Supplemental

Supplemental Material 1. Description of the Programme National Nutrition Santé Guidelines Score 2 (PNNS-GS2), reflecting the adherence to the 2017 French nutritional guidelines

The Programme National Nutrition Santé Guidelines Score (PNNS-GS2) score aims at reflecting the adherence to French food based dietary guidelines updated in 2017 as established by the High Council of Public Health (13). It is based on 13 components: seven refer to healthy foods: fruits and vegetables, nuts, legumes, whole-grain food, milk and dairy products, fish and seafood and added fat (a-linolenic acid-rich oils); their consumption increased the score. Six components refer to food categories whose intakes should be limited: red meat, processed meat, sweet food, sweet-tasting beverages, alcoholic beverages and salt; their consumption resulted in negative points. In the framework of a collective expertise, the scores and thresholds were determined according to the type of food, they are available elsewhere (27). In addition, an organic farming dimension was introduced in the score for plant-based components (fruit and vegetables, legumes, bread and grains). Different bonus and malus were allocated and weighting across component was applied according to the level of evidence of the relationship with health and based on a experts' panel as described elsewhere (27). A penalty was deducted in case of energy intake 5% higher than energy expenditure. The final score ranges from -∞ to 14.25. More details on the PNNS-GS2 score are described elsewhere (27).

Supplemental Material 2. Description of the PANDIET score reflecting the probability of adequate nutrient intake

The PANDiet score is calculated including 28 nutrients, ranging from 0 to 100. It is composed as the average of two sub-scores: adequacy and moderation. The adequacy sub-score is the average probability that nutrient intakes are satisfied (relative to the reference value) for the following nutrients: protein, total fat, fibre, vitamins (A, B1, B2, B3, B5, B6, B9, B12, C, D and E), calcium, copper, iodine, bioavailable iron, magnesium, manganese, bioavailable zinc, phosphorus, potassium, selenium, n-3 and n-6 fatty acids as well eicosapentaenoic acid and docosahexaenoic acid. The moderation sub-score is the average probability that intakes are not exceeding a reference value (defined by the nature of the nutrient) for the following nutrients: protein, total fat, sugars, saturated fatty acids, cholesterol, and sodium. Tolerances are also granted if intakes are above the reference value for the following nutrients: retinol, vitamins B3, B6, B9, D and E, calcium, copper, magnesium, iodine, selenium, and zinc. More details on the PANDiet score are detailed elsewhere (29,30).

Supplemental Table 1. Computation of the plant-based diet index (PDI) and its two related scores healthy plant-based diet index (hPDI) and unhealthy plant-based diet index (uPDI) *(31)*

		Women		PDI	hPDI	uPDI
		Q1 (g/d)	Q5 (g/d)			
Plant-based food						
Healthy						
	Wholegrain products	<2	>110			
	Vegetables	<177	>516		Positive score (1 to 5 based on consumption quintiles)	Reverse score (5 to 1 based on consumption quintiles)
	Fruit	<113	>421			
	Nuts	<0.4	>10			
	Legumes	<2	>21	Positive score (1 to 5 based on consumption quintiles)		
	Vegetable oils	<9	>30			
	Coffee, tea	<266	>1036			
Unhealthy						
	Fruit juices	<1	>150		Reverse score (5 to 1 based on consumption quintiles)	Positive score (1 to 5 based on consumption quintiles)
	Refined grains	<51	>185			
	Potatoes	<6	>28			
	Sugar-sweetened beverages	0	>26			
	Sweets and desserts	<25	>76			
Range				12 to 60		
Animal-based food						
	Animal fat	<1	>10			
	Fish, seafood	<15	>66			
	Dairy	<122	>596	Reverse score (5 to 1 based on consumption quintiles)	Reverse score (5 to 1 based on consumption quintiles)	Reverse score (5 to 1 based on consumption quintiles)
	Poultry	<46	>153			
	Processed meats	<46	>153			
	Red meats	<46	>153			
	Egg	<3	>16			
	Miscellaneous	<14	>52			
Range				6 to 30		
Total range				**18 to 90**		

Supplemental Table 2. Scoring for the Comprehensive Diet Quality Index (cDQI) computation *(32)*

		Max score (5)	Min Score (0)
Plant-based Diet Quality Index (pDQI)			
Healthy			
	Wholegrain products	≥ 45g per 1000/kcal	No consumption
	Vegetables (excluding potatoes)	≥ 125g per 1000/kcal	No consumption
	Fruit	≥ 125g per 1000/kcal	No consumption
	Nuts, seeds, legumes	≥ 14,175g per 1000/kcal	No consumption
	Vegetable oils	≥ 14.86g per 1000/kcal	< 4.13g per 1000/kcal
	Coffee, tea	≥477.35g per 1000/kcal	< 91.72g per 1000/kcal
Unhealthy			
	Fruit juices	No consumption	≥79.38g per 1000/kcal
	Refined grains	<54g per 1000/kcal	≥129g per 1000/kcal
	Potatoes	No consumption	≥ 35g per 1000/kcal
	Sugar-sweetened beverages	No consumption	≥ 226.8g per 1000/kcal
	Sweets and desserts	< 14.98g per 1000/kcal	≥ 40.32g per 1000/kcal
Range pDQI		0 to 55	
Animal-based Diet Quality Index (aDQI)			
Healthy			
	Fish, seafood	≥ 14,175g per 1000/kcal	No consumption
	Dairy	≥ 312g per 1000/kcal	No consumption
	Poultry	≥ 17.09g per 1000/kcal	< 3.12g per 1000/kcal
Unhealthy			
	Processed meat	No consumption	≥ 28,35g per 1000/kcal
	Red meat	No consumption	≥ 45,36g per 1000/kcal
	Eggs	< 1.78g per 1000/kcal	≥ 8.62g per 1000/kcal
Range aDQI		0 to 30	
cDQI Total Range		**0 to 85**	

