

SUPPLEMENTAL DATA

Table S1. Total Fat and fatty acid composition of spreads and margarines in the US market in 2013, expressed in g per 100g edible food and % of total fatty acids*

	Format	Type	Branded	Total fat	Total SFA					Total MUFA			Total PUFA		C18:2 (LA)		C18:3 (ALA)	EPAY/DHA	Total TFA	Total TFA	PHVO
				g/100g	g/100g	% FA	% FA	% FA	% FA	% FA	g/100g	% FA	% FA	g/100g	% FA	% FA	% FA	% FA	g/100g	% FA	
1	Tub	Light	B	40.8	10.5	26.9	2.9	1.1	16.6	4.8	9.1	23.3	23.0	19.3	49.6	43.4	5.9	0.0	0.1	0.2	no
2	Tub	Light	B	39.0	10.3	27.6	2.8	1.2	17.4	4.8	8.8	23.6	23.3	18.1	48.6	42.5	5.8	0.0	0.1	0.2	no
3	Tub	Light	B	46.9	16.4	36.8	1.6	5.4	17.0	6.5	21.5	48.2	45.7	5.8	13.0	11.1	1.7	0.1	0.9	2.0	no
4	Tub	Light	B	38.7	7.7	20.8	0.0	0.4	16.7	2.8	20.6	55.6	54.2	8.7	23.4	17.3	5.7	0.0	0.1	0.2	no
5	Tub	Light	B	36.4	7.3	21.0	1.5	0.9	13.3	4.3	11.3	32.5	31.6	16.1	46.3	39.2	6.8	0.0	0.1	0.2	no
6	Tub	Light	B	37.6	9.0	25.1	0.2	0.7	21.5	3.2	18.3	51.2	50.4	8.1	22.7	18.4	4.9	0.4	0.4	1.1	no
7	Tub	Light	B	40.4	12.2	31.7	0.2	0.6	25.2	4.9	12.6	32.7	32.3	13.6	35.2	29.8	5.3	0.0	0.2	0.4	no
8	Tub	Reg	B	57.7	5.6	10.1	0.0	0.0	5.4	4.1	32.5	58.9	55.7	13.4	24.3	18.5	6.9	0.0	3.7	6.7	yes
9	Tub	Reg	B	47.2	12.3	27.3	2.8	1.2	17.3	4.8	10.8	24.1	23.7	21.7	48.3	42.8	5.2	0.0	0.2	0.4	no
10	Tub	Reg	B	35.6	9.1	26.7	2.6	1.1	17.2	4.6	7.8	23.0	22.7	17.0	50.1	44.2	5.8	0.0	0.0	0.1	no
11	Tub	Reg	B	58.9	11.4	20.2	0.4	0.3	11.8	6.8	13.6	24.2	23.8	28.8	51.1	45.2	5.6	0.0	2.5	4.5	yes
12	Tub	Reg	B	38.4	9.8	26.8	2.8	1.1	16.7	4.8	8.7	23.7	23.3	18.1	49.3	43.4	5.7	0.0	0.1	0.2	no
13	Tub	Reg	B	50.0	12.3	25.7	2.3	1.0	16.6	4.7	10.8	22.5	22.2	24.7	51.6	45.5	6.0	0.0	0.1	0.1	no
14	Tub	Reg	B	49.1	12.1	25.9	2.3	1.0	16.9	4.5	10.7	22.8	22.5	24.0	51.1	44.7	6.1	0.0	0.1	0.2	no
15	Tub	Reg	B	76.7	14.0	19.1	2.5	1.0	12.0	2.2	41.5	56.6	55.0	17.7	24.2	17.0	6.8	0.0	0.1	0.2	no
16	Tub	Reg	B	73.6	20.8	29.6	0.1	0.6	24.7	3.4	34.5	49.1	48.1	14.7	20.9	17.3	3.2	0.0	0.2	0.3	no
17	Tub	Reg	B	63.1	16.2	26.8	2.8	1.2	16.7	4.9	14.1	23.4	23.0	29.9	49.6	42.2	7.2	0.0	0.1	0.2	no
18	Tub	Reg	B	77.6	14.5	19.5	2.6	1.1	12.2	2.2	41.3	55.7	54.1	18.3	24.7	17.1	7.3	0.0	0.1	0.1	no
19	Tub	Reg	B	59.8	14.4	25.2	2.1	0.9	16.5	4.5	13.7	24.0	23.6	28.9	50.6	44.6	5.7	0.0	0.1	0.2	no
20	Tub	Reg	B	38.1	9.8	26.8	2.8	1.1	16.4	5.1	8.8	24.0	23.5	17.8	49.0	42.9	5.8	0.0	0.1	0.2	no
21	Tub	Reg	B	56.5	13.8	25.7	2.1	1.0	17.3	4.2	11.2	20.8	20.5	28.7	53.2	46.2	6.6	0.0	0.2	0.3	no
22	Tub	Reg	B	74.9	25.7	36.2	1.5	5.1	16.8	6.8	34.8	48.9	46.4	9.1	12.8	10.9	1.6	0.0	1.6	2.2	no
23	Tub	Reg	B	63.4	17.0	28.2	2.8	1.2	17.5	5.2	14.8	24.4	24.0	28.6	47.2	41.6	5.3	0.0	0.2	0.3	no

