## Annexe 1. Data processing

<b>Table 1</b> . Summary of classification of animal type for mixed-meat disaggregated meat variables.				
Disaggregated meat variable	Food description	Animal type		
	Pastrami	Beef		
	Corned beef	Beef		
	Beef bourguignon	Beef		
	Ham	Pork		
	Bacon	Pork		
Dragged rad most	Carbonara pasta sauce	Pork		
Processed red meat	Dairylea Lunchables	Pork		
	Gammon	Pork		
	Pepperoni	Pork		
	Pepperami or snack salami	Pork		
	Prosciutto	Pork		
	Beef burgers and	Beef		
	unspecified burgers, e.g.,			
	'Cheeseburger' and			
Burgers	'McDonald's Big Mac			
	burger'			
	Beef meatballs	Beef		
	Hot dogs	Pork		
	Beef Sausage	Beef		
	Spaghetti bolognese, canned	Beef		
	Pork sausage	Pork		
	Unspecified sausages,	Pork		
Sausages	e.g., 'Breakfast sandwich', 'Baked beans and			
	sausages' and			
	'Square/Lorne sausage'			
	Bierwurst	Pork		
	Bratwurst	Pork		
	Chorizo	Pork		
	Hot dogs	Pork		
	Black pudding	Pork		
Official	Cup a soup, made up	Poultry		
Offal	Haggis	Lamb		
	Pate	Poultry		
Oth an mad mas = t	Meat risotto	Beef		
Other red meat	Venison	Game		

Table 2. Food groups evaluated.			
Food category	Main food group	Sub food groups	Examples of items
		pizza	Cheese and tomato pizza (e.g. Margherita) Meat pizza (e.g. Hawaiian, pepperoni, meat feast)
		pasta manufactured products & ready meals	Instant noodles (e.g. Supernoodles) Pasta in tomato sauce, canned (e.g. Heinz Spaghetti Hoops)
	Pasta, rice, pizza and other	other pasta including homemade dishes	Pasta shapes, white/tricolore Macaroni cheese
	miscellaneous cereals	rice manufactured products & ready meals	Ready cooked savoury rice (e.g. Uncle Bens) Coconut rice
Cereals and Cereal Products		other rice including homemade dishes	White basmati rice (including easy-cook) White rice, fried (e.g. pilau rice)
		other cereals	Chocolate filled crepe Yorkshire pudding, shop-bought (e.g. Aunt Bessie)
Wholemeal bread  Brown, granary and wheatgerm bread	White bread	white bread (not high fibre; not multiseed bread)	Toast, white bread Garlic bread Wrap/tortilla, white
		wholemeal bread	Toast, wholemeal (brown) bread Toast, multiseed wholemeal bread
	and wheatgerm	brown granary and wheatgerm bread	Toast, 50:50 bread (e.g. Kingsmill) Toast, Hovis Best of Both bread 50/50 bread (e.g. Kingsmill, Warburtons)
	Other breads	other bread	Toast, gluten-free white bread Toast, rye bread

	High fibre breakfast cereals	high fibre breakfast cereals	Weetabix / Wheat biscuits Porridge, made with semi skimmed milk
	Other breakfast cereals	other breakfast cereals	Multigrain hoops (cheerios), supermarket brands Frosted Flakes cereal, supermarket brands
	Biscuits	biscuits manufactured / retail	Chocolate chip cookie Cream cracker Digestive biscuit
		biscuits homemade	Peanut butter cookies
		fruit pies manufactured	Fruit pie, slice from large pie, double crust Fruit pie, fried (e.g. McDonalds apple pie)
		fruit pies homemade	Fruit flan/tart Fruit pie, single crust
	Buns, cakes, pastries and fruit pies	buns cakes & pastries manufactured	Scotch pancake/drop scone Croissant, plain Pain au chocolat/chocolate croissant
		buns cakes & pastries homemade	Sponge cake, with no filling Sponge cake with butter cream filling, iced (e.g. birthday cake) Banana bread/cake
		cereal based milk puddings - manufactured	Custard, ready to serve Custard, ready to eat, individual pots Rice pudding, low fat, ready to eat, not canned (e.g. Muller rice)
Puddings	Puddings	cereal based milk puddings - homemade	Semolina Confectioners custard Rice pudding, not canned
		sponge puddings - manufactured	Chocolate sponge pudding, including melt in the middle Sticky toffee pudding Sponge pudding with jam/syrup/treacle, shop-bought
		sponge puddings - homemade	Sponge pudding Sponge pudding with jam/syrup/treacle, home made Pineapple upside down cake

