FrieslandCampina

Institute
for dairy nutrition and health

SEANUTS II Factsheet outcomes Indonesia

Breakfast with dairy: What is the relation with nutrient intake?

Outcomes Indonesia

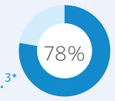
SEANUTS II

Children's rapid growth demands adequate nutrient intake throughout the day. New data from the second South East Asian Nutrition Surveys (SEANUTS II) shows that including dairy at breakfast is related to significantly higher daily intakes of essential micronutrients.

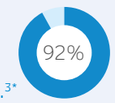
SEANUTS II, initiated by FrieslandCampina in collaboration with Universitas Indonesia, addresses the critical issue of the "triple burden" of malnutrition. This is the coexistence of undernutrition, overnutrition, and micronutrient deficiencies. The study showed that the dietary intakes of especially vitamin D and calcium did not meet the recommendations* for Indonesian children.

Nutrients of concern:

Calcium:
78% of all children aged 0.5 – 12 years did not meet the recommendations.[3*]



Vitamin D:
92% of all children aged 0.5 – 12 years did not meet the recommendations.[3*]



Recommended nutrient intakes:[4]

Calcium:
270 mg/day (0.5-1 year old);
1200 mg/day (10-12 years old).

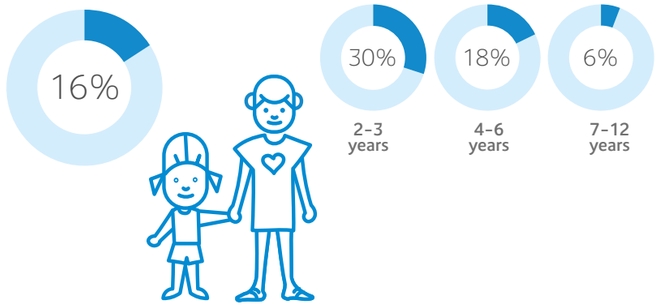
Vitamin D:
10 mcg/day (0.5-1 year old);
15 mcg/day (1-12 years old).

* Estimated Average Requirement (EAR)

Dairy during breakfast[1]

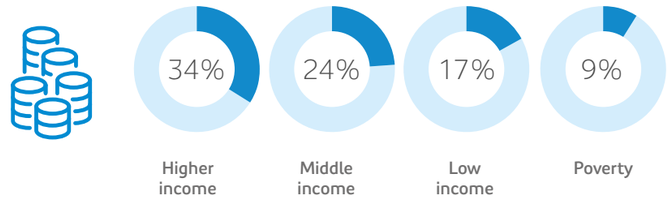
A study focused on breakfast, based on SEANUTS II data, investigated the relationship between a breakfast with dairy and nutrient intake.[1] This study included 2,216 children aged 2-12 years, mainly from Java and Sumatra and was based on a one-day 24-hour dietary recall and sociodemographic questionnaires. In this factsheet the key findings are presented.

16% of the children aged 2-12 years consumed dairy at breakfast; younger children more often than older children.

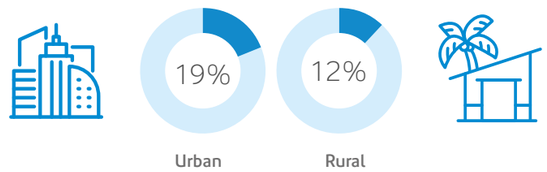


Average intake during breakfast:
1 portion of dairy

More children from the higher income families consumed dairy at breakfast:



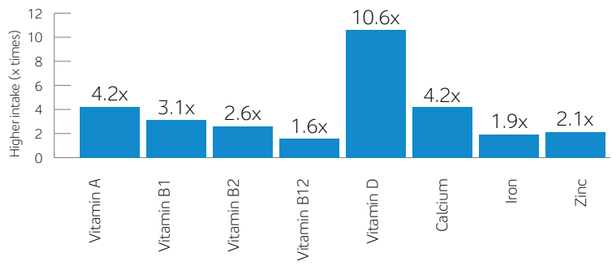
Children living in urban areas consumed more often dairy at breakfast than children living in rural areas.



Significantly higher nutrient intake during breakfast[1]

Children who consumed a breakfast with dairy had a significantly **higher** intake of vitamins and minerals **at breakfast** compared to children not consuming dairy at breakfast.

Higher micronutrient intake at breakfast (x times):

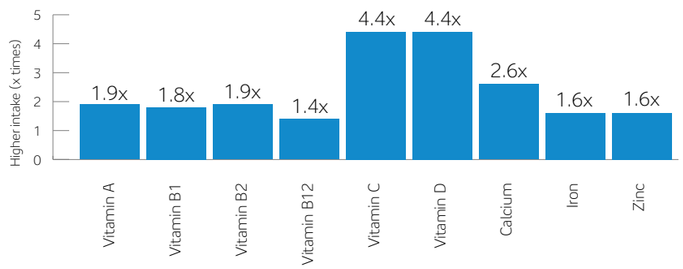


Children who consumed dairy at breakfast had a significantly higher intake at breakfast of total energy, protein, carbohydrates, fat, and fibre as well as vitamin C, choline, and DHA, compared to children not consuming dairy at breakfast.

Significantly higher daily nutrient intake[1]

Children who consumed a breakfast with dairy had a significantly **higher daily intake** of vitamins and minerals than children not consuming dairy at breakfast.

Higher daily micronutrient intake (x times):

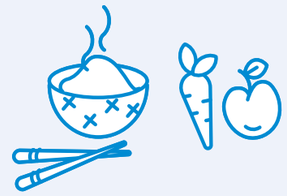


Children who consumed dairy at breakfast had a significantly higher daily intake of energy, protein, carbohydrates, fat, and fibre, as well as choline and DHA compared to children not consuming dairy at breakfast.

Daily calcium and vitamin D intake with dairy at breakfast was 811 mg and 8.5 mcg, respectively, compared to 309 mg and 1.9 mcg, respectively, without dairy at breakfast.

Definition of breakfast

First eating occasion after an overnight sleep, consumed after waking up and before 12:00 pm (including all foods consumed except water, tea, and coffee without milk).



Definition of dairy[2]

- Animal-based milk (liquid and powdered), yoghurt, and cheese, excluding human breast milk.
- Recommendation = 1 portion per day.
- 1 portion size of dairy is:
  - 1 glass milk = 200 ml
  - 3/4 glass goat milk = 185 ml
  - 4 tablespoons of powdered milk = 20 g
  - 270 g yoghurt
  - 2 slices of cheese = 40 g

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Are you a healthcare professional who wants to know all about dairy, nutrition, and health?

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References:

1. Mikulic, N., Khouw, I., Ng, S., et al. Dairy consumption at breakfast among Southeast Asian Children: Associations with nutrient intake from the South East Asian Nutrition Surveys II (SEANUTS II). Nutrients. 2024; 16(19), 3229. doi: 10.3390/nu16193229
2. 2014 Indonesia Guidelines for Balanced Nutrition. Ministry of Health, Indonesia
3. Kekalih, A., Chandra, D.D., Mirtha, L.T, et al. Dietary intakes, nutritional and biochemical status of 6 months to 12-year-old children before the COVID-19 pandemic era: the SEANUTS II study in Java and Sumatera Islands, Indonesia. Public Health Nutrition, 2024. Accepted for publication
4. Peraturan Menteri Kesehatan Nomor 28 Tahun 2019 Tentang Angka Kecukupan Gizi yang Dianjurkan untuk Masyarakat Indonesia. Jakarta: Ministry of Health Republic of Indonesia, 2019

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