Web Material legends

Web Figure 1. Predicted CES-D score trajectory from mixed-effects regression model for five levels of n-3:n-6 PUFA ratio, among women

Web Figure 2. Predicted CES-D score trajectory from mixed-effects regression model for five levels of n-3:n-6 PUFA ratio, among men

Web Figure. 3. Predicted CES-D score trajectory from mixed-effects regression model for five levels of n-3 HUFA:n-6 PUFA ratio, among women

Web Figure. 4. Predicted CES-D score trajectory from mixed-effects regression model for five levels of n-3 HUFA:n-6 PUFA ratio, among men

Web Figure. 5. Predicted CES-D score trajectory from mixed-effects regression model for five levels of n-3:n-6 HUFA ratio, among women

Web Figure. 6. Predicted CES-D score trajectory from mixed-effects regression model for five levels of n-3:n-6 HUFA ratio, among men

Web TABLE 1. Analysis of baseline *n-3* fatty acid absolute exposures and longitudinal change in CES-D component scores (both sexes combined), mixed-effects linear regression analysis, HANDLS study, Baltimore, MD, 2004-2013
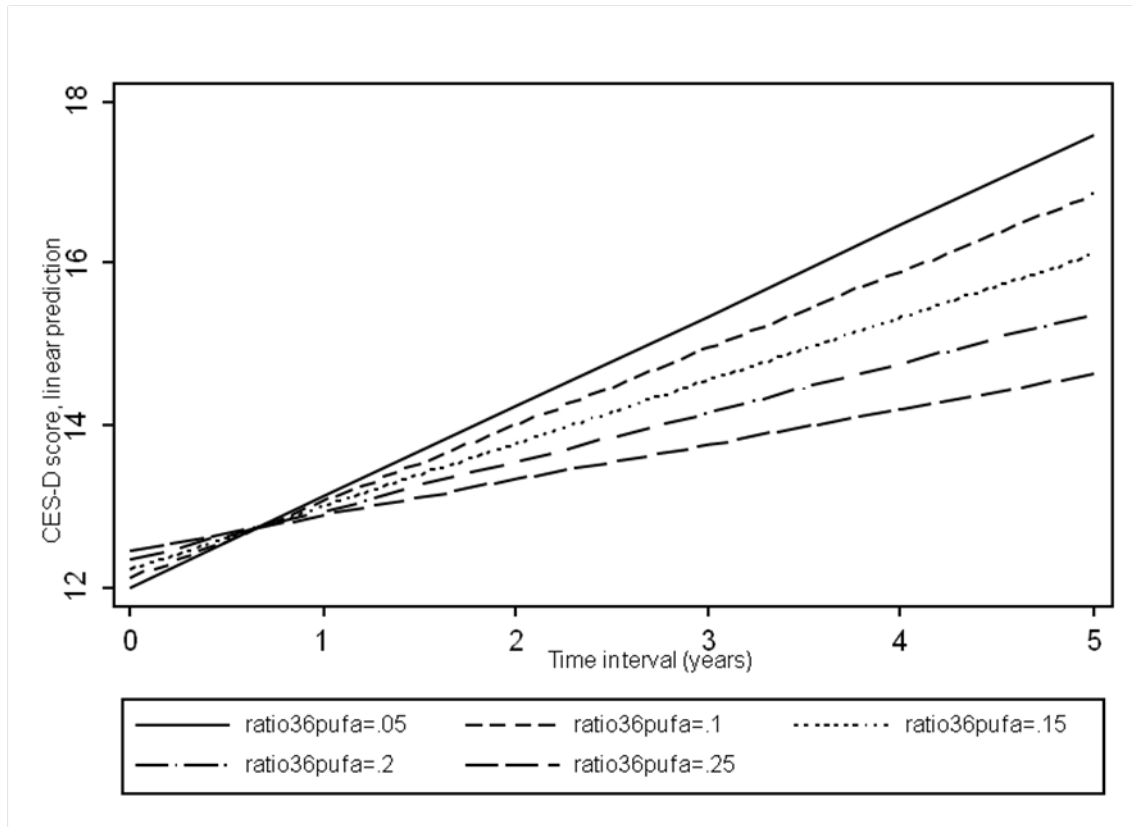
Web Figure. 7. n-3:n-6 PUFA vs. high omega-3 fish consumption and intake of oils