		-th	Trifle
		other cereal based puddings - manufactured	Cheesecake, flavoured, not with fruit, (e.g. chocolate/toffee) Pancake with sultanas or raisins
		other cereal based puddings - homemade	Jelly Jelly, reduced sugar Apple Crumble
	Whole milk (3.8% fat)	whole milk	Whole milk Whole milk, boiled
	Semi skimmed milk (1.8% fat)	semi skimmed milk	Semi skimmed milk Milk, cow's/dairy, type unknown
	1% fat milk	1% fat milk	Milk 1% fat Milk 1% fat, boiled
	Skimmed milk (0.5% fat)	skimmed milk	Skimmed milk Skimmed milk, boiled
	Other milk and cream	infant formula	Toddler/growing up milk (1-2 years) e.g. Aptamil 3, Cow & Gate 3 Toddler/ growing up milk (2-3 years), e.g. Aptamil 4, Cow & Gate 4
Milk and Milk Products		cream (including imitation cream)	Sour cream Dairy squirty/spray cream (e.g. anchor) Double cream
		other milk	Hot chocolate, made with milk Milkshake / Milk drink, not chocolate (e.g. strawberry, banana) Milkshake / Milk drink, chocolate flavour
		cottage cheese	Cottage cheese Cottage cheese, fat-free/low-fat
	Cheese	cheddar cheese	Cheddar cheese Cheddar cheese, vegetarian
		other cheese	Parmesan cheese Cheese strings/strips (e.g. Dairylea) Babybel cheese

	Yoghurt, fromage frais and other dairy desserts	yoghurt	Fruit yoghurt Natural yoghurt, greek-style Children's yoghurt drink (e.g. Munch Bunch Squashums, Petits Filous yoghurt drinks)
		fromage frais and dairy desserts manufactured	Yoplait Frubes/Wildlife Choobs Petit Filous fromage frais Fromage frais, fruit (incl. children's) not fortified (e.g. Tesco value)
		dairy desserts homemade	Not reported in DISH
	Ice cream	ice cream	Soft scoop vanilla ice cream Cornetto/king cone (Including supermarket brands)
Eggs and Egg Dishes	Eggs and egg dishes	egg products - manufactured	Vegetable based quiche (e.g. cheese & onion) Meringue Egg mayonnaise sandwich filler
		other eggs and egg dishes including homemade	Scrambled egg Boiled egg Fried egg
	Butter	butter (including spreadable butter)	Butter, salted Butter, unsalted Spreadable butter, salted
	Polyunsaturated margarine and	polyunsaturated margarine	Not reported in DISH
Fat Spreads	oils	polyunsaturated oils	Sunflower oil (e.g. Flora) Nut oil (e.g peanut/groundnut oil)
	Low fat spread	polyunsaturated low fat spread	Flora Light spread/margarine Flora Pro-Activ Light Spread
		low fat spread not polyunsaturated	Reduced fat buttery-taste spread / soft margarine (e.g. Tesco Butter Me Up Light) I can't believe it's not butter light
	Margarine and other cooking	block margarine	Hard spread/margarine (e.g. Stork, Willow)

	fats and oils NOT polyunsaturated	soft margarine not polyunsaturated	Not reported in DISH
		other cooking fats and oils not pufa	Olive oil Coconut oil
	Reduced fat	reduced fat spread (polyunsaturated)	Flora Buttery spread/margarine Flora Original spread/margarine
	spread	reduced fat spread (not polyunsaturated)	Lightest spreadable butter (e.g. Lurpak, Sainsbury,Äôs Buttersoft Light) Clover spread/margarine
Meat and Meat Products	Bacon and ham	ready meals / meal centres based on bacon and ham	Bacon and cheese grills Ham and egg salad
		other bacon and ham including homemade dishes	Ham, not smoked Ham, smoked
	Beef, veal and dishes	manufactured beef products including ready meals	Beef lasagne, ready meal Spaghetti bolognese, ready meal
		other beef & veal including homemade recipe dishes	Spaghetti bolognese, home made (pasta and sauce) Beef burger/hamburger, in a bun, not quarter pounder Beef lasagne

