

**Table S1.** Liver fibrosis as a function of sex and *PNPLA3* genotype

	<b>Model 1</b>		<b>Model 2</b>		<b>Model 3</b>		<b>Model 4</b>	
	Effect	<i>p</i> -value	Effect	<i>p</i> -value	Effect	<i>p</i> -value	Effect	<i>p</i> -value
	Size		Size		Size		Size	
	( $\eta^2 \times 100$ )		( $\eta^2 \times 100$ )		( $\eta^2 \times 100$ )		( $\eta^2 \times 100$ )	
Sex	8.39	<b>0.02</b>	7.64	<b>0.022</b>	1.26	0.339	1.40	0.316
Genotype	10.14	<b>0.008</b>	8.04	<b>0.019</b>	0.58	0.515	0.72	0.471
Sex*Genotype Interaction					3.77	0.101	3.95	0.096

Model 1: with no adjustments;

Model 2: adjusted for liver fat;

Model 3: includes the interaction between sex and *PNPLA3* genotype with no adjustments;

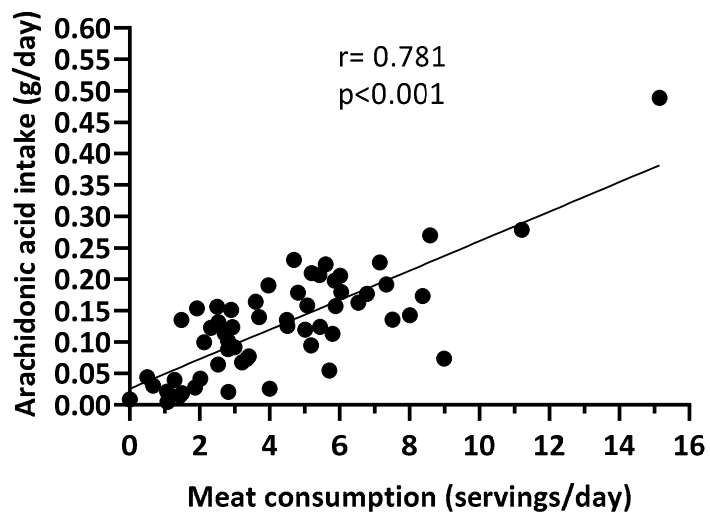
Model 4: includes the interaction between sex and *PNPLA3* genotype adjusted for liver fat

**Table S2.** Influence of dietary components on liver fibrosis in Hispanic adolescents with obesity and differential associations by *PNPLA3* genotype.

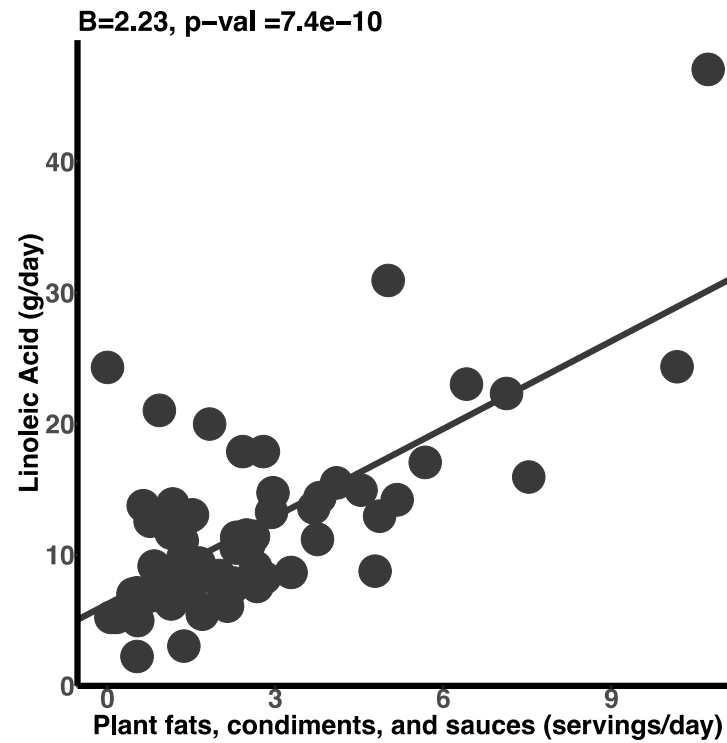
	Dietary influence on liver fibrosis*		Dietary influence on liver fibrosis by <i>PNPLA3</i> genotype*		
	$\beta$	<i>p</i> -value	$\beta_{GG}$	$\beta_{CC/CG}$	Interaction <i>p</i> -value
Energy intake (kcal/day)	2.66x10 <sup>-6</sup>	0.96	1.86 x10 <sup>-4</sup>	-1.22 x10 <sup>-4</sup>	<b>0.007</b>
Fat (g/day)	3.88x10 <sup>-3</sup>	0.22	6.78 x10 <sup>-3</sup>	1.88 x10 <sup>-4</sup>	<b>0.01</b>
Protein (g/day)	1.83x10 <sup>-3</sup>	0.35	4.59 x10 <sup>-3</sup>	-1.57 x10 <sup>-3</sup>	0.02
Carbohydrates (g/day)	-1.53x10 <sup>-3</sup>	0.15	-1.06 x10 <sup>-4</sup>	-1.74 x10 <sup>-3</sup>	0.048
Total sugars (g/day)	-2.36x10 <sup>-4</sup>	0.86	1.32 x10 <sup>-3</sup>	-1.68 x10 <sup>-3</sup>	0.06
Added sugars (g/day)	-1.44x10 <sup>-3</sup>	0.39	4.52 x10 <sup>-4</sup>	-3.18 x10 <sup>-3</sup>	0.06
Sucrose(g/day)	-2.62x10 <sup>-4</sup>	0.89	3.26 x10 <sup>-3</sup>	-1.97 x10 <sup>-3</sup>	0.09
Fiber (g/day)	-6.8x10 <sup>-4</sup>	0.92	1.14 x10 <sup>-2</sup>	-5.18 x10 <sup>-3</sup>	0.21
<b>Dietary Fatty Acids profile</b>					
Saturated fatty acids (g/day)	4.18x10 <sup>-3</sup>	0.46	7.11 x10 <sup>-3</sup>	-1.43 x10 <sup>-3</sup>	0.26
Unsaturated fatty acids (g/day)	8.86x10 <sup>-3</sup>	0.08	1.5 x10 <sup>-2</sup>	2.91 x10 <sup>-3</sup>	0.02
MUFA (g/day)	1.01x10 <sup>-2</sup>	0.17	2.12 x10 <sup>-2</sup>	1.52 x10 <sup>-3</sup>	<b>0.01</b>
Oleic acid (g/day)	1.01 x10 <sup>-2</sup>	0.20	2.24 x10 <sup>-2</sup>	1.26 x10 <sup>-3</sup>	<b>0.01</b>
PUFA (g/day)	1.04 x10 <sup>-2</sup>	0.20	2.13 x10 <sup>-2</sup>	-4.12 x10 <sup>-3</sup>	<b>0.01</b>
Omega-3 fatty acids (g/day)	4.75 x10 <sup>-2</sup>	0.52	1.31 x10 <sup>-1</sup>	-9.92 x10 <sup>-2</sup>	0.02
EPA (g/day)	-1.19	0.54	21.2	-3.34	<b>0.0002</b>
DHA (g/day)	0.61	0.34	4.19	-2.18 x10 <sup>-2</sup>	0.02
Omega-6 fatty acids (g/day)	1.16x10 <sup>-2</sup>	0.19	2.48 x10 <sup>-2</sup>	-3.73 x10 <sup>-3</sup>	<b>0.01</b>
Arachidonic acid (g/day)	0.95	<b>0.03</b>	1.87	-0.22	0.02
Linoleic acid (g/day)	1.14x10 <sup>-2</sup>	0.20	2.49 x10 <sup>-2</sup>	-3.79 x10 <sup>-3</sup>	<b>0.01</b>

