Attitudes, Activities, and Motivations of Pro-Vaccine Advocates

University of Colorado Anschutz Medical Campus

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Background

Vaccine hesitancy is a growing public health concern and has been classified as a major threat to global health by the WHO. While there has been extensive research on the attitudes of vaccine-hesitant individuals, little is known about the attitudes of provaccination advocates.

Objective

To describe among vaccine advocates: 1) vaccine attitudes, including attitudes about primary care clinic vaccine policies, 2) vaccine advocacy activities, and 3) motivations for vaccine advocacy.

Design and Methods

An internet survey was conducted July-November 2019. Vaccine advocacy groups across the US were invited to partner in survey distribution and participants were recruited from a convenience sample of their members. Advocacy activities were categorized as either policy-related, in-person, or online.

Results

Response rate was 8% (1,239/15,475). Respondents were mostly female, white, and highly educated (Table 1). Most reported Democratic Party affiliation and the most common occupation was healthcare practitioner. The majority of the respondents were from California (45%), Colorado (18%), and Ohio (5%). The majority of respondents (90%) strongly or somewhat agreed that a policy that did not allow patients to refuse or spread-out vaccines would encourage them to join a primary care clinic. The most common policy-related activities were contacting an elected official about vaccines, signing petitions to change vaccine policy, and attending a rally or other organized event to promote vaccine policy (Figure 2). Participants also described 'other' policy-related advocacy activities including occupational advocacy work (e.g., physician, nurse, or public health worker) and testifying for provaccine legislation. The most common in-person activities to advocate for vaccines were speaking with a friend or family member, speaking at a school, or speaking at a community event. The most commonly reported online activities to advocate for vaccines were using social media, email and text messages, and interacting with news. The most common motivation for vaccine advocacy was a sense of responsibility as a community member (Figure 1).

Vaccine Advocate Characteristics

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Table 1. Characteristics of vaccine advocates. Due to rounding not all totals may add to 100%. Other occupational categories reported by $\leq 4\%$ of respondents are not shown.

Conclusions

Our sample of vaccine advocates engaged in a variety of different advocacy activities and appeared to be a highly motivated by responsibility to their community as well as a range of other factors. Continued work to better understand vaccine advocates may help inform efforts to curb vaccine hesitancy and influence those who accept vaccines to advocate for vaccines.

Motivating factors

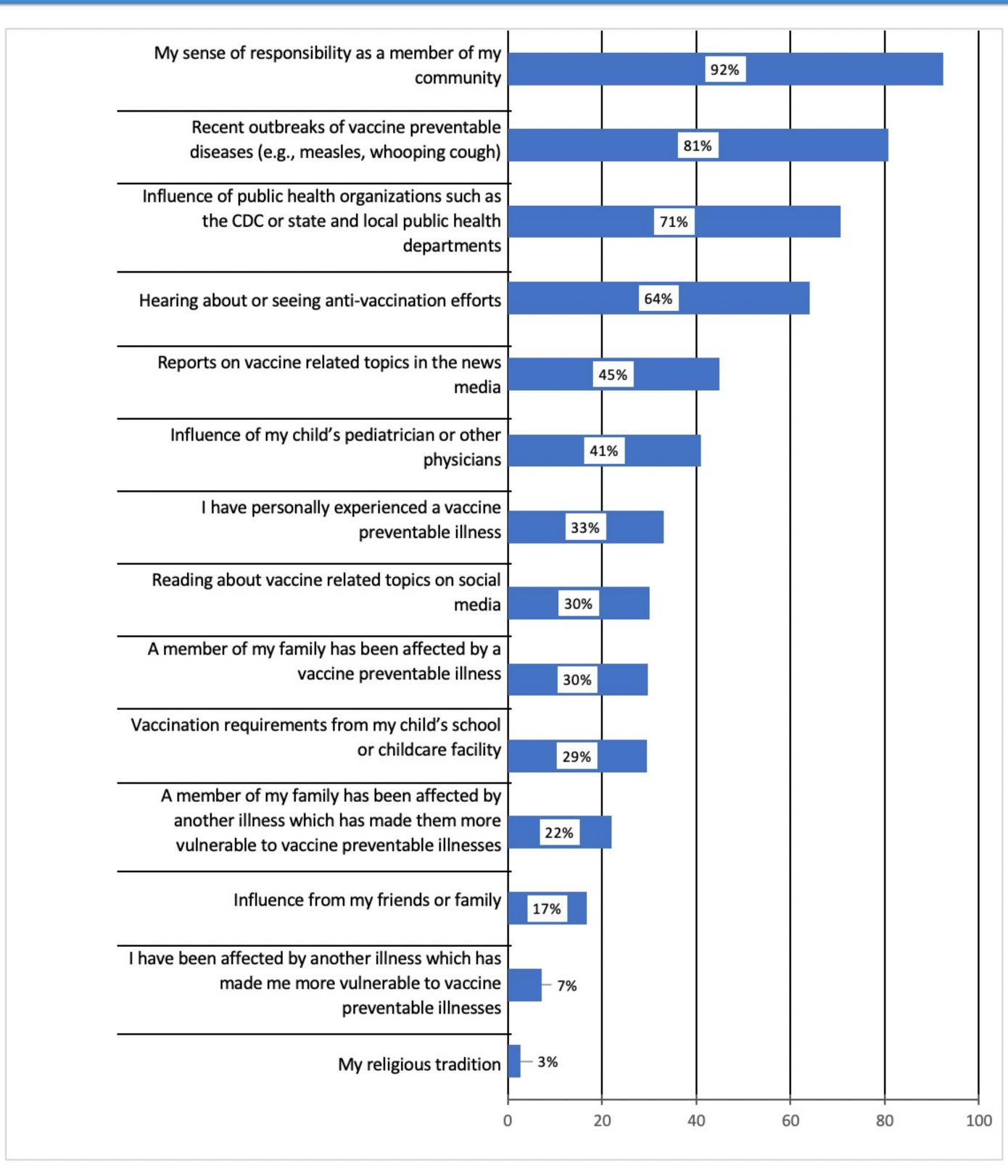


Figure 1. Motivating factors for vaccine advocates (n = 1,041)

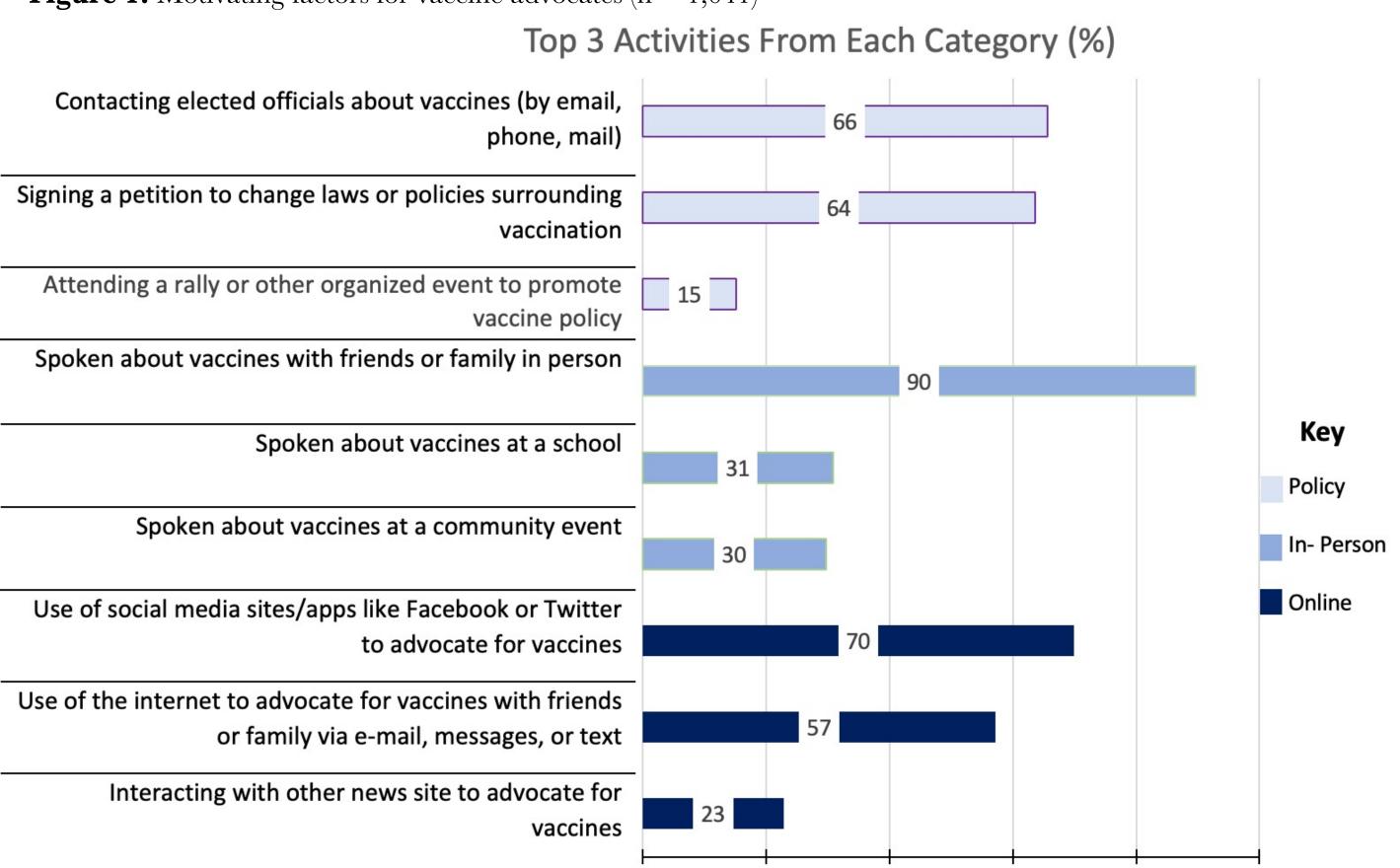
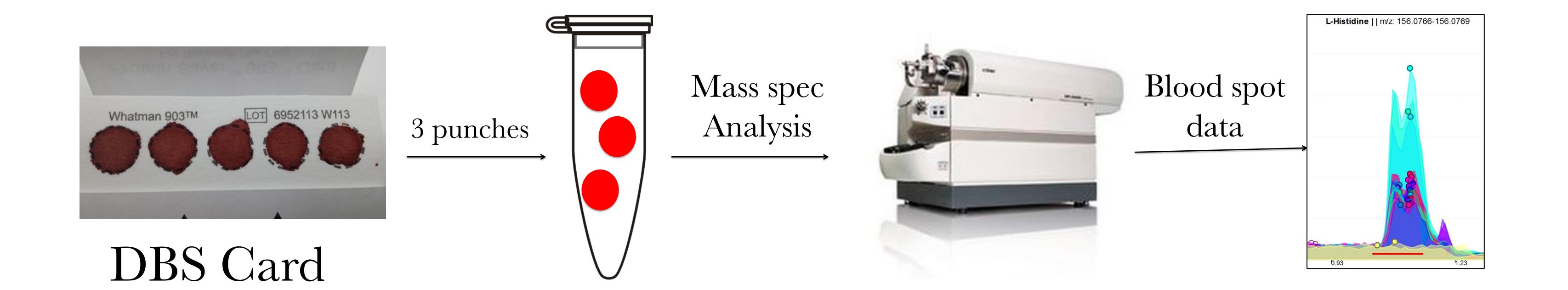
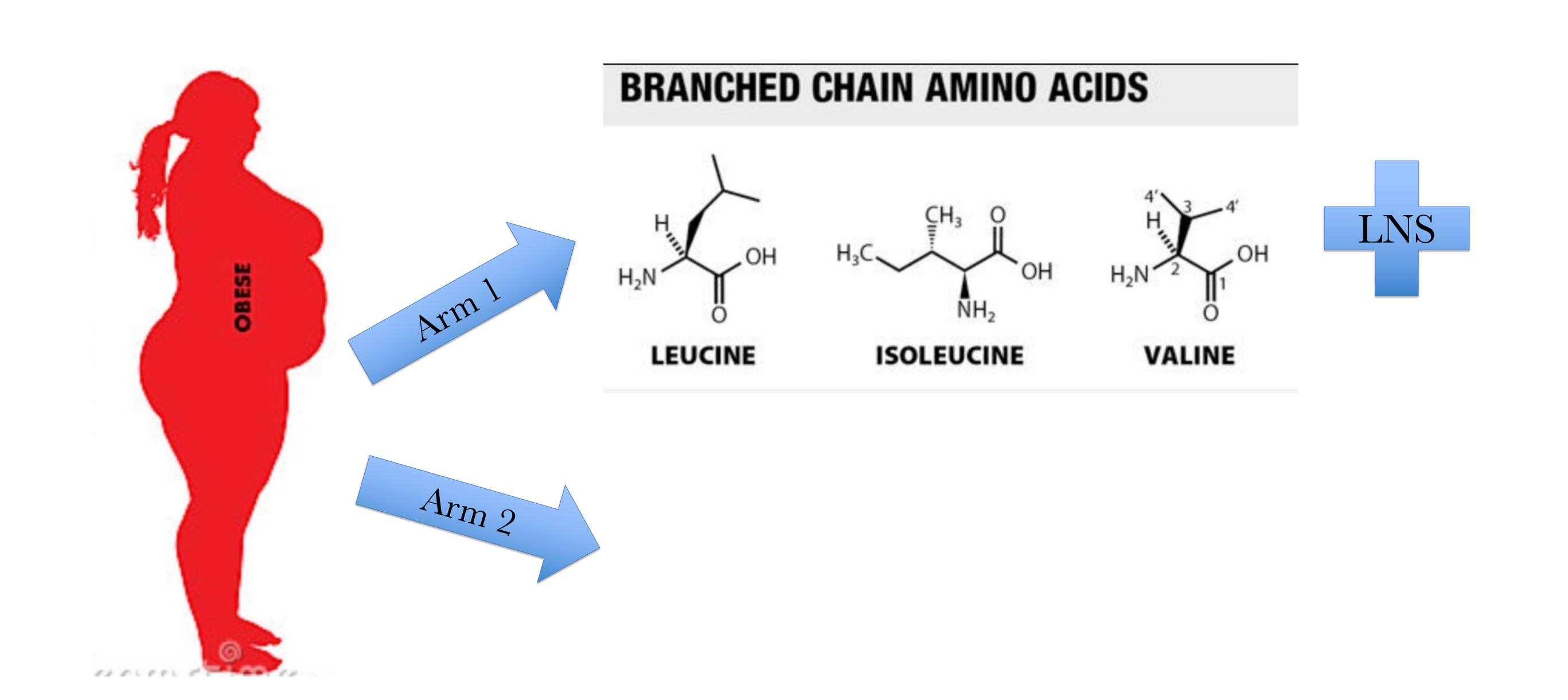
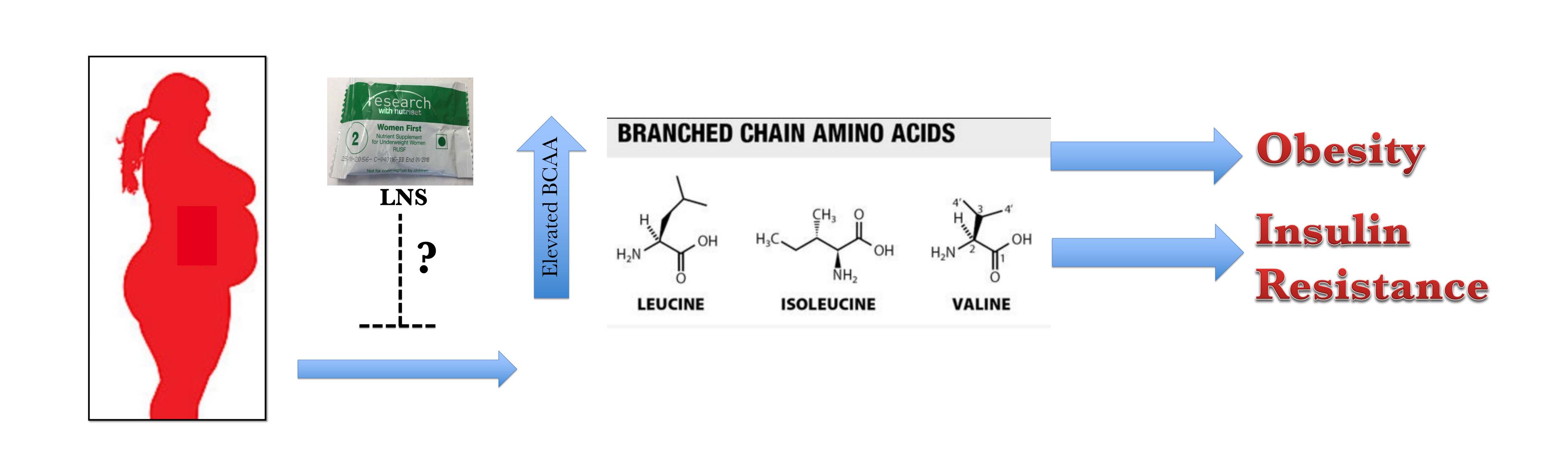