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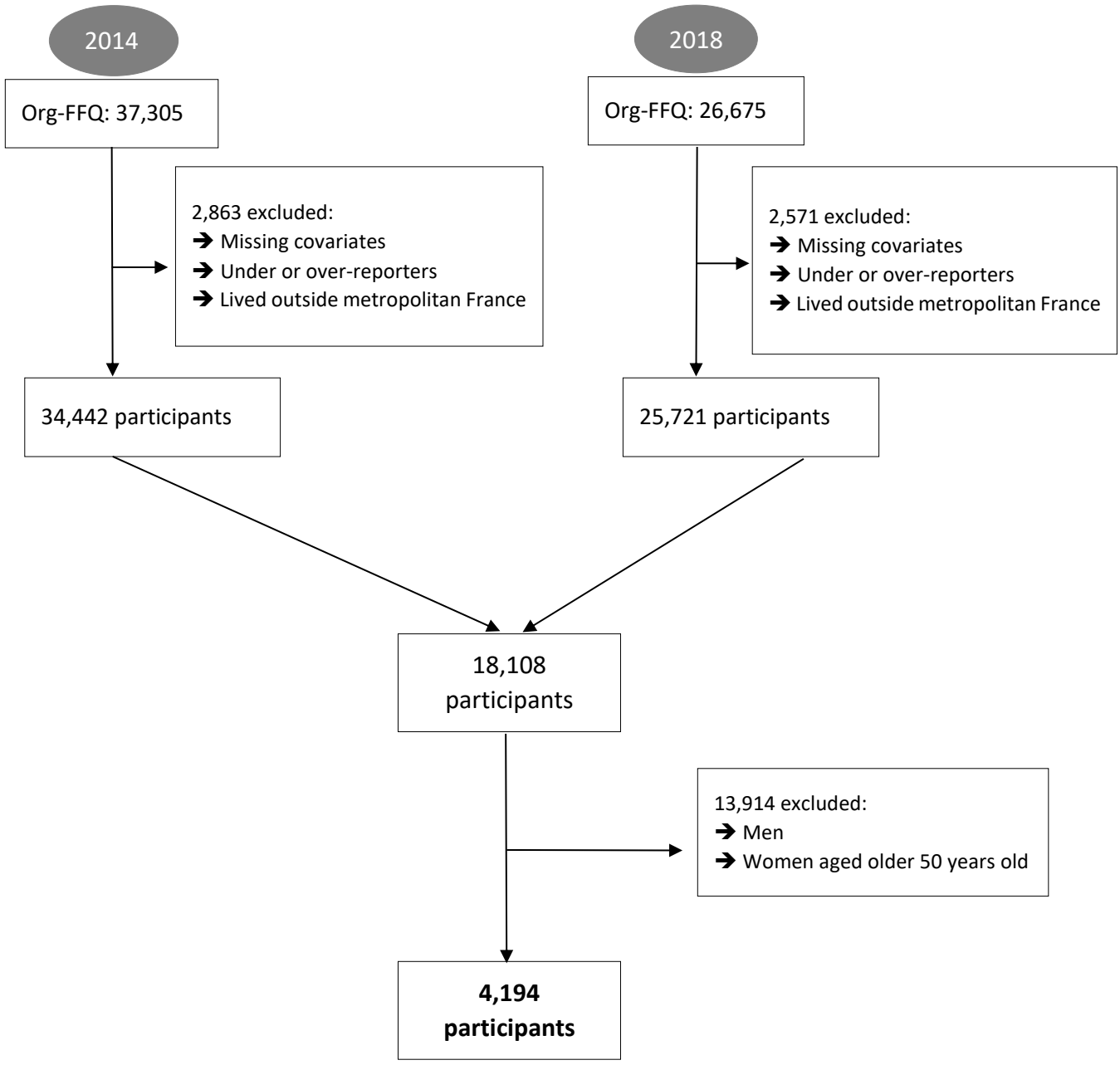
Supplemental Figure 1: Study sample selection



Supplemental Figure 2: Diagram describing the constitution of the women parity group

<table>
<tr><th colspan="2"></th><th>…</th><th>2014</th><th></th><th>Org-FFQ 2014</th><th>2015</th><th></th><th></th><th>2016</th><th></th><th></th><th>2017</th><th></th><th></th><th>2018</th><th></th><th>Org-FFQ 2018</th><th>2019</th><th>…</th></tr>
<tr><td rowspan="3">Previous children (before 2014)</td><td>Children born before 2014</td><td></td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>Child born in 2014</td><td></td><td></td><td></td><td></td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>Child born in 2015 (pregnancy during Org-FFQ14)</td><td></td><td></td><td></td><td colspan="2">(-9 months after Org-FFQ14)</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td rowspan="2">Birth of a child between the two questionnaires (2014-2018)</td><td>Multiparous</td><td></td><td></td><td></td><td colspan="2">(+9 months after Org-FFQ14)</td><td colspan="12">Birth of a new child</td><td></td><td></td><td></td></tr>
<tr><td>Primiparous</td><td>X</td><td>X</td><td>X</td><td colspan="2">(+9 months after Org-FFQ14)</td><td colspan="12">First child</td><td></td><td></td><td></td></tr>
<tr><td rowspan="3">Nulliparous</td><td>No child</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td></td></tr>
<tr><td>Child born after 2018</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td></td><td></td></tr>
<tr><td>Pregnancy during Org-FFQ18</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td></td><td></td><td></td></tr>
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Birth of a child

Pregnancy

X No child

Supplemental Table 3. Description of the composition of the main food groups

Food groups	Subcomponent
Healthy Plant-Based food	
Wholegrain products	Wholegrain rice, wholegrain pasta, wholegrain bread
Vegetables (excluding potatoes)	Avocado, artichoke, onion, garlic, mushroom, lettuce, carrot, celery, tomato, beetroot, cabbage, broccoli, green bean, chicory, spinach, cucumber, pepper, leek, fennel, pumpkin, turnip, pea, corn, seaweed, soup
Fruit	Fruit compote with and without added sugar, fruit in syrup, apple, peer, citrus fruit, banana, peach, apricot, melon, cherry, strawberry, plum, kiwi, grape, pineapple, mango, lychee, exotic fruit
Nuts, seeds, legumes	Oleaginous fruit, dried pulse, brewer's yeast, seed, bran, sprouted wheat, sprouted seed
Vegetable oils	Sunflower oil, olive oil, groundnut oil, rapeseed oil, corn oil, soybean oil, blended oils, walnut oil, hazelnut oil, grape seed oil, sesame oil, coconut oil, linseed oil, safflower oil
Coffee, tea	Coffee, tea
Unhealthy Plant-Based food	
Fruit juices	Fruit juice, 100% fruit juice
Refined grains /cereals	Cereal, muesli, bran, semolina, quinoa, rice, pasta, bread, crispbread
Potatoes	Potatoes, mashed potatoes, chip, Jerusalem artichoke
Sugar-sweetened beverages	Fruit nectar, syrup, fizzy drink, diet fizzy drink
Sweets and desserts	Pastry, brioche, chocolate biscuit, biscuit, honey, jam, peanut butter, chocolate spread, sugar, sweetener, whipped cream, chocolate, sweet, pie, pastry flan, cake, brownie, cream cake, chocolate bar, crepe, sorbet, ice cream, cone, breakfast cereal
Healthy Animal-Based food	
Fish, seafood	Shellfish, crustacean, breaded fish, oily fish, white fish, semi-oily fish
Dairy	All types of yoghurt and fromage blanc, sheep's milk yoghurt, goat's milk yoghurt, skimmed milk, semi-skimmed milk, whole milk, fermented milk, all types of cheese
Poultry	Chicken, turkey
Unhealthy Animal-Based food	
Processed meat	Ham, sausage, "pâté", "lardon"
Red meat	Rabbit, beef, goat, pork, veal, liver, tripe, breaded meat
Eggs	Egg
Other food groups	
Other fats	Butter, mayonnaise, "crème fraiche"
Other fatty, salty, and sweet products	Cracker, crisps, popcorn, mustard, ketchup, sauce, milky dessert, salty crepe, quiche, toasted ham and cheese, pizza, ravioli, sandwich, Asian cuisine, hamburger, panini, sauerkraut, cassoulet, dried fruit, salty oleaginous seed
Dairy and meat substitutes	All types of substitutes meat, tofu, seitan, soy yoghurt, vegetarian cheese, vegetarian milk, vegetarian cream
Alcoholic beverages	All types of alcohol
Other non-alcoholic beverages	Coffee and tea with milk or vegetable milk, chicory, hot chocolate, infusion, non-alcoholic beer, kombucha

Supplemental Table 4: Baseline daily food group consumption by women parity group (NutriNet-Santé study, n=4,194, 2014)[1]