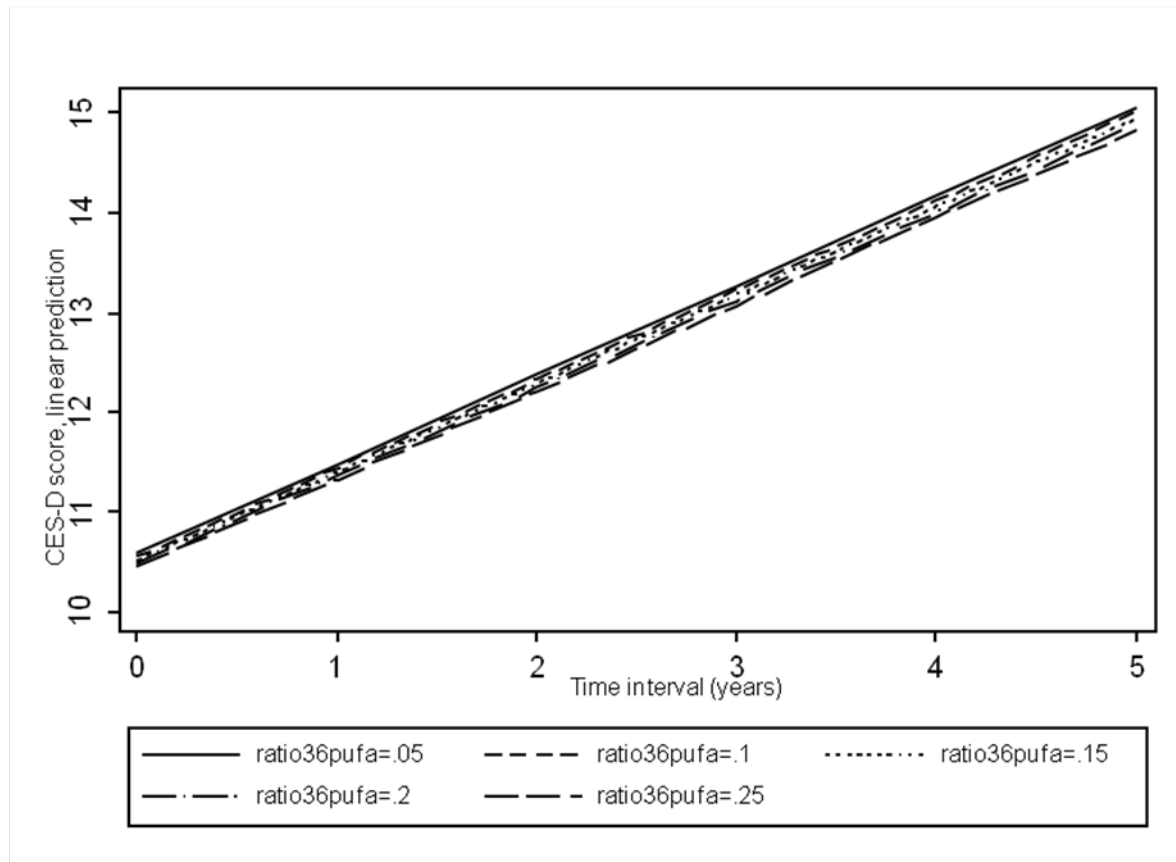1 Oz cooked lean meat from fish, other seafood high in n-3 fatty acids.

