

Dietary Transitions in Indonesia: The case of urban, rural, and forested areas

Mulia Nurhasan^{1,2*}, Desy Leo Ariesta¹, Mia Mustika Hutria Utami^{1,3}, Mochamad Fahim⁴, Nia Aprillyana⁵, Agus Muhamad Maulana¹, Amy Ickowitz¹

¹Center for International Forestry Research (CIFOR), Bogor, Indonesia

²Center for Regulation Policy and Governance (CRPG), Universitas Ibn Khaldun, Bogor, Indonesia

³Management of Food Service and Nutrition Study Program, College of Vocational Studies, IPB University, Bogor, Indonesia

⁴Statistics Indonesia of Kendal Regency, Social Statistics, Population and People's Welfare Department, Kendal, Indonesia

⁵Statistics Indonesia of Blora Regency, Regional Balance Sheet and Statistical Analysis Department, Blora, Indonesia

***Corresponding author:**

Mulia Nurhasan

m.nurhasan@cifor-icraf.org

Table A1 Food groups¹⁻¹¹

Food Groups	Food Groups
Rice based staples¹ Rice (local, best quality, imported), Sticky (glutinous) rice, Rice flour, Mixed rice/rice plate, Fried rice, Cooked rice, Rice rolls in coconut soup, Rice noodles, Prepared baby food	Legumes and nuts Groundnut (peanut) without shell, Groundnut (peanut) with shell, Mung bean, Cashew nut, Other nuts, Mung bean porridge, Soybean
Wheat based staples² Wheat flour, Instant noodles, Fresh noodles, Macaroni/dried noodle, Meatball/boiled/fried noodles, POH Instant noodles, White bread	Processed legumes Tofu (bean curd), Tempeh (soybean cake), Taucu (salted yellow soy beans), Oncom (fermented soy bean press cake), Other processed legumes, Melinjo cracker
Traditional staples Fresh corn with husk, Corn kernels, Other staple, Cassava, Sweet potato, Arrowroot, Taro, Potatoes, Dried cassava, Dried cassava flour, Tapioca/cassava flour, Other staples	Vitamin A rich fruit Mango, Papaya
Fish and Other Aquatic Animals (OAA)³ Yellow tail, Bonito/tuna/skipjack tuna, Mackerel, Trevally, Indian mackerel, Anchovy, Milk fish, Snake head, Mozambique tilapia, Common carp, Catfish, Barramundi, Baronang, Other fresh fish, Shrimp, Squid, Crab, Mussel, Other shrimp or seafood, Fish (fried/grilled/presto/steamed)	Other fruits Orange, Apple, Avocado, Rambutan, Lanzones, Durian, Snake fruit, Pineapple, Ambon banana, King banana, Other banana, Water apple, Sapodilla, Star fruit, Great hog plum, Watermelon, Rock melon, Jackfruit, Canned fruit, Other fruits, Coconut
Preserved fish and OAA Trevally, Mackerel, Frigate mackerel/tuna/skipjack tuna, Anchovy, Yellow stripe trevally, Three spot gourami, Milk fish, Snakehead murrel, Canned fish, Other salted/preserved fish, Dried shrimp, Dried squid, Other preserved and OAA	Edible fat Coconut oil, Corn oil, Other cooking oil, Margarine, Other oil
Fresh red meat (domesticated four legged animals) Beef, Buffalo, Goat, Pork	Sugar Cane sugar, Brown sugar (including Liquid sugar)
Avian meat⁴ Broiler chicken, free-range chicken, duck, and other birds (domesticated and wild)	Salt Salt

Food Groups	Food Groups
Other fresh meat/ wild meat Other fresh meat (non-avian)	Organ meat Liver, Offal, Trimmed fat meat, Bones, Other organ meats
POH meat ^{2,5,6} Beef jerky, Beef floss, Corned beef, Other preserved meat, Soto/gule/rawon/cincang (meat soups), Satay/tongseng (goat soup), Chicken/meat (fried/grilled/etc.)	Beverage Ingredients ⁸ Tea, Coffee (powder, beans, instant), Condensed milk, Instant chocolate, Chocolate powder, Syrup, Other beverage ingredients
Eggs Layer's egg, Domestic chicken egg, Duck egg, Bird egg, Other egg, Salted duck egg	Spices ⁹ Candle nuts, Coriander seeds, Pepper, Tamarind, Shallot, Garlic, Red chili, Green chili, Bird's eye chilli, Other spices
Liquid dairy Fresh milk, Pasteurized milk	Processed ingredients ¹⁰ Shrimp paste, Soy sauce, Flavor enhancer (mono sodium glutamate/ msg), Chili/tomato sauce, Prepared spices/packed, corn starch
Non liquid and processed dairy Powdered milk, Powdered baby milk, Cheese, Other dairy products	Crackers Crackers
Dark green leafy vegetables Spinach, Kangkung/water spinach, Mustard greens, Cassava leaves	Snacks ¹¹ Chips, Sweet bread/other bread, Jelly, Cookies /biscuit/crispy rolls, Traditional rice cakes, Fried fritters
Other vitamin A rich vegetables Carrot	Sugar-sweetened beverages Tea drink (bottled or box), Fruit juice, Soft drink with soda, Energy drink, Other drinks, Ice cream, Other sugary iced foods

Other vegetables⁷

Cauliflower/cabbage, Chinese cabbage, Green bean, Long beans, Tomato (cherry, vegetables and fruits), Cucumber, Eggplant, Bean sprout, Chayote, Baby corn, Vegetable soup/ mix vegetable saute, Tamarind dish/spicy coconut soup, Young jackfruit, Pawpaw, Mushroom, Stink bean, Jengkol (*Pithecellobium*), Canned vegetables, Other vegetables, Gado-gado/ketoprak/pecel (vegetable salad with peanut sauce)

¹We did not include rice and chicken porridge because it was not included in 2008 survey and therefore cannot be compared.

²POH stands for processed-preserved-prepared-outside-home, including factory-processed foods consumed at home or food prepared and consumed at restaurants and or food stalls. This category was made to adjust to the context in Indonesia and food grouping by BPS at SUSENAS.

³Pangasius, Pomfret, Giant gourami are considered as other fresh fish (food No. 34) in 2008.

⁴The 2008 survey did not include a question about duck, but was considered as other poultry (food No. 60).

⁵ The 2008 survey did not include a question about consumption of sausage, nuggets, smoked meats and preserved meatballs, but were considered as other preserved meat (food No. 65).

⁶The 2008 survey did not include a question about processed meat, but considered as cooked chicken/red meat (food No. 209).

⁷The 2008 survey did not include a question about cooked vegetables, there are no other food categories inclusive of it hence not considered in the analysis.

⁸Tea bags and instant coffee were not separately asked in 2008 and considered tea and coffee.

⁹Nutmeg and clove was not asked in 2017, other spices in 2008 has no unit, hence nutmeg, clove and other spices are not in the analysis.

¹⁰Tomato sauce was not a separate food category and considered as instant chili paste and tomato sauce (food No. 178).

¹¹Dumplings and fried dumplings (batagor) were not in 2017 food list and there were no other food categories inclusive of this.