Figure 2. Three Most Commonly Reported Policy-Related, In-Person, and Online Advocacy Activities (n = 1,108)

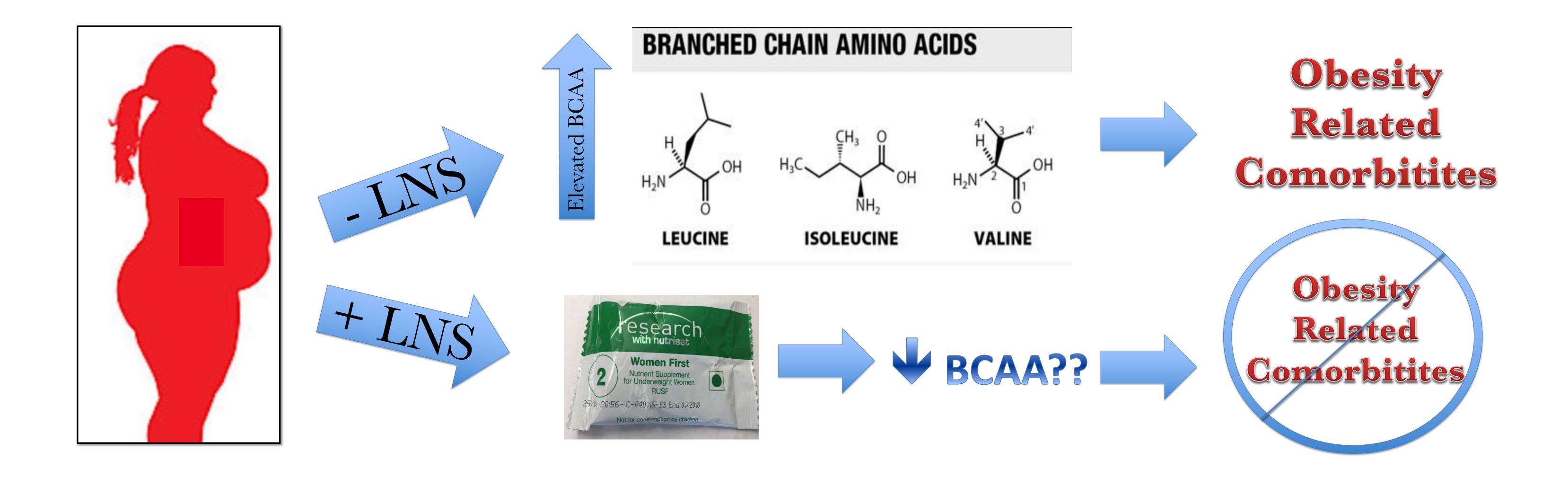


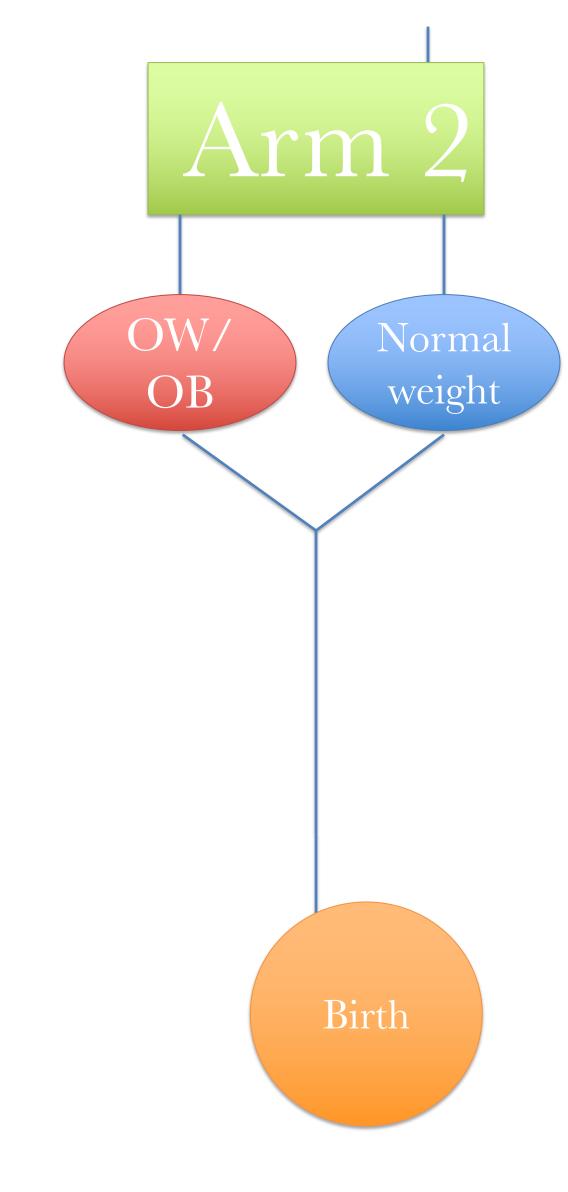