2 Grams of discretionary Oil.

URL for MEPED 2.0: http://www.ars.usda.gov/SP2UserFiles/Place/12355000/pdf/mped/mped2_doc.pdf
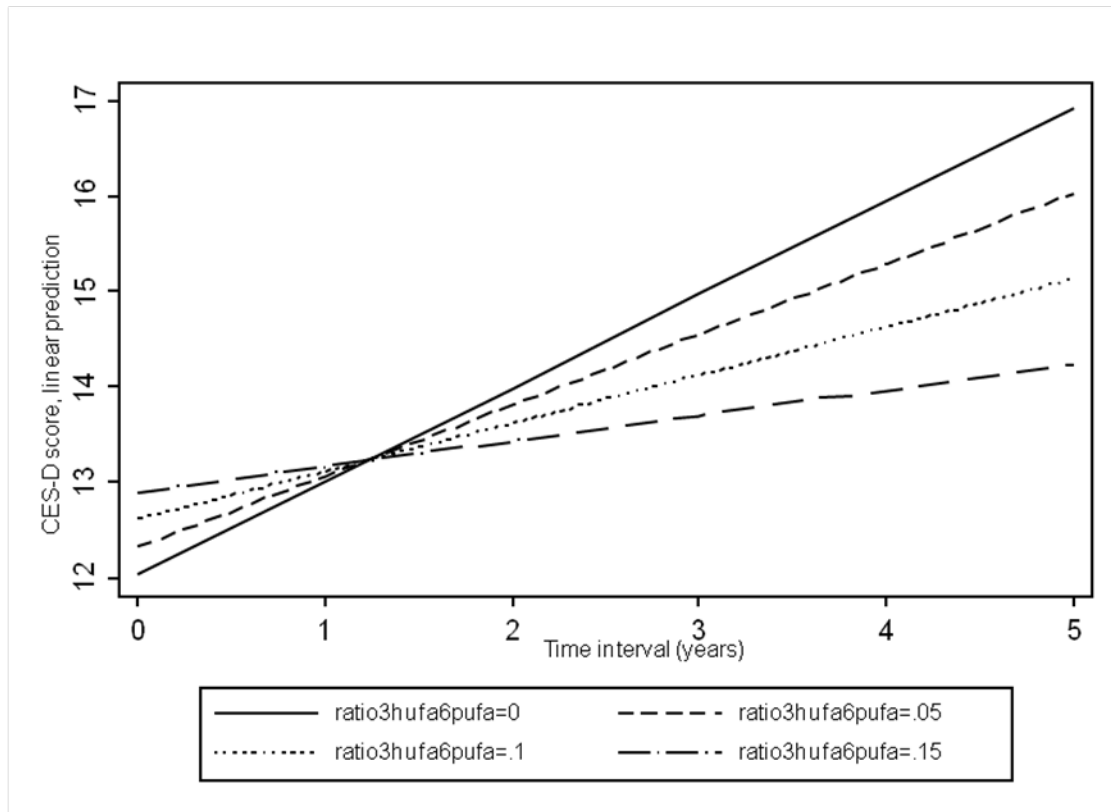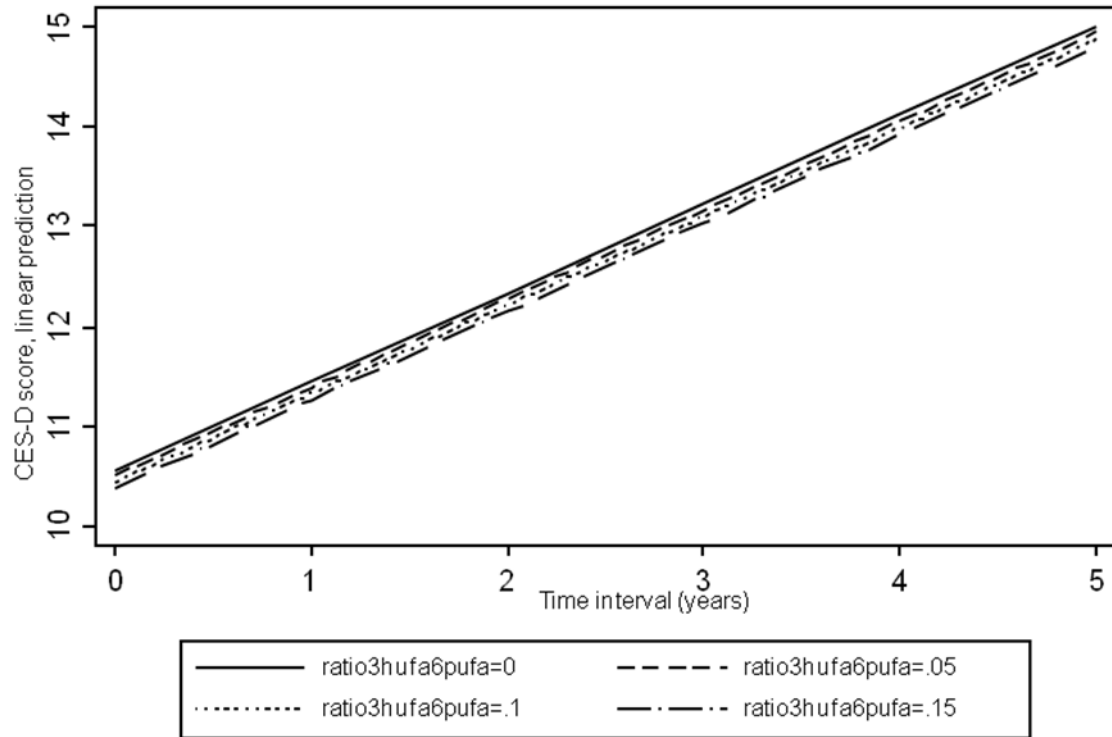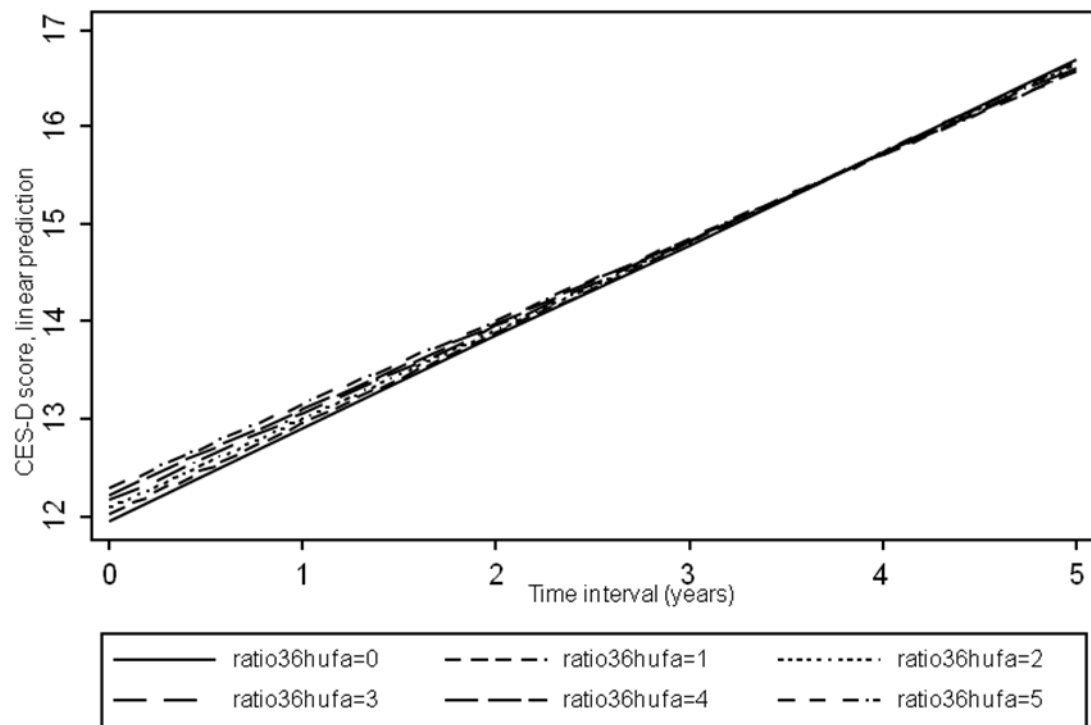
Web Figure. 1.

