# TRENDS IN FOOD AND NUTRIENT INTAKES IN IRELAND

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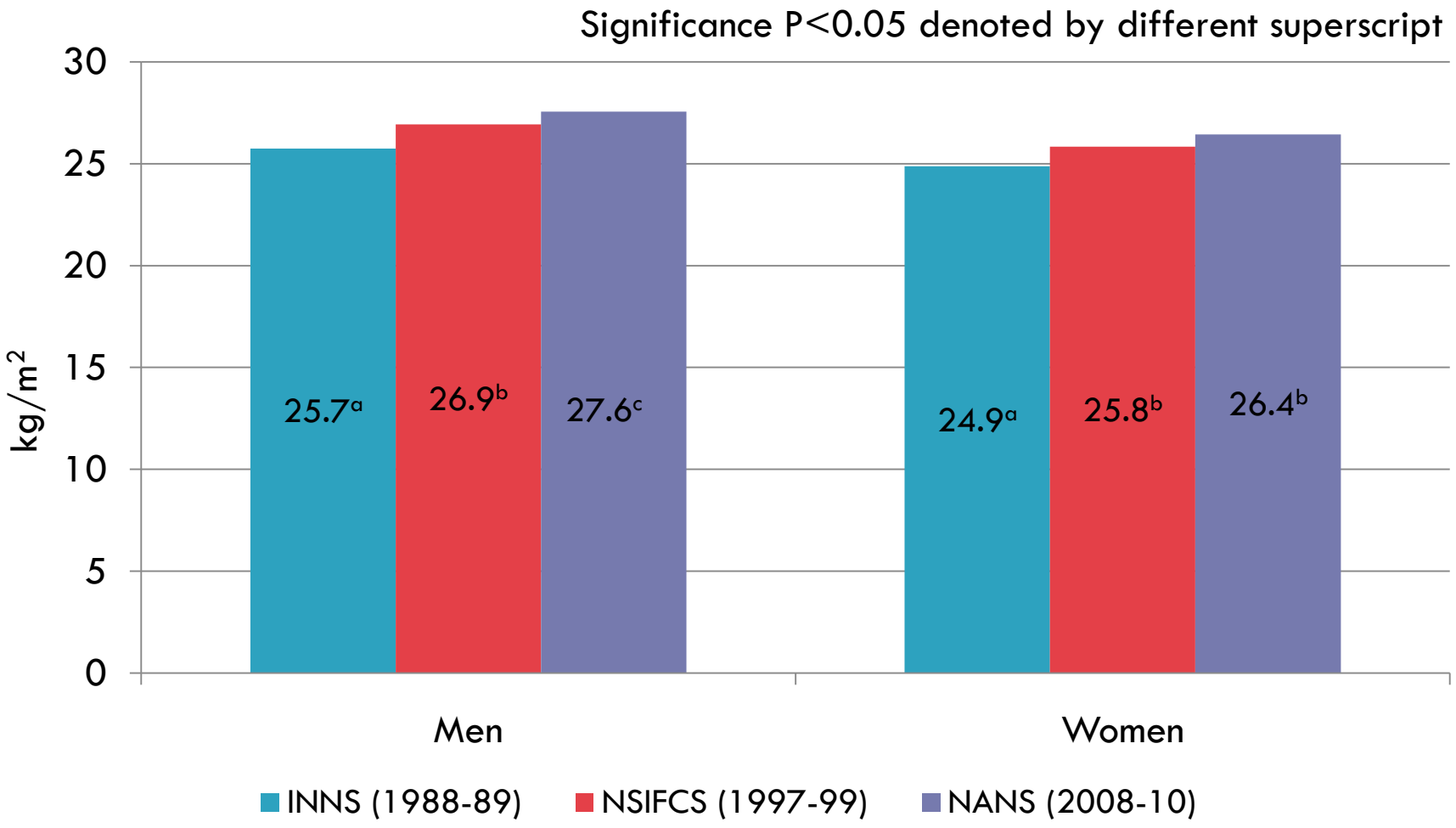
# Dietary surveys of Irish adults (18-64y)

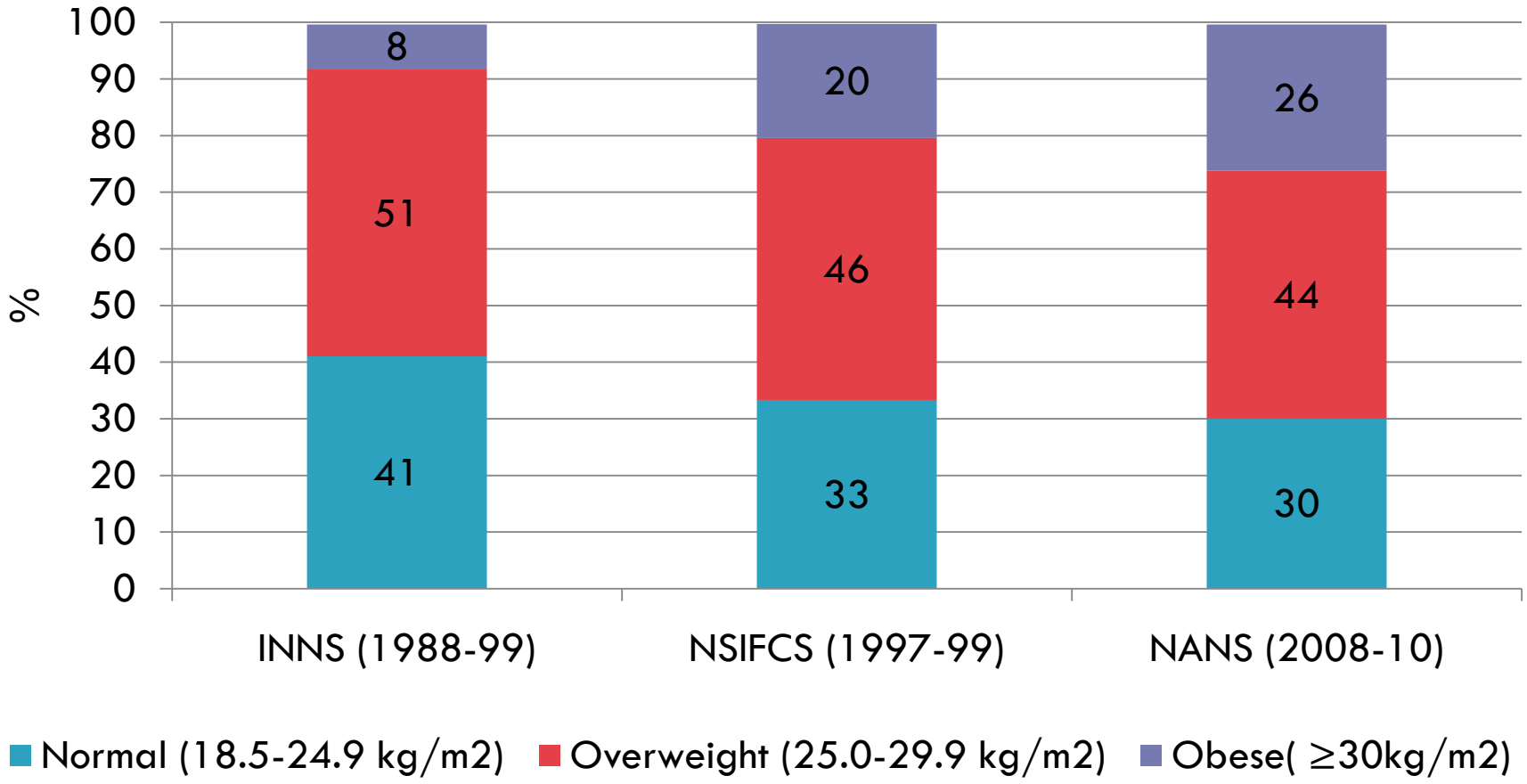
- **National Adult Nutrition Survey (NANS) (2008-2010)**
  - 4-day semi-weighed food diary
  - Nutrient intake estimated using UK food composition tables updated with Irish data
  - Anthropometry (measured)
- **North South of Ireland Food Consumption Survey (NSIFCS) (1997-1999)**
  - 7-day estimated food diary
  - Nutrient intake estimated using UK food composition tables updated with Irish data
  - Anthropometry (measured)
- **Irish National Nutrition Survey (INNS) (1988-1989)**
  - 7 day diet history
  - Anthropometry (measured)