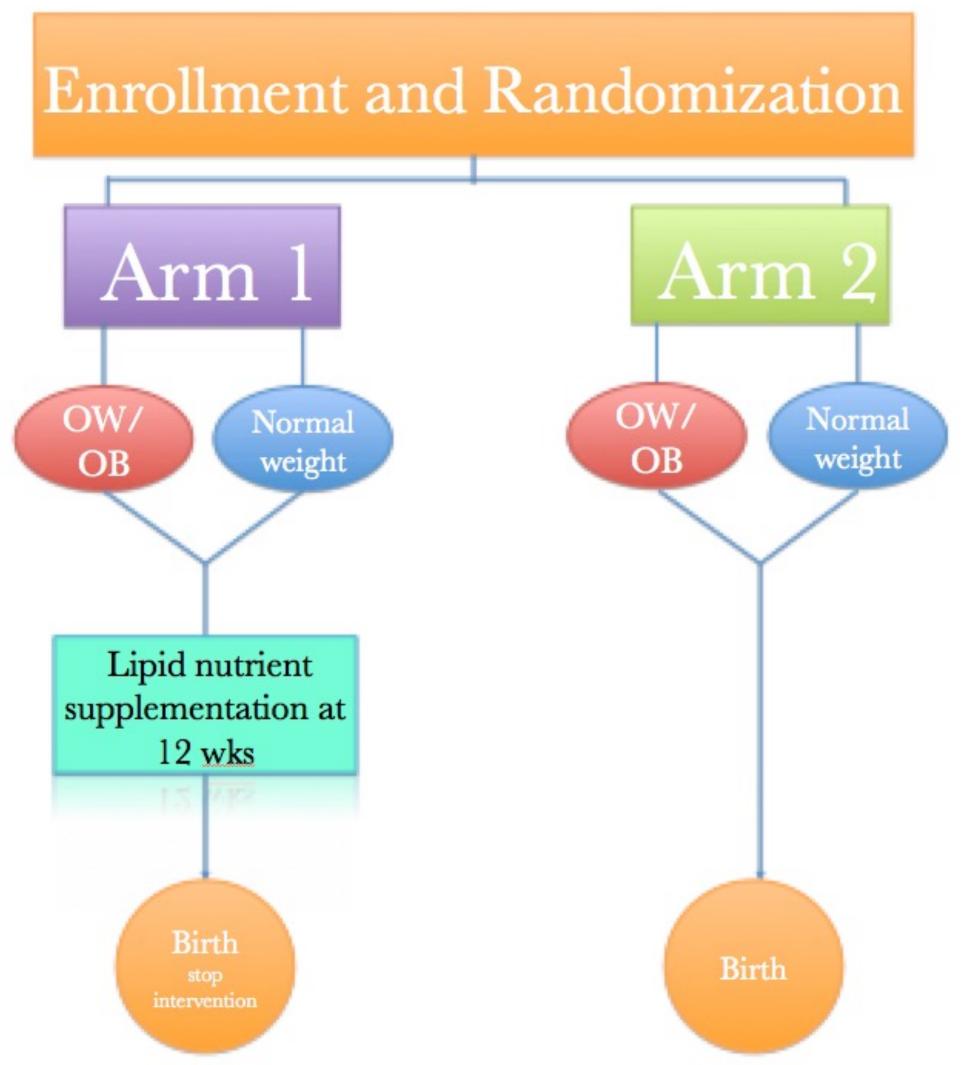


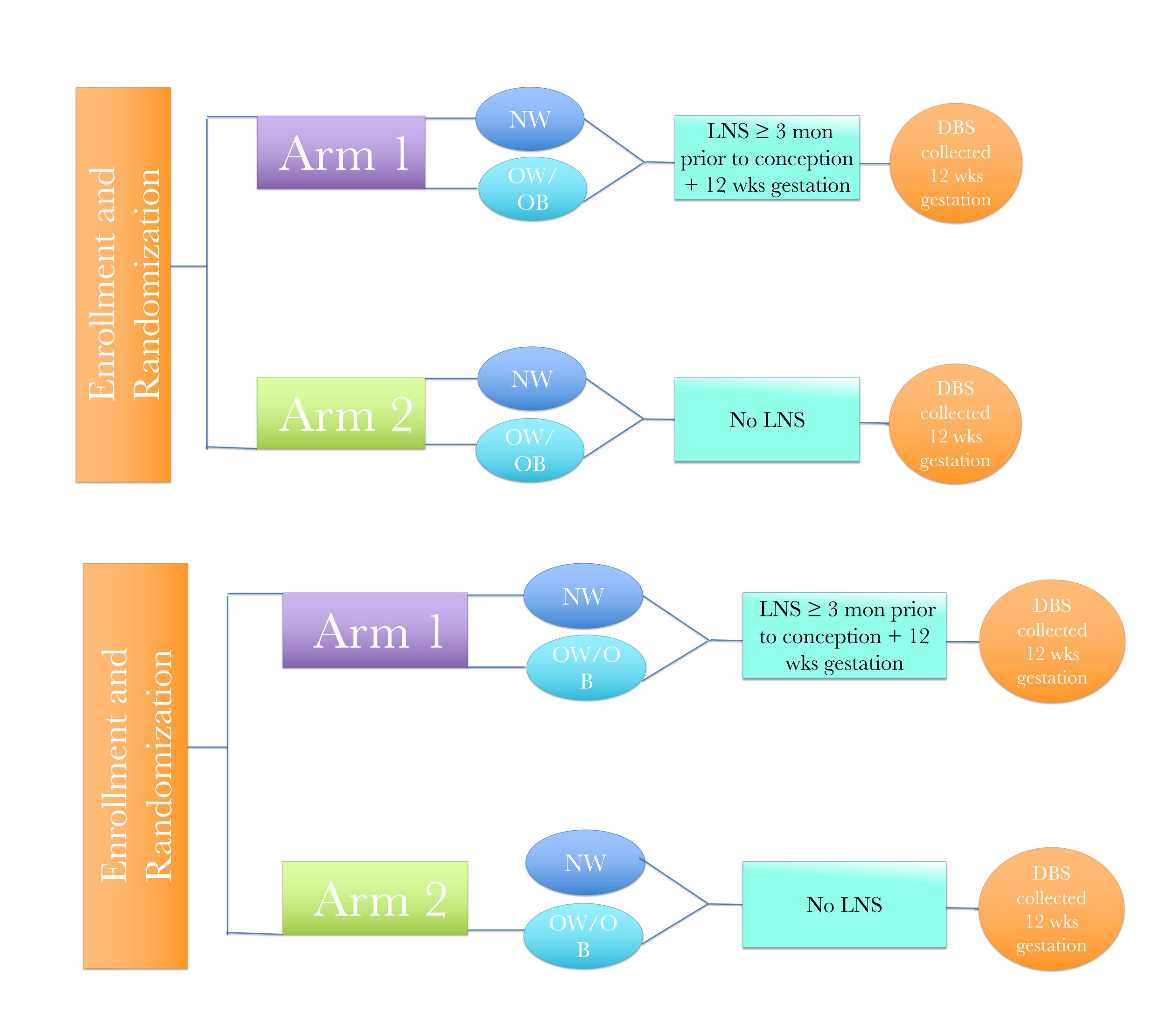


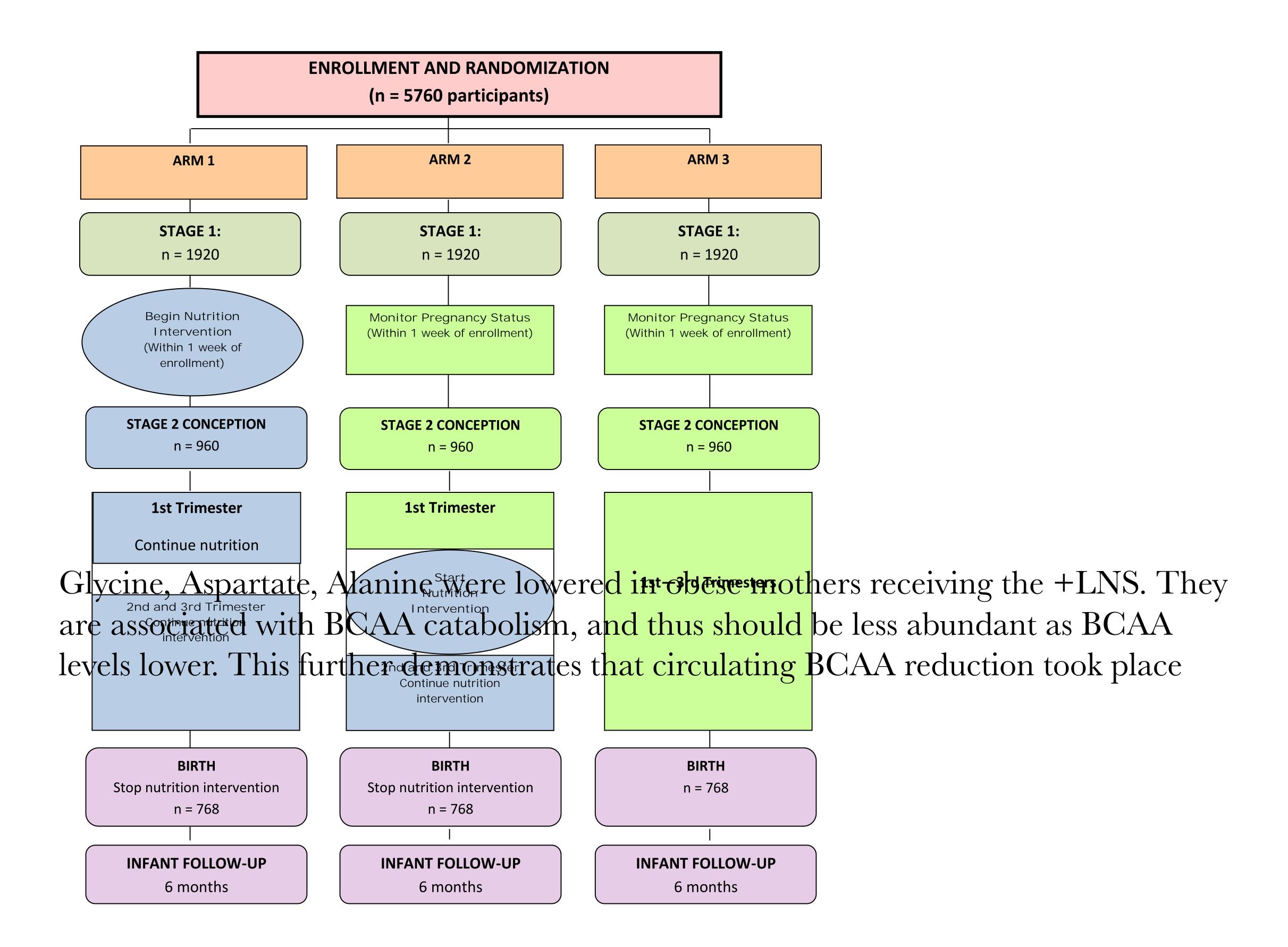
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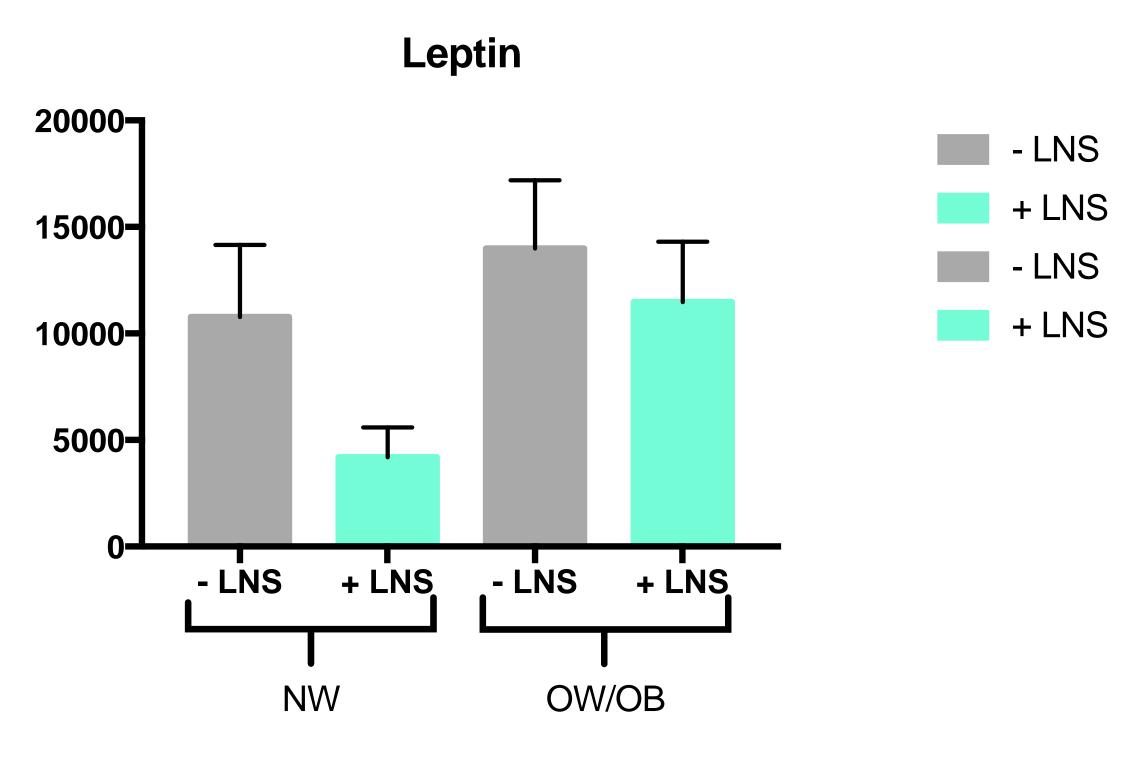


