

NUTRITION FOR HEALTH

EMBRACING OUR NAMIBIAN FOOD SYSTEMS



More information:
www.nafsan.org/N4H

HANDOUTS

JULY 2024

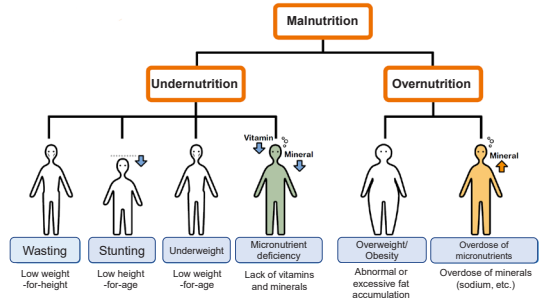


WHAT IS MALNUTRITION?

A serious condition that results from a deficiency or excess of essential nutrients.

2 TYPES OF MALNUTRITION “DOUBLE BURDEN OF MALNUTRITION”

- **Undernutrition** – Nutrient intake is lower than needed
- **Overnutrition** – Nutrient intake is higher than needed

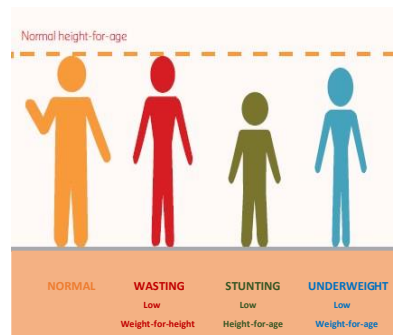


DIFFERENT FORMS OF UNDERNUTRITION

- Wasting = Weight is too low for height
- Stunting = Height is too short for age
- Underweight = Weight is too low for age
- Micronutrient Deficiency = Lack of specific vitamins and minerals

CAUSES OF UNDERNUTRITION

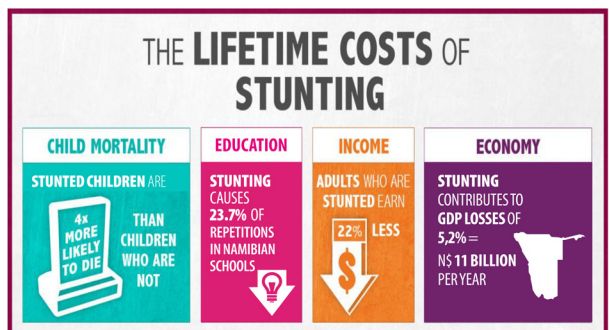
- Poverty
- Food Insecurity
- Lack of access to sufficient and nutritious food
- No clean water and lack of sanitation



EFFECTS OF UNDERNUTRITION

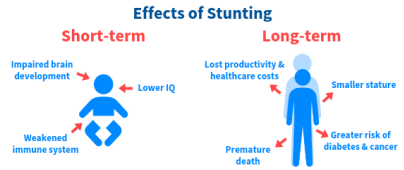
Long-term Consequences

- Short adult size
- Poor learning ability
- Poor performance at school
- Reduced economic productivity
- Low birth weight and stunted children in the next generation



Short-term Consequences

- Recurring illness
- Delayed physical and mental development
- Weakness
- Increased risk of death
- Poor appetite



SEVERE ACUTE MALNUTRITION (SAM)

- Two forms of Protein Energy Malnutrition: Kwashiorkor = lack of protein
Marasmus = lack of energy (calories/kilojoules)
- Marasmic kwashiorkor (combination of both kwashiorkor and marasmus)
- Micronutrient Deficiency (Iron, Vitamin A & Iodine deficiencies)
- Stunting (stunted growth): low height for age, irreversible after 2 years of age

MODERATE ACUTE MALNUTRITION (MAM)

- Wasting (recent rapid weight loss or failure to gain weight or infection)



Kwashiorkor



Marasmus



Kwashiorkor + Marasmus



Stunted Growth

SIGNS AND SYMPTOMS:

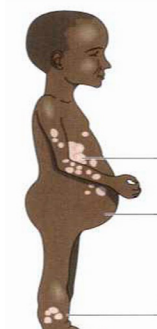
Marasmus

- Severe wasting
- Old man face
- Thinning hair
- Prominent ribs
- Constant hunger



Kwashiorkor

- Bilateral pitting edema
- Potbelly
- Brittle hair
- Sores and peeling skin
- Moon face
- Thin upper arms



OVERNUTRITION

- Overnutrition is a condition that results from excessive intake of food.

