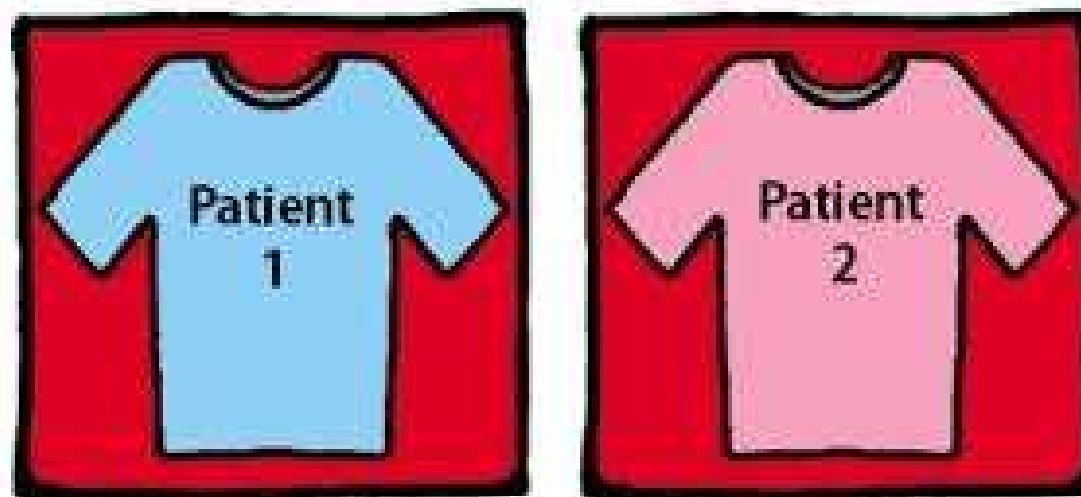




Sugar in a healthy diet – a dietitian's perspective

Gabrielle Jackson RD(SA)

Disclaimer:



One size does not fit all.

Everyone is different

- Age
- Gender
- Physical activity
 - Job
 - Type, frequency and intensity of exercise