		Previous children	Multiparous	Primiparous	Nulliparous
N		**2269**	**237**	**231**	**1457**
Whole-grain products					
	Model Uadj	48.23 (45.65-50.81)[a,b]	50.15 (42.17-58.13) [a,b]	38.92 (30.83-47.00)[a]	51.62 (48.40-54.83)[b]
	Model Adj	44.36 (41.52-47.20)[a]	53.11 (45.13-61.09)[a,b]	49.67 (41.42-57.93)[a,b]	55.45 (51.84-59.07)[b]
	Model Dsb*	44.35 (41.49-47.21)[a]	51.28 (43.16-59.41)[a,b]	51.30 (42.92-59.67)[a,b]	55.53 (51.86-59.20)[b]
Vegetables					
	Model Uadj	307.91 (297.38-318.43)[a,c]	286.54 (253.97-319.10)[a,b,c]	256.19 (223.21-289.18)[b]	313.14 (300.01-326.28)[c]
	Model Adj	289.76 (278.51-301.01)[a]	319.34 (287.70-350.98)[a,b]	324.70 (291.97-357.42)[a,b]	325.21 (310.87-339.55)[b]
	Model Dsb*	291.17 (279.58-302.75)[a]	319.92 (287.05-352.79)[a,b]	327.70 (293.82-361.58)[a,b]	326.75 (311.91-341.59)[b]
Fruit					
	Model Uadj	219.69 (211.31-228.06)[a,c]	199.09 (173.18-225.00)[a,b,c]	167.86 (141.62-194.11)[b]	230.03 (219.58-240.48)[c]
	Model Adj	206.31 (197.33-215.30)[a]	225.38 (200.11-250.65)[a,b]	218.81 (192.67-244.95)[a,b]	238.50 (227.05-249.96)[b]
	Model Dsb*	206.27 (197.12-215.42)[a]	227.12 (201.16-253.09)[a,b]	219.87 (193.11-246.64)[a,b]	238.53 (226.81-250.26)[b]
Nuts, seeds, legumes					
	Model Uadj	21.39 (19.96-22.83)[a]	18.96 (14.51-23.40)[a]	18.34 (13.84-22.84)[a]	27.89 (26.10-29.68)[b]
	Model Adj	19.53 (17.97-21.09)[a]	21.01 (16.62-25.40)[a]	25.14 (20.59-29.68)[a,b]	29.38 (27.38-31.37)[b]
	Model Dsb*	19.82 (18.23-21.42)[a]	20.58 (16.05-25.10)[a]	25.57 (20.91-30.24)[a,b]	29.15 (27.11-31.20)[b]
Vegetable oil					
	Model Uadj	18.95 (18.36-19.53)[a]	16.92 (15.12-18.72)[a,b,c]	15.45 (13.63-17.27)[b,c]	15.98 (15.25-16.70)[c]
	Model Adj	17.33 (16.72-17.94)[a]	17.62 (15.90-19.34)[a]	19.00 (17.23-20.78)[a]	17.81 (17.03-18.59)[a]
	Model Dsb*	17.44 (16.82-18.07)[a]	17.57 (15.79-19.35)[a]	19.20 (17.37-21.04)[a]	17.78 (16.97-18.58)[a]
Coffee, tea					
	Model Uadj	551.13 (533.23-569.03)[a]	363.37 (307.98-418.77)[b]	400.70 (344.58-456.81)[b]	485.04 (462.70-507.38)[c]
	Model Adj	516.88 (497.37-536.40)[a]	425.17 (370.26-480.07)[b]	494.12 (437.33-550.91)[a,b]	513.51 (488.62-538.39)[a]
	Model Dsb*	521.18 (501.17-541.20)[a]	419.31 (362.52-476.10)[b]	500.05 (441.50-558.60)[a,b]	510.25 (484.60-535.89)[a]
Fruit juices					
	Model Uadj	83.99 (79.15-88.83)[a]	96.90 (81.93-111.88)[a,b]	108.77 (93.60-123.93)[b]	97.91 (91.87-103.95)[b]
	Model Adj	90.40 (84.96-95.84)[a]	84.31 (69.00-99.62)[a]	95.33 (79.49-111.16)[a]	92.10 (85.16-99.04)[a]
	Model Dsb*	90.63 (85.08-96.18)[a]	82.98 (67.22-98.74)[a]	92.96 (76.72-109.21)[a]	92.38 (85.27-99.50)[a]
Refined grains					
	Model Uadj	150.29 (146.63-153.95)[a]	150.52 (139.20-161.83)[a,b]	127.76 (116.30-139.22)[b,c]	131.85 (127.28-136.41)[c]
	Model Adj	149.31 (145.55-153.06)[a]	142.65 (132.10-153.20)[a,b,c]	132.98 (122.07-143.89)[b,c]	133.83 (129.05-138.61)[c]
	Model Dsb*	148.81 (144.97-152.66)[a]	143.41 (132.50-154.33)[a,b]	131.74 (120.50-142.99)[b]	134.34 (129.41-139.26)[b]
Potatoes					
	Model Uadj	18.09 (17.36-18.82)[a]	17.05 (14.81-19.30)[a,b]	15.09 (12.81-17.36)[a,b]	16.14 (15.23-17.05)[b]
	Model Adj	16.95 (16.17-17.73)[a]	17.09 (14.91-19.28)[a]	18.00 (15.74-20.26)[a]	17.44 (16.45-18.44)[a]
	Model Dsb*	16.93 (16.13-17.73)[a]	17.08 (14.81-19.35)[a]	17.99 (15.65-20.33)[a]	17.43 (16.41-18.46)[a]
Sugar-sweetened beverages					
	Model Uadj	50.64 (45.48-55.81)[a]	43.11 (27.12-59.09)[a,b]	62.84 (46.65-79.03)[a,b]	64.98 (58.53-71.42)[b]
	Model Adj	55.63 (49.80-61.46)[a]	36.40 (19.99-52.81)[a]	55.68 (38.71-72.66)[a]	59.44 (52.00-66.88)[a]
	Model Dsb*	54.97 (48.99-60.95)[a]	37.93 (20.96-54.89)[a]	52.54 (35.05-70.03)[a]	58.98 (51.32-66.65)[a]
Sweets and desserts					
	Model Uadj	57.53 (55.88-59.17)[a]	56.77 (51.68-61.86)[a]	51.07 (45.92-56.22)[a]	54.20 (52.15-56.25)[a]
	Model Adj	57.28 (55.61-58.95)[a]	55.39 (50.69-60.08)[a]	55.08 (50.23-59.94)[a]	54.18 (52.05-56.31)[a]
	Model Dsb*	57.31 (55.60-59.01)[a]	55.63 (50.79-60.48)[a]	55.08 (50.09-60.08)[a]	54.07 (51.88-56.25)[a]
Fish, seafood					
	Model Uadj	36.43 (34.82-38.04)[a,c]	35.58 (30.59-40.57)[a,b,c]	29.33 (24.28-34.39)[b]	37.04 (35.02-39.05)[c]
	Model Adj	33.82 (32.04-35.60)[a]	38.21 (33.20-43.23)[a,b]	36.33 (31.14-41.51)[a,b]	39.56 (37.29-41.83)[b]
	Model Dsb*	33.78 (31.94-35.61)[a]	37.40 (32.19-42.61)[a,b]	36.38 (31.01-41.75)[a,b]	40.07 (37.72-42.42)[b]
Dairy products					
	Model Uadj	256.84 (247.86-265.82)[a,c]	245.51 (217.72-273.31)[a,b,c]	205.54 (177.39-233.69)[b]	254.76 (243.55-265.97)[c]
	Model Adj	257.68 (248.05-267.32)[a]	245.62 (218.51-272.72)[a]	224.54 (196.51-252.57)[a]	250.43 (238.14-262.71)[a]
	Model Dsb*	256.85 (246.96-266.75)[a]	244.93 (216.86-273.00)[a]	219.54 (190.60-248.47)[a]	254.42 (241.74-267.09)[a]
Poultry					
	Model Uadj	24.85 (23.77-25.93)[a]	23.87 (20.53-27.21)[a,b]	19.46 (16.08-22.85)[b]	22.31 (20.96-23.66)[b]
	Model Adj	24.44 (23.26-25.63)[a]	23.26 (19.94-26.59)[a]	20.90 (17.46-24.34)[a]	22.81 (21.30-24.32)[a]
	Model Dsb*	24.20 (23.00-25.41)[a]	23.22 (19.80-26.64)[a]	20.80 (17.27-24.33)[a]	22.63 (21.09-24.18)[a]
Processed meat					
	Model Uadj	33.21 (32.12-34.30)[a]	29.74 (26.36-33.12)[a,b]	30.61 (27.19-34.03)[a]	25.03 (23.67-26.39)[b]
	Model Adj	31.95 (30.80-33.09)[a]	28.48 (25.27-31.69)[a,b]	33.21 (29.89-36.53)[a]	26.79 (25.34-28.25)[b]
	Model Dsb*	32.13 (30.96-33.30)[a]	28.83 (25.51-32.16)[a,b]	33.17 (29.74-36.60)[a]	26.55 (25.05-28.05)[b]
Meat					