# Change in Body Mass Index (BMI)



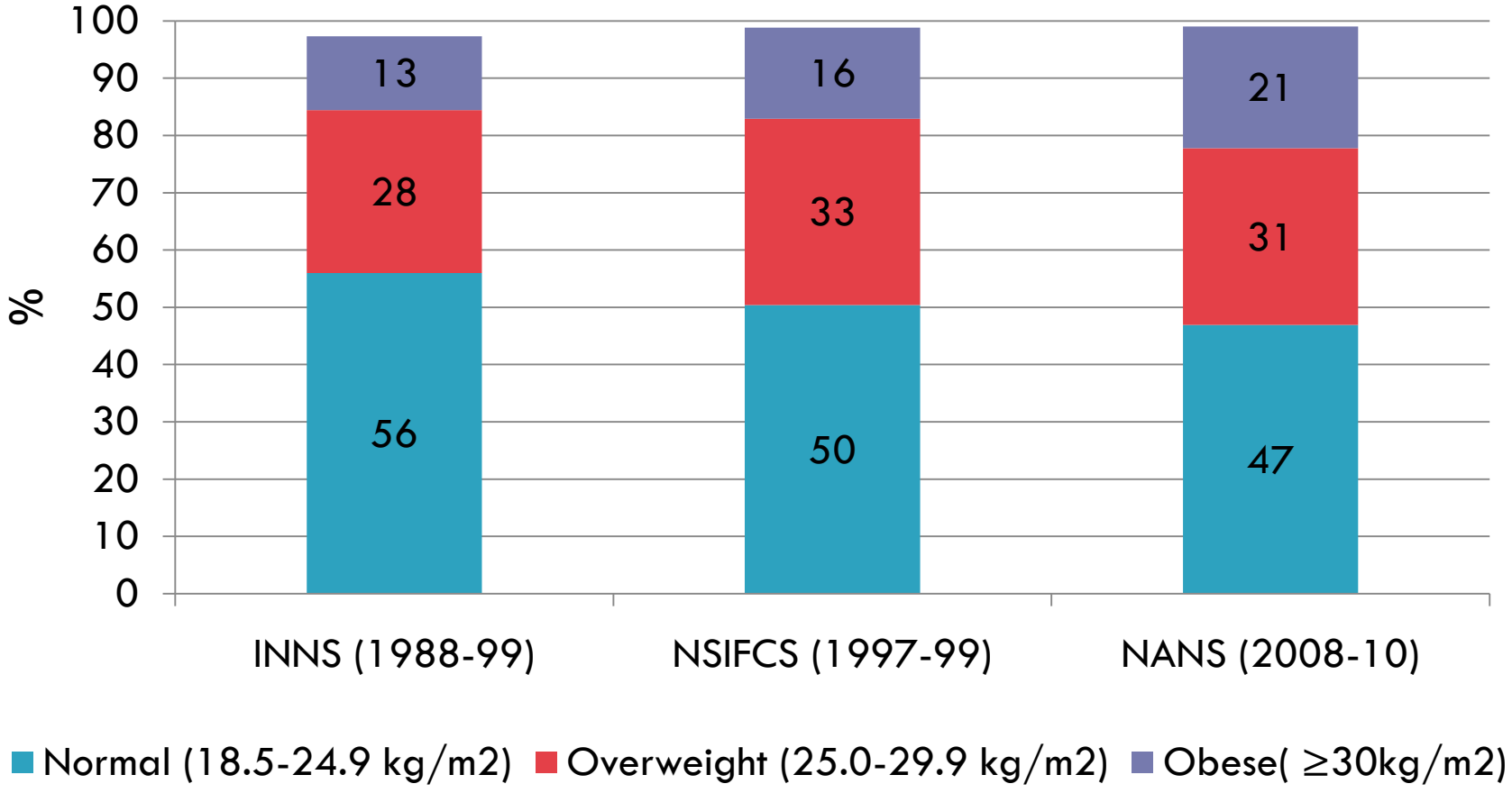

Boylan *et al.* 2013 PHN (In press)

# Change in Weight Status Men (18-64y)



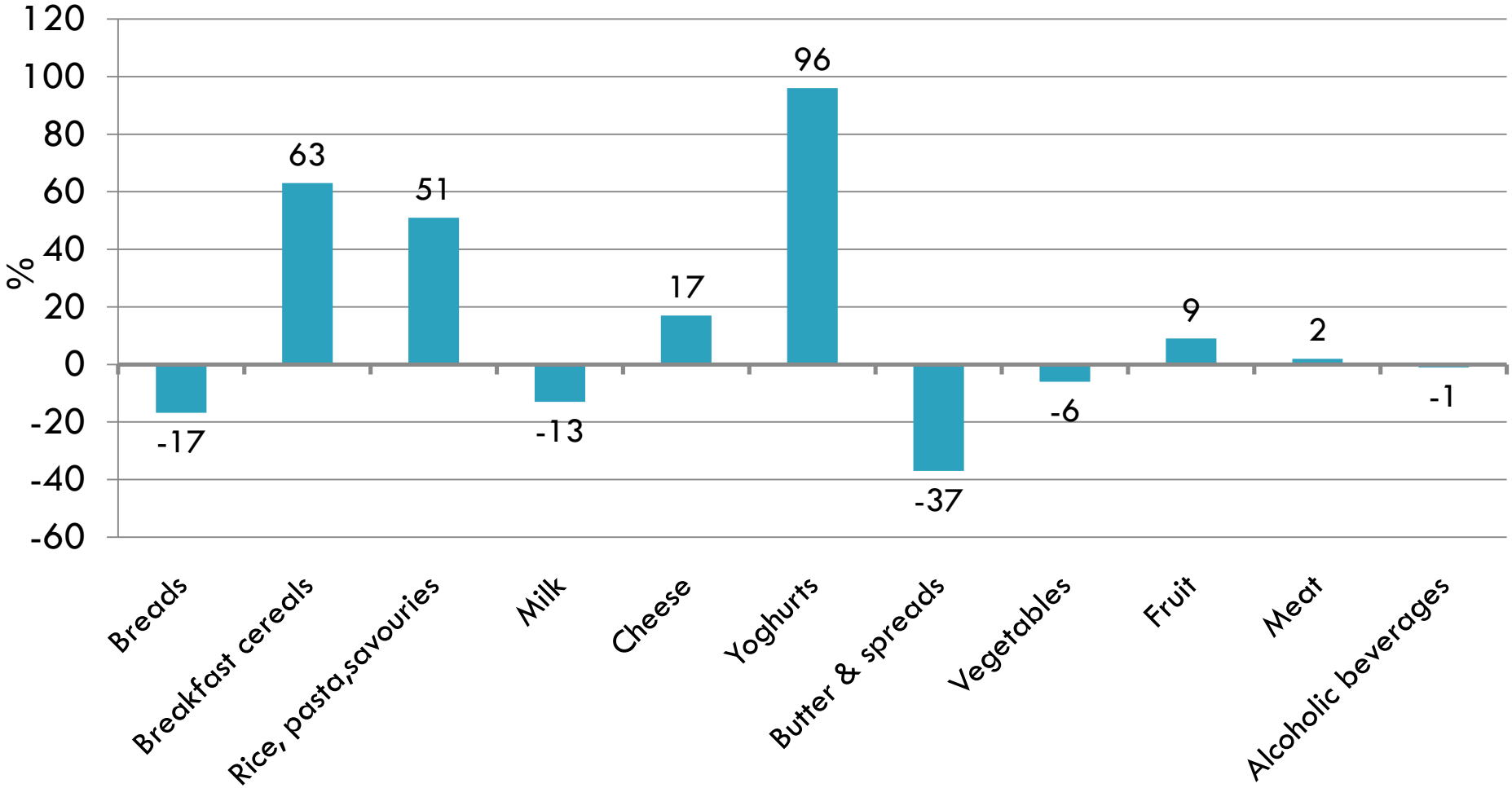

Boylan *et al.* 2013 PHN (In press)