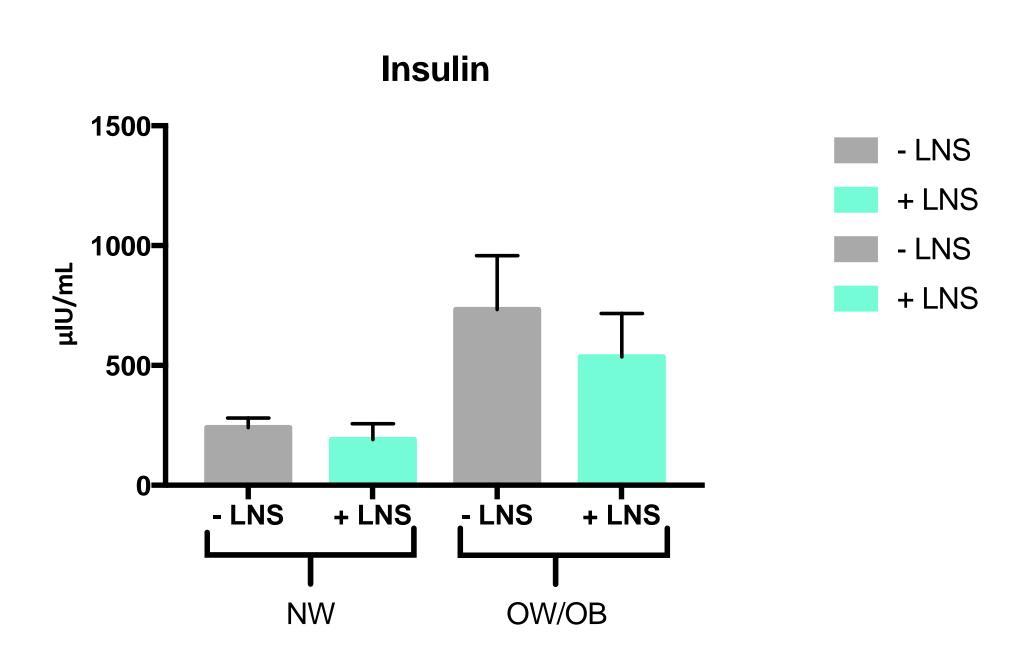


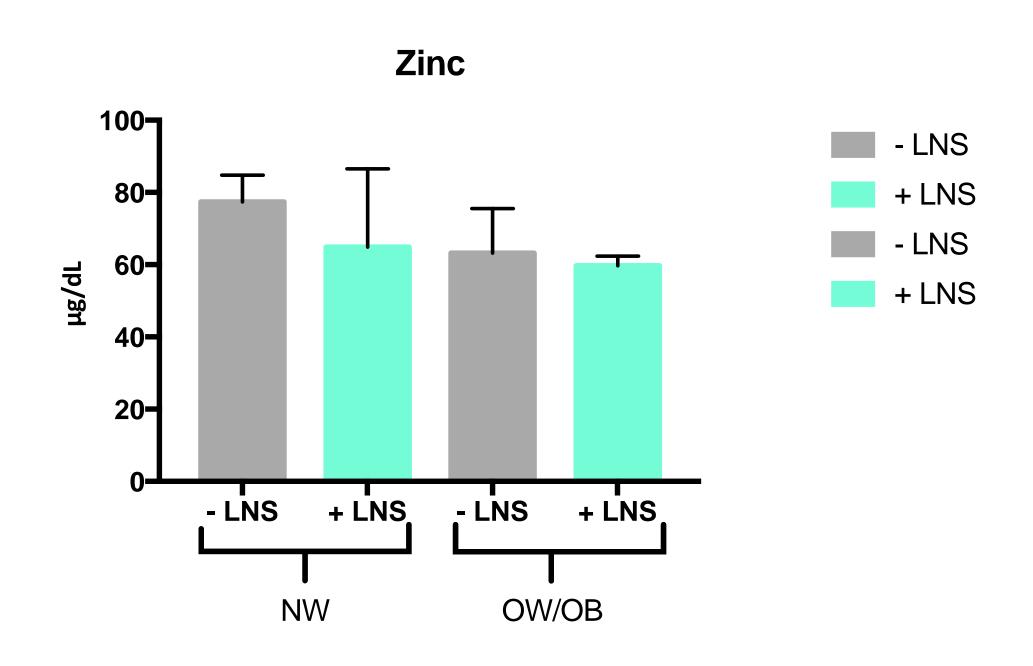


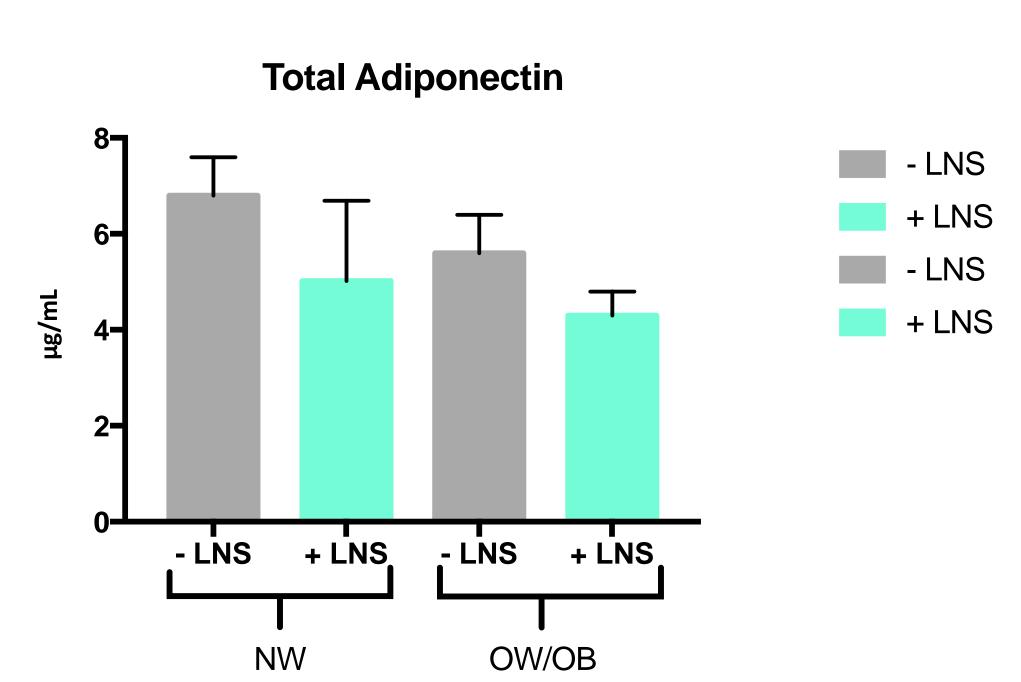


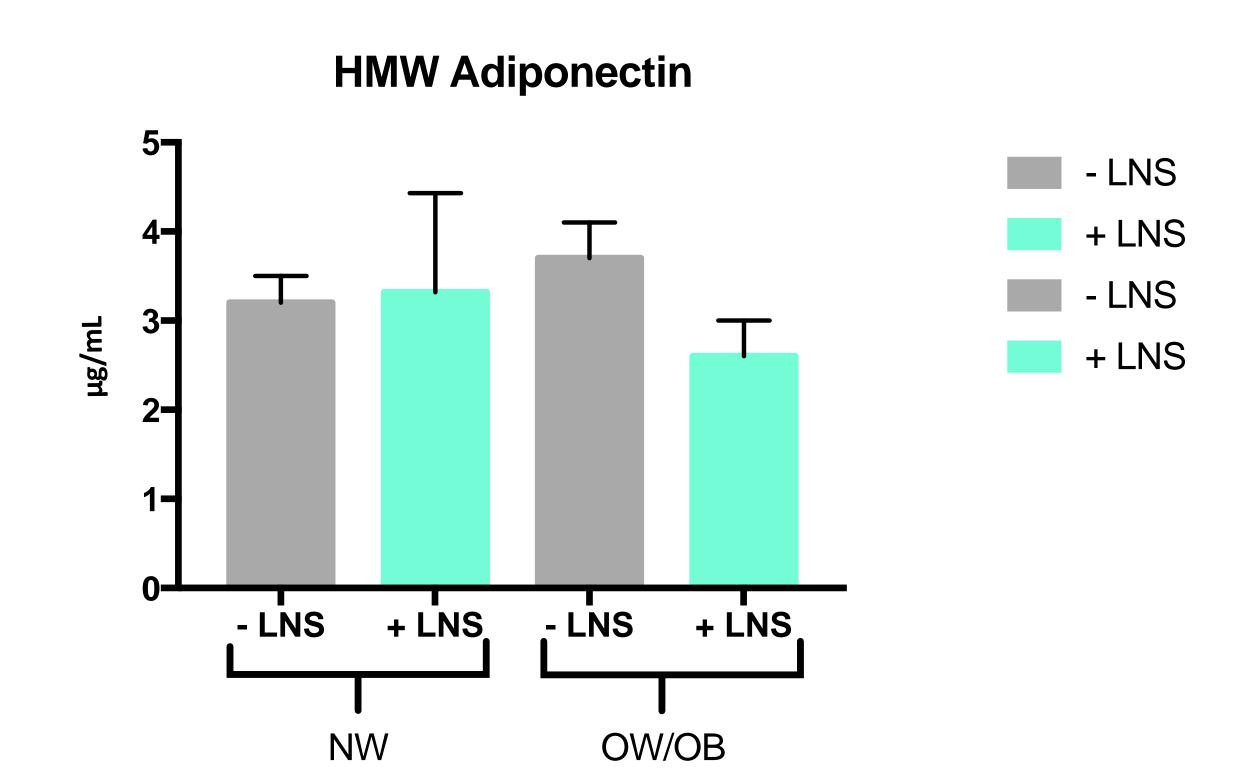


