Thiamine in pregnancy, breastfeeding and infancy

- Pregnant women need to eat enough thiamine for them and their developing babies.
- A diverse diet that includes a variety of good sources of thiamine everyday is important during pregnancy, post-birth and while breastfeeding. It is unsafe to follow restrictive diets!
- When babies transition from breastmilk to solid food, they need to consume good sources of thiamine (including fortified baby foods).
- Ask your doctor about using vitamin supplements containing thiamine.

How to reduce thiamine losses while cooking

1) Use the minimum amount of water for the preparation of vegetables and do not discard the cooking water.
2) Cook for the minimum amount of time possible; a high temperature for a short time is preferable.
3) Cover the pot with a lid to shorten cooking time.
4) Keep raw foods the minimum time possible in storage; cooked foods should not be stored.
5) Wash vegetables before cutting them.
6) If possible do not wash rice before cooking. If necessary, rinse once only with a little cold water.
7) Do not cook rice with excess water that needs to be discarded.
8) If possible, use parboiled rice, instead of white (polished) rice.
9) Do not add sodium bicarbonate to green vegetables for retention of their color in cooking or canning.
10) Prefer raw than roasted nuts (e.g. peanuts) and seeds (e.g. sunflower seeds).
11) Prefer wholegrain cereals – the darker, the better!

Thiamine (Vitamin B1)

A guide to increase thiamine intake and prevent deficiency of this essential nutrient.
WHAT IS IT?
Thiamine is a vitamin with a very important role in energy production, and, therefore, in the growth, development, and function of cells. **Thiamine deficiency** can result in:
- Heart palpitations, sudden heart failure, water retention (edema)
- Poor vision, foot/wrist drop, loss of reflexes, pins and needles in limbs, lack of appetite, memory loss, irritability, confusion
- Permanent brain and nerve damage, and even death, if treatment is not provided on time!

HOW MUCH DO WE NEED?
Recommended intake/day in different groups
- Birth to 6 months: 0.2 mg
- 7–12 months: 0.3 mg
- 1–9 years: 0.5-0.9 mg
- +10 years: 1.2 mg (males); 1.1 mg (females)
- Pregnancy: 1.4mg
- Breastfeeding: 1.5mg

GOOD FOOD SOURCES
**Good food sources of thiamine are:**
- Pork: 1mg/100g (~1 pork chop)
- Liver (pork, chicken, beef): 0.3mg/100g
- Pulses (lentils, various beans, peas): 0.20-0.47mg/cup
- Seeds (sunflower, sesame): 0.22-0.42mg/28g
- Nuts (pistachios, peanuts): 0.1-0.3mg/28g
- Wholegrain cereals (wheat, brown rice, oatmeal): 0.15-0.3mg/cup
- Fortified/enriched products:
  - rice: 0.36mg/1 cup
  - baby cereal: 0.2mg/50g

MODERATE AND POOR FOOD SOURCES
**Moderate and poor food sources of thiamine are:**
- Fish: 0.04-0.13mg/100g
- Most fruit and vegetables: 0.02-0.13mg/cup
- Dairy products (milk/yoghurt): 0.05-0.11mg/cup
- White rice (unenriched): 0.03mg/cup
- Processed cassava: 0mg/cup
- Sugar, alcohol, fat: 0mg

ANTI-THIAMINE FACTORS
These are products that can accelerate losses of thiamine in the body. **Do not:**
- chew fermented tea leaves or betel nuts
- consume African silkworm larvae
- consume raw or fermented fish (cook it instead!)
- consume tea with a meal; drink it between meals

Foods rich in vitamin C (e.g. orange, kiwi, lemon, tomato) may have a protective role and should be consumed along with the meals.