# Change in Weight Status Women (18-64y)

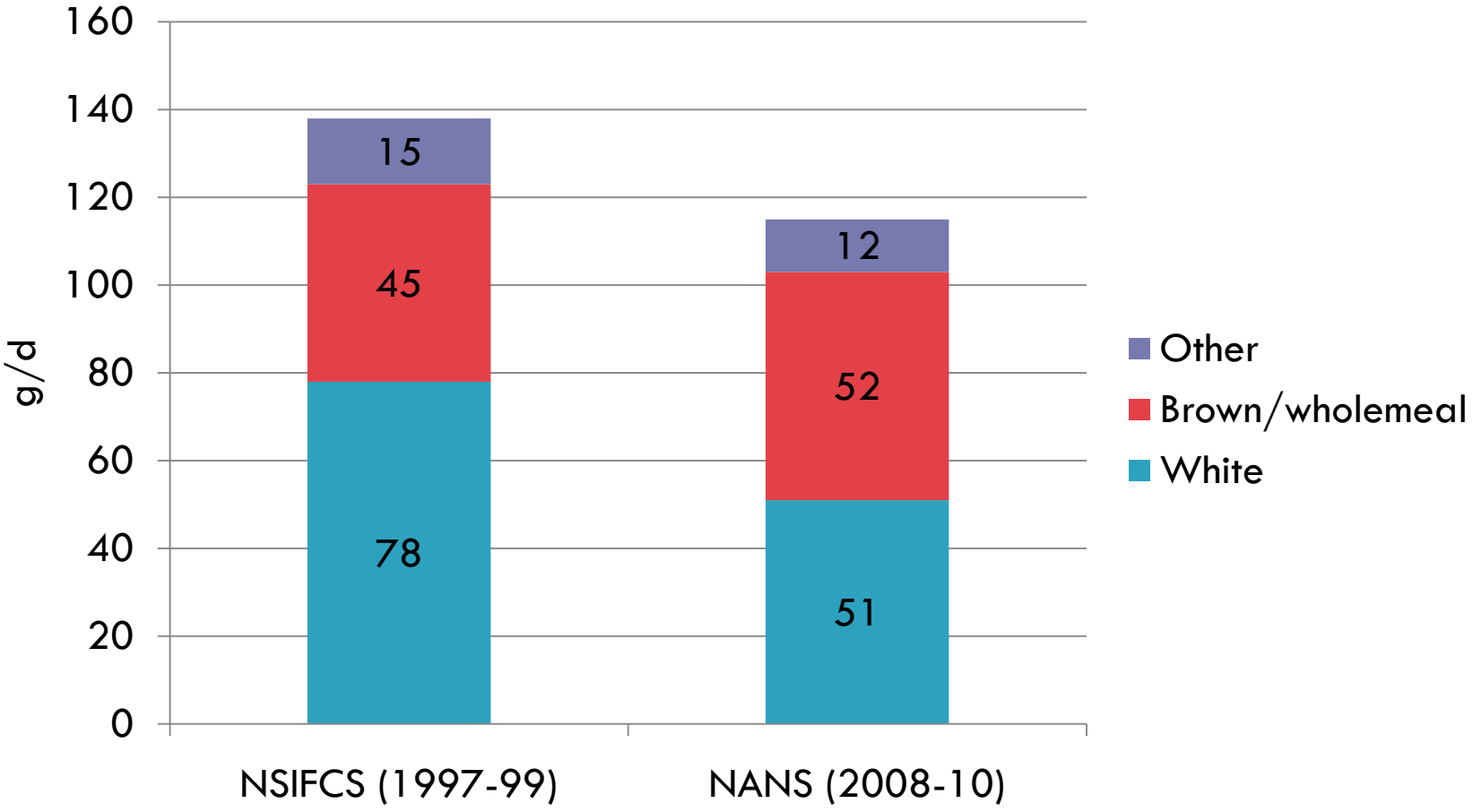



Boylan *et al.* 2013 PHN (In press)

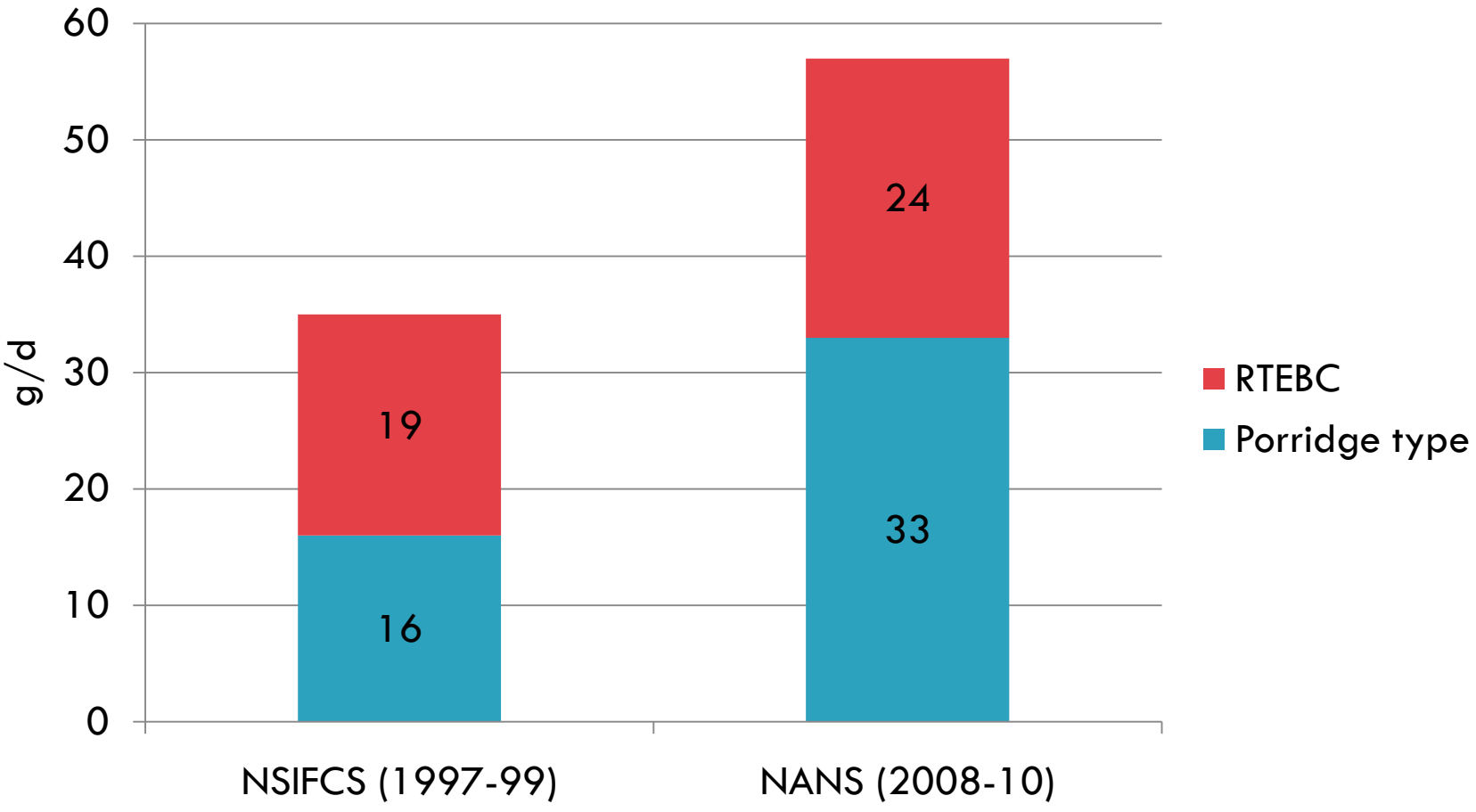
# Change in Food Intake between NSIFCS(1997-99) and NANS (2008-10)