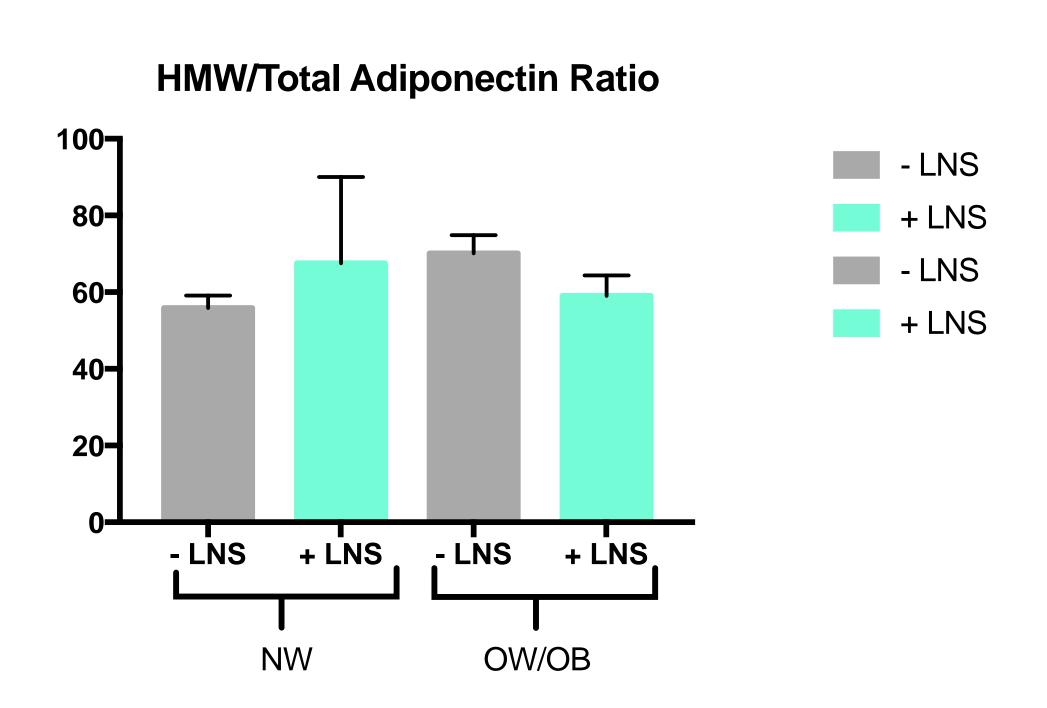


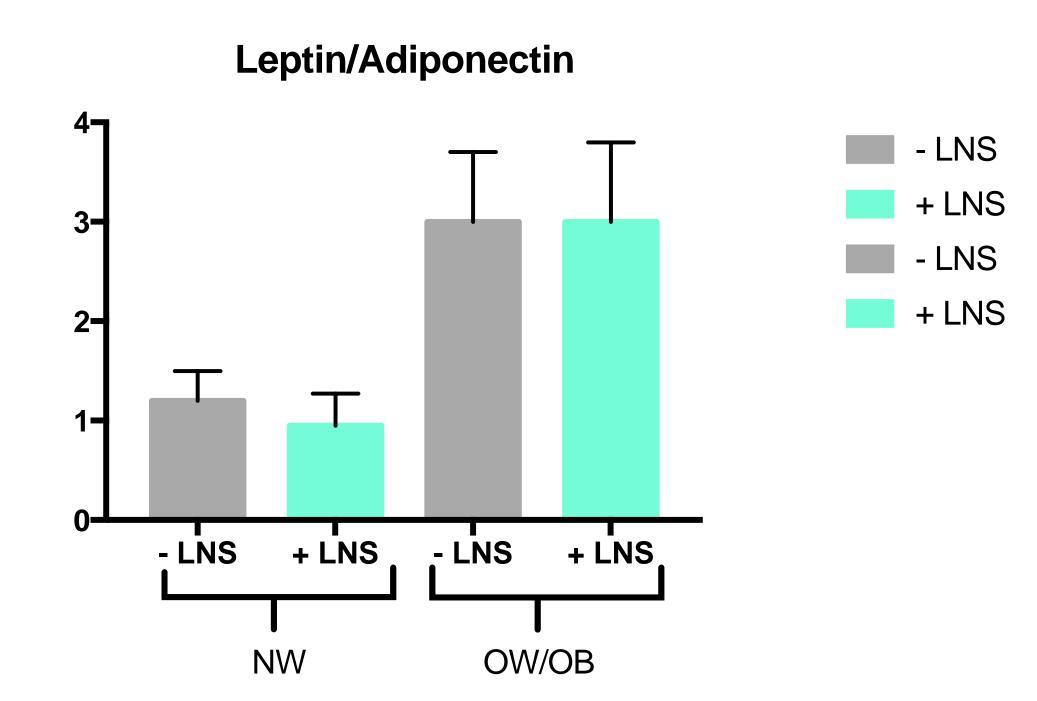




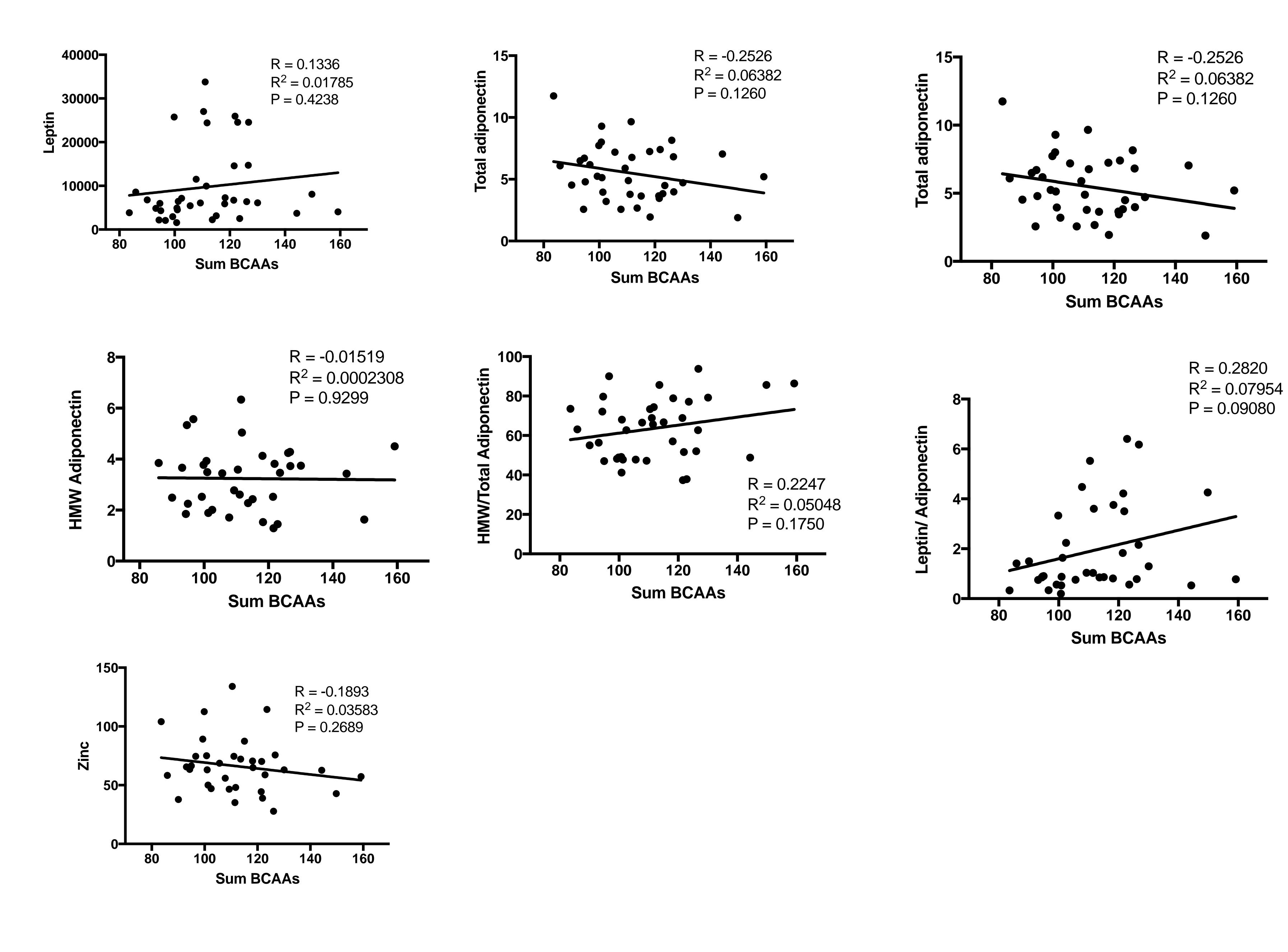


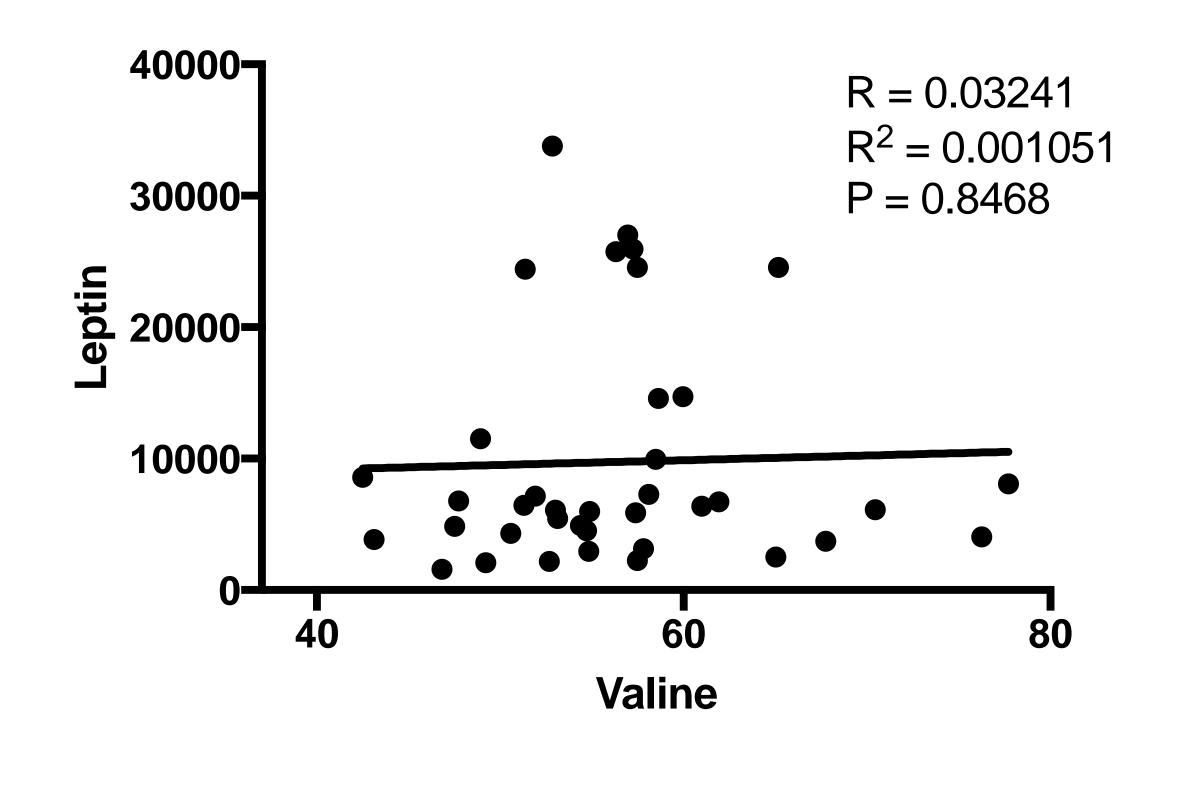


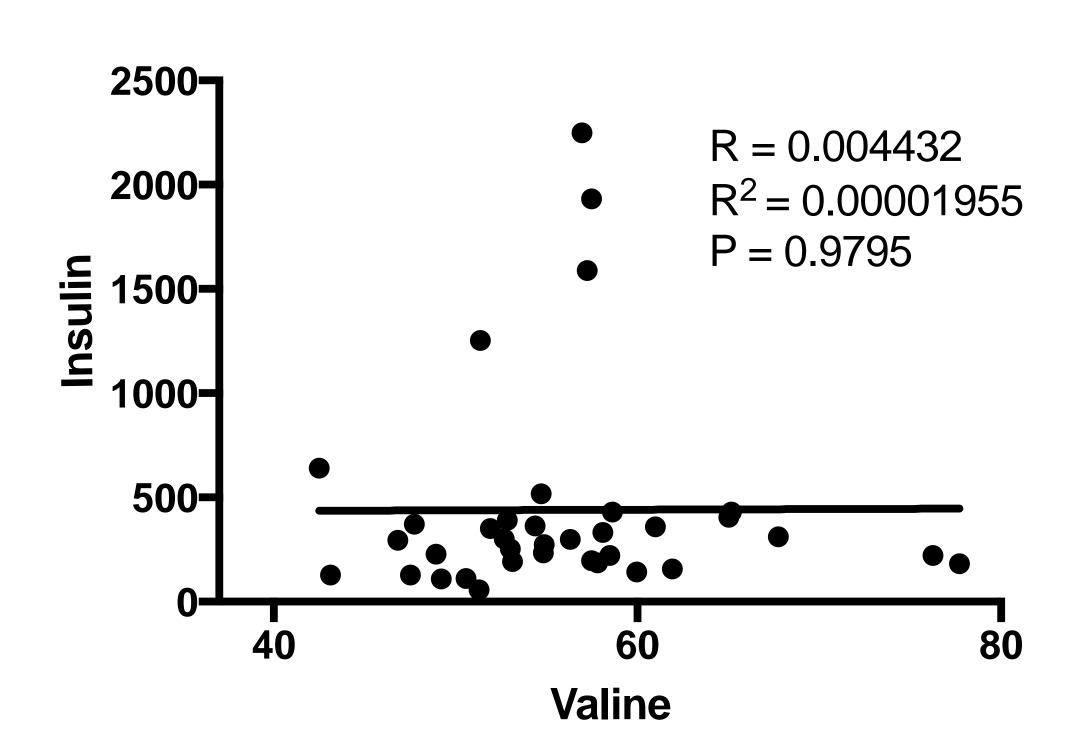


