Supplemental Tables & Figures

Table S1 Complete Composition of Three Experimental Diets

	Experimental Exposure Diets						
Ingredient	Control	Western	Mediterranean				
Main Ingredients (g/100g food)							
Fat Source	7	20.5*	21.4				
Casein	20	19	19				
Cornstarch	40	14	23				
Dyestrose	13.2	13.2	13.2				
Sucrose	10	25.5	9.2				
Cellulose	5	2	8				
Mineral Mix	3.5	3.8	3.8				
Vitamin Mix	1	1.1	1.1				
Composition of Fat Source (g/100g food)							
Corn Oil	100	29	4				
Butter, anhydrous	0	33	4				
Palm Oil	0	30	0				
Olive Oil	0	8	91				
Menheden (Fish) Oil	0	0	1				
	Vitamins (unit/kg food)						
Nicotinic acid (mg)	30	30	30				
Pantothenate (mg)	15	15	15				
Pyridoxine (mg)	6	6	6				
Thiamin (mg)	5	5	5				
Riboflavin (mg)	6	6	6				
Folic acid (mg)	2	1	4				
Biotin (mg)	0.2	0.2	0.2				
Vitamin B12 (ug)	25	10	10				
Vitamin K (ug)	900	900	900				
Vitamin E (IU)	75	25	75				
Vitamin A (IU)	4000	4000	8000				
Vitamin D (IU)	1000	400	1000				
Choline (mg)	1000	1000	1000				
Vitamin C (mg)	0	0	500				

 Table S1 Complete Composition of Three Experimental Diets, continued

1	Experimental Exposure Diets				
Ingredient	Control	Western	Mediterranean		
Minerals (unit/kg food)					
Calcium (mg)	5000	5000	5000		
Phosphorus (mg)	3000	3000	3000		
Magnesium (mg)	513	513	850		
Sodium (mg)	1039	7000	1039		
Potassium (mg)	3600	3600	8000		
Chloride (mg)	1631	1631	1631		
Sulfur (mg)	300	300	300		
Iron (mg)	45	45	45		
Zinc (mg)	38	38	38		
Manganese (mg)	10	10	10		
Copper (mg)	6	6	6		
Iodine (mg)	0.2	0.2	0.2		
Molybdenum (mg)	0.15	0.15	0.15		
Selenium (mg)	0.15	0.15	0.15		
Silicon (mg)	5	5	5		
Chromium (mg)	1	1	1		
Flouride (mg)	1	1	1		
Nickel (mg)	0.5	0.5	0.5		
Boron (mg)	0.5	0.5	0.5		
Lithium (mg)	0.1	0.1	0.1		
Vanadium (mg)	0.1	0.1	0.1		

^{*} **Bolded text** is used to emphasize nutrients in the Western and Mediterranean diet that differ significantly from the Control diet. These differences reflect nutrient differences in human Western and Mediterranean dietary intake patterns.

 Table S2
 10-Month Offspring Hepatic Lesions Assessed via Histopathology

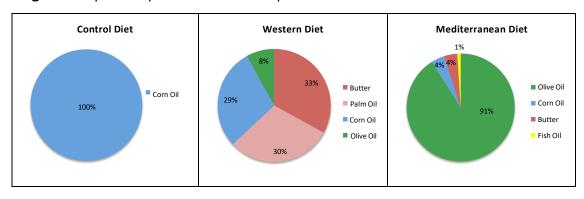
•	Perinatal	Experimental Diet: Mean (SD)		ANOVA	Tukey's	
Hepatic Lesion	BPA Exposure	Control	Western	Mediterranean	p-value	p-values*
	10-month Female Offspring					
Discrete Variables (Presence/Absence): Frequency (%)				Chi-squared p-value		
Adenoma	No Yes	0 0	0 0	0	n.s.	n.s.
Nodular Hyperplasia	No Yes	0/10 (0.00) 2/9 (22.22)	0/12 (0.00) 0/11 (0.00)	0/11 (0.00) 4/12 (33.33)	0.0122	n.s.
Oval Cell Hyperplasia	No Yes	5/11 (45.45) 3/11 (27.27)	1/12 (8.33) 1/11 (9.09)	1/12 (8.33) 8/12 (66.67)	0.0094	n.s.
Kupffer Cell Hyperplasia	No Yes	5/11 (45.45) 2/11 (18.18)	1/12 (8.33) 2/11 (18.18)	2/12 (16.67) 8/12 (66.67)	0.0299	n.s.
Cell Infiltrates	No Yes	8/11 (72.73) 7/11 (63.64)	9/12 (75.00) 9/11 (81.82)	9/12 (75.00) 11/12 (91.67)	0.7327	n.s.
Eosinophilic Foci	No Yes	0/11 (0.00) 1/11 (9.09)	0/12 (0.00) 0/11 (0.00)	0/12 (0.00) 0/12 (0.00)	0.3398	n.s.
Mixed Cell Foci	No Yes	0 0	0 0	0 0	n.s.	n.s.
Clear Cell Foci	No Yes	0/11 (0.00) 1/11 (9.09)	0/12 (0.00) 0/11 (0.00)	0/12 (0.00) 0/12 (0.00)		

Table S2 10-Month Offspring Hepatic Lesions Assessed via Histopathology, continued