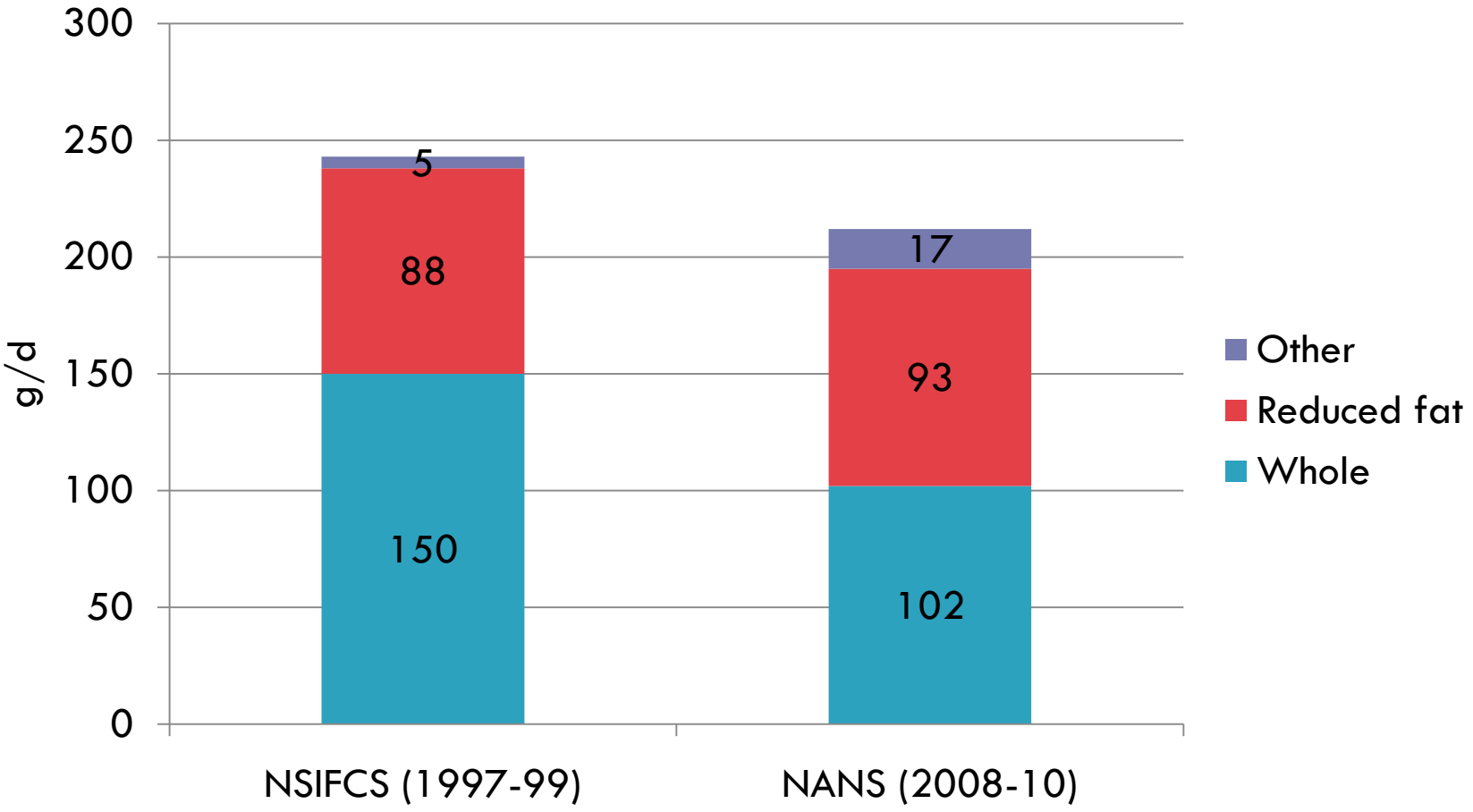
# Change in patterns of bread intake (g/d)



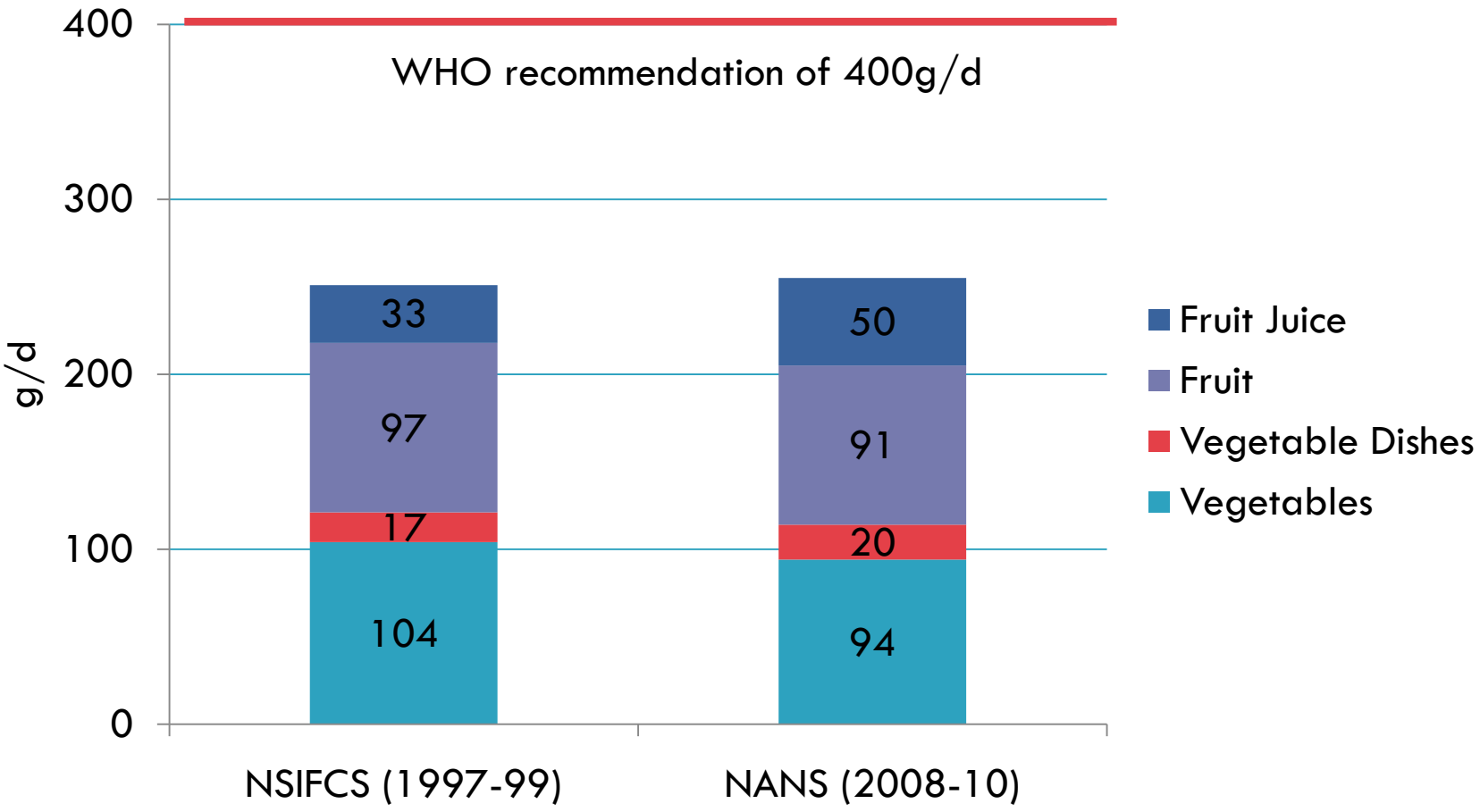
# Change in patterns of breakfast cereal intake (g/d)



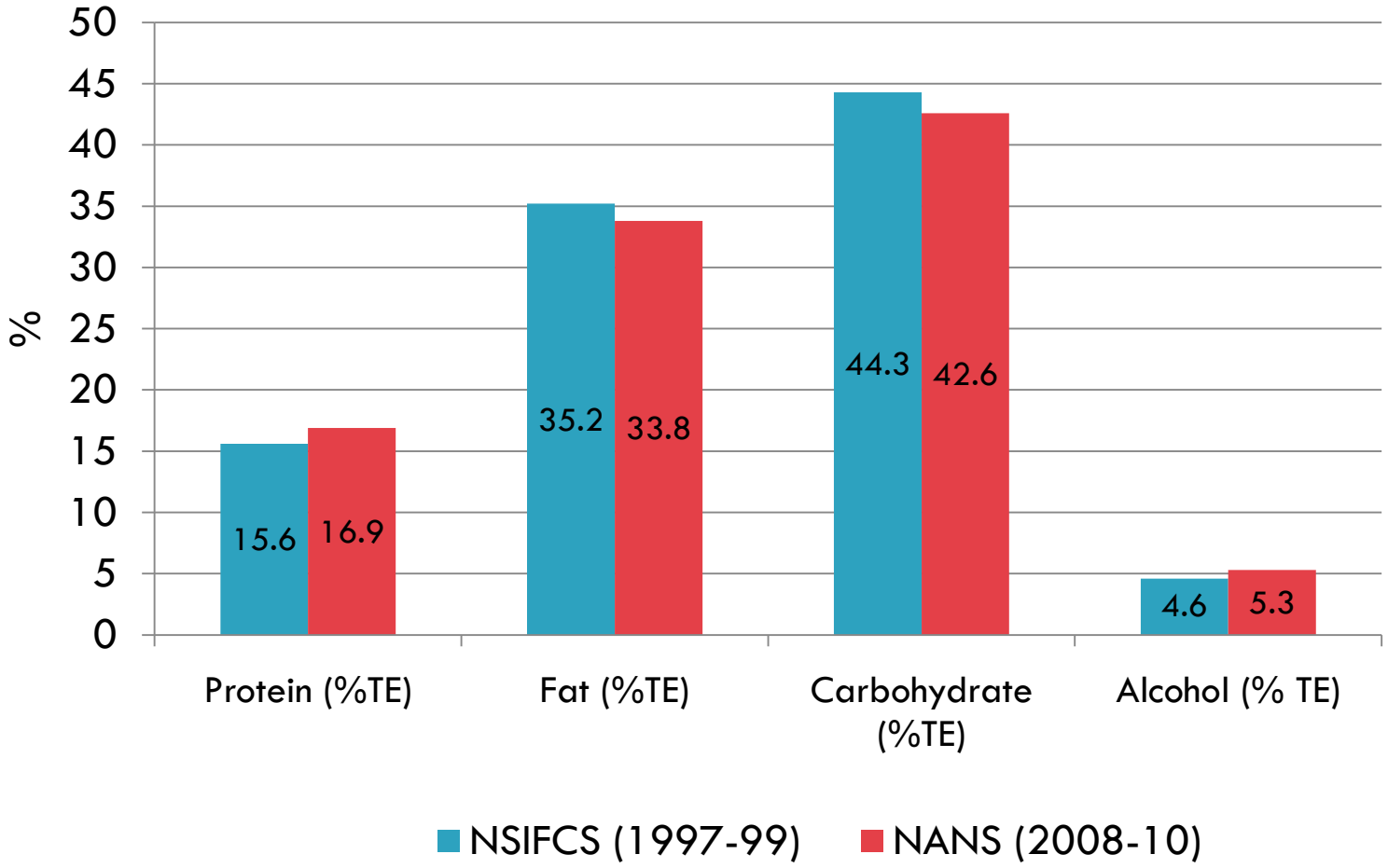
# Change in patterns of milk intake (g/d)