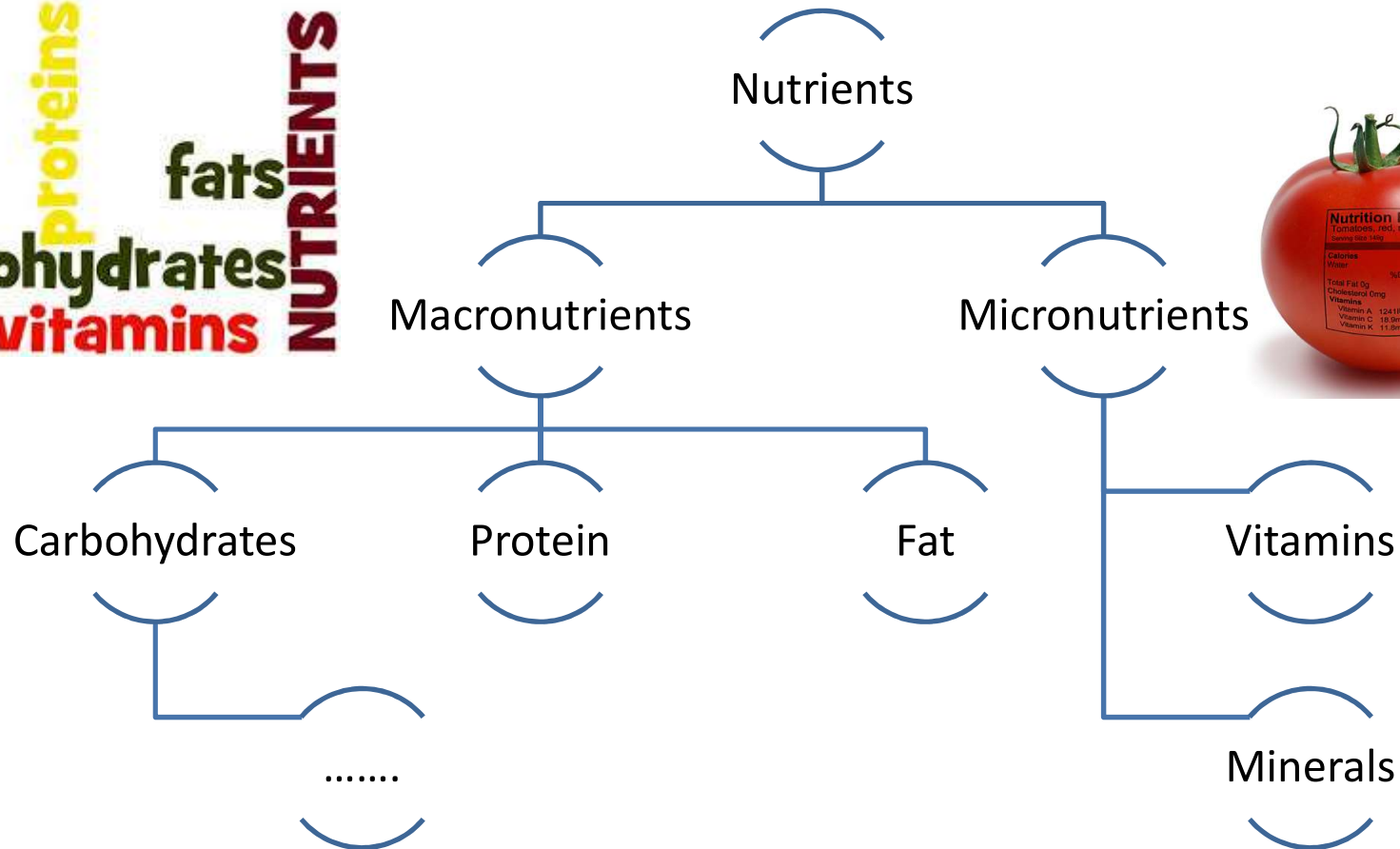
Why sugar in the diet is important

- Questions we should ask:
 - Are all sugars the same?
 - What does science say?
 - What is the average consumer's understanding of “sugar”?

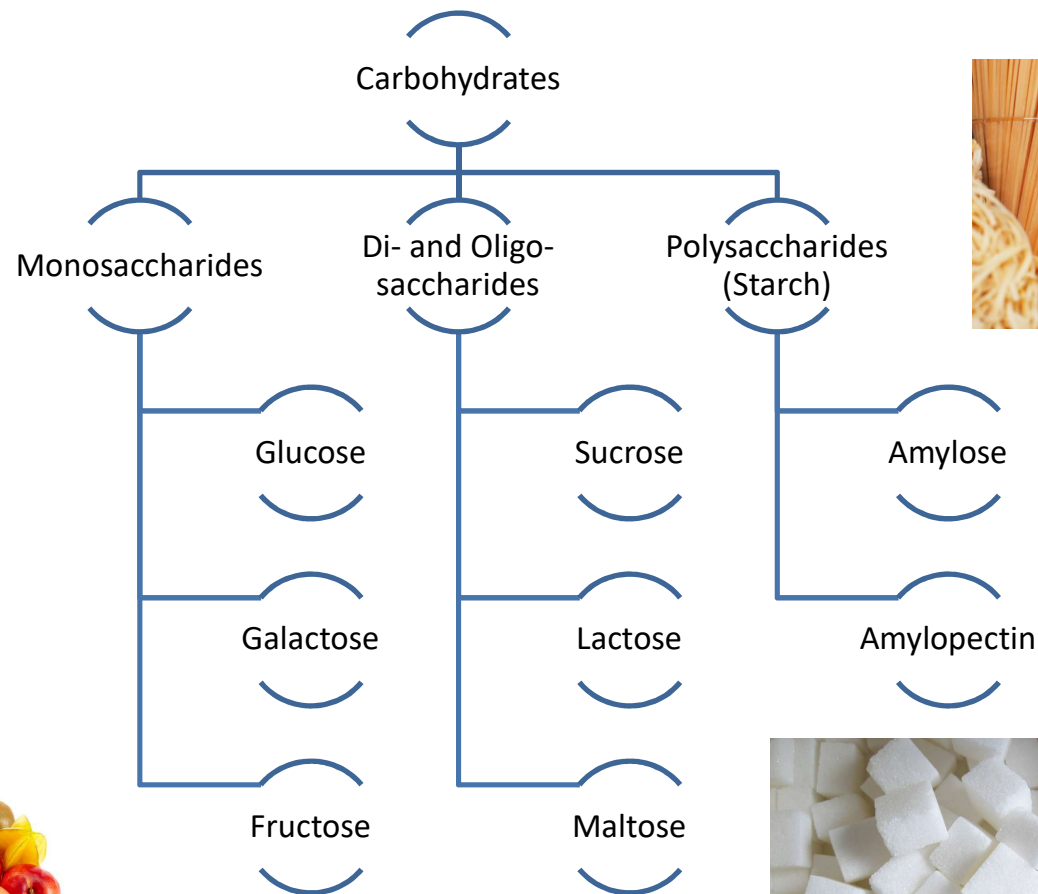


Understanding Sugar¹:

