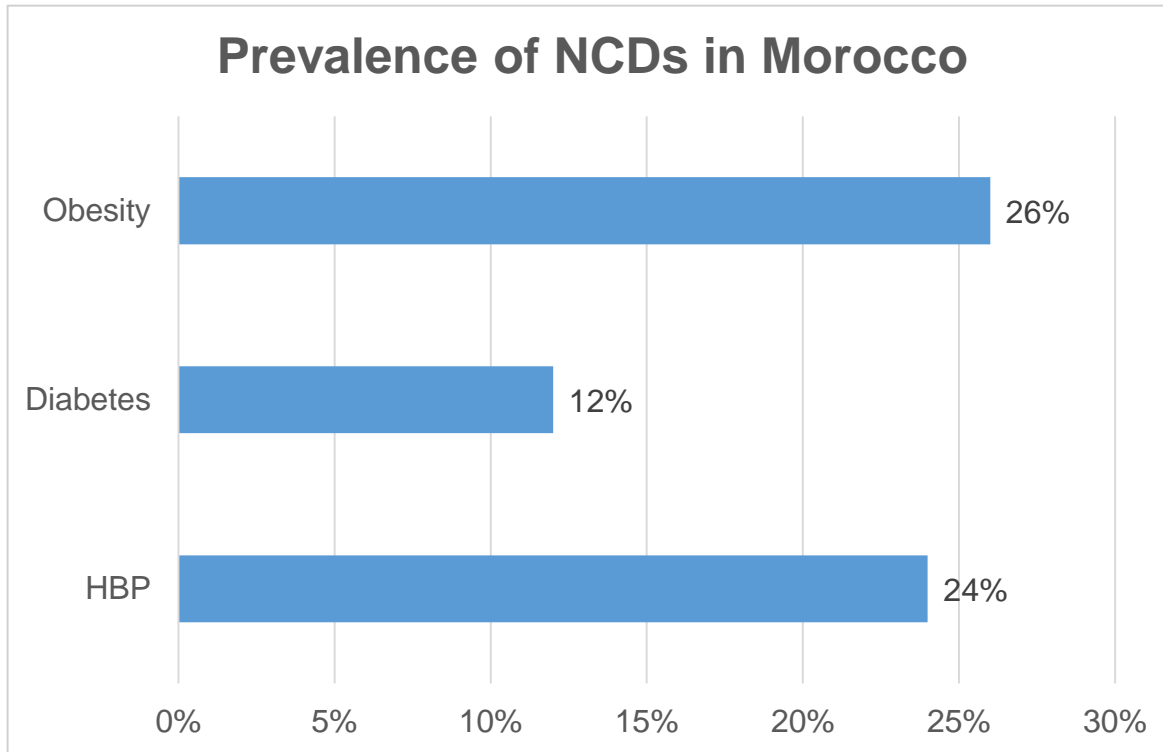
Faculty of Medicine

Mohammed VI University of Health Sciences

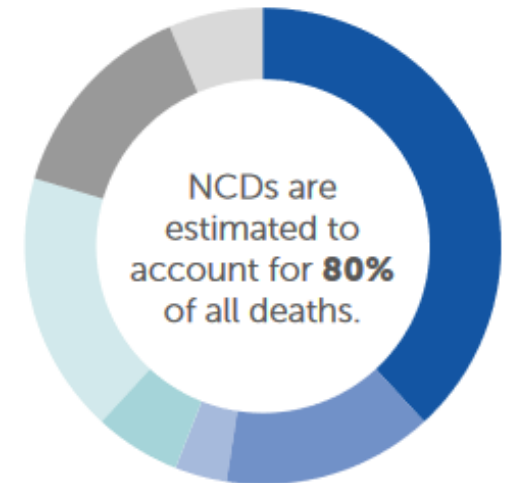
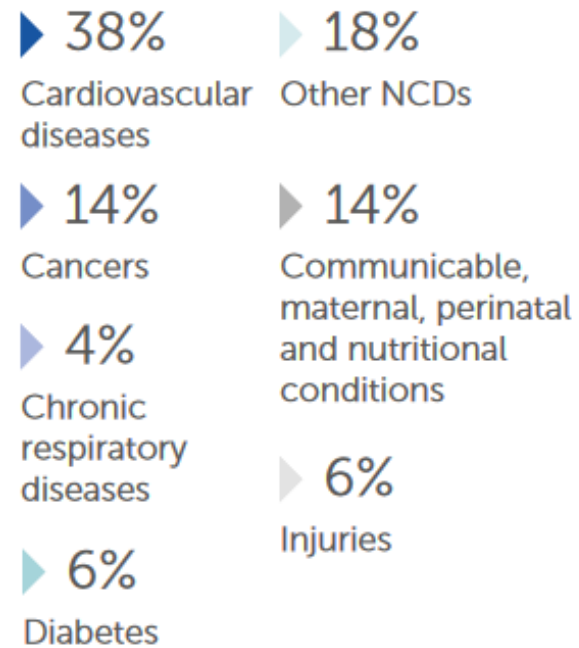
ali.jafri@outlook.com