24	Tub	Reg	B	62.4	19.9	33.5	10.0	3.8	9.0	6.4	27.7	46.7	46.3	5.4	9.1	8.7	0.4	0.0	6.4	10.7	no
25	Tub	Reg	B	60.6	13.6	23.5	0.2	0.4	19.2	2.8	32.5	56.1	54.9	11.7	20.1	15.3	4.5	0.0	0.1	0.2	no
26	Tub	Reg	B	59.2	15.5	27.4	3.0	1.2	17.3	4.6	13.4	23.7	23.4	27.4	48.5	43.0	5.3	0.0	0.2	0.4	no
27	Tub	Reg	B	59.7	11.6	20.3	1.5	0.8	12.9	4.0	18.8	32.9	32.0	26.6	46.6	39.4	6.9	0.0	0.1	0.2	no
28	Tub	Reg	B	66.9	19.7	30.8	0.1	0.5	25.1	4.4	19.5	30.6	30.2	24.4	38.2	33.6	4.3	0.0	0.3	0.5	no
29	Tub	Reg	B	61.9	18.9	31.9	0.2	0.6	25.3	4.8	19.5	33.0	32.5	20.5	34.7	30.4	3.8	0.3	0.2	0.4	no
30	Spray	Reg	B	38.2	6.3	17.2	0.1	0.1	10.6	5.3	9.2	25.2	24.8	21.0	57.4	50.3	6.8	0.0	0.1	0.2	no
31	Spray	Reg	B	43.7	6.7	16.0	0.0	0.1	10.4	4.7	10.0	24.1	23.7	24.8	59.3	52.6	6.5	0.0	0.3	0.6	no
32	Stick	Reg	B	50.7	10.1	20.9	0.0	0.1	10.8	9.0	14.4	29.6	29.4	13.5	27.8	24.8	3.0	0.0	10.5	21.7	yes
33	Stick	Reg	B	59.0	17.3	30.7	2.1	1.1	22.0	4.1	19.1	33.9	33.2	19.9	35.2	30.2	4.8	0.0	0.1	0.2	no
34	Stick	Reg	B	88.3	32.8	38.9	0.3	0.8	33.3	3.7	36.5	43.2	42.4	14.8	17.5	14.2	3.0	0.0	0.3	0.3	no
35	Stick	Reg	B	65.0	12.6	20.3	0.0	0.1	10.8	8.5	18.0	28.9	28.6	19.8	31.9	28.0	3.6	0.0	11.7	18.9	yes
36	Stick	Reg	B	83.4	24.3	30.5	2.1	1.1	22.2	4.0	27.1	34.1	33.4	28.1	35.2	30.1	4.9	0.0	0.1	0.2	no
37	Stick	Reg	B	53.6	16.9	33.0	2.1	1.1	23.9	4.6	13.6	26.5	26.0	20.7	40.4	35.6	4.6	0.0	0.1	0.2	no
38	Tub	Reg	PL	52.7	14.8	29.4	3.2	1.4	19.3	4.3	10.3	20.4	20.1	25.2	50.0	43.9	5.9	0.0	0.1	0.3	no
39	Tub	Reg	PL	47.3	8.5	18.8	0.0	0.1	10.8	6.8	11.5	25.4	25.0	22.4	49.4	43.8	5.4	0.0	2.9	6.5	yes
40	Tub	Reg	PL	60.1	13.8	24.0	0.4	1.1	17.7	3.1	31.1	54.1	52.6	12.3	21.4	15.7	5.3	0.0	0.3	0.5	no
41	Tub	Reg	PL	81.9	14.8	18.9	0.0	0.1	10.5	7.4	22.1	28.2	27.8	31.6	40.3	35.5	4.6	0.0	9.9	12.6	yes
42	Tub	Reg	PL	48.7	8.6	18.4	0.0	0.1	10.8	6.7	11.7	25.1	24.8	23.3	50.1	44.2	5.6	0.0	3.0	6.4	yes
43	Tub	Reg	PL	60.9	15.7	27.0	2.5	1.2	16.8	5.2	13.3	22.9	22.5	28.6	49.2	43.5	5.3	0.0	0.6	1.0	no
44	Stick	Reg	PL	76.2	15.1	20.7	0.0	0.1	10.9	8.8	20.5	28.1	27.9	22.6	31.0	27.2	3.6	0.0	14.7	20.2	yes
45	Stick	Reg	PL	51.9	10.3	20.7	0.0	0.1	11.0	8.7	14.3	28.9	28.6	15.3	30.9	27.4	3.3	0.0	9.7	19.6	yes
46	Stick	Reg	PL	72.8	14.4	20.7	0.0	0.1	10.6	9.0	19.8	28.4	28.2	19.5	28.0	24.7	3.2	0.0	15.9	22.8	yes