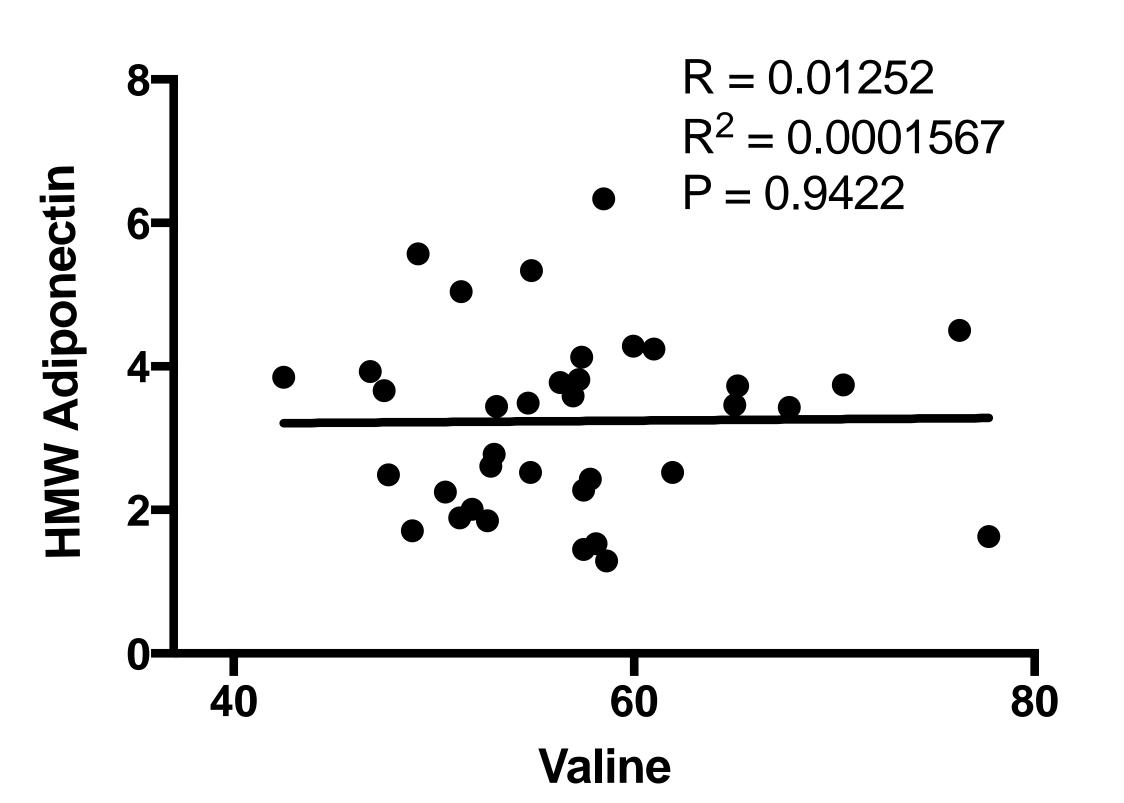


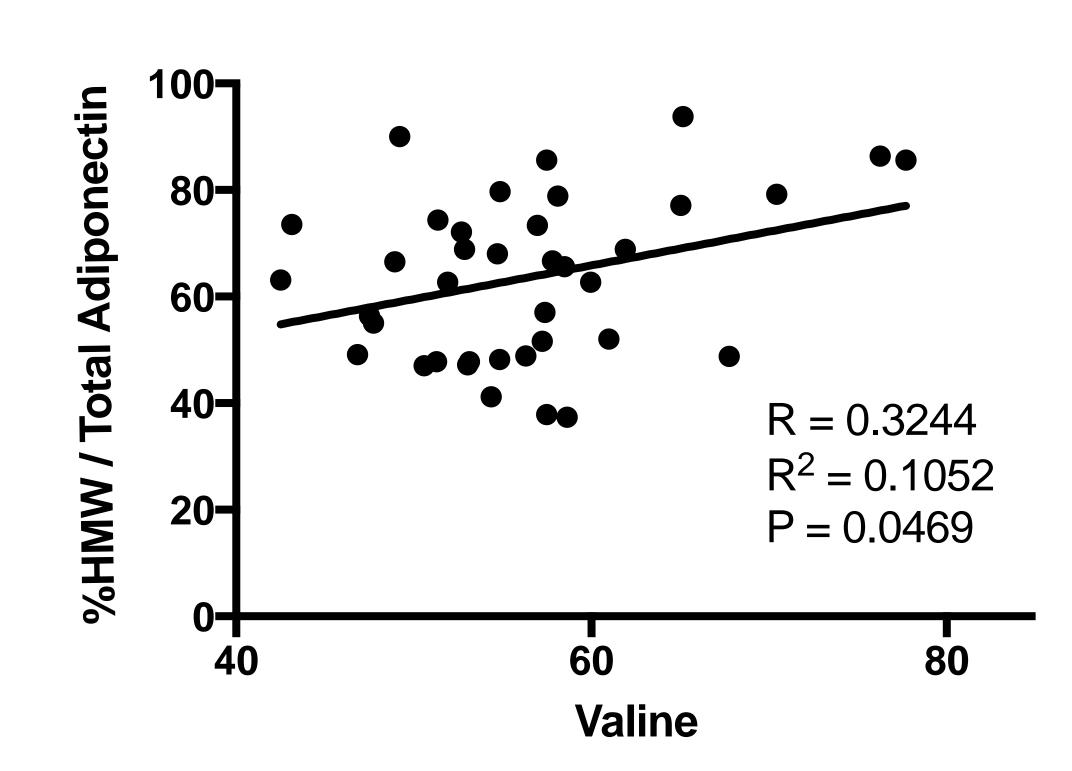
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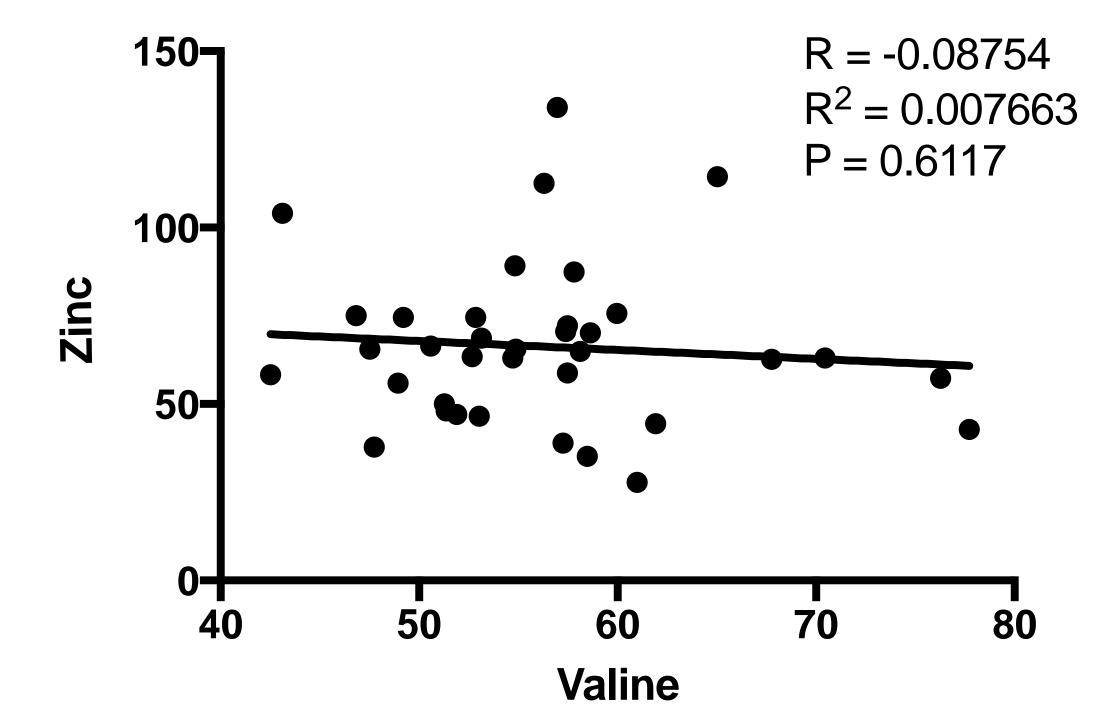