FORMS OF OVERNUTRITION

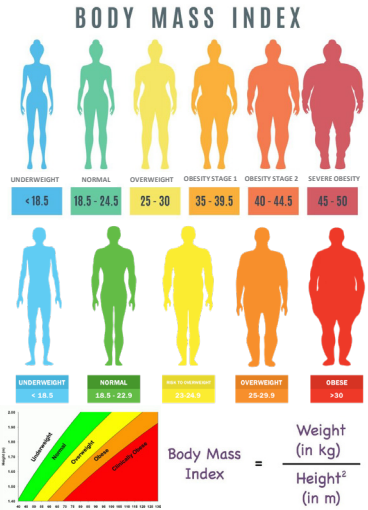
- Overweight** = Body Mass Index greater than 29.5 Kg/m²
- Obese** = Body Mass Index greater than 30 Kg/m²

RISKS OF OBESITY

- Type 2 diabetes
- High blood pressure (Hypertension)
- Cancer
- Stroke
- Depression
- Increased health costs
- Shorter life-span

CAUSES OF OBESITY

- Eating too much junk food
- Lack of exercise
- Not enough sleep
- Genetics
- Stress
- Trauma



TYPES OF SUGARS

Natural Sugars

These are sugars naturally found in milk (lactose), fruits (fructose), and in some vegetables.

Added Sugars

These are sugars that are added to food, food products, and drinks during processing/preparation.

Examples: tomato sauce, mayonnaise, flavored yogurt, breakfast cereals, cool drinks, energy drinks and juices.

Recommended sugar intake: 50 grams (= 10 teaspoons) per day

DANGERS OF ADDED SUGARS

- Weight gain
- Obesity
- Type 2 diabetes
- Heart Disease



RETHINK YOUR FAVOURITE DRINKS!

WORLD HEALTH ORGANISATION'S RECOMMENDATION: ADDED SUGAR PER DAY: MAX. 50G (=10 TEASPOONS) CHILDREN EVEN LESS.



3 TYPES OF FATS IN OUR DIET

THE FACTS ON FAT

The American Heart Association recommends replacing bad (saturated) fats with good (unsaturated) fats as part of a healthy eating pattern.

LOVE IT
UNSATURATED (POLY & MONO)
✓ Lowers rates of cardiovascular and all-cause mortality
✓ Lowers bad cholesterol & triglyceride levels
✓ Provides essential fats your body needs but can't produce itself

LIMIT IT
SATURATED
✗ Increases risk of cardiovascular disease
✗ Raises bad cholesterol levels

LOSE IT
ARTIFICIAL TRANS FAT, HYDROGENATED OILS & TROPICAL OILS
✗ Increases risk of heart disease
✗ Raises bad cholesterol levels

LEARN MORE AT HEART.ORG/EATSMART

Not all fats are the same:

- ✓ 'love' certain fats = healthy = mono- and polyunsaturated fat
- ✓ 'limit' certain fats = partially healthy = saturated fat
- ✓ 'lose' certain fats = unhealthy = artificial trans-fatty acids

Healthy' fats - usually liquid = 'oils' = marula, groundnut, olive, sunflower), but also in avocados, nuts, and fish/seafood.

Fats to be limited - mostly solid: margarine, peanut butter, butter and animal fats.

Unhealthy trans-fats - also solid and in fast foods, pastries, snacks, spreads and ultra-processed foods.

ULTRA-PROCESSED FOOD

Processed foods refer to any food item that undergoes deliberate changes before being consumed or sold to consumers. These changes can include washing, cutting, cooking, canning, bottling, drying, freezing, or adding preservatives for increased shelf life. Processed foods are not always bad for us, and some processing methods can actually help retain nutrients in the food.

Ultra-processed foods, often referred to as 'fast foods', can be cheap, convenient, tasty, and have a longer shelf life, but often have lots of added sugar, refined carbohydrates, trans fats, salt/sodium, which tends to have a lot of (empty) calories per bite. They mostly contain artificial colourings, sweeteners and preservatives, and they can be highly addictive, so one could say that ultra-processed food is often not designed with health in mind but with profit.

Examples of ultra-processed foods are chips, pizza, burgers, sausages, salami, bacon, pies, 'ready-to heat' food, instant soups/sauces, cheese, cakes, puddings, ice cream, breakfast cereals, candies, as well as soda drinks (= 'soft drinks') and energy drinks.