Notes: SFA, saturated fatty acids; MUFA, monounsaturated fatty acids; PUFA, polyunsaturated fatty acids; TFA, trans fatty acids; PHVO, partially hydrogenated vegetable oils; LA, linoleic acid; ALA, alpha-linolenic acid; EPA/DHA, eicosapentaenoic acid and docosahexaenoic acid; B, Branded; PL, Private Label; Reg, Regular.

* The analysis of fatty acids was done by gas chromatography. PHVO was assessed from the food label using the ingredient list and the Nutrition Facts label. Data are expressed in grams per 14 g serving size.

Table S2. Total Fat and fatty acid composition of spreads and margarines in the US market in 2011, expressed in g per 100g edible food and % of total fatty acids*

	Format	Type	Branded	Total fat	Total SFA		Total MUFA		Total PUFA		C18:2 (LA)	C18:3 (ALA)	EPA/DHA	Total TFA	
				g/100g	g/100g	% FA	g/100g	% FA	g/100g	% FA	% FA	% FA	% FA	g/100g	% FA
1	Tub	Light	B	32.7	5.9	19.0	7.3	23.2	16.2	51.7	45.2	6.5	0.0	1.9	6.0
2	Tub	Light	B	43.1	11.2	27.3	8.7	21.2	21.0	51.0	44.3	6.6	0.0	0.2	0.5
3	Tub	Light	B	58.7	11.0	19.6	13.1	23.3	28.9	51.6	44.0	7.4	0.0	3.1	5.6
4	Tub	Light	B	42.6	8.0	19.6	9.4	23.1	20.9	51.4	44.6	6.7	0.0	2.4	5.9
5	Tub	Light	B	38.7	10.5	28.6	7.9	21.4	18.3	49.6	43.1	6.5	0.0	0.2	0.5
6	Tub	Light	B	42.1	13.0	32.4	12.4	30.7	14.6	36.4	31.3	5.0	0.0	0.2	0.5
7	Tub	Reg	B	48.1	8.7	19.0	10.7	23.3	23.6	51.4	44.9	6.4	0.0	2.9	6.3
8	Tub	Reg	B	35.9	9.5	27.8	7.4	21.6	17.2	50.2	43.5	6.6	0.0	0.2	0.5
9	Tub	Reg	B	41.8	10.7	26.7	8.9	22.3	20.2	50.5	45.2	6.0	0.0	0.2	0.5
10	Tub	Reg	B	52.9	13.3	26.4	10.6	21.0	26.3	52.1	45.4	6.7	0.0	0.3	0.6