	Lamb and dishes	manufactured lamb products including ready meals	Kheema naan Shepherd's pie (lamb), ready meal
		other lamb including homemade recipe dishes	Lamb curry, homemade Lamb kebab with minced lamb and herbs
		manufactured pork products including ready meals	Pork/pork and beef meatballs, grilled Roast pork slices, pre- packed/deli Sweet and sour pork, ready meal, with rice
		other pork including homemade recipe dishes	Meatballs in tomato sauce Pork chop, grilled, fat not eaten Chinese dumpling
	Coated chicken and turkey manufactured	manufactured coated chicken / turkey products	Chicken goujon/nugget/dipper, in breadcrumb or batter Chicken nuggets/pieces, from takeaway e.g McNuggets Coated chicken breast fillet, grilled
	Chicken, turkey	manufactured chicken products incl ready meals	Chicken pasta bake Chicken slice, smoked or unsmoked (pre-packed/deli) Chicken chow mein, stir fry (with noodles)
	and dishes	other chicken / turkey incl homemade recipe dishes	Chicken breast, fried Chicken curry home made Roast chicken (skin eaten)
	Liver, products and dishes	liver and dishes	Pate (e.g. brussels liver pate / duck and orange pate) Lambs liver, fried
	Burgers and kebabs	burgers and kebabs purchased	Beef meatballs, grilled or oven baked McDonalds Cheeseburger Beef burger, 100% beef, grilled (no bun)

	Sausages	ready meals based on sausages	Toad in the hole
		other sausages including homemade dishes	Pork sausage, grilled Hot dog/frankfurter Sausage, fried
	Meat pies and	manufactured meat pies and pastries	Sausage roll Steak pie, slice from a large pie (including steak and kidney) Steak pie, individual (including steak and kidney)
	pastries	homemade meat pies and pastries	Chicken pie, slice from a large Chicken and vegetable pie, slice from a large Chicken pie, gravy based, slice from a large pie
	Other meat and meat products	other meat products manufactured incl ready meals	Pepperami or snack salami Salami Luncheon meat, not canned Haggis
		other meat including homemade recipe dishes	Corned beef hash Chinese crispy duck (including pancake and sauce) Roast duck (skin eaten)
	White fish coated or fried including fish fingers	white fish coated or fried	Fish fingers, grilled or oven baked Fish fillet in breadcrumbs/batter grilled or oven baked Haddock in breadcrumb/batter, grilled or oven baked
Fish and Fish Dishes	Other white fish, shellfish, fish dishes and canned tuna	manufactured white fish products incl ready meals	Sushi, tuna based Fish pie, toddler meal (e.g. Little Dish, Annabel Karmel)
		other white fish including homemade dishes	Cod grilled or oven baked Fisherman's pie, home made Sea bass, baked or grilled

		manufactured shellfish products incl ready meals	Crabstick / seafood stick Mixed meat/seafood paella
		other shellfish including homemade dishes	Prawns/shrimps, boiled Prawn stir fry (prawns and vegetables) Fish/seafood chowder
		manufactured canned tuna products incl ready meals	Tuna, in brine, canned Tuna, in oil, canned Tuna mayonnaise, shop-bought
		other canned tuna including homemade dishes	Tuna, in spring water, canned Tuna pasta salad Tuna mayonnaise, home made
	Oily fish	manufactured oily fish products incl ready meals	Sushi, salmon based Salmon, canned Fish sandwich paste (e.g. salmon)
	Olly list!	other oily fish including homemade dishes	Salmon, grilled or oven baked Salmon, cold smoked Salmon, fried
Sandwiches	Sandwiches	sandwiches	Ham sandwich with white/malted bread Cheese sandwich with white/malted bread Cheese and ham sandwich with white/malted bread
		carrots raw	Carrots, raw Baby carrots, raw
Vegetables, potatoes	Salad and other raw vegetables	salad and other raw vegetables	Cucumber Red/yellow/orange pepper, raw Side salad (e.g. including lettuce, tomato, cucumber), no dressing