	Model Uadj	57.56 (55.40-59.72)[a]	49.59 (42.91-56.28)[a,b]	39.22 (32.45-45.99)[b]	43.46 (40.76-46.15)[b]
	Model Adj	54.18 (51.93-56.42)[a]	49.99 (43.67-56.32)[a,b]	47.78 (41.24-54.32)[a,b]	47.30 (44.43-50.16)[b]
	Model Dsb*	53.80 (51.49-56.11)[a]	49.74 (43.19-56.30)[a,b]	47.41 (40.66-54.17)[a,b]	47.52 (44.56-50.48)[b]
Eggs					
	Model Uadj	9.94 (9.45-10.42)[a]	8.27 (6.77-9.78)[a]	7.95 (6.42-9.47)[a]	9.94 (9.33-10.55)[a]
	Model Adj	9.50 (8.96-10.04)[a]	9.41 (7.89-10.94)[a]	10.16 (8.58-11.73)[a]	10.09 (9.40-10.78)[a]
	Model Dsb*	9.50 (8.95-10.05)[a]	9.42 (7.85-10.98)[a]	10.24 (8.62-11.85)[a]	10.27 (9.56-10.98)[a]
Other fat[2]					
	Model Uadj	10.76 (10.41-11.10)[a]	9.92 (8.86-10.98)[a,b]	7.82 (6.74-8.89)[b,c]	8.08 (7.65-8.51)[c]
	Model Adj	10.28 (9.91-10.65)[a]	9.81 (8.77-10.85)[a,b]	8.83 (7.76-9.91)[a,b]	8.68 (8.21-9.15)[b]
	Model Dsb*	10.35 (9.96-10.73)[a]	9.98 (8.90-11.06)[a,b]	8.92 (7.81-10.04)[a,b]	8.70 (8.21-9.19)[b]
Other fatty, salty, and sweet products[3]					
	Model Uadj	68.99 (67.06-70.92)[a]	70.67 (64.69-76.65)[a]	64.28 (58.22-70.33)[a,b]	61.70 (59.29-64.11)[b]
	Model Adj	69.20 (67.23-71.17)[a]	64.65 (59.12-70.18)[a,b]	64.58 (58.86-70.30)[a,b]	62.31 (59.80-64.81)[b]
	Model Dsb*	69.31 (67.31-71.32)[a]	65.14 (59.46-70.82)[a,b]	64.58 (58.73-70.44)[a,b]	62.14 (59.58-64.71)[b]
Dairy and meat substitutes[4]					
	Model Uadj	25.25 (21.41-29.09)[a]	16.85 (4.97-28.73)[a]	31.10 (19.07-43.14)[a,b]	44.92 (40.13-49.72)[b]
	Model Adj	23.22 (18.87-27.56)[a]	19.78 (7.55-32.00)[a]	37.96 (25.32-50.60)[a,b]	46.52 (40.98-52.06)[b]
	Model Dsb*	23.21 (18.75-27.68)[a]	20.34 (7.67-33.01)[a]	38.71 (25.65-51.77)[a,b]	46.49 (40.76-52.21)[b]
Alcoholic beverages					
	Model Uadj	55.38 (52.03-58.72)[a]	51.93 (41.57-62.28)[a]	61.28 (50.79-71.77)[a]	55.52 (51.34-59.69)[a]
	Model Adj	52.93 (49.32-56.55)[a]	53.52 (43.35-63.68)[a,b]	67.65 (57.13-78.16)[b]	58.05 (53.44-62.66)[a,b]
	Model Dsb*	53.88 (50.15-57.61)[a]	51.56 (40.97-62.15)[a]	67.55 (56.63-78.47)[a]	58.69 (53.91-63.47)[a]
Other non-alcoholic beverages[5]					
	Model Uadj	242.91 (230.92-254.89)[a]	257.45 (220.37-294.54)[a]	194.67 (157.11-232.24)[a]	233.21 (218.26-248.17)[a]
	Model Adj	227.57 (214.07-241.06)[a]	296.04 (258.08-334.00)[b]	252.05 (212.78-291.31)[a,b]	241.73 (224.52-258.94)[a,b]
	Model Dsb*	226.64 (212.81-240.46)[a]	304.13 (264.90-343.35)[b]	258.32 (217.88-298.76)[a,b]	245.25 (227.53-262.96)[a]

[1] Values are means (95% CI)

[2] Butter, mayonnaise and cream

[3] Snacks, chips, salted biscuits, dried fruits, dressing, sauces, milky-desserts and mixed dishes

[4] Soy, soy milk plant-based cream

[5] Chocolate or chicory with milk, chicory, water, infusion, kombucha, non-alcoholic beer

Means annotated with a different letter are significantly different means

ANOVA (model Uadj) and ANCOVA (model Adj and Dsb) with Tukey's post-hoc tests were used for testing differences between groups

Model Uadj was unadjusted

Model Adj was adjusted for age (modelled as a continuous variable), educational level, occupational status, monthly household income, geographical region, physical activity, body mass index (modelled as a continuous variable), marital status, smoking status, daily score intake in 2014 and absolute difference in energy intake (kcal/d)

Model Dsb was model Adj further adjusted for social-desirability bias

*N= 3980 (respectively N=2161; N=219; N=224; N=1376)

Supplemental Table 5: Baseline daily indexes by women parity group (NutriNet-Santé study, n=4,194, 2014)[1]