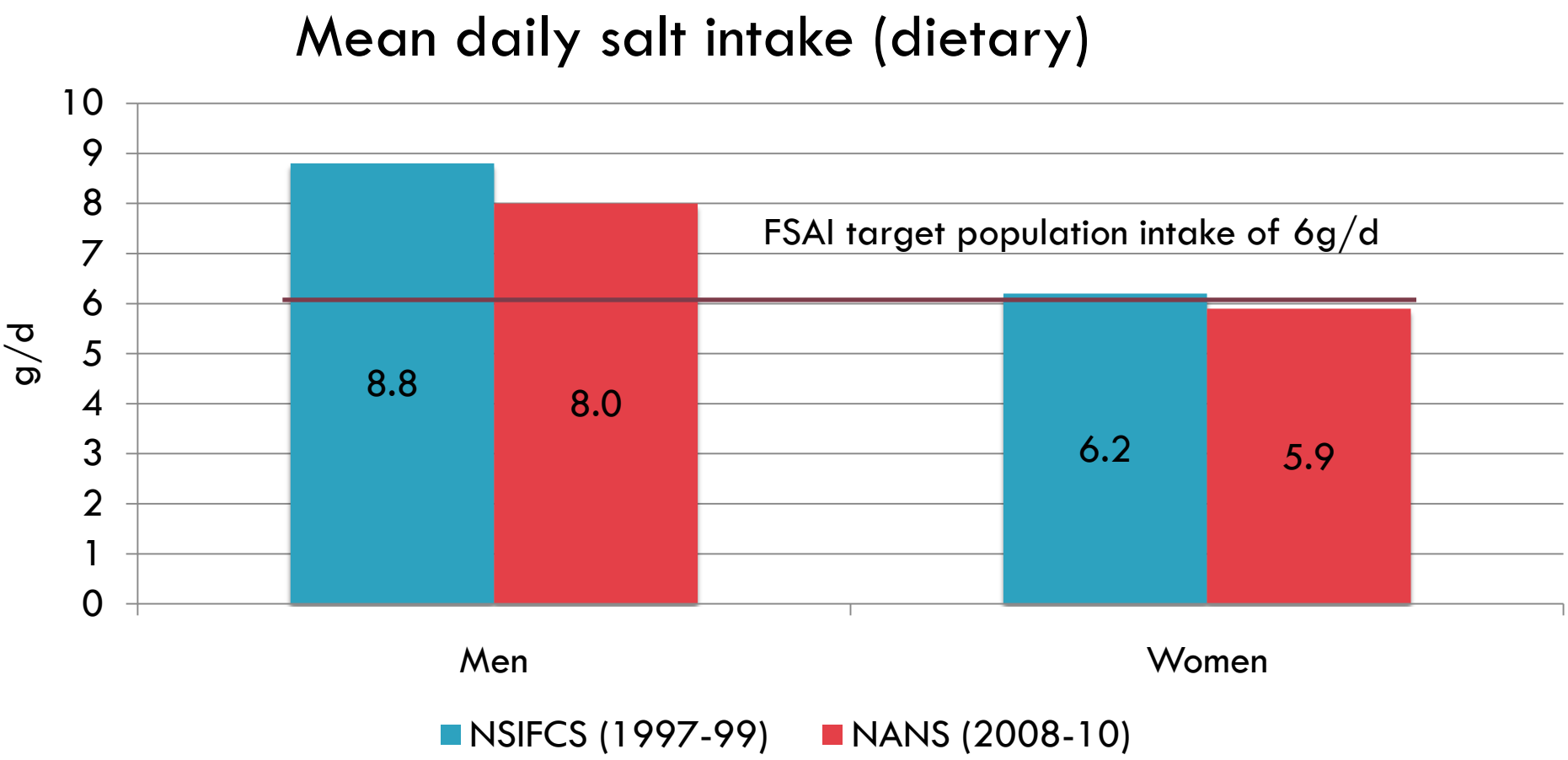
# Change in patterns of fruit & vegetable intake (g/d)