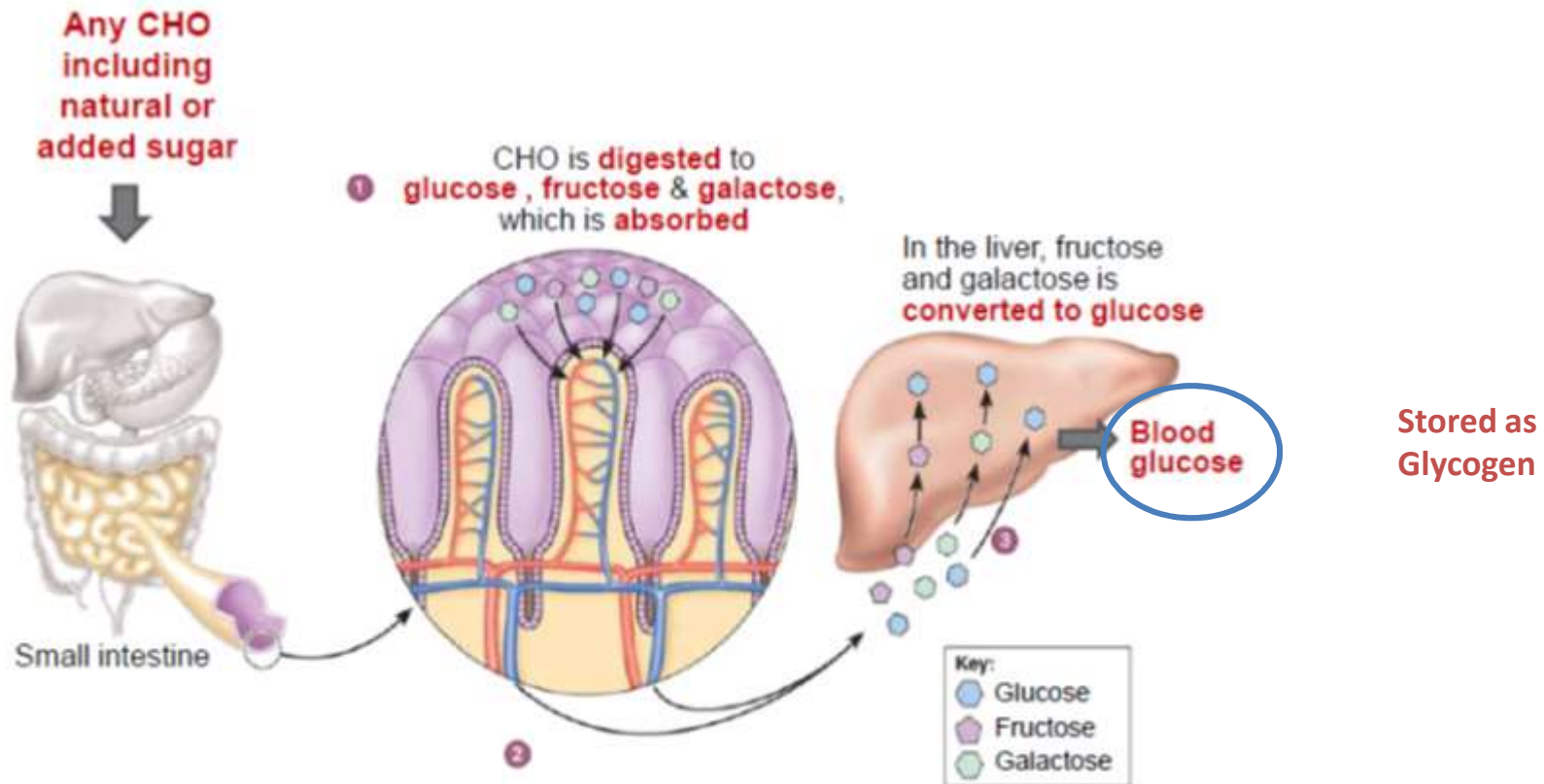
minerals
proteins
fats
carbohydrates
vitamins
NUTRIENTS



