Tab/table name	Component in English	Column/variable name	Essential nutrients for optimisation (i.e. default targets for NUT diet)	Details	Data matches	Unit
food_composition	**Database of nutrient content per 100g of foods from multiple sources of food composition data**					
	Food unique ID	**ENHANCE_ID**			ID to match food composition data to food price data and	
	Original food code	original_food_Code		Food code from original food composition tables, e.g. " Food Code" in the USDA tables		
	Food composition table region ID	FCT_ID				
	Food composition table region name	FCT_name		Name of the region or country of the original food composition table		
	Name of food in English	food_name_english				
	Name of food in language of place of origin	food_name_other				
	Name of food in Latin	food_name_scientific				
	General food name used across FCTs	**food_name_generic**		General food name given to commodities used for matching foods at a higher level, before matching to a specific FCT region	HDB_generic_food_item	
	Food group Level 1	FG1		Macro level		
	Food group level 2	FG2		Intermediate level		
	Food group level 3	FG3		Micro level		
	Edible portion coefficient (from as purchased to as described)	EDIBLE		Edible portion coefficient (from as purchased to as described)		-
	Energy	ENERC_KCAL		Energy (kcal/100 g EP) = total protein (g/100 g EP) × 4 + total fat (g/100 g EP) × 9 + available carbohydrate (g/100 g EP) × 4 + total dietary fibre (g/100 g EP) × 2 + alcohol (g/100 g EP) × 7		kcal
	Water	WATER				g
	Protein, total	PROTCNT		Total protein (g/100 g EP) = nitrogen conversion factor (XN) × total nitrogen (g/100 g EP)		g
	Fat, total	FAT		Mixed solvent extraction or [Soxhlet method with continuous extraction]		g

Tab/table name	Component in English	Column/variable name	Essential nutrients for optimisation (i.e. default targets for NUT diet)	Details	Data matches	Unit
	Fatty acids, total saturated	FASAT		Fatty acids, total saturated (g/100 g EP) = fatty acids, total saturated (% of total FA) × fatty acid conversion factor × fat, total (g/100 g EP) / 100		g
	Fatty acids, total monounsaturated	FAMS		Fatty acids, total monounsaturated (g/100 g EP) = fatty acids, total monounsaturated (% of total FA) × fatty acid conversion factor × fat, total (g/100 g EP) / 100		g
	Fatty acids, total polyunsaturated	FAPU		Fatty acids, total polyunsaturated (g/100 g EP) = fatty acids, total polyunsaturated (% of total FA) × fatty acid conversion factor × fat, total (g/100 g EP) / 100		g
	Cholesterol	CHOLE				mg
	Fibre, total dietary or [fibre, crude]	FIBTG				g
	Carbohydrate, available; calculated by difference	CHOAVLDF		Carbohydrate, available; calculated by difference (g/100 g EP) = 100 – (water + total fat + total protein + ash + total dietary fibre + alcohol) (g/100 g EP)		g
	Sucrose	SUCS				g
	Phytate, total	PHYTCPP				mg
	Vitamin A (expressed in retinol activity equivalents)	VITA_RAE		Vitamin A in retinol activity equivalents (mcg/100 g EP) = retinol (mcg/100 g EP) + beta-carotene equivalents (mcg/100 g EP) / 12		mcg
	Vitamin A, Retinol	RETOL				mcg
	Choline, total	CHOLN				mg
	Thiamine (vitamin B_1)	THIA				mg
	Riboflavin (vitamin B_2)	RIBF				mg
	Niacin equivalents or [niacin, preformed] (vitamin B_3)	NIAEQ		Niacin equivalents (mg/100 g EP) = niacin (mg/100 g EP) + tryptophan (mg/100 g EP) / 60 or [HPLC, microbiological]		mg
	Tryptophan	TRP				mg
	Vitamin B_6	VITB6C				mg
	Pantothenic Acid	PANTAC				mg