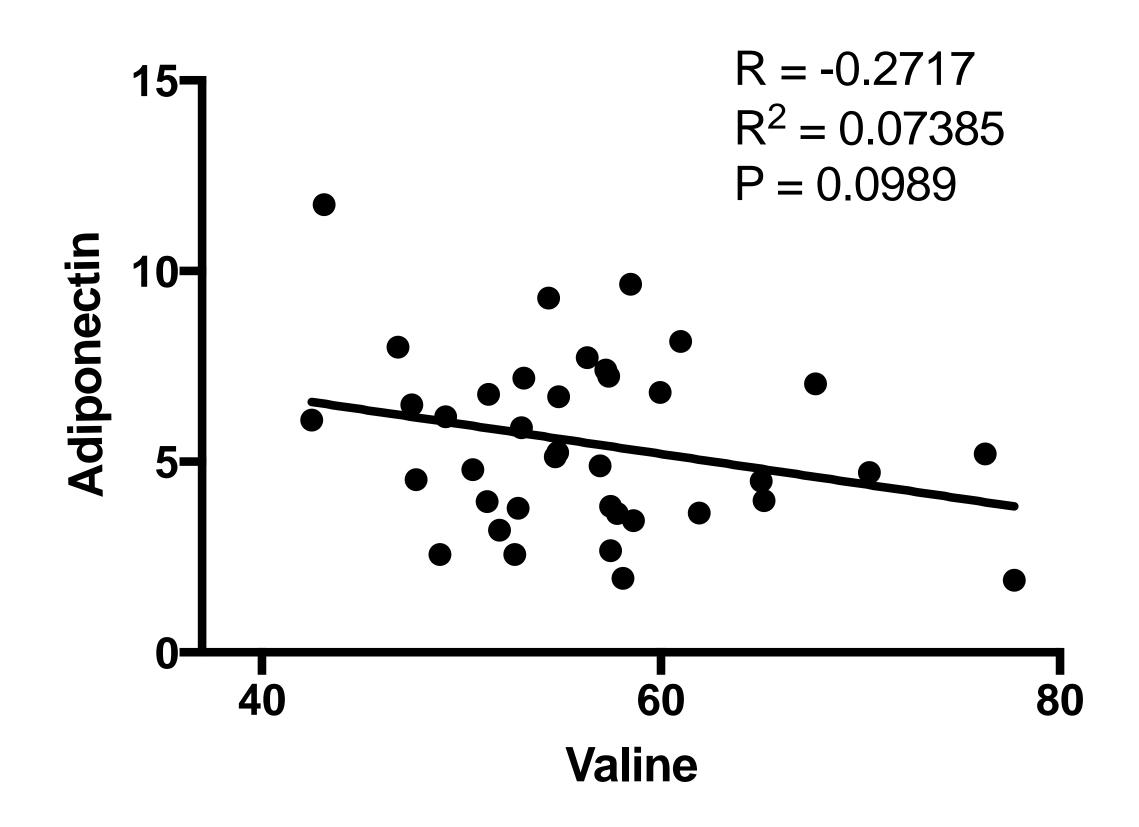


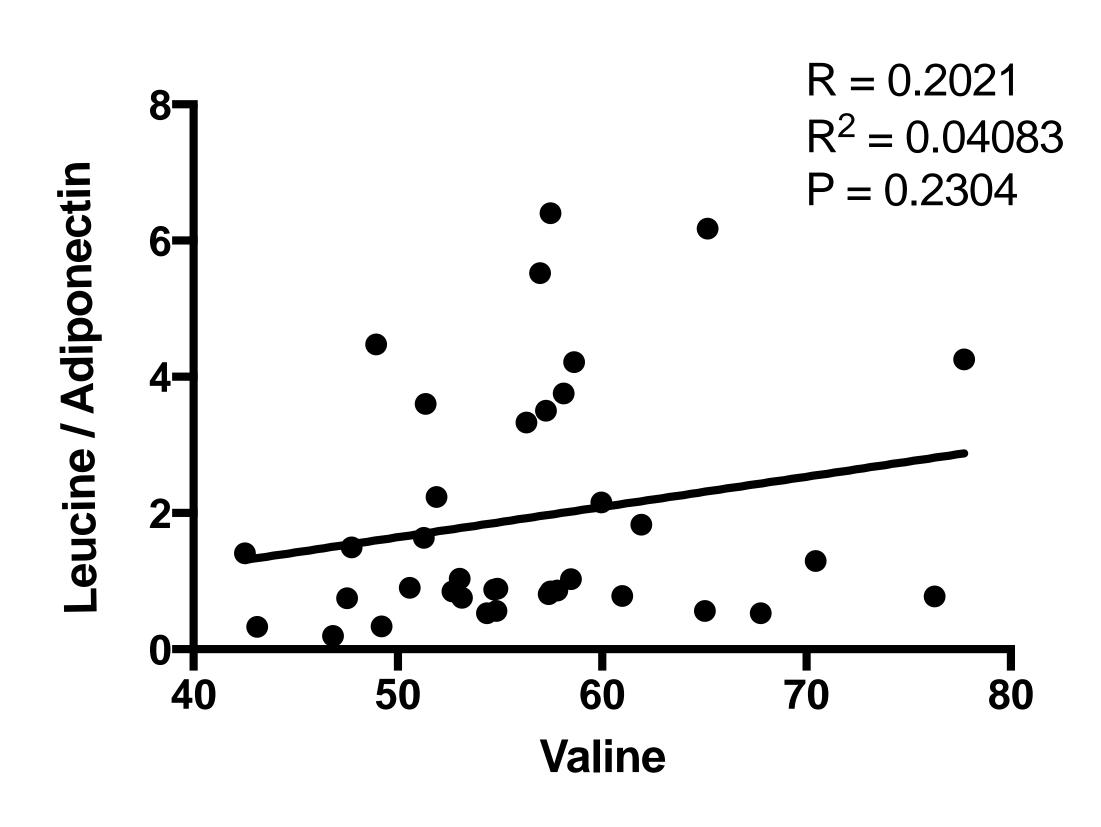


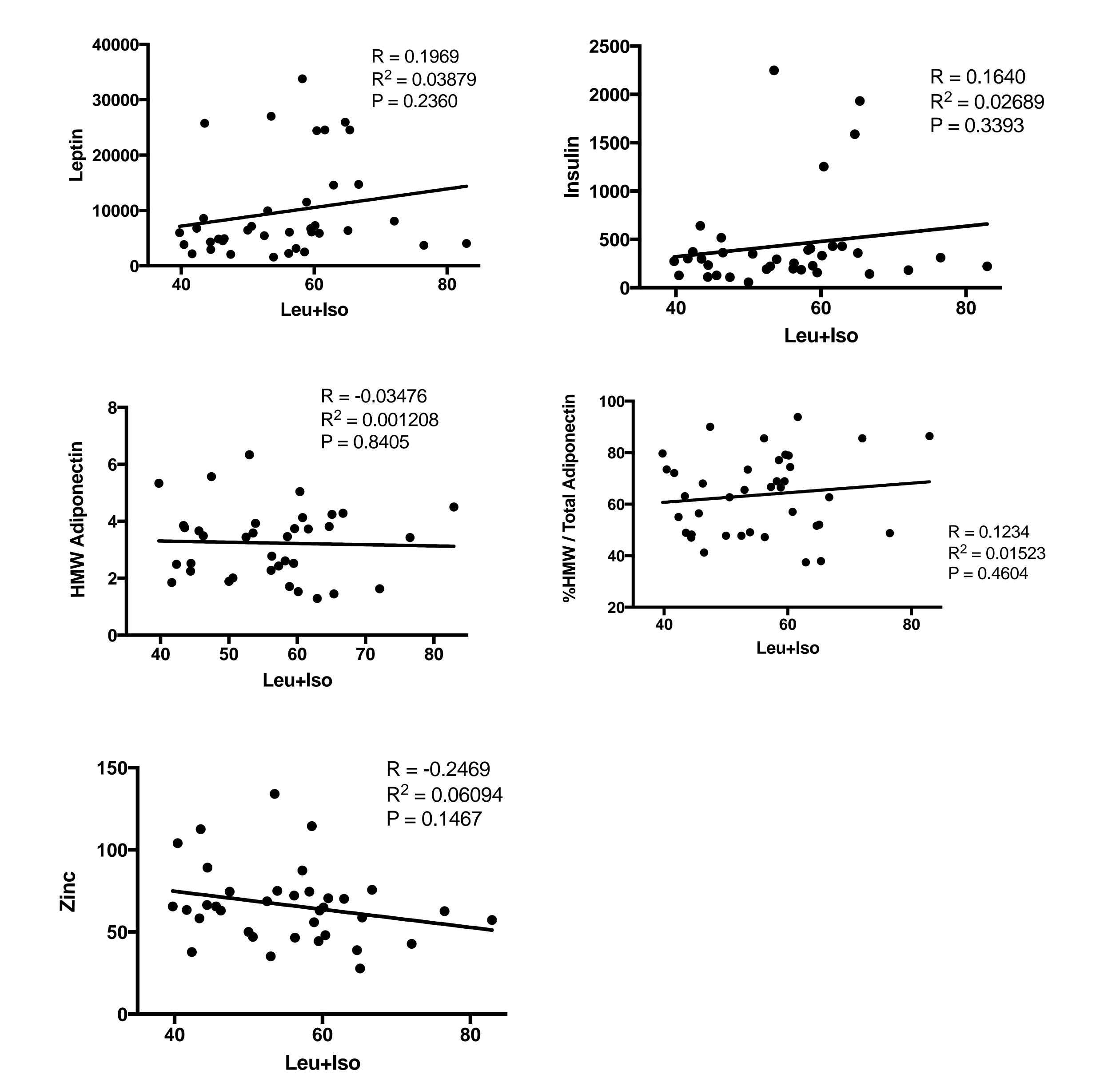


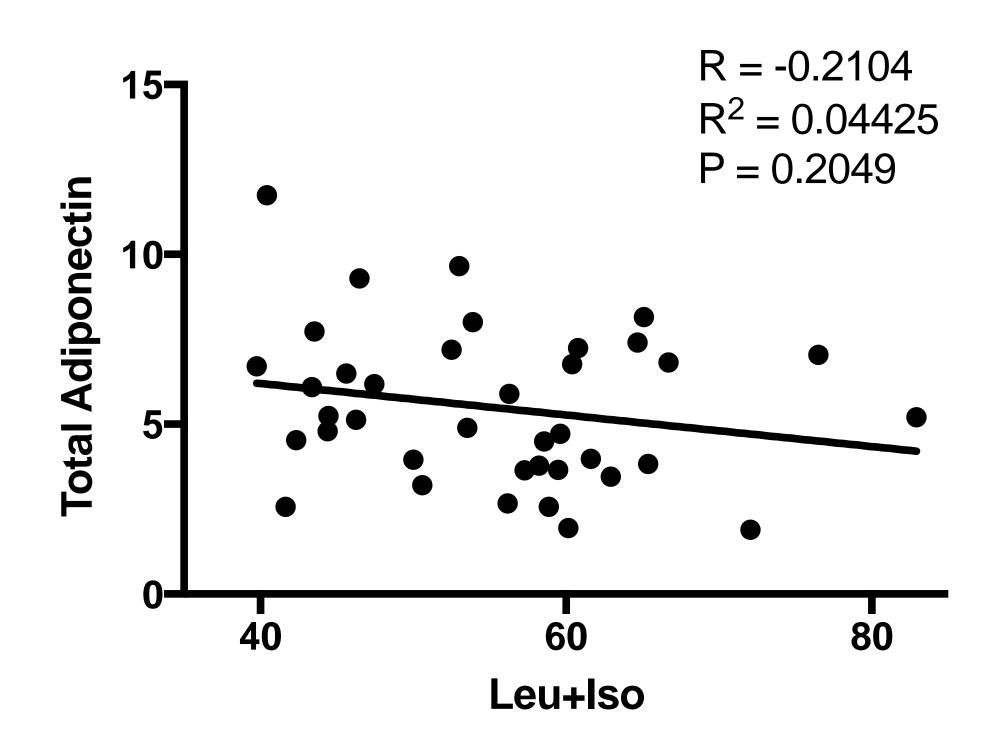


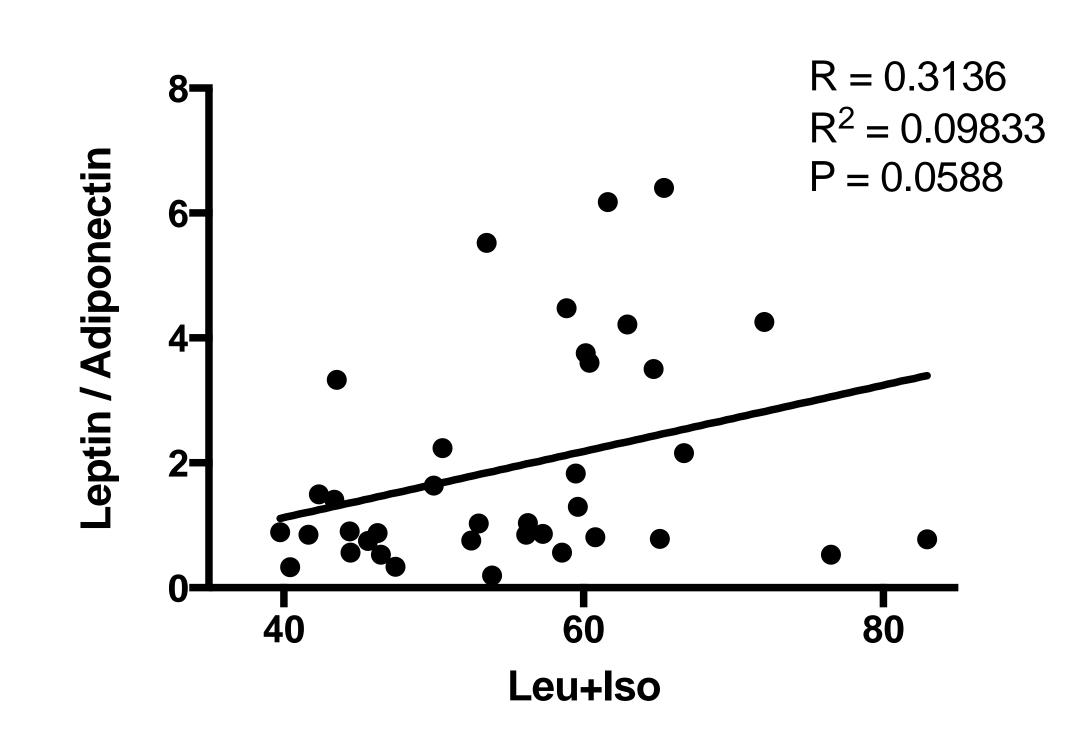