# Change in macronutrient intake



# Change in dietary salt intake (g/d)

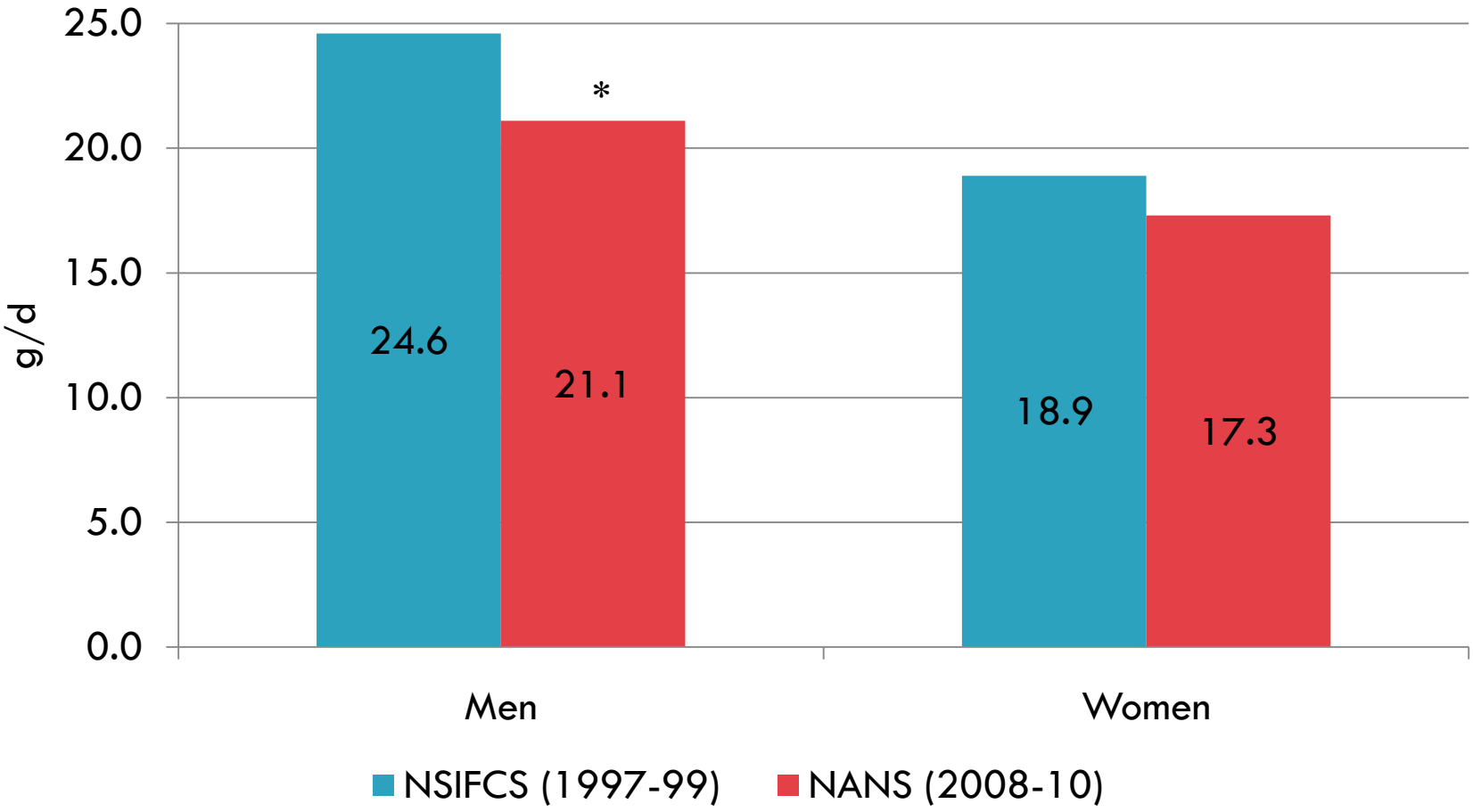



Urinary data NANS: Additional intake of 25-30% from discretionary salt

# Changes in dietary salt sources

| Food group | NSIFCS 1997-99 | NANS 2008-10 | Difference |
|---|---|---|---|
| | Salt intake (g/d) | | |
| Breads | 2.10 | 1.50 | ↓ 0.60 |
| Cured/processed meats | 1.68 | 1.33 | ↓ 0.35 |
| Spreading fats | 0.48 | 0.23 | ↓ 0.25 |
| Ready-to-eat breakfast cereals | 0.35 | 0.23 | ↓ 0.10 |
| Milk/milk products | 0.68 | 0.60 | ↓ 0.08 |
| Processed vegetables/veg dishes | 0.10 | 0.28 | ↑0.18 |
| Savouries including pizza/pasta dishes | 0.24 | 0.33 | ↑0.09 |

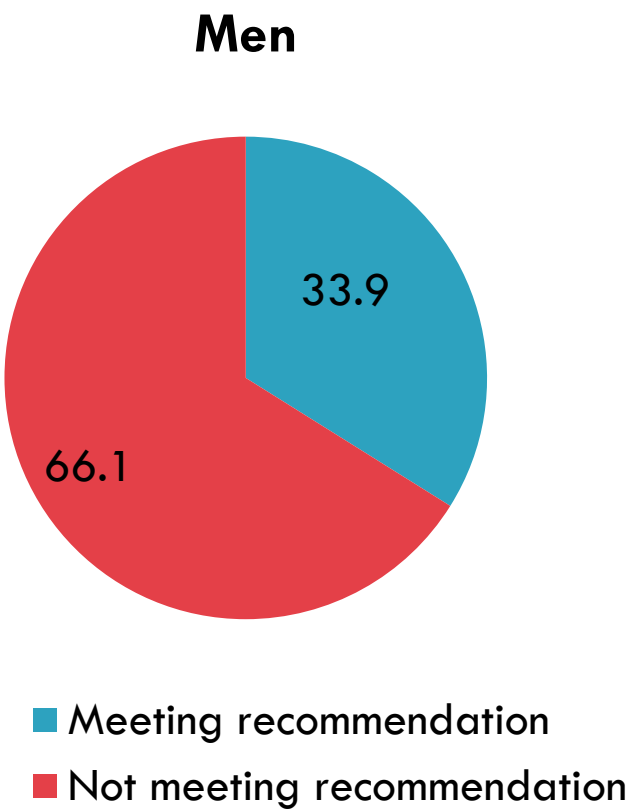
# Change in Dietary Fibre intake (g/d)




* Denotes significant difference P<0.05

# Dietary Fibre adequacy(NANS)

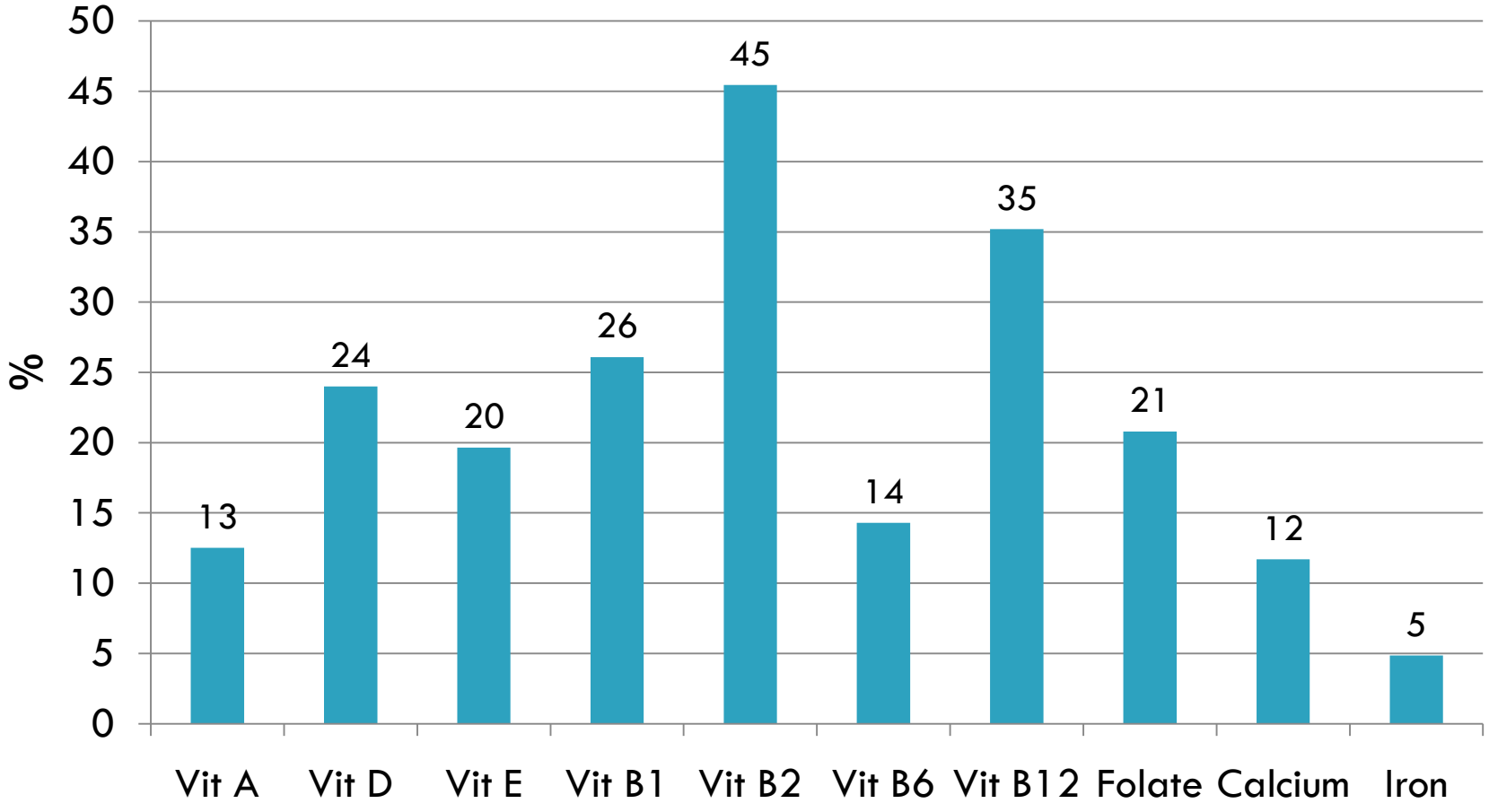
EFSA 2010 recommendation of Dietary Fibre Intake≥25g/d