Tab/table name	Component in English	Column/variable name	Essential nutrients for optimisation (i.e. default targets for NUT diet)	Details	Data matches	Unit
	Folate, dietary folate equivalents (DFE)	FOLDFE		Dietary folate equivalents (mcg/100 g EP) = naturally occurring food folates (mcg/100 g EP) + 1.7 × synthetic folic acid (mcg/100 g EP)		mcg
	Vitamin B_{12}	VITB12				mcg
	Vitamin C	VITC				mg
	Vitamin D	VITD		Vitamin D = Vitamin D2 + Vitamin D3; analysed by HPLC		mcg
	Vitamin E (expressed in alpha-tocopherol equivalents) or [alpha-tocopherol]	VITE		Vitamin E expressed in alpha-tocopherol equivalents (mg/100 g EP) = alpha-tocopherol (mg/100 g EP) + 0.4 × beta-tocopherol (mg/100 g EP) + 0.1 × gamma-tocopherol (mg/100 g EP) + 0.01 × delta-tocotrienol (mg/100 g EP) or [HPLC]		mg
	Vitamin K (µg)	VITK				mcg
	Calcium (mg)	CA				mg
	Copper (mg)	CU				mcg
	Iron (mg)	FE		Iron bioavailability factor, to be applied to total dietary iron to derive bioavailable (absorbed) iron		mg
	Iron coefficient	FECOE				-
	Iron absorbed (mg)	FEABS				mg
	Iron coefficient ID	FECOECAT		Iron coefficient category, according to food type		-
	Phosphorus (mg)	P				mg
	Potassium (mg)	K				mg
	Manganese (mg)	MN				mg
	Magnesium (mg)	MG				mg
	Selenium (mg)	SE				mcg
	Sodium (mg)	SODIUM				mg
	Zinc (mg)	ZN				mg
MDA_kcal						
	Food group Level 1	**FG1**		Macro level food group	1:m match to food composition data	
	English name of food group Level 1	FG1_name				
	Ratio of kilocalories from each food group	energy_ratio				

Tab/table name	Component in English	Column/variable name	Essential nutrients for optimisation (i.e. default targets for NUT diet)	Details	Data matches	Unit
	Exception for food groups expressed not as ratio, but in grams instead	energy_exception		Boolean variable to indicate exception in column C of .csv		
	Maximum ratio of energy (kcal) from each food group	FG_max_ratio		If cell is empty, no upper constraint is imposed at food group level		
food_groups						
	Food group Level 1	**FG1**		Macro level food group	1:m match to food	
	English name of food group Level 1	FG1_name				
	Food group Level 2	FG2				
	English name of food group Level 2	FG2_name				
	HDB Food group ID	FGHDBID				
	HDB Food group code	FGHDBCODE				
	HDB Food group name	FGHDBNAME				
individual_requirements	**Database of energy and nutrient specifications of individuals specified by WHO**					
	Unique identifie for the individual	Id				
	Description of individual (sex, age, weight, activity level)	Description				
	Biological sex	Sex				
	Range of age, in months or years	Age_range				
	Age in months	Age_m				months
	Age in years	Age_y				years
	Body mass in kilograms	Weight				kg
	Physical activity level	PAL		Physical activity level or energy requirements expressed as multiplier of the basal metabolic rate (BMR)		
	Physical activity level label	PAL_label				
	Binary variable that defines automatic inclusion of breastmilk in the diet of children under 2 years	Breastfed				
	Amount of breastmilk in grams to be included in the diet of children under two; column "Breastfed" must be "TRUE" for inclusion	BreastMilkPortionSize				g
	Scaling factors adjust MDA according to energy requirements of individual	IndividualScalingFactorMDA				

Tab/table name	Component in English	Column/variable name	Essential nutrients for optimisation (i.e. default targets for NUT diet)	Details	Data matches	Unit
	Estimated average daily energy requirement (EAR) in kcal	Energy	X			kcal
	Minimum percentage of energy from fat	FatMinPercent	X			percentage
	Maximum pecentage of energey from fat	FatMaxPercent	X			percentage
	Protein requirement based on 12% of energy, in grams	Protein	X			g
	Vitamin A, Retinol Activity Equivalents, Recommended Safe Intake	RetinolActivityEquivalent	X			mcg
	Vitamin B1, RNI	VitaminB1	X			mg
	Vitamin B2, RNI	VitaminB2	X			mg
	Niacin, RNI	Niacin	X			mg
	Vitamin B6, RNI	VitaminB6	X			mg
	Pantothenic Acid, RNI	PantothenicAcid	X			mg
	Folate, RNI	Folate	X			mcg DFE
	Vitamin B12, RNI	VitaminB12	X			mcg
	Vitamin C, RNI	VitaminC	X			mg
	Iron Absorbed, RNI	IronAbsorbed	X			mg
	Calcium, RNI	Calcium	X			mg
	Magnesium, RNI	Magnesium	X			mg
	Zinc -Refined (300mg phytate) diet	ZincRef	X	Highest bioavailability level for zinc		mg
	Zinc - Semi-Refined (600mg phytate) diet	ZincSemiref	X			mg
	Zinc - Semi-Unrefined (900mg phytate) diet	ZincSemiunref	X			mg
	Zinc - Unrefined (1200mg phytate) diet	ZincUnrefined	X	Lowest bioavailability based on high phytate containing diets (default)		mg
	Biotin, RNI	Biotin				mg
	Choline, RNI	Choline				mg
	Fluoride, RNI	Fluoride				mg
	Manganese, RNI	Manganese				mg
	Vitamin E, RNI	VitaminE				mg
	Phosphorus, RNI	Phosphorus				mg
	Copper, RNI	Copper				mcg
	Molybdenum, RNI	Molybdenum				mcg
	Iodine, RNI	Iodine				mcg
	Selenium, RNI	Selenium				mcg