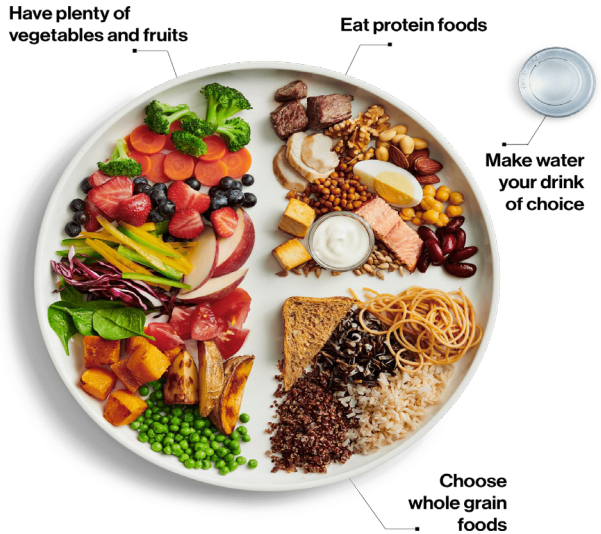
Regular consumption of ultra-processed foods has been linked to obesity and to serious health issues, e.g. gut disturbances, micronutrient deficiencies, diabetes and cancer.

HEALTHY PLATE

The importance of eating a variety of foods

- Provides the body with a range of nutrients.
- Reduces the risk of diseases
- Makes meals more interesting from day to day.
- Promotes good health

There is no single food that can supply all nutrients in the amounts needed. Eating foods from all food groups helps you to obtain nutrients for good health.



IMPORTANCE OF WATER

It is important to drink enough water (8-12 glasses per day)

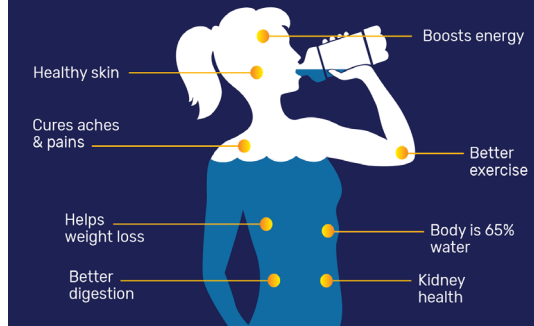
- Regulates the body's temperature.
- Prevents dehydration
- Improves brain performance.
- Proper functioning of the digestive system

NB! Drinking too little can cause constipation and dehydration.

Dehydration can be treated at home, using the Oral Rehydration Solution:

- ORS consists of: 1 liter of boiled and cooled water, 6 levelled teaspoons of sugar and half a teaspoon of salt.

BENEFITS OF DRINKING WATER



Home-made remedies for mild/medium cases of Dehydration:



HOMEMADE ORS

CURE FOR DEHYDRATION AND DIARRHOEA



5. Drink this homemade ORS several times a day until you recover completely.

FOOD PRESERVATION

Food preservation is the process of treating and handling food in order to slow down spoilage and prevent foodborne illness while maintaining nutritional value, texture and flavor.

TRADITIONAL PRESERVATION:



Drying



Smoking



Salting



Jellying / Jam



Sugaring



Fermenting & Pickling

MODERN PRESERVATION:

Food Storage Tips

- Keep perishable foods, such as meat, poultry, and dairy products, in the refrigerator.
- Store dry goods, such as grains, flours, and cereals, in airtight containers in a cool, dry place.
- Store fruits and vegetables in the refrigerator or in a cool, dry place, depending on the type of produce.
- Avoid storing food in direct sunlight or near heat sources, as these can accelerate spoilage.



Canning



Pasteurization



Sterilization



Freeze drying



Vacuum Packing

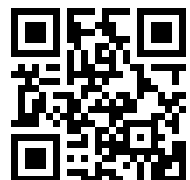


Chemicals



For more information visit:

www.nafsan.org/resources



FOODBORNE ILLNESSES

...are caused by food or drinks contaminated with bacteria, viruses, or parasites.

What to do?

- First aid: drink lots of water, get proper rest, eat light food like bananas, apples, crackers, bread, rice
- What to avoid: alcohol, fried, fatty or spicy foods, meat, eggs, milk-products, coffee and smoking
- Severe symptoms = see a doctor: bloody diarrhea, or diarrhea for more than 3 days, frequent vomiting, signs of dehydration (no/little urine, dry mouth/throat, dizziness), fever is high (39°C+) or lasts 3+ nights.

Short-term Symptoms	Long-term Symptoms



First 1,000 Days

270 days	365 days				365 days	
Pregnancy	Birth	0 up to 6 months	6 up to 9 months	9 up to 12 months	12 up to 24 months	First = 1,000 Days

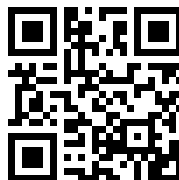
“Breast is Best!” For optimal nutrition and immune support for your growing child exclusively breastfeed your newborn for the first 6 months, then introduce first foods while continuing to breastfeed until your child is at least 2 yrs old.

More information:

www.nafsan.org/breastfeeding



www.RightStart.com.ng



<https://cloud.nafsan.org/ChildNutrition.pdf>