1st Africa Food Environment Research Network Meeting
(FERN 2020) | Virtual Meeting | Nov 3 – 5, 2020

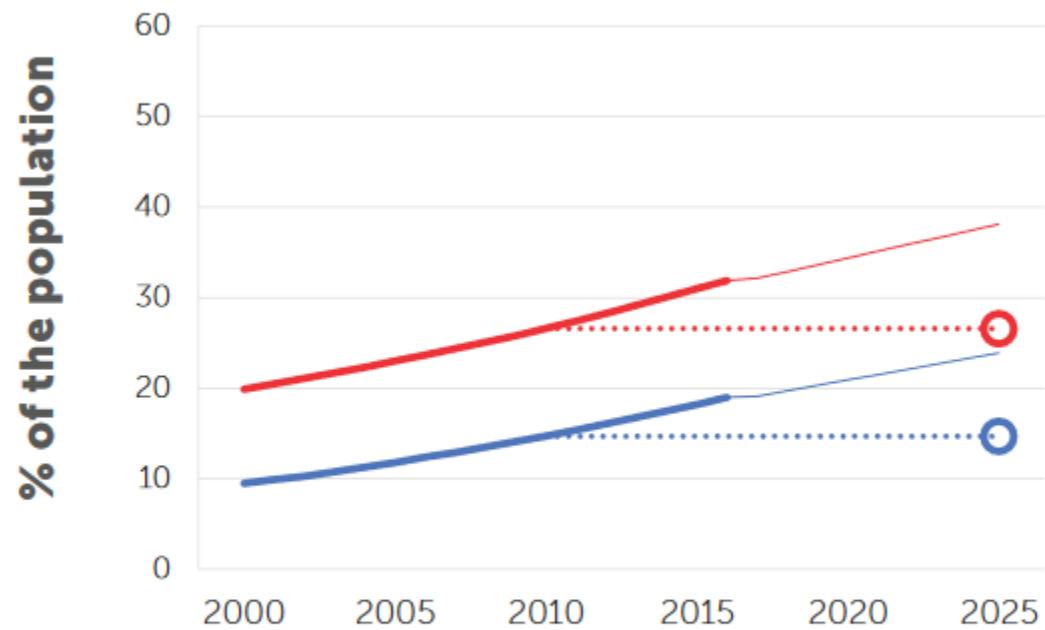
NCD country profile



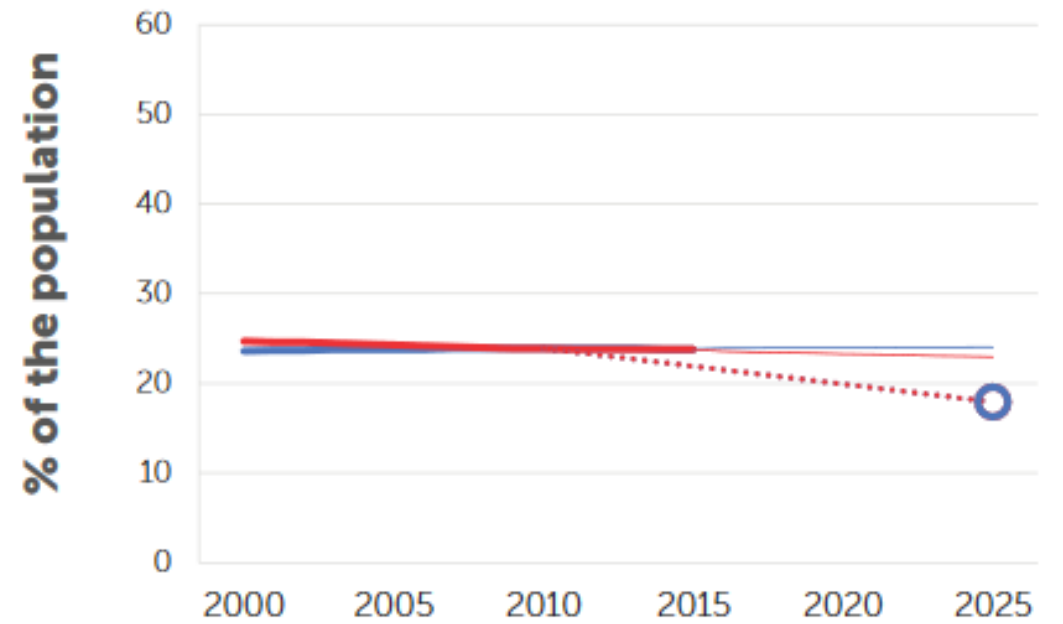
PROPORTIONAL MORTALITY*