Tab/table name	Component in English	Column/variable name	Essential nutrients for optimisation (i.e. default targets for NUT diet)	Details	Data matches	Unit
	Vitamin D, RNI	VitaminD				mcg
	Chromium, RNI	Chromium				mcg
	Vitamin A upper limit	ULVitaminA	X			mcg
	Calcium upper limit	ULCalcium	X			mg
	Iron upper limit	ULIron	X			mg
	Vitamin C upper limit	ULVitaminC	X			mg
	Niacin upper limit	ULNiacin	X			mg
	Folic Acid upper limit	ULFolicAcid				mcg
	Vitamin B6 upper limit	ULVitaminB6				mg
	Zinc upper limit	ULZinc				mg
	Phosphorus upper limit	ULPhosphorus				mg
	Copper upper limit	ULCopper				mcg
	Molybdenum upper limit	ULMolybdenum				mcg
	Iodine upper limit	ULIodine				mcg
	Magnesium upper limit	ULMagnesium				mg
	Selenium upper limit	ULSelenium				mcg
	Choline upper limit	ULCholine				mg
	Flouride upper limit	ULFlouride				mg
	Manganese upper limit	ULManganese				mg
	Vitamin D upper limit	ULVitaminD				mcg
	Vitamin E upper limit	ULVitaminE				mg
individual_requirements_plw	**Database of additional energy and nutrient specifications required during pregnancy and lactation**					
	Unique identified for the lactation or pregnancy stage	Id_plw				
	Additional energy requirements in kcal	Energy	X			kcal
	Protein requirement based on 12% of energy, in grams	Protein	X			g
	Additional requirement for Vitamin A, Retinol Activity Equivalents	RetinolActivityEquivalent	X			mcg
	Additional requirement for Vitamin B1	VitaminB1	X			mg
	Additional requirement for Vitamin B2	VitaminB2	X			mg
	Additional requirement for Niacin	Niacin	X			mg
	Additional requirement for Vitamin B6	VitaminB6	X			mg
	Additional requirement for Pantothenic Acid	PantothenicAcid	X			mg

Tab/table name	Component in English	Column/variable name	Essential nutrients for optimisation (i.e. default targets for NUT diet)	Details	Data matches	Unit
	Additional requirement for Folate	Folate	X			mcg DFE
	Additional requirement for Vitamin B12	VitaminB12	X			mcg
	Additional requirement for Vitamin C	VitaminC	X			mg
	Additional requirement for Iron Absorbed	IronAbsorbed	X			mg
	Additional requirement for Calcium	Calcium	X			mg
	Additional requirement for Magnesium	Magnesium	X			mg
	Additional requirement for Zinc -Refined (300mg phytate) Diet	ZincRef	X			mg
	Additional requirement for Zinc - Semi-Refined (600mg phytate) Diet	ZincSemiref	X			mg
	Additional requirement for Zinc - Semi-Unrefined (900mg phytate) Diet	ZincSemiunref	X			mg
	Additional requirement for Zinc - Unrefined (1200mg phytate) Diet	ZincUnrefined	X			mg
	Additional requirement for Biotin	Biotin				mg
	Additional requirement for Choline	Choline				mg
	Additional requirement for Fluoride	Fluoride				mg
	Additional requirement for Manganese	Manganese				mg
	Additional requirement for Vitamin E	VitaminE				mg
	Additional requirement for Phosphorus	Phosphorus				mg
	Additional requirement for Copper	Copper				mcg
	Additional requirement for Molybdenum	Molybdenum				mcg
	Additional requirement for Iodine	Iodine				mcg
	Additional requirement for Selenium	Selenium				mcg
	Additional requirement for Vitamin D	VitaminD				mcg
	Additional requirement for Chromium	Chromium				mcg
	Vitamin A upper limit	ULVitaminA	X			mcg
	Calcium upper limit	ULCalcium	X			mg
	Iron upper limit	ULIron	X			mg
	Vitamin C upper limit	ULVitaminC	X			mg
	Niacin upper limit	ULNiacin	X			mg
	Folic Acid upper limit	ULFolicAcid		Upper limit, only applicable to synthetic forms, i.e. Supplements		mcg
	Vitamin B6 upper limit	ULVitaminB6				mg
	Zinc upper limit	ULZinc				mg
	Phosphorus upper limit	ULPhosphorus				mg