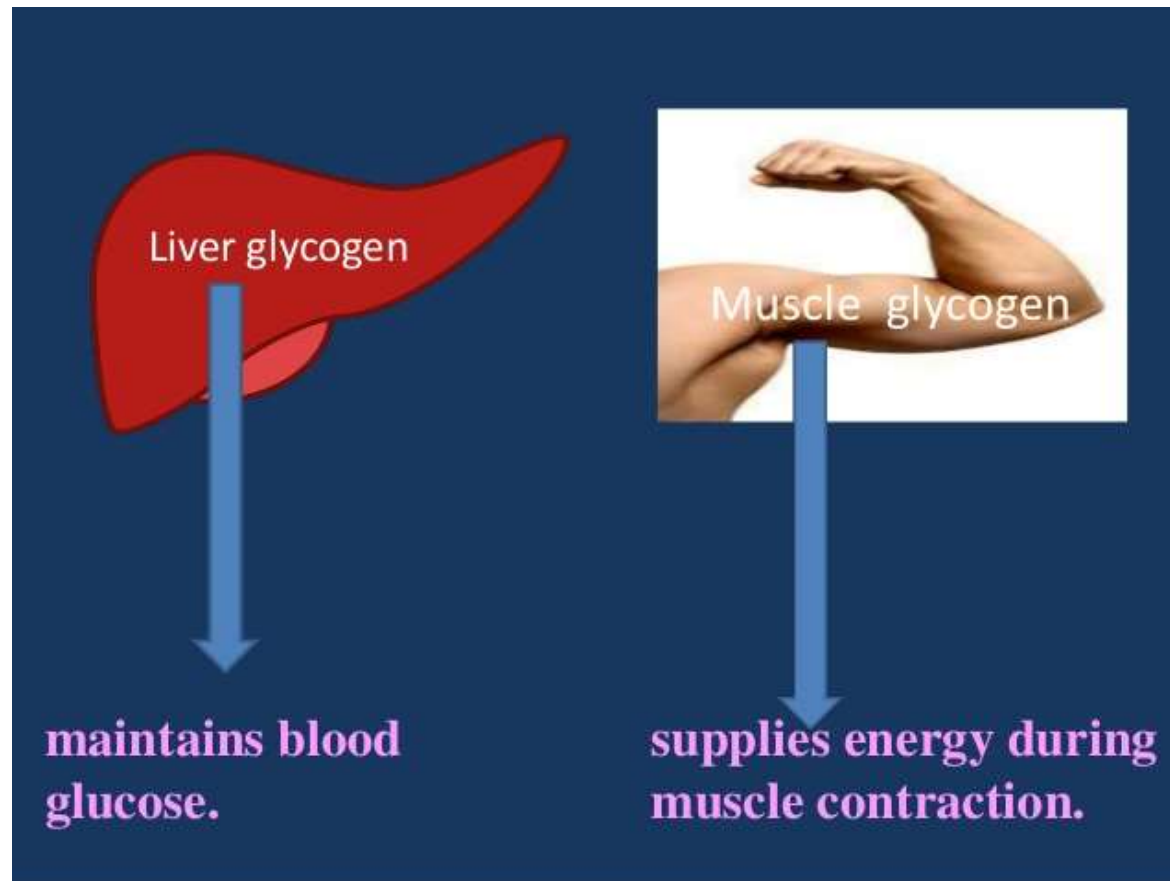
Understanding Sugar cont¹:



Sugar in the Body



Sugar in the Body

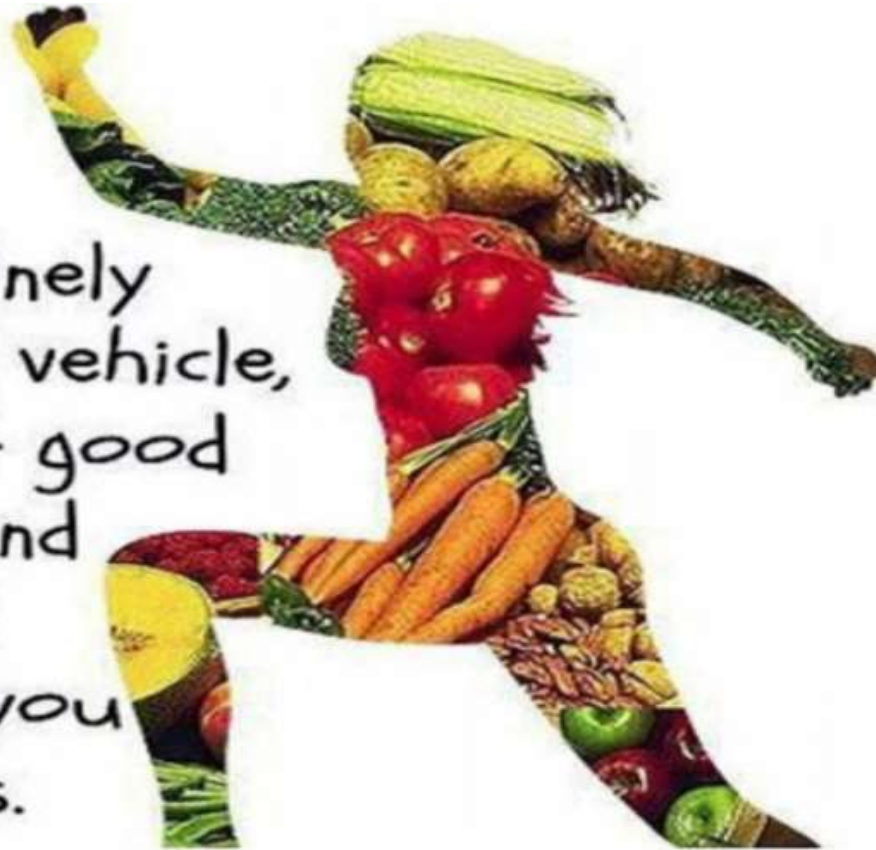


Would you put Diesel in your Ferrari?



Would you put Diesel in your Ferrari?

Your
body
is a finely
tuned vehicle,
give it good
fuel and
it will
take you
places.