OBESITY



RAISED BLOOD PRESSURE



Past trends Projected linear trends Global targets

Males — — ○

Females — — ○

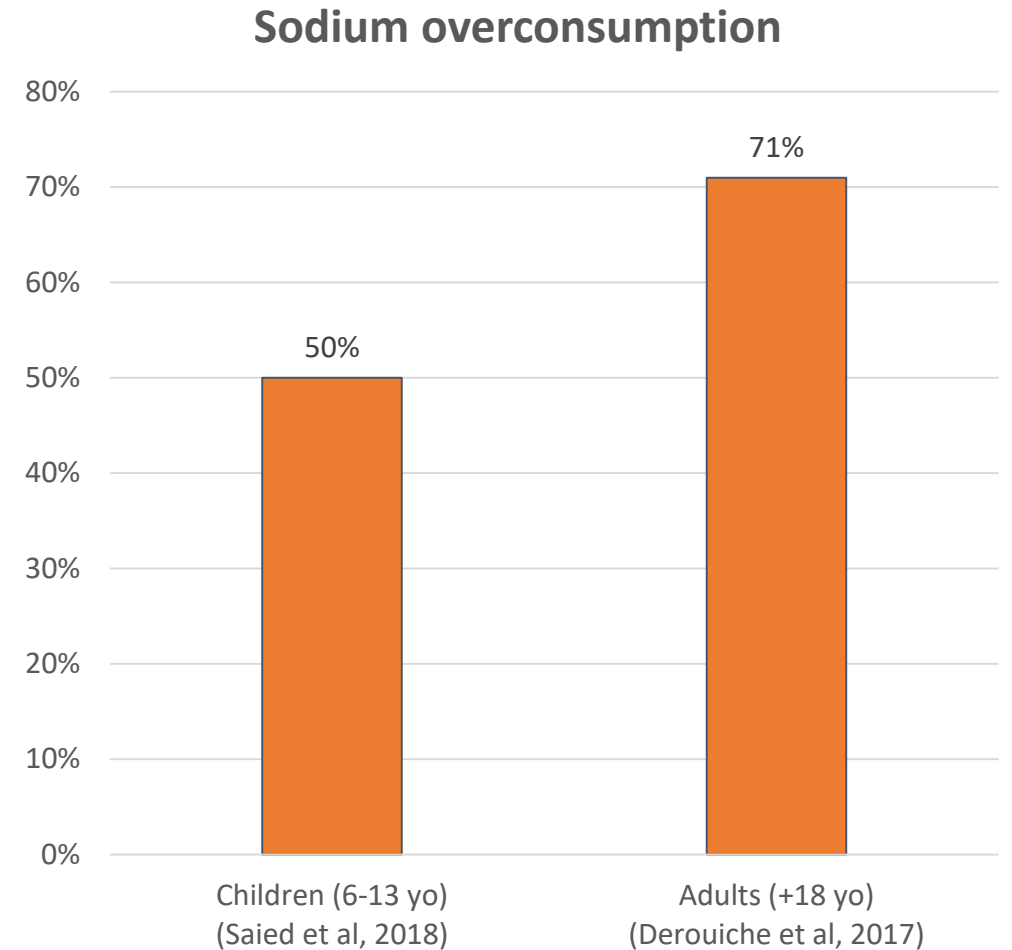
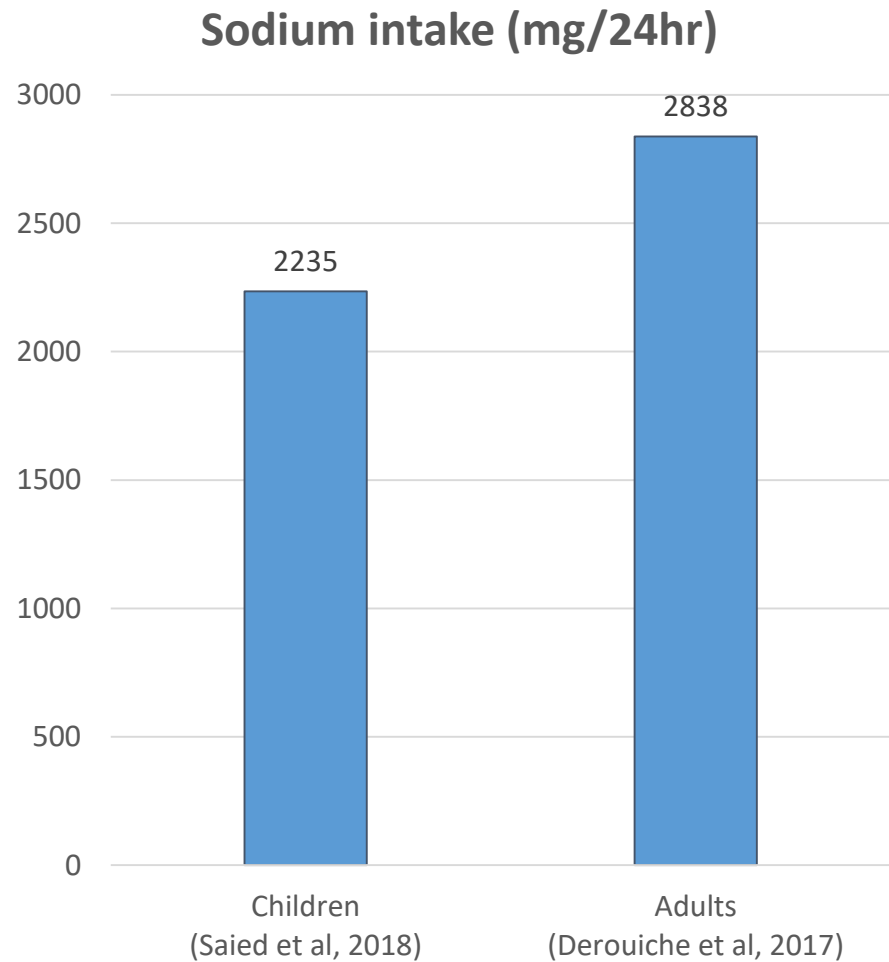
How did we get here?