11	Tub	Reg	B	52.8	13.3	26.5	10.5	20.8	26.2	52.1	45.7	6.7	0.0	0.3	0.6
12	Tub	Reg	B	69.5	17.9	26.9	17.8	26.8	30.2	45.5	39.7	5.8	0.0	0.5	0.7
13	Tub	Reg	B	57.1	14.7	26.9	12.7	23.2	26.9	49.4	42.9	6.5	0.0	0.3	0.5
14	Tub	Reg	B	59.0	15.2	26.9	11.9	21.1	29.1	51.5	44.6	6.8	0.0	0.3	0.5
15	Tub	Reg	B	38.9	10.0	27.1	7.8	21.1	19.0	51.2	44.5	6.7	0.0	0.2	0.6
16	Tub	Reg	B	55.0	13.0	24.6	11.1	21.2	25.2	48.0	42.0	6.0	0.0	3.3	6.2
17	Tub	Reg	B	64.4	12.0	19.5	14.0	22.7	31.8	51.6	45.1	6.4	0.0	3.8	6.2
18	Tub	Reg	B	59.0	11.4	20.2	29.3	52.1	14.8	26.2	21.1	5.1	0.0	0.9	1.5
19	Tub	Reg	B	57.7	10.5	19.0	12.7	23.0	28.4	51.4	45.0	6.3	0.0	3.6	6.5
20	Tub	Reg	B	60.3	11.9	20.6	17.8	31.0	27.6	47.9	40.2	7.6	0.0	0.3	0.5
21	Tub	Reg	B	66.2	20.1	31.7	19.6	31.1	23.2	36.7	31.6	4.5	0.4	0.3	0.5
22	Tub	Reg	B	63.6	19.4	31.9	18.9	31.1	22.2	36.6	32.2	4.3	0.0	0.3	0.5
23	Spray	Reg	B	42.4	7.0	17.4	8.7	21.5	24.5	60.6	52.3	8.1	0.0	0.2	0.5
24	Spray	Reg	B	62.5	10.5	17.6	13.6	22.7	35.0	58.6	51.3	7.2	0.0	0.7	1.2
25	Stick	Light	B	39.7	7.7	20.4	9.1	23.9	12.3	32.5	28.5	4.0	0.0	8.8	23.2
26	Stick	Reg	B	55.2	10.9	20.6	12.3	23.3	17.3	32.7	28.5	4.1	0.0	12.3	23.3
27	Stick	Reg	B	60.3	11.5	20.0	15.3	26.5	18.5	32.1	28.6	4.0	0.0	12.3	21.4
28	Stick	Reg	B	65.6	13.0	20.7	14.9	23.7	20.3	32.4	28.2	4.0	0.0	14.6	23.2
29	Stick	Reg	B	78.9	22.7	30.0	19.6	26.0	30.2	40.1	34.0	6.0	0.0	2.9	3.8
30	Stick	Reg	B	55.4	10.5	19.8	14.5	27.4	16.3	30.9	27.4	3.9	0.0	11.6	21.9
31	Stick	Reg	B	84.3	16.5	20.5	19.1	23.7	26.2	32.6	28.5	4.0	0.0	18.7	23.2
32	Stick	Reg	B	74.7	37.5	52.9	22.4	31.6	9.1	12.8	10.6	1.6	0.3	1.9	2.7