	Previous children	Multiparous	Primiparous	Nulliparous
N	**2269**	**237**	**231**	**1457**
Total energy intake (kcal/d)				
Model Uadj	1937.81 (1914.40-1961.21)[a]	1866.31 (1793.89-1938.72)[a,c]	1642.76 (1569.41-1716.11)[b]	1795.08 (1765.87-1824.29
Model Adj	1909.30 (1882.94-1935.65)[a]	1883.97 (1809.75-1950.52)[a,c]	1673.97 (1597.43-1750.52)[b]	1831.65 (1798.03-1865.28
Model Dsb*	1913.08 (1886.22-1939.94)[a]	1671.00 (1826.01-1978.62)[a,c]	1671.00 (1592.58-1749.42)[b]	1831.34 (1796.90-1865.78
PDI score (12 to 60)				
Model Uadj	35.32 (35.05-35.59)[a]	35.75 (34.91-36.58)[a,b]	36.29 (35.44-37.14)[a,b]	36.46 (36.12-36.80)[b]
Model Adj	35.17 (34.87-35.47)[a]	35.94 (35.09-36.79)[a,b]	36.57 (35.69-37.45)[b]	36.61 (36.22-36.99)[b]
Model Dsb*	35.24 (34.93-35.55)[a]	35.77 (34.89-36.64)[a,b]	36.53 (35.63-37.43)[b]	36.53 (36.14-36.93)[b]
HPDI score (12 to 60)				
Model Uadj	33.50 (33.16-33.84)[a]	31.95 (30.88-33.01)[b]	32.52 (31.44-33.59)[a,b]	34.80 (34.37-35.23)[c]
Model Adj	32.76 (32.39-33.13)[a]	33.52 (32.48-34.57)[a,b]	34.60 (33.52-35.68)[b,c]	35.36 (34.89-35.84)[c]
Model Dsb*	32.84 (32.46-33.22)[a]	33.33 (32.26-34.40)[a,b]	34.83 (33.73-35.94)[b,c]	35.35 (34.86-35.83)[c]
UPDI score (12 to 60)				
Model Uadj	38.06 (37.78-38.34)[a]	39.83 (38.97-40.70)[b,c]	40.68 (39.81-41.56)[b]	38.83 (38.48-39.18)[c]
Model Adj	38.86 (38.56-39.16)[a]	38.36 (37.52-39.21)[a,b]	38.76 (37.88-39.63)[a,b]	38.13 (37.75-38.51)[b]
Model Dsb*	38.80 (38.49-39.10)[a]	38.43 (37.57-39.30)[a,b]	38.49 (37.59-39.38)[a,b]	38.04 (37.65-38.43)[b]
Organic food consumption (g/d)				
Model Uadj	688.27 (657.79-718.74)[a]	632.78 (538.48-727.08)[a,b]	513.81 (418.29-609.32)[b]	692.80 (654.77-730.83)[a]
Model Adj bis	632.15 (601.56-662.73)[a]	728.90 (642.90-814.91)[a,b]	689.49 (600.55-778.43)[a,b]	736.70 (697.68-775.73)[b]
Model Dsb bis*	629.33 (598.06-660.61)[a]	719.65 (630.94-808.36)[a,b]	712.70 (621.28-804.13)[a,b]	738.26 (698.17-778.36)[b]
CDQI score (0 to 85)				
Model Uadj	49.91 (49.52-50.29)[a]	48.61 (47.43-49.79)[a,b]	47.58 (46.39-48.78)[b]	50.09 (49.62-50.57)[a]
Model Adj	49.07 (48.65-49.48)[a]	50.37 (49.21-51.53)[a,b]	49.73 (48.53-50.93)[a,b]	50.77 (50.25-51.30)[b]
Model Dsb*	49.11 (48.69-49.53)[a]	50.14 (48.95-51.33)[a,b]	49.96 (48.74-51.19)[a,b]	50.88 (50.34-51.42)[b]
ADQI score (0 to 30)				
Model Uadj	15.63 (15.47-15.80)[a]	15.71 (15.21-16.22)[a,b]	15.38 (14.86-15.89)[a,b]	16.03 (15.83-16.24)[b]
Model Adj	15.72 (15.53-15.90)[a]	15.93 (15.42-16.45)[a]	15.42 (14.88-15.95)[a]	15.86 (15.62-16.09)[a]
Model Dsb*	15.70 (15.51-15.88)[a]	15.93 (15.39-16.46)[a]	15.36 (14.81-15.91)[a]	15.92 (15.68-16.16)[a]
PDQI score (0 to 55)				
Model Uadj	34.27 (33.96-34.59)[a]	32.90 (31.92-33.87)[b,c]	32.21 (31.22-33.19)[b]	34.06 (33.67-34.45)[a,c]
Model Adj	33.35 (33.01-33.69)[a]	34.44 (33.48-35.39)[a,b]	34.31 (33.32-35.30)[a,b]	34.92 (34.48-35.35)[b]
Model Dsb*	33.42 (33.07-33.76)[a]	34.22 (33.24-35.19)[a,b]	34.60 (33.59-35.61)[a,b]	34.96 (34.51-35.40)[b]
PNNS_GS2 score (-∞ to 14.25)				
Model Uadj	2.36 (2.23-2.49)[a]	2.86 (2.45-3.27)[a,b]	2.99 (2.58-3.41)[b]	3.25 (3.08-3.42)[b]
Model Adj	2.43 (2.31-2.56)[a]	3.10 (2.74-3.46)[b]	2.69 (2.32-3.06)[a,b]	3.14 (2.98-3.30)[b]
Model Dsb*	2.43 (2.30-2.56)[a]	3.01 (2.64-3.37)[b]	2.74 (2.37-3.12)[a,b]	3.16 (3.00-3.33)[b]
PANDiet score (0 to 100)				
Model Uadj	63.41 (63.11-63.71)[a]	63.29 (62.36-64.22)[a]	62.58 (61.63-63.52)[a]	64.70 (64.32-65.07)[b]
Model Adj	63.13 (62.80-63.47)[a]	63.98 (63.03-64.92)[a,b]	63.59 (62.62-64.57)[a,b]	64.86 (64.43-65.28)[b]
Model Dsb*	63.10 (62.76-63.44)[a]	63.79 (62.82-64.76)[a,b]	63.61 (62.61-64.61)[a,b]	64.97 (64.53-65.41)[b]
Plant to total protein ratio (%)				
Model Uadj	0.33 (0.32-0.33)[a]	0.33 (0.31-0.34)[a]	0.34 (0.32-0.36)[a,b]	0.37 (0.36-0.38)[b]
Model Adj	0.33 (0.32-0.33)[a]	0.33 (0.31-0.35)[a]	0.35 (0.33-0.37)[a,b]	0.37 (0.36-0.38)[b]
Model Dsb*	0.33 (0.32-0.33)[a]	0.33 (0.31-0.35)[a]	0.35 (0.33-0.37)[a,b]	0.37 (0.36-0.37)[b]

[1] Values are means (95% CI)

[2] Values are adjusted with the residual method for energy intake

Means annotated with a different letter are significantly different means

ANOVA (model Uadj) and ANCOVA (model Adj and Dsb) with Tukey's post-hoc tests were used for testing differences between groups

Model Uadj was unadjusted

Model Adj was adjusted for age (modelled as a continuous variable), educational level, occupational status, monthly household income, geographical region, physical activity, body mass index (modelled as a continuous variable), marital status, smoking status, daily score intake in 2014 and absolute difference in energy intake (kcal/d)

Model Adj bis was adjusted for age (modelled as a continuous variable), educational level, occupational status, monthly household income, geographical region, physical activity, body mass index (modelled as a continuous variable), marital status, smoking status, baseline food intake for the group considered, absolute difference in energy intake (kcal/d) and absolute difference in total consumption (conventional + organic)