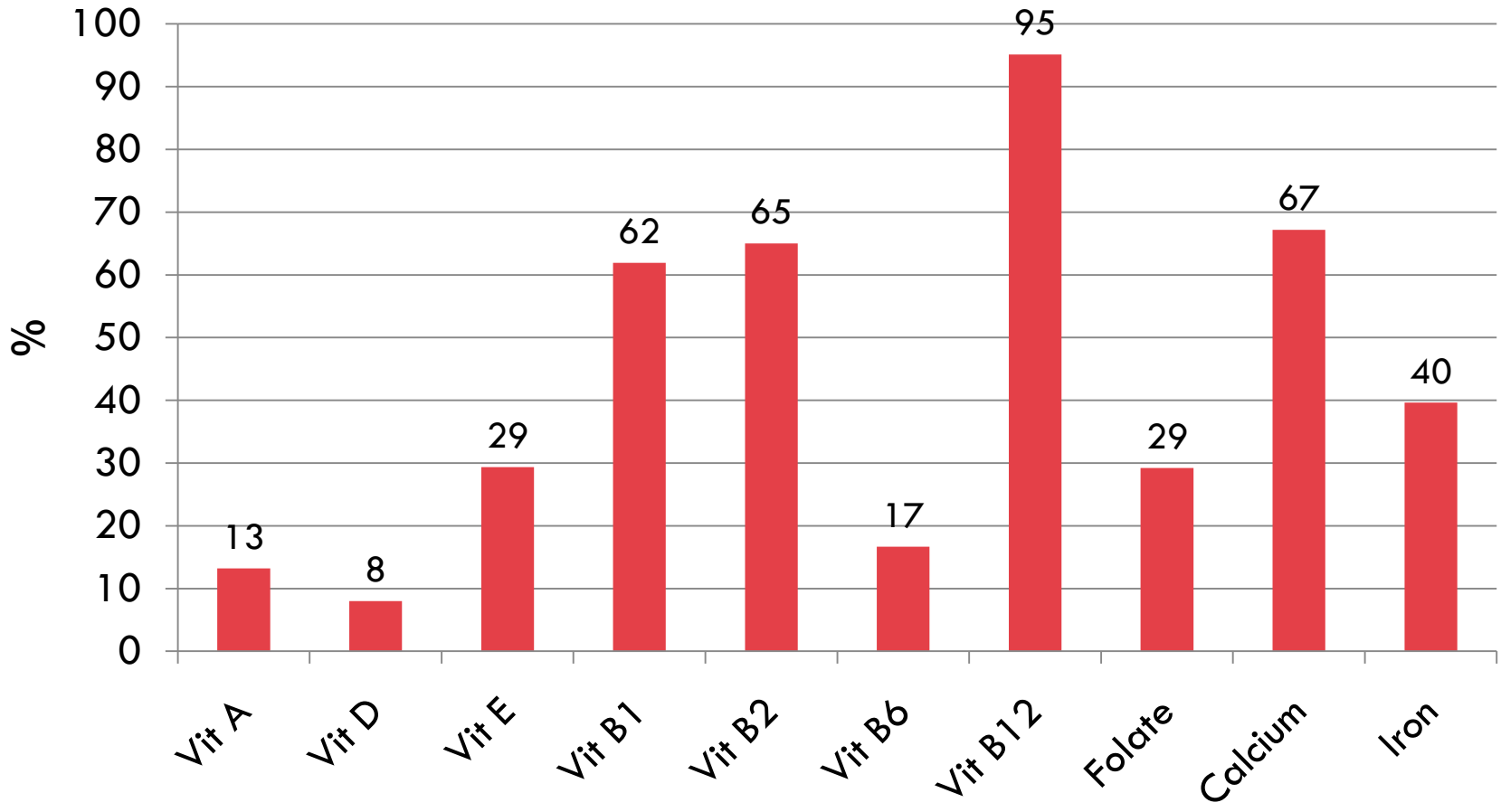

Excludes under-reporters for energy

Bannon 2011 PhD thesis

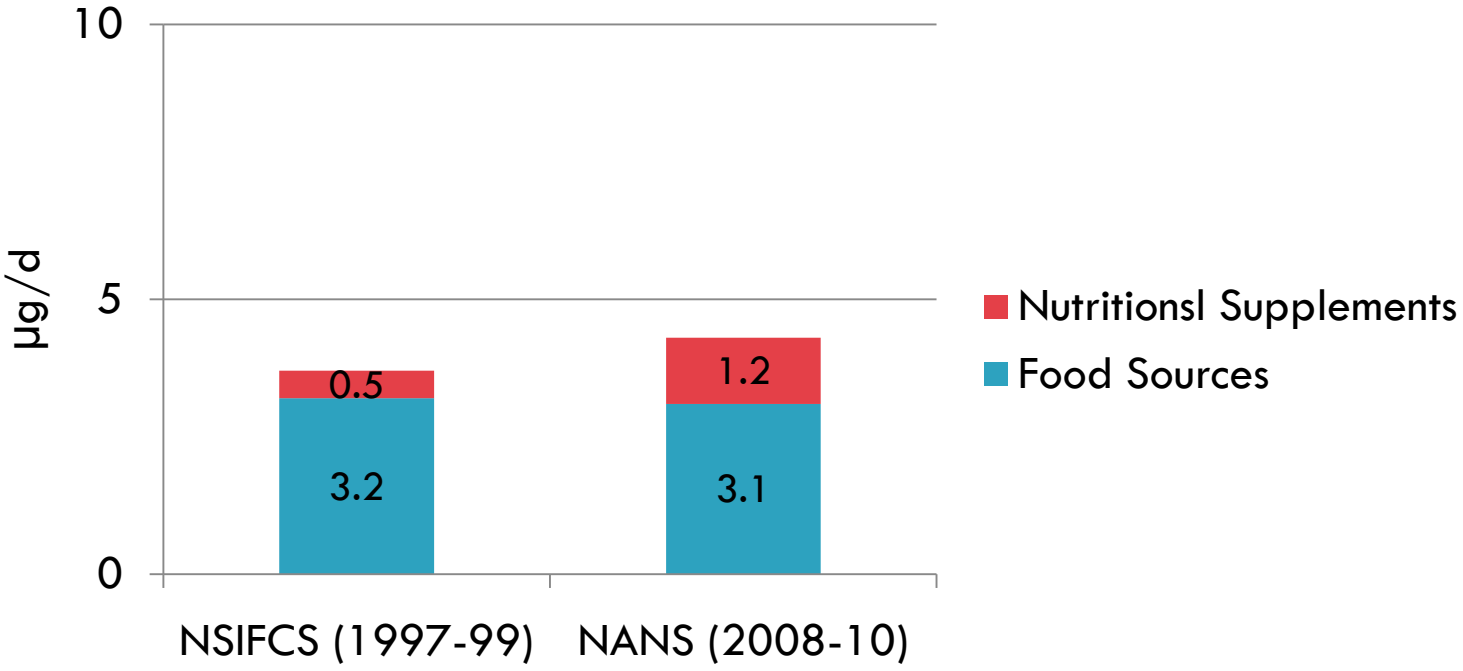
# Change in micronutrient intake between NSIFCS(1997-99) and NANS (2008-10) **Men**