		Cherry tomatoes
	tomatoes raw	Tomato, fresh
	peas not raw	Peas, cooked from frozen Peas
	green beans not raw	Green beans/French beans Green beans/French beans, canned
	baked beans	Baked beans Baked beans, reduced sugar Baked beans on toast (with white/malted bread)
	leafy green vegetables not raw	Broccoli, boiled Broccoli, steamed/microwaved Tenderstem broccoli, cooked
	carrots not raw	Carrots Carrots, roasted Carrots, cooked from frozen
	tomatoes not raw	Passata (strained tomatoes) Tomatoes, canned Sundried tomatoes
Vegetables (not raw) including vegetable dishes	beans and pulses incl ready meal & homemade dishes	Houmous/hummus Lentil dahl / Tarka dahl Houmous/hummus, reduced fat
	meat alternatives incl ready meals & homemade dish	Vegetarian chicken-style nuggets/goujons, in breadcrumbs (e.g. Quorn nuggets) Vegetarian meat-style sausage (e.g. Linda McCartney), not Quorn Vegan/plant-based sausages
	other manufactured vegetable products incl rm	Vegetarian sushi Vegetable rice Guacamole
	other vegetables including homemade dishes	Sweetcorn / sweet corn, canned Sweetcorn / sweet corn, cooked Corn on the cob (sweetcorn)

	Chips, fried and roast potatoes and potato products	chips purchased including takeaway	Oven chips Chips, french fries/fine cut, fried (from frozen) Takeaway chips, fries (McDonalds Only)
		other manufactured potato products fried/baked	Potato waffles, grilled/baked Potato shapes (e.g. Alphabites, Smilies), grilled/baked Potato farl/cake
		other fried / roast potatoes incl homemade dishes	Chips, fried Roast potatoes Takeaway chips, chip shop style
	Other potatoes, potato salads	other potato products & dishes - manufactured	Gnocchi New potatoes (baby potatoes), canned Potato salad, with mayonnaise/salad cream
	and dishes	other potatoes including homemade dishes	Mashed potato, with butter Baked potato / jacket potato, skin eaten Potato wedges
	Fruit	apples and pears not canned	Apple, skin eaten Apple, skin not eaten Pear, skin eaten
Fruit		citrus fruit not canned	Orange Tangerines / mandarins / clementines/ satsumas Grapefruit
		bananas	Banana Banana, baked Banana chips
		canned fruit in juice	Apple slices, canned Peaches, canned in juice Fruit cocktail, canned in juice
		canned fruit in syrup	Peaches, canned in syrup Fruit cocktail, canned in syrup Mandarins, canned in juice
		other fruit not canned	Strawberries Red grapes Blueberries / bilberries

	Sugar, Preserves and	sugar	White sugar Maple syrup Brown sugar
		preserves	Jam/conserve, berries (e.g. strawberry) Honey Jam/conserve, reduced sugar
Sugar, Preserves and Confectionery	Confectionery	sweet spreads fillings and icing	Chocolate and nut spread (e.g Nutella) Chocolate spread Ice cream topping sauce (e.g. strawberry)
	Sugar confectionery	sugar confectionery	Haribo (sweets) Ice Iolly, juice-based (e.g. Fruit Pastilles) Bear yoyo (pure fruit rolls)
	Chocolate confectionery	chocolate confectionery	Milk chocolate bar (e.g. Dairy Milk) Kinder chocolate bar Milk chocolate buttons
Crisps and savoury snacks	Crisps and savoury snacks	crisps and savoury snacks	Potato crisps (e.g. Walkers) Pom Bears (crisps) Baked potato crisps (e.g. Walkers)
Nuts and Seeds	Nuts and seeds	nuts and seeds	Peanut butter, smooth Peanut butter, crunchy (with bits) Peanut butter, no added sugar
Non-alcoholic beverages	Fruit Juice	fruit juice	Apple juice Orange juice, 100% fruit (e.g. Tropicana) Mixed fruit juice, 100% fruit (e.g. Tropicana)
		smoothies 100% fruit and/or juice	Red berry fruit smoothie Yellow fruit smoothie (e.g. coconut and mango) Fruit smoothie with added vitamins (e.g. Naked, super smoothie, protect/energise type)
		coffee	Coffee, instant Coffee, fresh Espresso coffee
	Tea, coffee and water	tea	Tea Decaf tea Green Tea
		herbal tea (made-up weight)	Herbal/ Fruit tea Redbush/ Red Bush/ Rooibos tea