Model Dsb was model Adj further adjusted for social-desirability bias

Model Dsb bis was model Adj bis further adjusted for social-desirability bias

Abbreviations: aDQI: Animal-based Diet Quality Index; cDQI: Comprehensive Diet Quality Index; hPDI: Healthyl Plant-based Diet Index; PANDiet: Diet Quality Index Based on the Probability of Adequate Nutrient Intake; PDI: Plant-based Diet Index; PNNS-GS2: Programme National Nutrition Santé-Guideline Score 2; pDQI: Plant-based Diet Quality Index; uPDI: Unhealthy Plant-based Diet Index

*N= 3980 (respectively N=2161; N=219; N=224; N=1376)

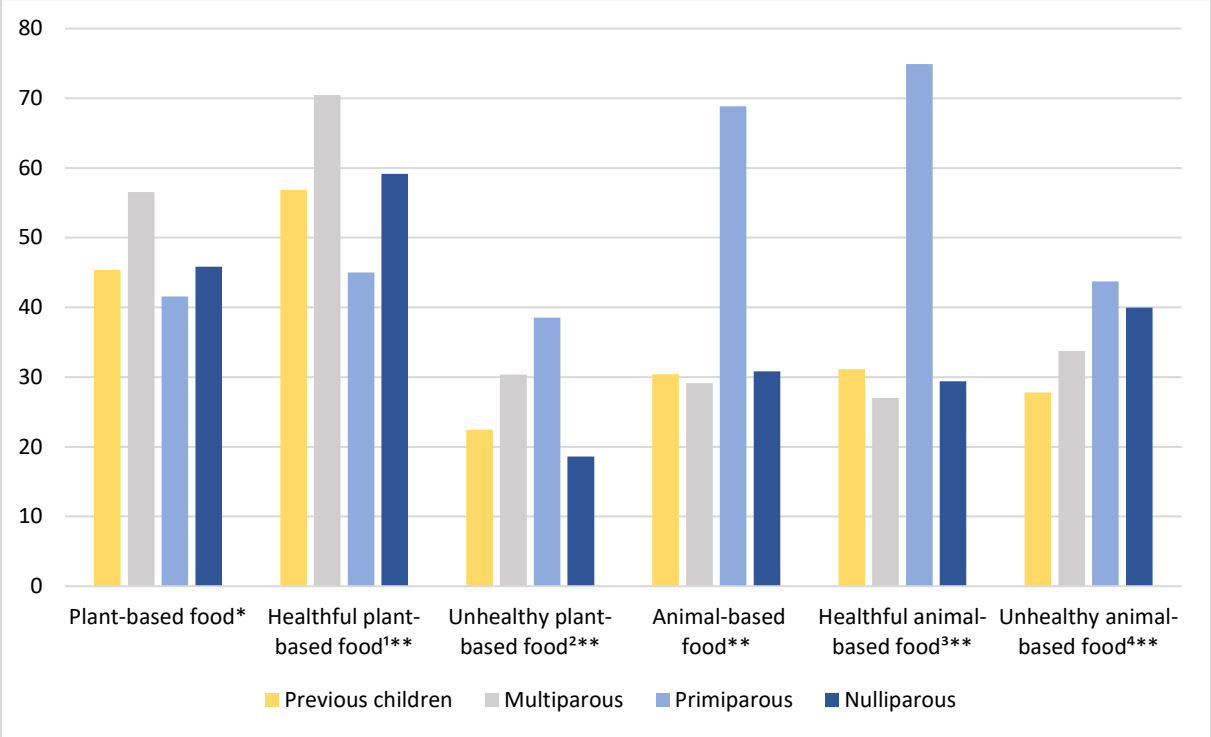
Supplemental Table 6: Absolute differences over time (2018 vs 2014) in daily indexes by women parity after removing women who were pregnant when the Org-FFQ14 (NutriNet-Santé study, n=4,084)[1]

g/d	Previous children	Multiparous	Primiparous	Nulliparous
	2191	205	231	1457
Whole-grain products	**5.66** (2.87-8.44)[a]	**6.77** (-1.40-14.95)[a]	**12.79** (4.86-20.73)[a]	**8.44** (4.98-11.90)[a]
Vegetables	**28.05** (16.19-39.90)[a,b]	**11.79** (-23.07-46.64)[a,b]	**-15.19** (-49.03-18.65)[a]	**45.58** (30.84-60.33)[b]
Fruit	**30.55** (21.95-39.16)[a]	**40.24** (14.95-65.53)[a]	**19.16** (-5.40-43.72)[a]	**43.46** (32.75-54.16)[a]
Nuts, seeds, legumes	**9.96** (8.34-11.58)[a]	**5.07** (0.31-9.83)[a]	**4.95** (0.33-9.58)[a]	**13.81** (11.79-15.83)[b]
Vegetable oil	**2.98** (2.33-3.62)[a]	**3.48** (1.60-5.37)[a]	**2.83** (1.00-4.66)[a]	**2.47** (1.67-3.27)[a]
Coffee, tea	**38.24** (21.36-55.13)[a]	**20.77** (-28.92-70.47)[a]	**-104.65** (-152.86--56.45)[b]	**14.38** (-6.62-35.37)[a]
Fruit juices	**-17.35** (-21.62--13.08)[a]	**-31.25** (-43.79--18.70)[a]	**-19.73** (-31.92--7.55)[a]	**-23.41** (-28.71--18.10)[a]
Refined grains	**-5.96** (-9.83--2.09)[a]	**7.44** (-3.92-18.79)[a]	**-11.32** (-22.36--0.29)[a,b]	**-15.25** (-20.07--10.44)[b]
Potatoes	**-0.18** (-0.88-0.52)[a]	**1.48** (-0.57-3.53)[a]	**-1.23** (-3.22-0.76)[a]	**-0.86** (-1.72-0.01)[a]
Sugar-sweetened beverages	**-12.76** (-16.94--8.59)[a]	**-10.18** (-22.46-2.10)[a]	**-3.87** (-15.79-8.05)[a]	**-12.21** (-17.40--7.01)[a]
Sweets and desserts	**1.91** (0.31-3.51)[a]	**4.49** (-0.21-9.19)[a]	**5.27** (0.71-9.84)[a]	**0.58** (-1.41-2.57)[a]
Fish, seafood	**2.36** (0.80-3.92)[a]	**-2.61** (-7.20-1.98)[a]	**-3.05** (-7.51-1.41)[a]	**-0.09** (-2.04-1.85)[a]
Dairy products	**-21.77** (-31.15--12.39)[a]	**-21.14** (-48.71-6.43)[a,b]	**28.86** (2.07-55.66)[b]	**-16.52** (-28.18--4.86)[a]
Poultry	**2.61** (-1.00-6.21)[a]	**-4.00** (-14.58-6.59)[a]	**-10.41** (-20.69--0.12)[a]	**-1.83** (-6.31-2.65)[a]
Processed meat	**-2.23** (-3.18--1.29)[a]	**-2.46** (-5.24-0.32)[a]	**-5.49** (-8.19--2.80)[a]	**-4.33** (-5.51--3.16)[a]
Meat	**-6.33** (-8.36--4.30)[a]	**-6.77** (-12.74--0.80)[a]	**-8.70** (-14.50--2.90)[a]	**-6.80** (-9.33--4.27)[a]
Eggs	**2.48** (1.68-3.27)[a]	**1.64** (-0.69-3.98)[a]	**0.89** (-1.38-3.16)[a]	**3.75** (2.76-4.74)[a]
Other fat	**0.23** (-0.12-0.58)[a]	**1.33** (0.31-2.35)[a]	**0.46** (-0.54-1.45)[a,b]	**-0.66** (-1.09--0.23)[b]
Other fatty, salty, and sweet products	**5.56** (3.72-7.41)[a]	**8.07** (2.64-13.50)[a]	**7.13** (1.86-12.40)[a]	**2.79** (0.49-5.09)[a]
Dairy and meat substitutes	**14.63** (9.86-19.41)[a]	**4.45** (-9.57-18.47)[a]	**0.08** (-13.53-13.69)[a]	**16.12** (10.17-22.06)[a]
Alcoholic beverages	**6.75** (3.82-9.69)[a]	**3.57** (-5.06-12.19)[a]	**-23.45** (-31.83--15.07)[b]	**3.81** (0.16-7.46)[a]
Other non-alcoholic beverages	**40.29** (25.71-54.88)[a]	**4.68** (-38.24-47.60)[a]	**57.33** (15.69-98.96)[a]	**40.05** (21.91-58.18)[a]