Would you put Diesel in your Ferrari?



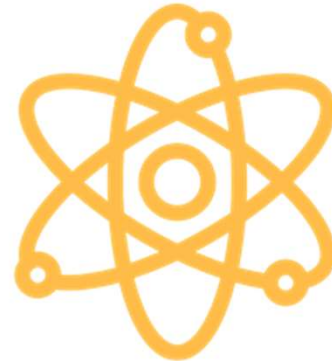
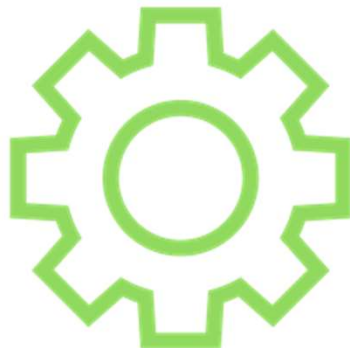
- Per 100 ml • Per 100g apple⁸
 - 180 kJ
 - 10,6 g sugar
- 275 kJ
 - 13,5 g sugar

Vs.



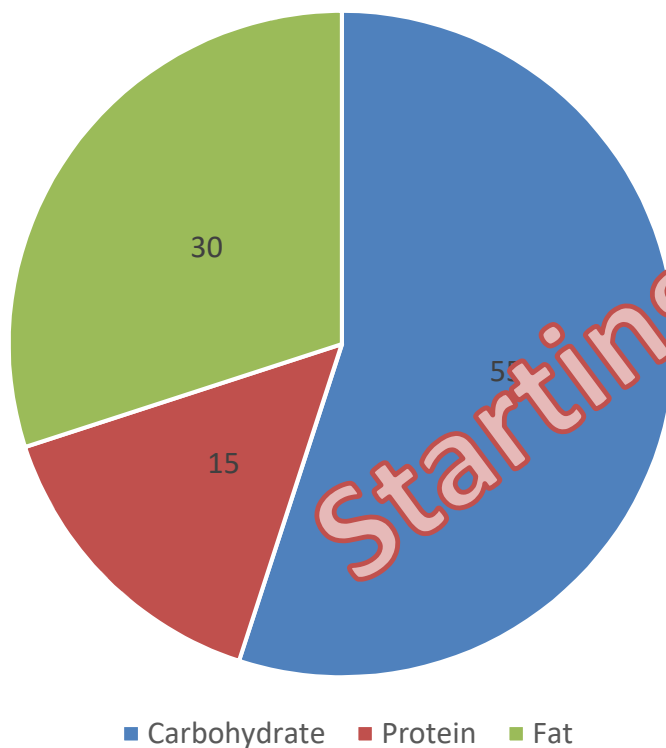
What does science say?

- Prudent dietary guidelines
- South African Food Based Dietary Guidelines
- Sugar content perceptions



Prudent Dietary Guidelines:

Prudent Dietary Guidelines



European study conducted -
The “healthful diet”⁴:

- Cholesterol, less than 300 mg a day
- Saturated fat, less than 10% of calories
- Protein, 10%–15% of calories
- Monosaccharides, less than 10% of calories

➤ 13% lower mortality rate in men (study of 20 years)