Tab/table name	Component in English	Column/variable name	Essential nutrients for optimisation (i.e. default targets for NUT diet)	Details	Data matches	Unit
	Copper upper limit	ULCopper				mcg
	Molybdenum upper limit	ULMolybdenum				mcg
	Iodine upper limit	ULIodine				mcg
	Magnesium upper limit	ULMagnesium				mg
	Selenium upper limit	ULSelenium				mcg
	Choline upper limit	ULCholine				mg
	Flouride upper limit	ULFlouride				mg
	Manganese upper limit	ULManganese				mg
	Vitamin D upper limit	ULVitaminD				mcg
	Vitamin E upper limit	ULVitaminE				mg
environmental_data_2022	**Database of environmental impact indicators for 2022**					
	Unique identifierof country	country_code				
	Name of country	country				
	FAO Food Balance Sheets (FBS) item code	**fbs_item_code**			Item code matched to ENHANCE_ID	
	FAO Food Balance Sheets (FBS) item name	fbs_item				

Tab/table name	Component in English	Column/variable name	Essential nutrients for optimisation (i.e. default targets for NUT diet)	Details	Data matches	Unit
	Type of environmental footprint data (nested)	footprint_type		GHG footprint: - kg_co2e_total: Kilograms of total GHG emissions, in carbon dioxide equivalents (CO2e). - kg_co2e_excl_luc: Kilograms of GHG emissions, in carbon dioxide equivalents (CO2e), excluding LUC CO2 emissions. For items and item groups not associated with LUC, this reflects the total GHG emissions. - kg_co2_luc_pasture: Kilograms of CO2 emissions from deforestation for pasture. - kg_co2_luc_feed_palm: Kilograms of CO2 emissions from deforestation for cultivating palm for animal feed. - kg_co2_luc_feed_soy: Kilograms of CO2 emissions from deforestation for cultivating soy for animal feed. - kg_co2_luc_human_palm_soy: Kilograms of CO2 emissions from deforestation for cultivating palm or soy products for human consumption, e.g., soybean oil used in manufacturing or cooking. Water footprint: - l_blue_green_wf: Liters of total consumptive (blue plus green) WF. - l_blue_wf_total: Liters of total blue WF. - l_blue_wf_excl_pond: Liters of blue WF excluding WF from pond aquaculture. For items and item groups not associated with pond aquaculture, this reflects the total blue WF. - l_blue_wf_freshwater_pond: Liters of blue WF from freshwater pond aquaculture. - l_blue_wf_brackish_pond: Liters of blue WF from brackish water pond aquaculture. - l_green_wf: Liters of total green WF.		kg CO2e / kg kg CO2e / kg kg CO2/ kg kg CO2/ kg kg CO2/ kg kg CO2/ kg l/kg l/kg l/kg l/kg l/kg l/kg

Tab/table name	Component in English	Column/variable name	Essential nutrients for optimisation (i.e. default targets for NUT diet)	Details	Data matches	Unit
	Environmental footprint per kilogram of food produced	footprint/kg				footprint/kg
	Method of calculation	method				
	Country and food specific food extraction factor	extraction_factor		Factor to be applied to total food amount in diet to calculate quantity of item produced before food losses in production (country specific)	fbs_item code matched to fao_item_code	
ENHANCE_ID2FBS	**Matching of fbs item code to the ENHANCE_ID**					
	Food unique ID	**ENHANCE ID**				
	FAO Food Balance Sheets (FBS) item code	**fbs_item_code**				
	FAO Food Balance Sheets (FBS) item name	fbs_item				
conversion_table	**Matches labels across datasets**					
	New nutrient names used in the food composition file	New_names				
	Upper limit variable names	Ulnames				
	Nutrient target or lower limit variable name in individual requirements file	Llnames				
	Minimum percentage of energy	MinPercent				
	Maximum percentage of energy	MaxPercent				
	Whether upper limit should be applied to all sources of the nutrient or only from supplemental sources	Supplement_bound				