	Perinatal	Experimental Diet: Mean (SD)		ANOVA	Tukov's	
Hepatic Lesion	BPA Exposure	Control	Western	Mediterranean	p-value	Tukey's p-values*
	10-month Male Offspring					
Discrete Variables (Presence/Absence): Frequency (%)				Chi-squared p-value		
Adenoma	No	1/12 (8.33)	2/12 (16.67)	2/10 (20.00)	0.4076	
Adenoma	Yes	3/10 (30.00)	3/12 (25.00)	0/12 (0.00)		
Nodular Hyperplasia	No	7/12 (58.33)	5/12 (41.67)	3/10 (30.00)	0.2804	
Nodulai nyperpiasia	Yes	5/10 (50.00)	3/12 (25.00)	2/12 (16.67)		
Oval Cell Hyperplasia	No	7/12 (58.33)	4/12 (33.33)	2/10 (20.00)	0.1349	
	Yes	5/11 (45.45)	6/12 (50.00)	1/12 (8.33)		
Kupffer Cell Hyperplasia	No	7/12 (58.33)	4/12 (33.33)	2/10 (20.00)	0.1826	
	Yes	6/11 (54.55)	6/12 (50.00)	2/12 (16.67)		
Cell Infiltrates	No	10/12 (83.33)	10/12 (83.33)	9/10 (90.00)	0.8363	
	Yes	8/11 (72.73)	10/12 (83.33)	10/12 (83.33)		
Eosinophilic Foci	No	0/12 (0.00)	1/12 (8.33)	0/10 (0.00)	0.2093	
	Yes	2/11 (18.18)	0/12 (0.00)	0/12 (0.00)		
Mixed Cell Foci	No	0/12 (0.00)	1/12 (8.33)	0/10 (0.00)	0.6153	
	Yes	0/11 (0.00)	1/12 (8.33)	1/12 (8.33)	0.0133	
Clear Cell Foci	No	1/12 (8.33)	1/12 (8.33)	0/10 (0.00)	0.551	
	Yes	1/11 (9.09)	2/12 (16.67)	0/12 (0.00)	0.551	

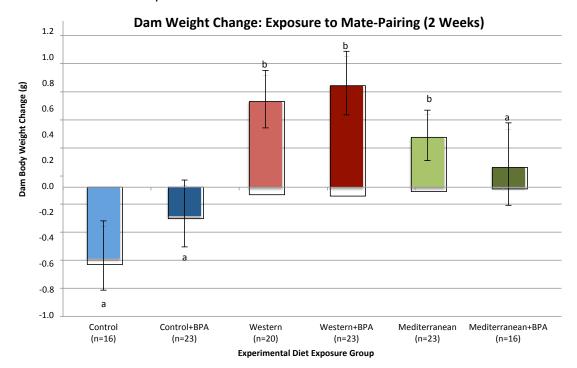
^{*}Only significant (p < 0.05) or borderline significant (p < 0.10) comparisons are shown; all others are not significant (n.s.).

Figure S1 Lipid Composition of Three Experimental Mouse Diets



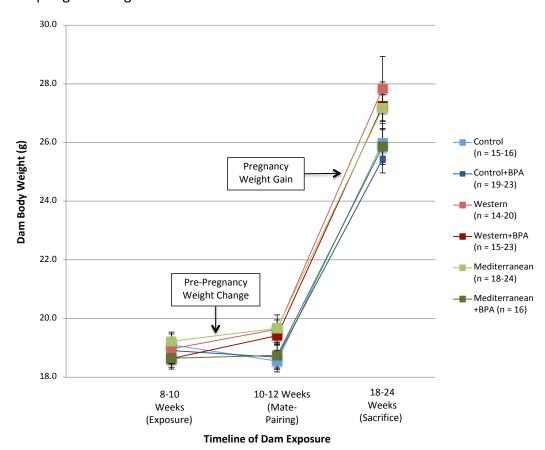
<u>Figure S1 Legend:</u> This figure illustrates the difference in lipid sources used to create each of the study's three experimental diets. Corn oil was the sole lipid source in the Control diet. Saturated fats composed >60% of the Western diet, contributed largely by butter and palm oil. In the Mediterranean diet, olive oil was the main source; fish oil was also added to reflect the higher n-3 PUFA content of human Mediterranean diets.

Figure S2 Pre-Pregnancy Body Weight Change in Dams by Exposure Group: First Two Weeks of Exposure



<u>Figure S2 Legend:</u> Dams were exposed to one of six experimental diets for two weeks prior to mate-pairing. Body weight changed as the dams adjusted to their new diets. This figure illustrates the average weight change by exposure group; error bars denote the SEM for each group. ^a Denotes the average weight of Control dams; groups that do not differ significantly from Control are also marked with 'a'. ^bDenotes exposure groups with average weights that differ significantly (p < 0.05) from Control.

Figure S3 Body Weight Change in Dams by Exposure Group: Initial Exposure to Offspring Weaning



<u>Figure S3 Legend:</u> Dam body weight was measured at three time points: (1) start of exposure to experimental diets at 8-10 weeks of age, (2) at mate-pairing two weeks later, (3) and four days after their pups were weaned (PND25). Mean body weight of dams in each exposure group is plotted above with the SEM designated by the error brackets.

Figure S4 Variation in Body Size, Liver Health and Mesenteric Adiposity at 10-Months

10-Month Control+BPA Female







Figure S4 Legend: A female and male mouse perinatally exposed to the Control +BPA diet had very different hepatic responses to the exposure. The female mouse (left) weighed only 25.1g, had a relative liver weight of 3.6%, relative MAT weight of 2.1%, and a dark red, healthy liver with only minimal vacuolation and hypertrophy. In contrast, the male mouse (right) weighed 47.4g, had a relative liver weight of 5.9%, relative MAT weight of 3.3%, and a yellowish-pink liver, riddled with masses and moderate to severe hyperplasia. This example is indicative of the range of responses observed within the same perinatal exposure group, across all study groups. So although many hepatic outcomes did not differ by perinatal exposure, there was a wide range of responses among the individual study animals.