		bottled water still or carbonated	Bottled mineral water, still or fizzy Mineral water, flavoured, no added sugar (e.g. Fruit Shoot Hydro, Volvic touch of fruit sugar free) Soda water
		tap water only	Water (from tap, including hot water, filtered water)
	Soft drinks, not diet	soft drinks low calorie concentrated	Blackcurrant squash / juice, with ADDED SUGAR, diluted Apple and blackcurrant squash / juice, with ADDED SUGAR, diluted Fruit squash / juice, with ADDED SUGAR, diluted
		soft drinks low calorie carbonated	Flavoured water, still or fizzy (with added sugar) (e.g. Volvic a touch of fruit) Coca-Cola/Coke/Pepsi Irn bru
		soft drinks low calorie rtd still	Apple juice drink, ready to drink Mixed fruit juice drink, ready to drink, 25-49% juice (e.g. Capri sun, Rubicon) Ribena juice drink, ready to drink
	Soft drinks, diet	soft drinks not low calorie concentrated	Orange squash, no added sugar, diluted Apple and blackcurrant squash, no added sugar, diluted Blackcurrant squash / juice, no added sugar, diluted
		soft drinks not low calorie carbonated	Diet Coca-Cola, e.g. Coke Zero, Pepsi Max Fanta Zero Diet irn bru
		soft drinks not low calorie rtd still	Fruit shoot Robinson's fruit shoot juiced Apple juice drink, ready to drink, no added sugar
Miscellaneous	Miscellaneous	beverages dry weight	Premixed / ready to drink spirits and cocktails, low alcohol, based on gin, rum, vodka, whisky Nesquik milkshake powder Cocoa powder
		soup manufactured/ retail	Chicken noodle soup Cream of tomato soup, canned Tomato soup (without cream), carton

		soup homemade	Lentil soup Vegetable soup Chicken and vegetable soup, homemade
		nutrition powders and drinks	Protein Shake Protein powder Soya protein powder
		savoury sauces pickles gravies & condiments	Tomato ketchup Tomato based pasta sauce, home made Gravy
		commercial toddlers drinks	Infant and toddler fruit juice and water drink, ready to drink, with added vit C
Toddler foods	Toddler foods	commercial toddlers foods	Toddler cereal bar (e.g. Organix carrot cake cereal bar) Pure fruit puree, ready to eat pot or pouch Baby biscuits/biscotti (e.g. Organix goodies, Heinz biscotti)
	Other milk and cream DF	other milk and cream DF	Soya-based toddler/ growing up milk (1-3 years), e.g. Alpro Junior Non dairy cream alternative (e.g. Alpro soya) Oat milk
	Cheese DF	cheese DF	Vegan, dairy free cheese, coconut based
Milk and Milk Products (dairy-free)	Yoghurt, fromage frais and other dairy desserts DF	yoghurt, fromage frais and other dairy desserts DF	Soya yoghurt, plain (e.g. Alpro Soya) Soya yoghurt, with fruit (e.g. Alpro Soya) Coconut-based yoghurt, Greek style, e.g.Oykos dairy free, Alpro
	Ice cream DF	ice cream DF	Dairy free ice cream Dairy free / vegan ice cream, oat/nut/coconut-based (e.g. Ben & Jerry's)

Table 3. Summary of main food groups included in food categories 'meat and			
meat products' and 'milk and milk products'.			
Food category	Main food groups	Food items	
	Bacon and ham (code=22)	All	
	Beef, veal and dishes	All	
	(code=23)		
	Lamb and dishes (code=24)	All	
	Pork and dishes (code=25)	All	
	Coated chicken and turkey	All	
	manufactured (code=26)		
	Chicken and turkey dishes	All	
Meat and meat products	(code=27)		
	Liver, products and dishes	All	
	(code=28)		
	Burgers and kebabs (code=29)	All	
	Sausages (code=30)	All	
	Meat pies and pastries	All	
	(code=31)		
	Other meat and meat products	All	
	(code=32)		
	Whole milk (code=10)	All	
	Semi-skimmed milk (code=11)	All	
	Skimmed milk (code=12)	All	
	Other milk and cream	All except dairy-free	
	(code=13)		
	Cheese (code=14)	All except dairy-free	
	Yoghurt, fromage frais and other	All except dairy-free	
Milk and milk products	dairy desserts (code=15)		
	Butter (code=17)	All	
	Ice cream (code=53)	All except dairy-free	
	1% Milk (code=60)	All	
	Tea, coffee and water	All those containing	
	(code=51)	the words	
	- /	'cappuccino', 'latte',	
		'flat white', or	
		'mocha'	