Web Figure 2

Web Figure. 3.

Web Figure. 4.

Web Figure 5.

Web Figure 6.
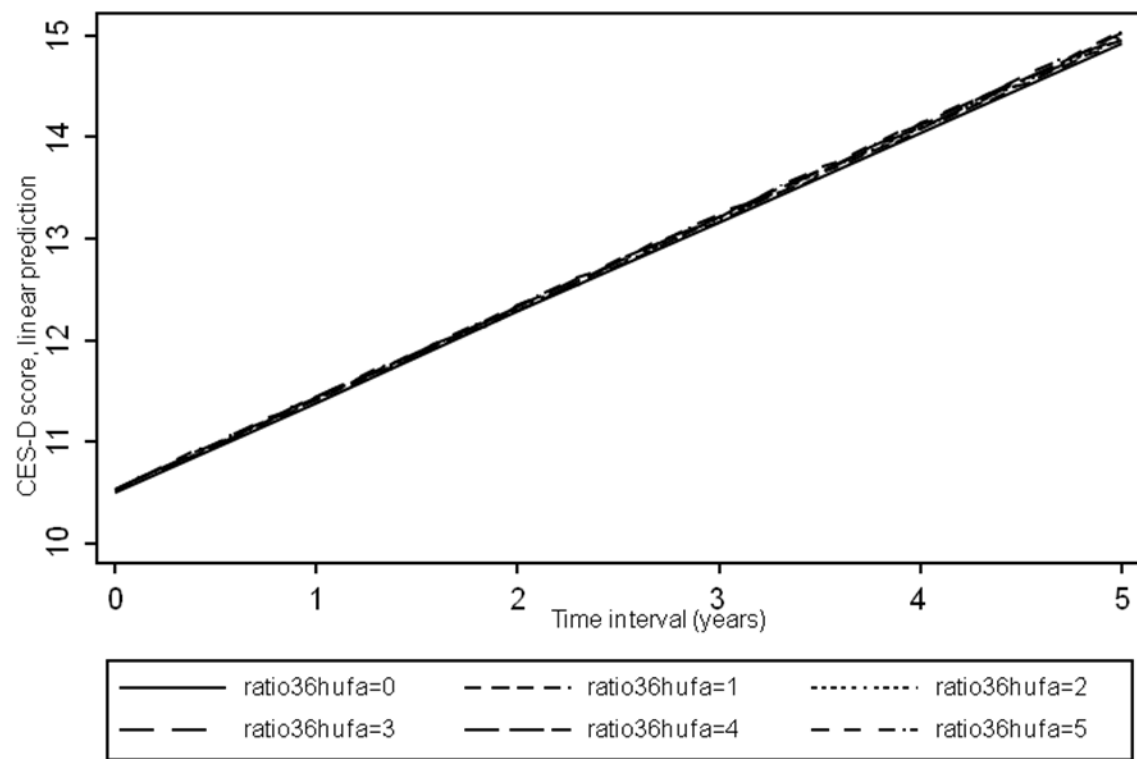
Web TABLE 1.

	n-3 HUFA (% energy) [a,b]		n-3 PUFA (% energy) [a,b]	
	$\gamma \pm SEE$	p-value	$\gamma \pm SEE$	p-value
CES-D component 1: Somatic complaints	**N=2,053**	**N'=3,341**	**N=2,052**	**N'=3,340**
Fixed effect				
Intercept	+9.02±0.64	<0.001	+9.15±0.66	<0.001
Time	+1.37±0.15	<0.001	+1.39±0.16	<0.001
Age_{base}	-0.02±0.01	0.031	-0.02±0.01	0.035
Age_{base} ×Time	+0.00±0.00	0.14	+0.00±0.00	0.14
n-3 exposure	+0.37±0.43	0.40	-0.14±0.24	0.56
n-3 exposure×Time	-0.12±0.09	0.19	-0.04±0.06	0.51
Random effects				
Level 1 residuals	+3.03±0.08	<0.001	+3.03±0.08	<0.001
Level 2 residuals				
Intercept	+2.89±0.09	<0.001	+2.89±0.09	<0.001
Linear slope	+0.11±0.14	<0.001	+0.12±0.13	<0.001
CES-D component 2: Depressed affect	**N=2,049**	**N'=3,337**	**N=2,049**	**N'=3,337**
Fixed effect				
Intercept	+6.90±0.63	<0.001	+7.12±0.65	<0.001
Time	+1.08±0.15	<0.001	+1.05±0.16	<0.001
Age_{base}	-0.02±0.01	0.19	-0.01±0.01	0.21
Age_{base} ×Time	+0.00±0.00	0.15	+0.00±0.00	0.16
n-3 exposure	+0.24±0.43	0.58	-0.29±0.24	0.27
n-3 exposure×Time	-0.08±0.09	0.41	-0.04±0.06	0.51
Random effects				
Level 1 residuals	+2.81±0.09	<0.001	+2.81±0.09	<0.001
Level 2 residuals				
Intercept	+3.02±0.09	<0.001	+3.01±0.09	<0.001
Linear slope	+0.28±0.09	<0.001	+0.28±0.06	<0.001
CES-D component 3: Positive affect	**N=2,051**	**N'=3,338**	**N=2,051**	**N'=3,338**
Fixed effect				

