

**Sex-specific cardiovascular responses to control or high fat diet feeding in C57bl/6 mice chronically exposed to bisphenol A.**

Bhavini B. Patel<sup>\*</sup>, Mohamad Raad<sup>\*</sup>, Igal A. Sebag<sup>†</sup> and Lorraine E. Chalifour<sup>\*,†,‡,§</sup>

<sup>\*</sup> Lady Davis Institute for Medical Research,

<sup>†</sup> Division of Cardiology,

<sup>‡</sup> Division of Endocrinology, Jewish General Hospital, 3755 chemin Cote Ste Catherine, Montréal, Québec, H3T 1E2.

<sup>§</sup> Division of Experimental Medicine, Department of Medicine, McGill University, 850 Sherbrooke Street, Montréal, Québec, H3A 1A2

Running head: Cardiac response to chronic BPA

Corresponding author:

Lorraine E. Chalifour, PhD

Lady Davis Institute for Medical Research,

Jewish General Hospital,

3755 chemin Cote Ste Catherine,

Montreal, Quebec, H3T 1E2, Canada,

(514) 340-8222 ext. 4295,

Fax (514) 340-7502

[lorraine.chalifour@mcgill.ca](mailto:lorraine.chalifour@mcgill.ca)

Supplementary table 1. Animal number per analysis

Sex	Treatment	Diet	Blood pressure	Echocardiography	ECG	Stress ECG	Protein expression	Histology
Male	VEH	CD	8	8	11	8	5	5
		HFD	8	9	6		7	5
	BPA	CD	8	8	11	8	5	5
		HFD	7	9	7		7	5
	DES	CD	7	6	11	8	5	5
		HFD	8	9	8		7	5
Female	VEH	CD	6	8	11	9	5	5
		HFD	8	9	8		7	5
	BPA	CD	7	8	11	9	5	5
		HFD	8	9	8		7	5
	DES	CD	8	8	11	9	5	5
		HFD	10	9	9		7	5

The number of adult progeny used for each analysis method is indicated.

VEH = vehicle; BPA = bisphenol A; DES = diethylstilbestrol; CD = control diet; HFD = high fat diet.

## Supplemental data

### Supplemental table 2; nutrient comparisons

Nutrient (%)	Teklad Global 2018	TD.06416	TD.06414
Protein - casein	None	18.6	23.5
Protein - wheat, corn, soy	18%	None	None
Carbohydrate	44.2	64.7	27.3
Fat - vegetable	6.2		
Fat - lard	None	4.2	34.3
Calories from protein	24	20.1	18.4
Calories from carbohydrate	58	70	21.3
Calories from fat	18	10	60

#### Legend:

All diets are commercially available and were purchased from Harlan (Madison, WI). Data on the diet components was assembled from information supplied by Harlan.

Teklad Global 2018 is a fixed formula diet which was used to feed all dams until pups were weaned on post-natal day 21. It does not contain animal or fish protein so all protein and fat are from wheat, corn and soy.

TD.06416 is a purified component diet which was used to feed all control diet (CD) mice from weaning until euthanasia at 4 months of age. All protein is from casein and all fat is from lard.

TD.06414 is a purified component diet which was used to feed all high fat diet (HFD) mice from weaning until euthanasia at 4 months of age. All protein is from casein and all fat is from lard.

Dams were fed the Teklad Global 2018 diet during gestation and lactation. Pups were randomly selected to the control or high fat diets at weaning and were maintained on the assigned diet until euthanasia at 4 months of age.

Supplemental table 3; formula comparisons in the control and high fat diet

Nutrient (g/kg diet)	TD.06416	TD.06414
Casein	210	265
L-cysteine	3	4
Cornstarch	280	0
Maltodextrin	50	160
Sucrose	325	90
Lard	20	310
Soybean oil	20	30
Cellulose	37.15	65.5
Mineral mix, AIN-93G-MX	35	48
Vitamin mix, AIN-93-VX	15	21
Choline bitartrate	2.75	3
Calcium phosphate	2	3.4

Legend:

Nutrient components of the control diet (TD.06416) and high fat diet (TD.06414) as designed and supplied by Harlan (Madison, WI). Pups were randomly selected to the control or high fat diets at weaning and were maintained on the assigned diet until euthanasia at 4 months of age.