The set of food items from the NDB 2022 that corresponded to each DISH food code were identified to include the environmental impact data of these items. There were 12 food codes in the DISH survey data that did not correspond to a food code in the NDB 2022. Of these, six items had the same item description with a different food code and were therefore matched based on the item description (**Table 14**). Of the remaining six items, NDB items with a similar food description were matched to these six DISH items to obtain estimates for both environmental impact and disaggregated dairy data (**Table 15**). In instances where the food code in DISH corresponded to multiple items in the NDB, the associated environmental impact was estimated by taking the average of each item with a duplicate food code. After merging the NDB environmental impact data with the DISH item level, there were 17

unique items that did not have data on greenhouse gas emissions (**Table 16**). These items were reported in 148 instances corresponding to 0.2% of the total items reported. Finally, as the impact per gram of beverage items that require additional water corresponded to the gram weight of the commodity without water (e.g., ground coffee), while the gram weight of the drink item reported in DISH corresponds to the weight of the drink including water (e.g., a cup of coffee), we applied several conversion factors to each relevant beverage item in order to not overestimate the impact of these items.

Table 4. Food items reported in DISH that share an item description with NDB			
2022 but have a different food code.			
DISH food code	DISH description	NDB 2022 food code	
(NutrientTableCode)	(Description_English)		
11612	Spanish omelette / frittata	6172	
11610	Tomato soup (without cream), carton	7927	
11608	Vegetable pasta salad	9099	
11588	Dairy free / vegan ice cream, oat/nut/coconut- based (e.g. Ben and Jerry's)	9053	
11613	Vegetarian mince chilli (e.g. Quorn)	6323	
11614	Horlicks/Ovaltine, made with milk	10724	

Table 5. Food items in DISH that share neither an item description or a food code			
	•	natched to other NDB iter	
DISH food code (NutrientTableCode)	DISH description (Description_English)	Matched NDB 2022 item description	Matched NDB Food code
6171	Vegetarian bolognese sauce, made with lentils	Vegetarian bolognese sauce (e.g. made with Quorn mince)	9180
5466	Meatballs in tomato sauce, e.g. chicken/turkey	Meatballs in tomato sauce	11522
8286	Vegetable curry, ready meal, with rice (e.g balti, tikka masala)	Vegetable curry	1943
11611	Vegetarian bolognese sauce, made with vegetables only	Vegetarian bolognese sauce (e.g. made with Quorn mince)	9180
11609	Vegetable pasta bake (with cheese)	Pasta with vegetables in a cream/cheese-based sauce	6139
2260	Sesame Snaps	Savoury cracker (e.g. Sesame and poppy thins, butter puffs, onion crackers)	10062

<b>Table 6.</b> Items consumed in the DISH survey that did not have data on greenhouse gas emissions following the process of merging foodDB with NDB 2022.			
Cook-in-sauce, chilli with pulses (e.g. Uncle Bens)			
Egg curry			
Finecut salad (e.g. including lettuce, pepper, carrot, sweetcorn, cabbage type) with a cream-based/mayonnaise type dressing			
Pure fruit puree, (4mth+), ready to eat pot or pouch			
KFC tower burger			
Pea and cheese curry (e.g. matar paneer)			
Toddler cereal bar (e.g. Organix carrot cake cereal bar, Kiddylicious crispy sticks)			
Toddler corn snacks (e.g. organix carrot sticks and tomato stars)			
Vegetarian sausage, cheese based			
Boiled egg, white only			
Boiled egg, yolk only			
Chewing gum, sugar free			
Naan bread, kheema			
Mixed nuts, unsalted			
Turmeric			
Chicken curry, ready meal, with rice, reduced fat			

Each meat containing item was assigned one meat ingredient per meat food type that it contained. Meat ingredients were defined as all items where the gram weight of the item was equal to the gram weight of the associated meat type. The mapping between meat containing items and the associated meat ingredient was the same as that used in Jaacks et al. which was based on the description of the item in SHeS 2021 (7). As some meat item descriptions differed between SHeS and DISH, we converted each item description in the mapping to the associated food code in DISH

of the item in DISH. If the food code was not available in DISH then we used the associated food code in SHeS to convert the meat ingredient mapping to food codes. The nutrients per gram of each meat ingredient were then assigned based on food code. For example, the item in the original meat ingredient mapping "Lamb tikka masala" did not exist in DISH, but its food code 5592 corresponds to the DISH item "Lamb curry, homemade". The lamb ingredient assigned to "Lamb tikka masala" in the original mapping was "Stewing lamb, stewed" with food code 1003. We therefore set the lamb ingredient in the DISH item "Lamb curry, homemade" to be "Stewing lamb, stewed". In addition, five non-composite meat ingredients in SHeS were considered as composite ingredients in DISH. Each of these composite items was matched to a non-composite meat item to be the associated meat ingredient as per the other non-composite meat items. The non-composite meat items associated with these five items are provided in **Table 17**.