Intercept	+8.53±0.39	<0.001	+8.34±0.40	<0.001
Time	+0.63±0.10	<0.001	+0.63±0.10	<0.001
Age_{base}	+0.02±0.01	0.004	+0.02±0.01	0.006
Age_{base} ×Time	-0.00±0.00	0.22	-0.00±0.00	0.22
n-3 exposure	+0.14±0.26	0.61	+0.28±0.15	0.05
n-3 exposure ×Time	+0.02±0.06	0.75	-0.01±0.03	0.73
Random effects				
Level 1 residuals	+1.84±0.05	<0.001	+1.84±0.05	<0.001
Level 2 residuals				
Intercept	+1.74±0.06	<0.001	+1.74±0.06	<0.001
Linear slope	+0.13±0.05	<0.001	+0.13±0.04	<0.001
CES-D component 4: **Interpersonal problems**	**N=2,051**	**N'=3,344**	**N=2,051**	**N'=3,344**
Fixed effect				
Intercept	+1.39±0.20	<0.001	+1.41±0.21	<0.001
Time	+0.38±0.05	<0.001	+0.39±0.05	<0.001
Age_{base}	-0.01±0.00	0.033	-0.01±0.00	0.035
Age_{base} ×Time	+0.00±0.00	0.003	+0.00±0.00	0.003
n-3 exposure	+0.06±0.13	0.64	-0.02±0.08	0.83
n-3 exposure ×Time	-0.02±0.03	0.51	-0.01±0.02	0.64
Random effects				
Level 1 residuals	+0.99±0.03	<0.001	+1.00±0.03	<0.001
Level 2 residuals				
Intercept	+0.88±0.03	<0.001	+0.88±0.03	<0.001
Linear slope	+0.10±0.02	<0.001	+0.10±0.02	<0.001

Abbreviations: AA=Arachidonic acid; ALA=α-linolenic acid; CES-D=Center for Epidemiologic Studies-Depression scale; DHA=Docosahexaenoic acid; DPA=Docosapentaenoic acid EPA=Eicosapentaenoic acid; HANDLS=Healthy Aging in Neighborhoods of Diversity Across the Lifespan; HS=High School; HUFA=highly unsaturated fatty acids; LA=Linoleic acid; *n-3*=omega-3; *n-6*=omega-6; PIR=Poverty Income Ratio; PUFA=polyunsaturated fatty acids; SEM=standard error of the mean.

[a] Models were further adjusted for other covariates (main effects and interaction with time). See methods section for more details on covariate coding and model specifications. Time at baseline visit was set to zero. Baseline age was centered at 50y, total energy intake at 2000kcal/d, total

carotenoid intake at 3mg/1,000kcal/d, vitamin C intake at 30mg/1,000kcal/d, vitamin A intake at 300 RE/1,000 kcal/d, vitamin E at 3 mg/1,000 kcal/d, vitamin B-6 at 0.8 mg/1,000 kcal/d, vitamin B-12 at 3 μg/1,000 kcal/d, folate at 170 μg/1,000 kcal/d. [b] N=number of participants in the analysis; N'=total number of visits included in the analysis.

Web Figure 7.