33	Tub	Light	PL	50.5	9.1	18.8	11.2	23.1	24.5	50.8	44.2	6.5	0.0	3.5	7.3
34	Tub	Reg	PL	68.5	12.8	19.6	15.0	22.9	30.2	46.0	39.9	6.1	0.0	7.5	11.5
35	Tub	Reg	PL	51.8	9.3	18.7	11.3	22.8	26.0	52.5	45.7	6.7	0.0	3.0	6.1
36	Tub	Reg	PL	58.4	18.3	32.8	21.5	38.6	15.3	27.5	22.9	4.5	0.0	0.6	1.1
37	Tub	Reg	PL	82.7	15.1	19.1	18.3	23.2	35.6	45.1	39.2	5.8	0.0	9.9	12.6
38	Tub	Reg	PL	40.3	7.5	19.6	8.8	22.9	19.0	49.3	42.7	6.5	0.0	3.2	8.2
39	Tub	Reg	PL	68.8	13.1	19.9	14.9	22.7	32.5	49.4	42.8	6.5	0.0	5.3	8.1
40	Tub	Reg	PL	41.1	7.9	20.1	9.0	22.8	19.8	50.3	43.5	6.7	0.0	2.7	6.8
41	Tub	Reg	PL	47.4	9.0	20.0	10.1	22.3	23.4	51.8	44.7	7.0	0.0	2.7	6.0
42	Tub	Reg	PL	39.6	7.7	20.2	8.8	23.3	18.7	49.4	42.9	6.5	0.0	2.7	7.0
43	Tub	Reg	PL	49.9	9.0	18.8	10.9	23.0	24.3	50.9	44.4	6.5	0.0	3.5	7.3
44	Tub	Reg	PL	52.5	9.7	19.3	11.6	23.0	25.8	51.5	44.8	6.7	0.0	3.1	6.2

Notes: SFA, saturated fatty acids; MUFA, monounsaturated fatty acids; PUFA, polyunsaturated fatty acids; TFA, trans fatty acids; PHVO, partially hydrogenated vegetable oils; LA, linoleic acid; ALA, alpha-linolenic acid; B, Branded; PL, Private Label; Reg, Regular.

* The analysis of fatty acids was done by gas chromatography. PHVO was assessed from the food label using the ingredient list and the Nutrition Facts label. Data are expressed in grams per 14 g serving size and in percentage of total fatty acids.

Table S3: USDA-FNDDS Reference Data on the fatty acid composition of margarines and spreads

Type	Format	Total fat	g/serving				% FA				WIFYE code (1)	USDA code (2)
			SFA	cis-MUFA	cis-PUFA	TFA	SFA	cis-MUFA	cis-PUFA	TFA		
Margarine	stick	11.3	2.1	3.5	3.3	2.1	19.4	31.5	30.1	19.0	81102010	04610
	tub	11.2	2.0	4.4	3.7	0.8	18.4	40.3	33.8	7.5	81102020	04611
Spread	stick	8.5	1.5	2.5	2.2	1.8	19.0	31.0	27.8	22.2	81103040	04612
	tub	8.4	1.7	2.2	3.7	0.5	20.9	27.6	45.2	6.3	81103080	04613
Light spread	tub	5.3	1.2	1.8	1.7	0.2	24.7	36.5	35.6	3.2	81104010	04128

Notes: USDA, U.S. Department of Agriculture; FNDDS, Food and Nutrient Database for Dietary Studies; WIFYE, what's in the foods you eat; % FA, % of total fatty acids; SFA, saturated fatty acids; cis-MUFA, cis-monounsaturated fatty acids; cis-PUFA, cis-polyunsaturated fatty acids; TFA, trans fatty acids.

Data are expressed in grams per 14 g serving size and in percentage of total fatty acids.

1. U.S. Department of Agriculture, Agricultural Research Service. 2014. USDA Food and Nutrient Database for Dietary Studies 2011-2012. Food Surveys Research Group Home Page, <http://www.ars.usda.gov/ba/bhnrc/fsrg>.
2. U.S. Department of Agriculture, Agricultural Research Service. 2014. USDA National Nutrient Database for Standard Reference, Release 28. Nutrient Data Laboratory Home Page, <http://www.ars.usda.gov/nutrientdata>