In South Africa

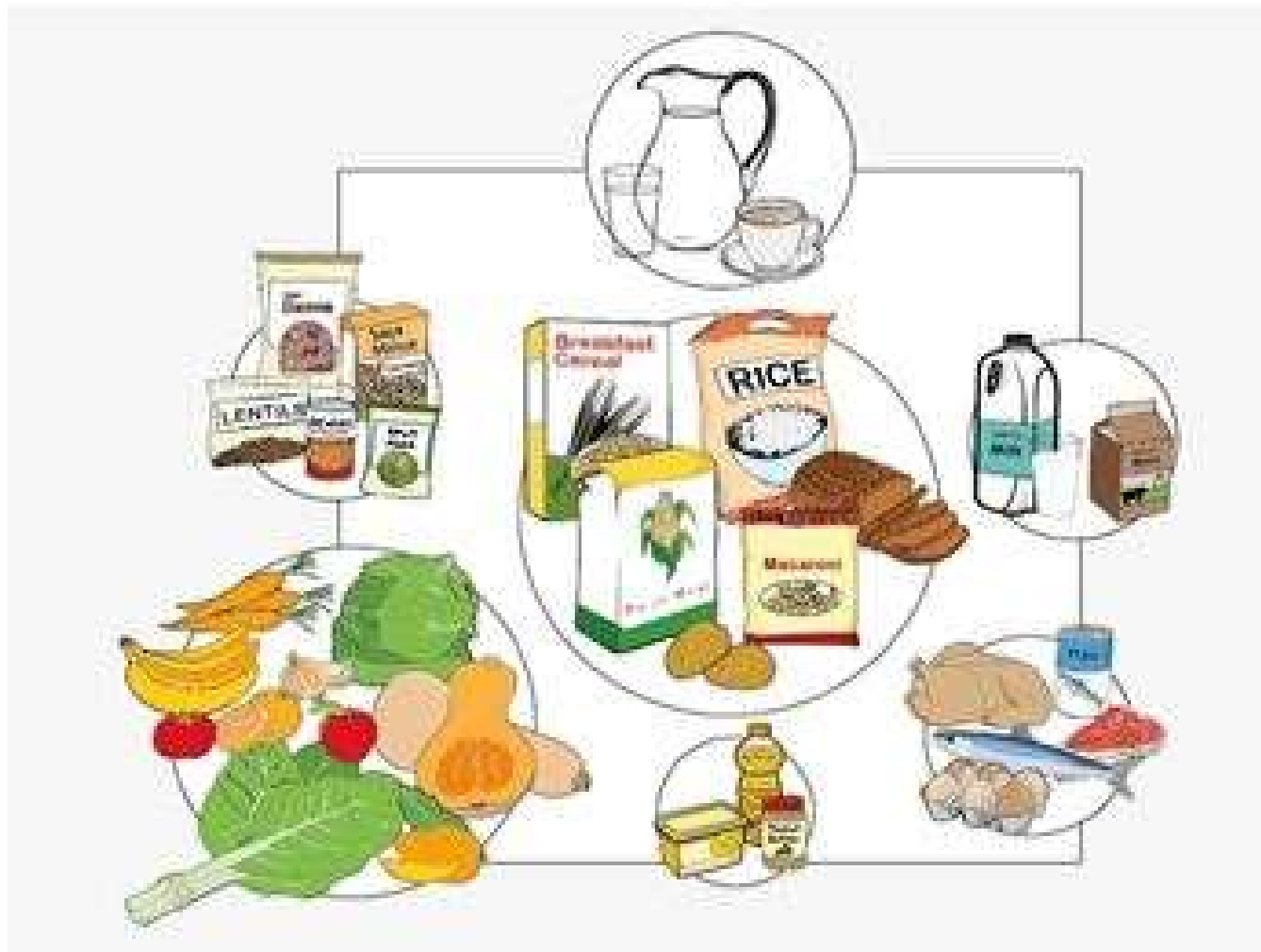
- South African Food Based Dietary Guidelines (SAFBDG)⁴
 - Developed in 2003
 - Revised in 2012
 - Simple guidelines for healthy eating (with the intention of reducing non-communicable disease)



Revised general SAFBDG's - 2012

- Enjoy a variety of foods.
- Be active!
- Make starchy foods part of most meals.
- Eat plenty of vegetables and fruit every day.
- Eat dry beans, split peas, lentils and soya regularly.
- Have milk, maas or yoghurt every day.
- Fish, chicken, lean meat or eggs can be eaten daily.
- Drink lots of clean, safe water.
- Use fats sparingly. Choose vegetable oils, rather than hard fats.
- Use sugar and foods and drinks high in sugar sparingly.