<b>Table 7.</b> Summary of the mapping between composite items in DISH that were not considered composite items in SHeS and their associated non-composite meat		
ingredients.		
Composite item description in DISH and	Non composite item description and	
the food code	food code	
"Sausage, fried", "Square/Lorne	"Pork sausage, grilled", 11529	
sausage", 1279		
"Beef sirloin steak, fried", 9425	"Beef sirloin steak, grilled", 9427	
"Bacon, smoked, fried (including fat)",	"Bacon, back/middle, smoked, grilled	
8246	(including fat)", 8238	
"Bacon, unsmoked, fried (including fat)",	"Bacon, back/middle, unsmoked, grilled	
909	(including fat)", 914	
"Tandoori chicken", 1123	"Roast/grilled chicken breast (skin not	
	eaten)", 5127	

As the environmental impact dataset was created based on the NDB 2022 but the dairy disaggregation was performed using the Food Standard's Agency's recipe database (16), there were some dairy ingredient food codes without environmental impact data. The environmental impact of these dairy ingredients were matched to closely matched dairy ingredients. For example, the dairy ingredient "MILK SKIMMED AFTER BOILING" with food code 700 was assigned to have the same environmental impact per gram as "Skimmed milk". A summary of these matches is provided in **Table 18**.

Table 8. Summary of the mapping between	en dairy ingredients from the ESA recine
database without environmental impact d	
environmental impact data.	
Food code and food name from the FSA	Matched dairy food ingredient in the
recipe database	NDB 2022
613, MILK SKIMMED PASTEURISED	Skimmed milk
SUMMER	
0544 MILLO OKUMATED DA OTELIDIOED	01: 1:
8544, MILK SKIMMED PASTEURISED	Skimmed milk
WINTER	Chimana ad maille
616, MILK SKIMMED UHT	Skimmed milk
700, MILK SKIMMED AFTER BOILING	Skimmed milk
10251, ONE PERCENT (1%) MILK, PASTEURISED	Skimmed milk
608, MILK SEMI-SKIMMED PASTEURISED SUMMER	Semi skimmed milk
8543, MILK SEMI-SKIMMED PASTEURISED WINTER	Semi skimmed milk
602, MILK WHOLE SUMMER PASTEURISED	Whole milk
603, MILK WHOLE PASTEURISED WINTER	Whole milk
604, MILK WHOLE STERILISED	Whole milk
605, MILK WHOLE UHT	Whole milk
7738, FROMAGE FRAIS, VIRTUALLY	Natural fromage frais, fat free, sugar
FAT FREE, NATURAL, UNSWEET	free
	Soft cheese, full-fat (e.g. Philadelphia);
	Soft cheese, reduced fat (e.g.
7112, CHEESE SOFT MEDIUM FAT	Philadelphia Light/Extra Light)
GEO CLIEFCE CLIEFDDAD I OW FAT	Reduced fat hard cheese (e.g.
659, CHEESE CHEDDAR LOW FAT	Cheddar/Cheshire)
10977, FROMAGE FRAIS, LOW FAT, NATURAL, UNSWEETENED E.G.	Petits Filous fromage frais
PETIT FILOUS	
7727, CHEESE EDAM REDUCED FAT	Edam cheese
654, CHEESE CHEDDAR ENGLISH	Cheddar cheese
, , , , , , , , , , , , , , , , , , , ,	Double Gloucester cheese; Cheddar
688, CHEESE CREAM FULLFAT	cheese
7735, FROMAGE FRAIS, FULL FAT,	Natural fromage frais, sugar free
NATURAL, UNSWEETENED	
639, CREAM SINGLE FROZEN	Single cream
640, CREAM SINGLE UHT	Single cream
645, CREAM WHIPPING FROZEN	Whipped cream
646, CREAM WHIPPING UHT	Whipped cream