# Change in micronutrient intake between NSIFCS(1997-99) and NANS (2008-10) **Women**

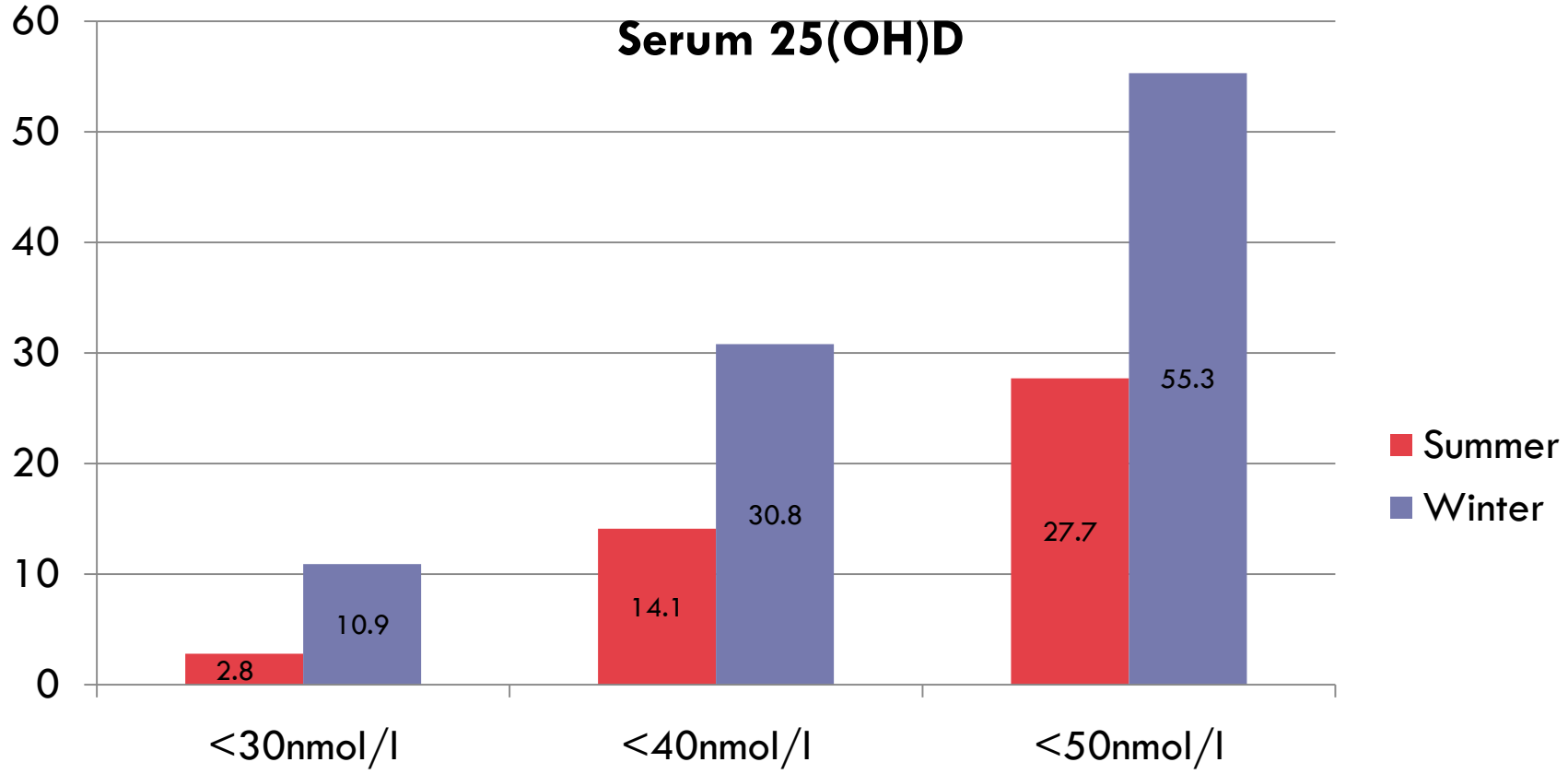


# Vitamin D intake and adequacy



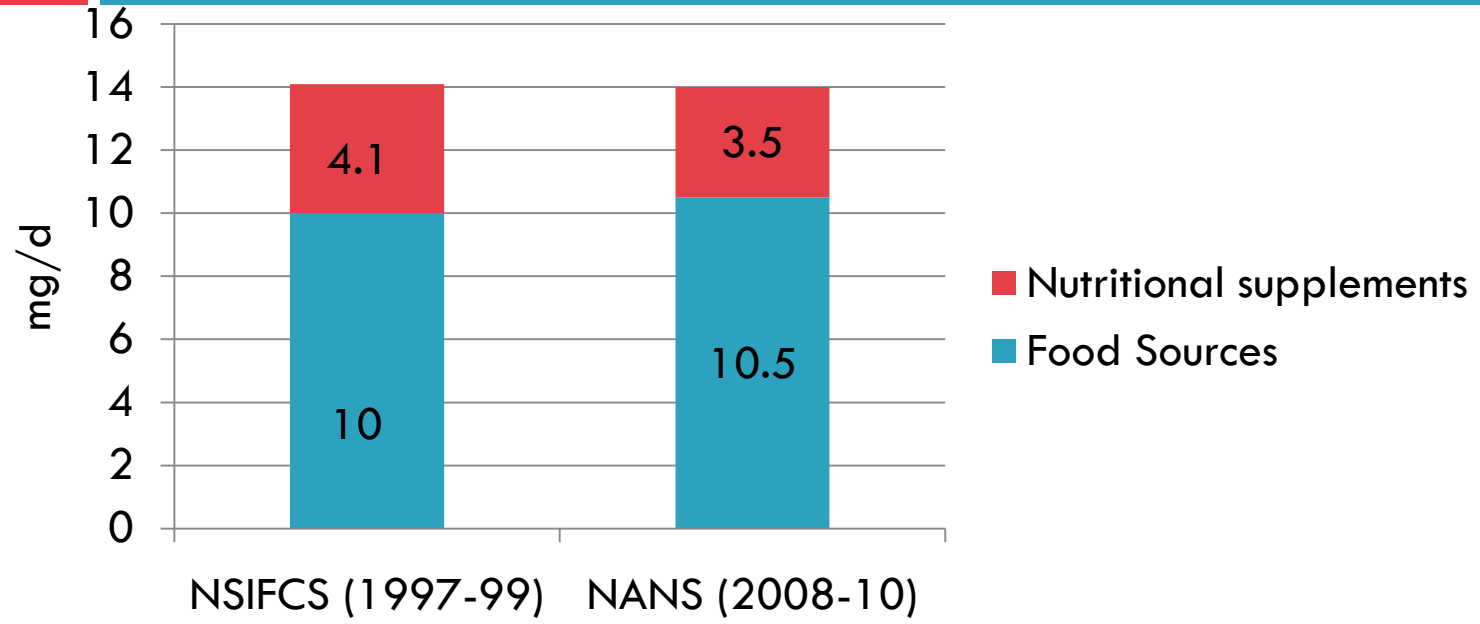

| NANS (18-64y) | |
|---|---|
| | % population (18-64y) |
| Intake <10µg (IOM, 2010) | 93% |
| Intake < 5µg | 73% |

# Vitamin D status (NANS 2008-10)(18-64y)




Cashman *et al.* (2013) *Br J Nutr, 109*, ***1248-56.***

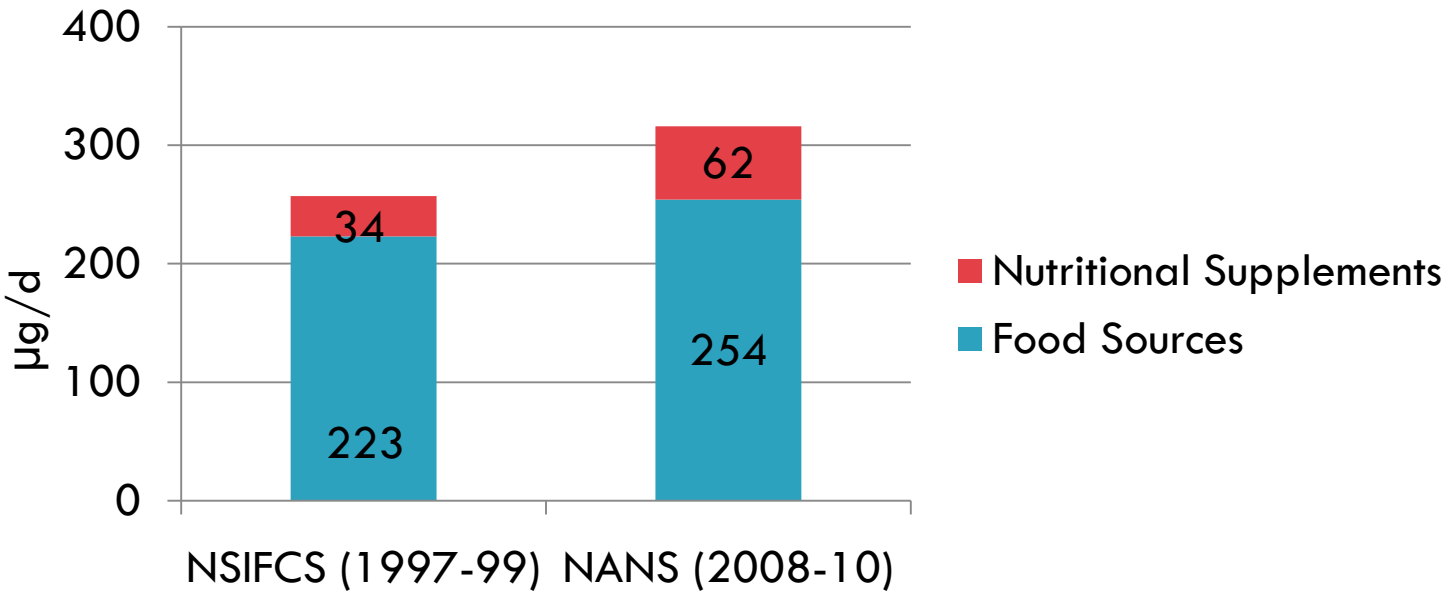
# Iron intake & status(women 18-50y)




| NANS (dietary & biochemical data) | |
|---|---|
| Inadequate intake (%<EAR) | 53% |
| Low Hb levels | 8% |
| Low Fe stores | 14% |
| Fe deficiency | 4% |

# Folate intakes(women 18-50y)

Compliance with the folic acid supplementation recommendation of 400µg is low (6%)




- This additional intake of 59µg may result in approx 13% reduction in risk of NTD-affected births*

*estimated by linear extrapolation as per (Daly et al 1997 The Lancet 350,1666-1669)

# Conclusions

- ↑ in prevalence of obesity in both men and women
- ↑ trend in intake of breakfast cereals, 'rice, pasta & savouries' and yoghurts
- ↓ trend in intakes of bread, milk & spreading fats
- No change in intakes of meat, fruit, vegetables or alcoholic beverages

# Conclusions

- ↓ in intake of fat-still higher than recommended
- ↓ in intake of salt but still higher than recommended
- DF intakes inadequate for both men and women with intakes ↓ for men
- ↑trends in micronutrient intake
  - Nutritional supplements
  - Fortified foods
  - Vit D (men and women) and iron and folate (women of child-bearing age) still of public health concern

# Acknowledgements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Health Research Board