\*Models adjust for age, gender and energy intake

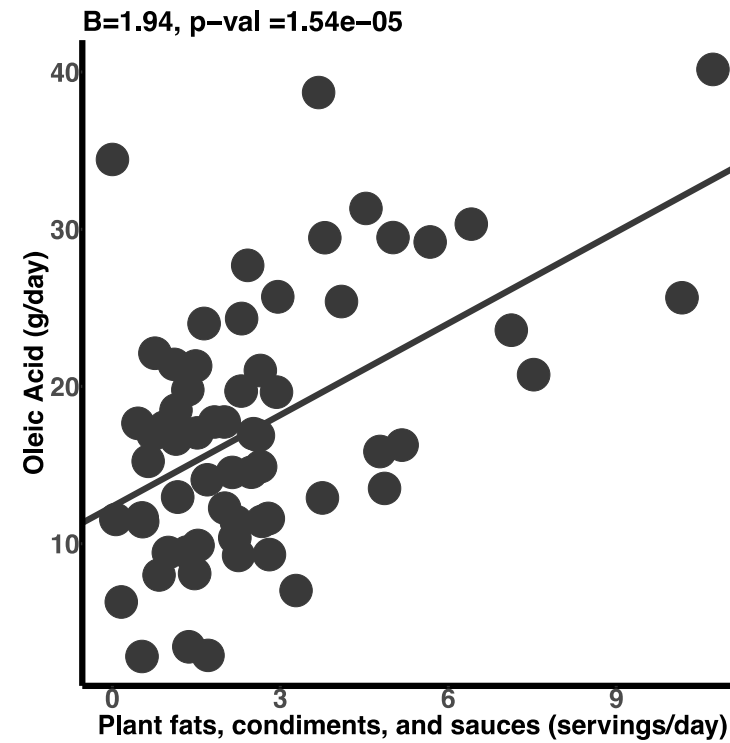
MUFA, monounsaturated fatty acids; PUFA, polyunsaturated fatty acids; EPA, Eicosapentaenoic fatty acid; DHA, Docosahexaenoic fatty acid



**Figure S1. Association between dietary arachidonic acid intake and meat consumption of participants in the study.** A linear model was used to determine the association between arachidonic acid intake (g/day) and meat consumption (servings/day). This model additionally adjusted for caloric intake.



(a)



(b)

**Figure S2. Association between dietary linoleic acid and oleic acid intakes and total plant fats, condiments and sauces consumption of participants in the study.** A linear model was used to determine the association between (a) linoleic acid intake (g/day) or (b) oleic acid intake (g/day) and total plant fats, condiments and sauces consumption (servings/day).