Revised general SAFBDG's - 2012

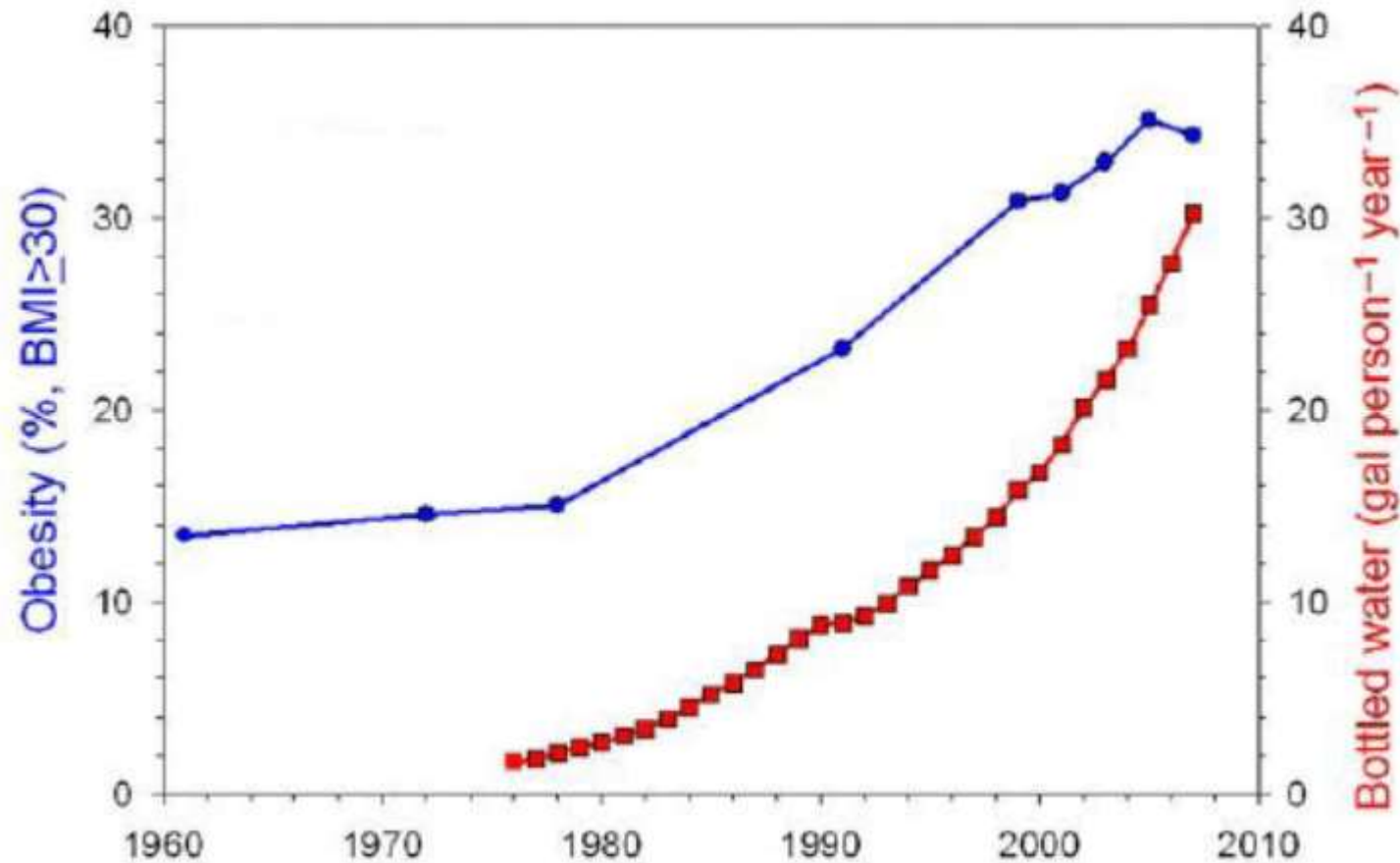


How consumers see 'sugar':

- What is the average consumer's understanding of 'sugar'?
- Do they perceive certain high sugar foods better than others and why?



But what about this?



What I have seen:

- Low fat milk vs full cream milk
 - Higher in ‘sugar’: 6,1 g vs 6 g per 125 ml (½ cup)²
 - NB to distinguish “Added sugar”



Study: Fruit juice ⁵

- SAJCN 2018
- Consumption patterns and demographic factors influence on fruit juice classifications, health benefits and sugar content perceptions in two municipal districts in Cape Town, Western Cape, South Africa

Study: Fruit juice ⁵

- “Literature has caused some confusion among consumers as a result of conflicting messages received”
- “The three main reasons why respondents consumed fruit juice were:
 - Healthier than other drinks (28,3%)
 - Refreshing (19,3 %)
 - Liked the taste (17,8%)”



Study: Fruit juice ⁵

- “Results affirm that consumers... perceive that not all fruit juice classifications are equally healthy”
- “Fruit juice intake resulted in better, healthy, nutritious diet quality and was found to have a significantly positive relationship regarding the higher consumption of total and whole fruit, while the consumption of added sugar was lower”

Study: SSB ⁶

- Diabetes care 2014
- Point – counterpoint
- Dietary Sugar and Body Weight: Have We Reached a Crisis in the Epidemic of Obesity and Diabetes?

Study: SSB ⁶

- “Starting around 2000, sugar consumption appears to have declined considerably, but the prevalence of obesity (and diabetes) has continued to rise.”



Study: SSB ⁶

Table 2—Putative effects of sugar*

Adverse outcome	Strength of the evidence
Increases weight in an isocaloric exchange with other macronutrients	None
Increases weight in a hypercaloric diet**	Moderate/inconsistent
Decreases weight in a hypocaloric diet**	Weak/inconsistent
Increases appetite resulting in weight gain	None
Causes diabetes	None
Provides unnecessary energy	Strong

*Sugar defined as sucrose, glucose, fructose, or HFCS. **A hypercaloric diet is defined as a diet in which energy intake exceeds energy expenditure, and a hypocaloric diet is defined as a diet in which energy intake is less than energy expenditure, thereby favoring weight gain and weight loss, respectively.