- 1940s: Food subsidies
 - Regular food supply to markets
 - Maintaining stable costs
 - Food prices control
- 1960s-1970s: Promoting agriculture
 - Agricultural subsidies
 - Investing in dams
- 2000s: Free trade agreements
 - Food imports from the EU: 9.5 billion DHs (~1 billion USD)
 - Food imports from the US: 5.9 billion DHs (~640 million USD)

The conundrum of food fortification

- White flour (iron, folic acid, vitamin B)
- Vegetable oils (vitamins A and D3)
- Salt (iodine)

Sodium intake in Morocco



Principal source of sodium chloride in the Moroccan diet

- **Fast foods:** 1.42 – 2.62 g/serving (Elkardi et al, 2017)
- **Homemade meals:** 0.5 – 1.25 g/100 g (Technical report: Derouiche et al., 2014)
- **Commercial white bread:** 8.4 – 30 g/kg (Jafri et al., 2017)
 - Within WHO recommendation (<10 g/kg): 1.3%
 - Within the national federation guidelines (<18 g/kg): 61.3%
 - Over 18 g/kg: 38.7%

National initiative to reduce added salt in manufactured food

- **Stakeholders:** government, industry, scholars, NGOs
- **Objective:** Voluntary reduction of added salt in staple foods
- **Pilot vector:** Commercial white bread
- **Partner:** National federation of professional bakeries



Principal outcomes

- **Adherence:** 85% independent professionals voluntary adhered to the initiative in Casablanca (KAP survey: Derouiche et al., 2016)
- **Lowering added salt:** 25 % less added salt in bread preparation (Mokhantar, 2016 – *unpublished*)
- Average salt lowered from 17.42 g/Kg in 2011 to 13.10 g/Kg in 2016.

National measures



Apport moyen en sel chez l'adulte

REDUCTION RELATIVE DE %30 DE LA CONSOMMATION MOYENNE DE SEL / SODIUM DANS LE MILIEU




Surpoids et obésité

REDUIRE LA SEDENTARITE DE %10




Activité physique



SUSPENDRE LA HAUSSE DU DIABETE ET DE L'OBESITE (INDICATEURS : SURPOIDS CHEZ LES ADOLESCENTS ET OBESITE ET SURPOIDS ET OBESITE CHEZ LES ADULTES)



المملكة المغربية
ROYAUME DU MAROC



PROGRAMME NATIONAL DE NUTRITION



وزارة الصحة
Ministère de la Santé

Q&A

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