[1] Values are means (95% CI). Values was adjusted for age (modelled as a continuous variable), educational level, occupational status, monthly household income, geographical region, physical activity, body mass index (modelled as a continuous variable), marital status, smoking status, baseline food intake for the group considered and absolute difference in energy intake (kcal/d)

Means annotated with a different letter are significantly different means

Supplemental Figure 3: Proportion of women increasing their daily food group consumption by more than 5% by women parity group (NutriNet-Santé study)[1]



[1]Values presented are percentages. P-values were based on chi-squared test for testing differences in proportions within a food group. ** p-values <0.0001. *p-values <0.01

Intakes in 2014 and 2018 were adjusted for age, occupational status, monthly household income, geographical region, physical activity, body mass index (modelled as a continuous variable), marital status, smoking status, baseline food intake for the group considered, energy intake in 2014 or 2018 (kcal/d)

Supplemental Table 7: Absolute differences over time (2018 vs 2014) in organic consumption and daily indexes by women parity group (NutriNet-Santé study, n=4,194)[1]

	Previous children 2269	Multiparous 237	Primiparous 231	Nulliparous 1457
Organic food consumption (g/d)				
Model Uadj	156.60 (131.74-181.46)[a]	220.30 (143.40-297.25)[a]	247.50 (169.58-325.42)[a]	193.10 (162.04-224.09)[a]
Model Adj bis	153.06 (127.90-178.22)[a]	186.92 (116.16-257.68)[a,b]	204.01 (130.61-277.41)[a,b]	210.90 (178.81-242.99)[b]
Model Dsb bis*	151.57 (125.77-177.37)[a]	174.74 (101.54-247.95)[a,b]	197.64 (121.95-273.33)[a,b]	219.36 (186.29-252.43)[b]
ADQI score (0 to 30)				
Model Uadj	0.42 (0.25-0.59)[a]	0.06 (-0.46-0.57)[a]	0.86 (0.34-1.38)[a]	0.24 (0.03-0.45)[a]
Model Adj	0.32 (0.16-0.48)[a]	0.10 (-0.35-0.55)[a]	0.73 (0.27-1.20)[a]	0.41 (0.20-0.61)[a]
Model Dsb*	0.34 (0.18-0.50)[a]	0.08 (-0.38-0.54)[a]	0.73 (0.25-1.21)[a]	0.42 (0.21-0.63)[a]
PDQI score (0 to 55)				
Model Uadj	2.76 (2.51-3.01)[a]	2.09 (1.32-2.87)[a]	2.18 (1.40-2.97)[a]	2.61 (2.30-2.92)[a]
Model Adj	2.69 (2.43-2.95)[a]	1.86 (1.14-2.58)[a]	1.86 (1.11-2.60)[a]	2.81 (2.49-3.14)[a]
Model Dsb*	2.67 (2.41-2.93)[a]	1.80 (1.06-2.54)[a]	1.74 (0.97-2.50)[a]	2.77 (2.43-3.10)[a]

[1] Values are means (95% CI)

[2] Values are adjusted with the residual method for energy intake

Means annotated with a different letter are significantly different means

ANOVA (model Uadj) and ANCOVA (model Adj and Dsb) with Tukey's post-hoc tests were used for testing differences between groups

Model Uadj was unadjusted

Model Adj was adjusted for age (modelled as a continuous variable), educational level, occupational status, monthly household income, geographical region, physical activity, body mass index (modelled as a continuous variable), marital status, smoking status, baseline food intake for the group considered and absolute difference in energy intake (kcal/d)

Model Adj bis was adjusted for age (modelled as a continuous variable), educational level, occupational status, monthly household income, geographical region, physical activity, body mass index (modelled as a continuous variable), marital status, smoking status, baseline food intake for the group considered, absolute difference in energy intake (kcal/d) and absolute difference in total consumption (conventional + organic)

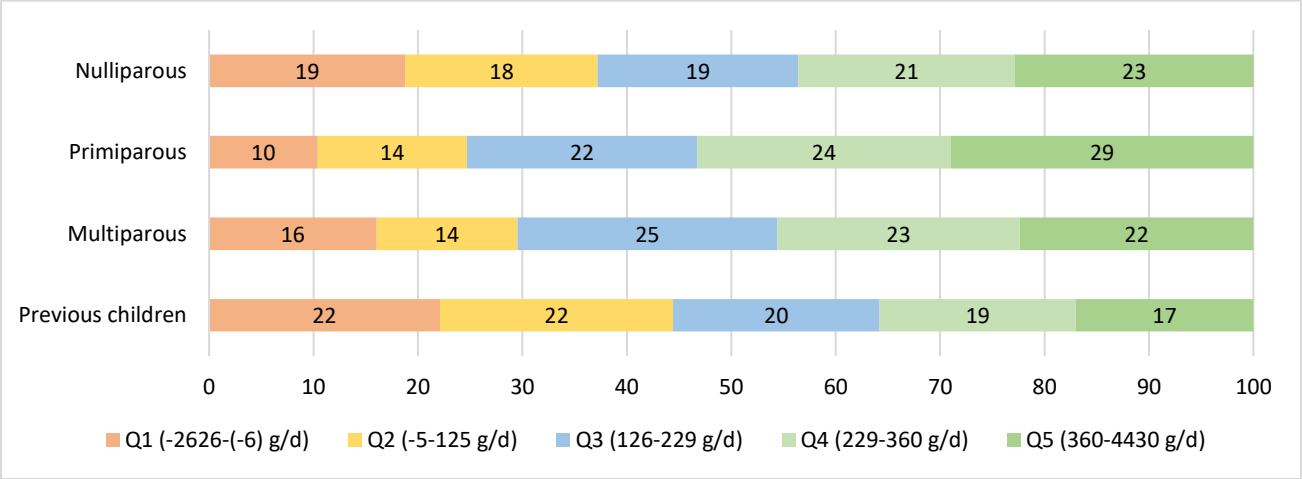
Model Dsb was model Adj further adjusted for social-desirability bias

Model Dsb bis was model Adj bis further adjusted for social-desirability bias

Abbreviations: aDQI: Animal-based Diet Quality Index; pDQI: Plant-based Diet Quality Index

*N= 3980 (respectively N=2161; N=219; N=224; N=1376)

