

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, fatigue, 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.