Study: SSB ⁶

- “No change in body weight from an isocaloric exchange; it therefore seems likely that any effect of sugar on weight is because of the energy it supplies and not because it has any unique property”



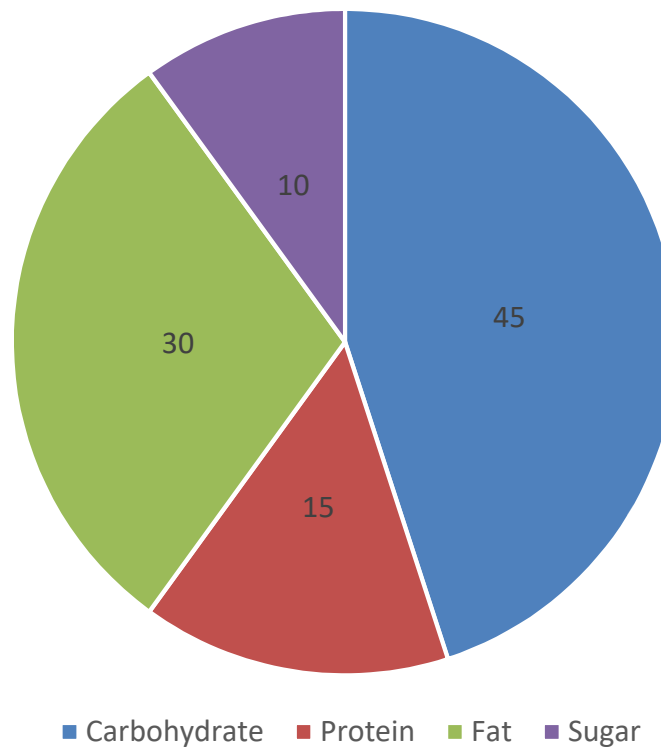
And what about WHO⁷?

- ‘In both adults and children, WHO recommends reducing the intake of free sugars to less than 10% of total energy intake’
 - Free sugars include monosaccharides and disaccharides added to foods and beverages by the manufacturer, cook or consumer, and sugars naturally present in honey, syrups, fruit juices and fruit juice concentrates.

Conclusion:

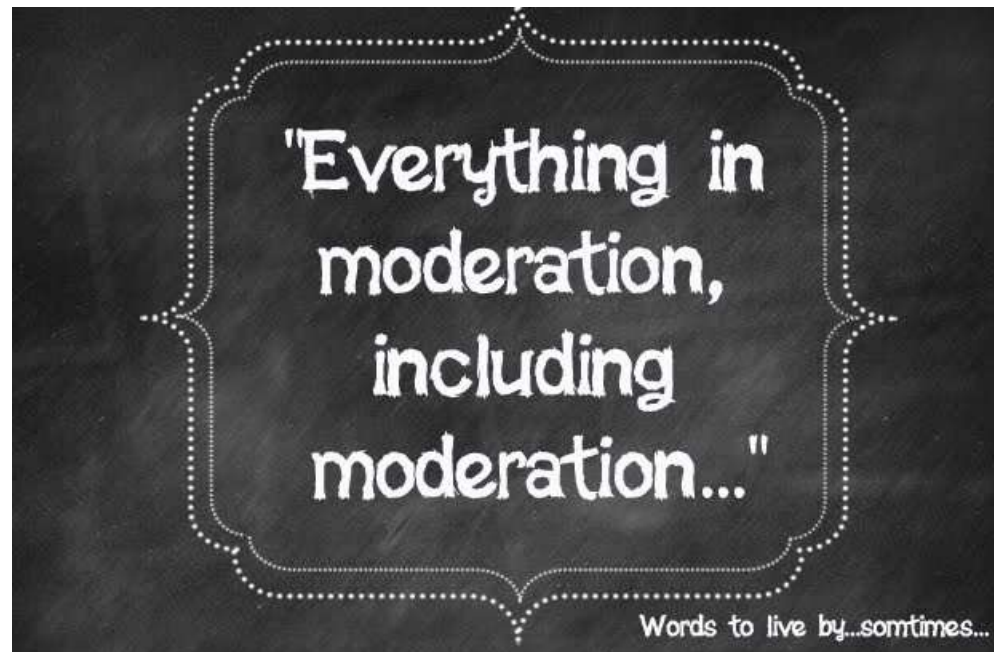
Theoretically

Prudent Dietary Guidelines



Conclusion:

- The age old words of any dietician (and Oscar Wilde):



Sources:

1. Krause's food and nutrition therapy; 12th edition; Mahan & Escott-Stump
2. Renal exchange lists; Renal Smart
3. https://www.health.harvard.edu/newsletter_article/diet-and-health-patterns-matter-most
4. <https://www.nutritionociety.co.za/index.php/11-useful-information/26-the-new-south-african-food-based-dietary-guidelines-in-perspective>
5. SAJCN 2018; Consumption patterns and demographic factors influence on fruit juice classifications, health benefits and sugar content perceptions in two municipal districts in Cape Town, Western Cape, South Africa; R G Duffett
6. Diabetes care 2014; Dietary Sugar and Body Weight: Have We Reached a Crisis in the Epidemic of Obesity and Diabetes?; R Kahn & J L Sievenpiper
7. Executive summary - Guideline: Sugars Intake for Adults and Children; World Health Organisation; 2015
8. MRC Food finder 3

Questions?