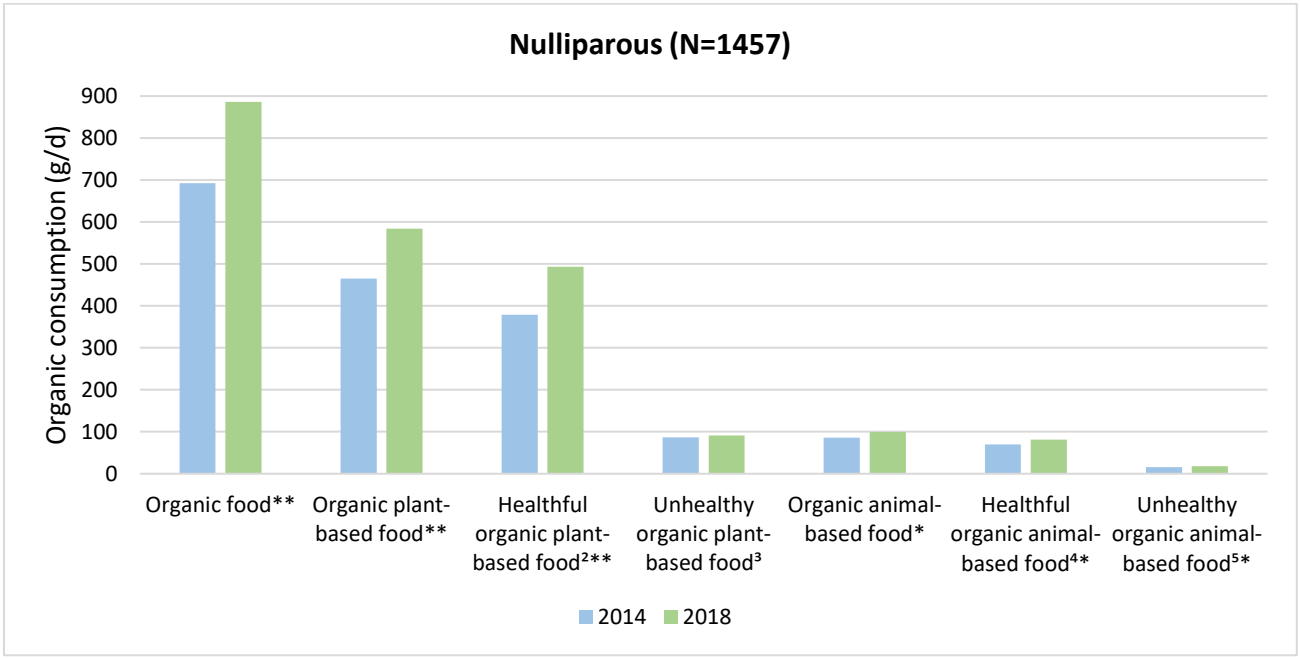
Supplemental Figure 4: Quintiles of difference over time in organic consumption (2018 vs 2014) by women parity group (NutriNet-Santé study, n=4,194)[1]



Values presented are percentages. P-values were based on chi-squared tests (p-value <0.0001)

[1]Difference in organic consumption is adjusted for age (modelled as a continuous variable), educational level, occupational status, monthly household income, geographical region, physical activity, body mass index (modelled as a continuous variable), marital status, smoking status, baseline organic food intake, difference in total food consumption and absolute difference in energy intake (kcal/d)

Supplemental Figure 5: Mean daily consumption of organic food groups in 2014 and 2018 by women parity group (NutriNet-Santé study)[1]



[1]Unadjusted means

* p-values <0.05. P-values were based on Student test for paired values comparing 2014 to 2018 data

** p-values <0.0001. P-values were based on Student test for paired values comparing 2014 to 2018 data

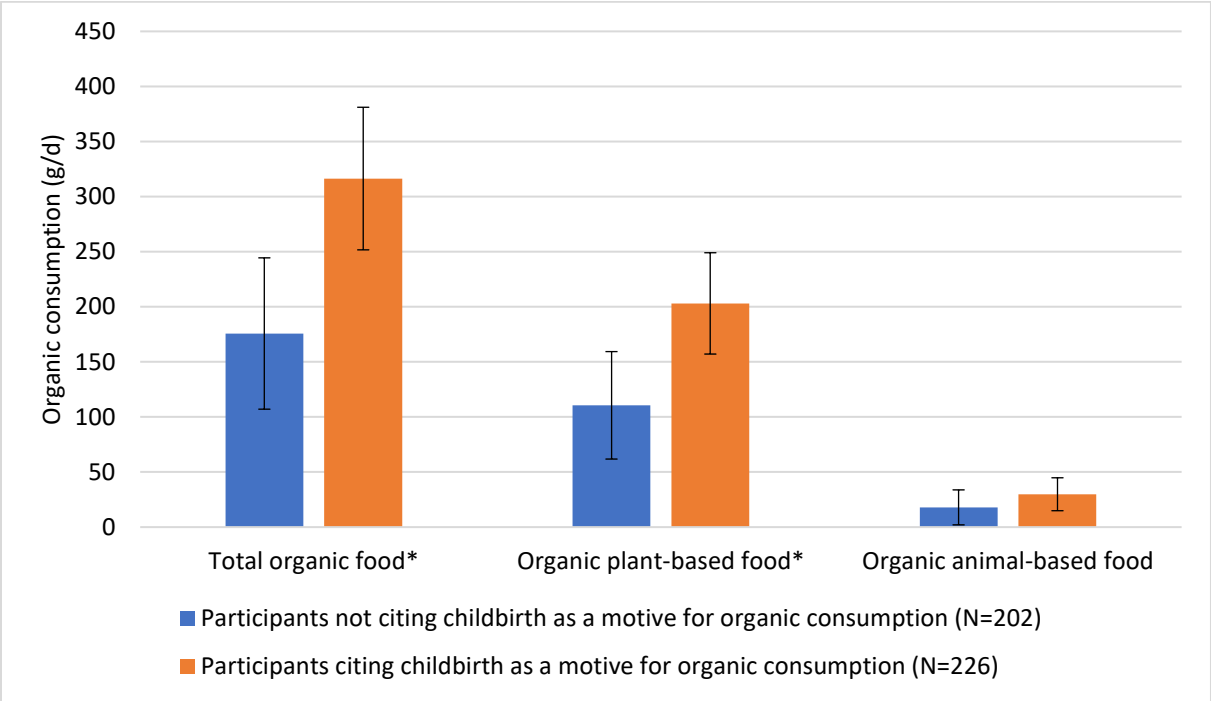
[2] Wholegrain products, vegetables, fruit, nuts, legumes, vegetable oils, coffee, tea

[3] Fruit juices, refined grains, potatoes, sugar-sweetened beverages, sweets and desserts

[4] Fish, seafood, dairy, poultry

[5] Processed meats, red meat, egg

Supplemental Figure 6: Absolute differences over time (2018 vs. 2014) in daily consumption of organic food groups among women pregnant during the period, citing childbirth as a motive for organic consumption (NutriNet-Santé study, n=428)[1]



[1]Values are means (95% CI)

ANCOVA with Tukey's post-hoc test was used for testing differences between consumption according to whether or not the reason was mentioned. *p-values <0.001

Difference in organic consumption was adjusted for age (modelled as a continuous variable), educational level, occupational status, monthly household income, geographical region, physical activity, body mass index (modelled as a continuous variable), marital status, smoking status, baseline food intake for the group considered, absolute difference in energy intake (kcal/d) and absolute difference in total consumption per group (conventional + organic)