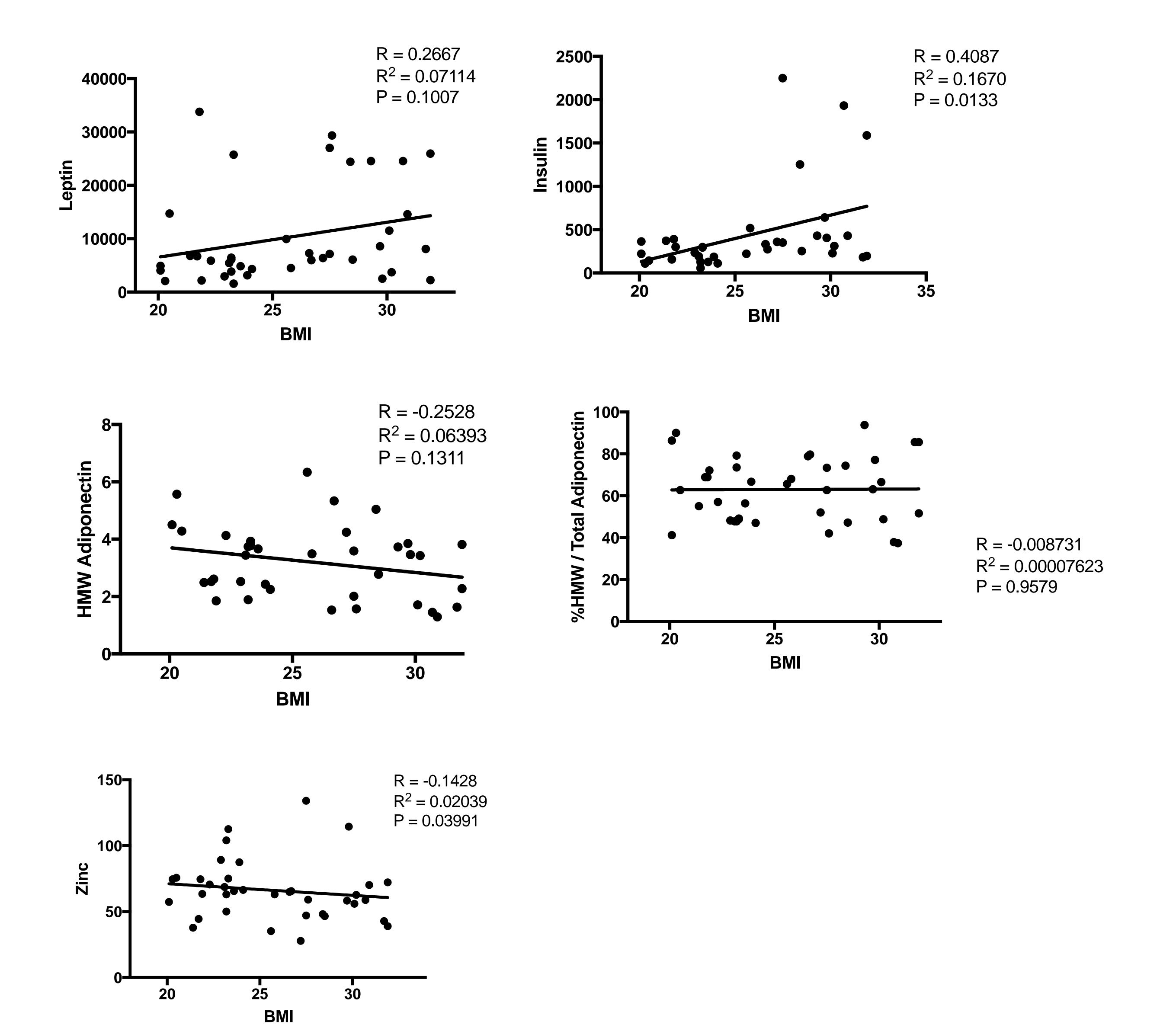


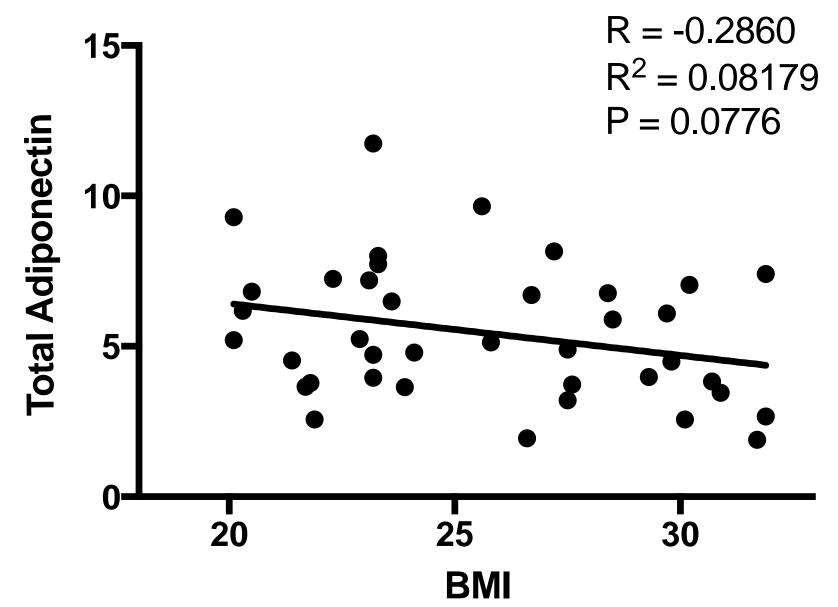


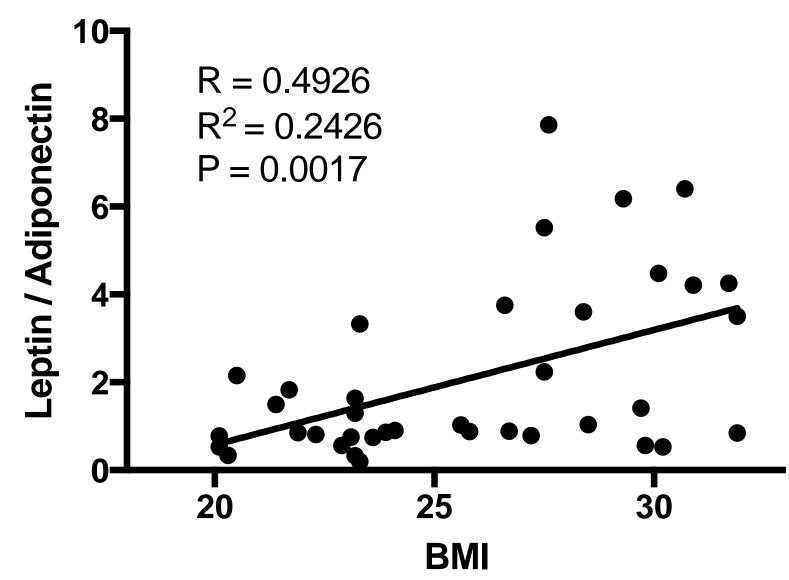




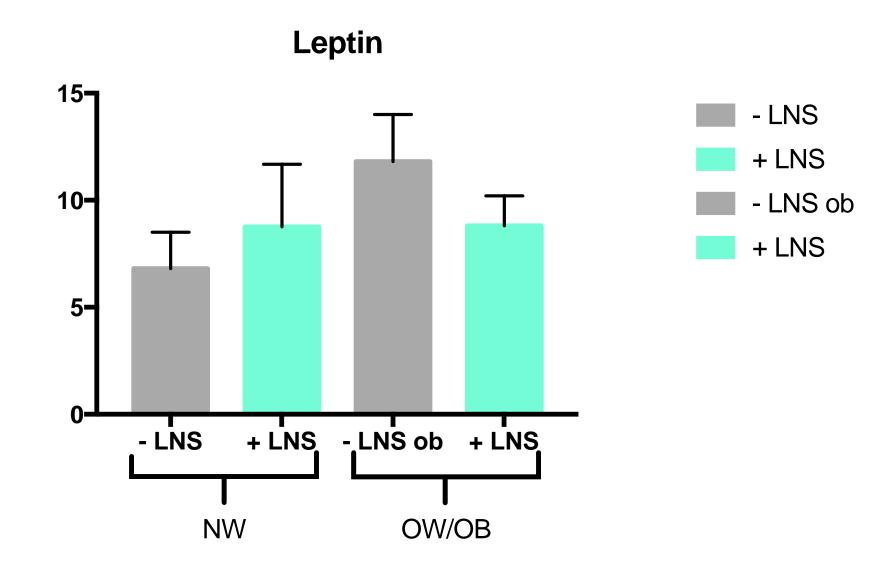


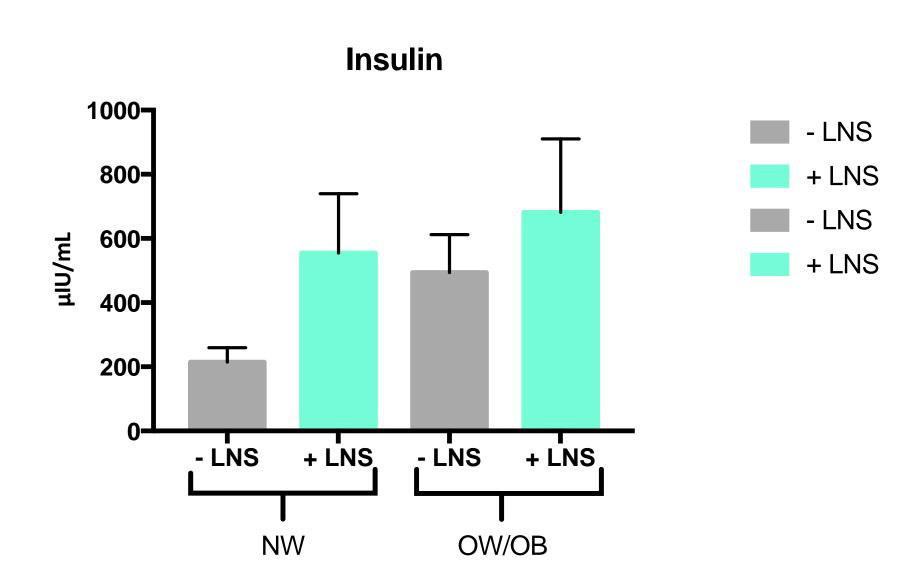


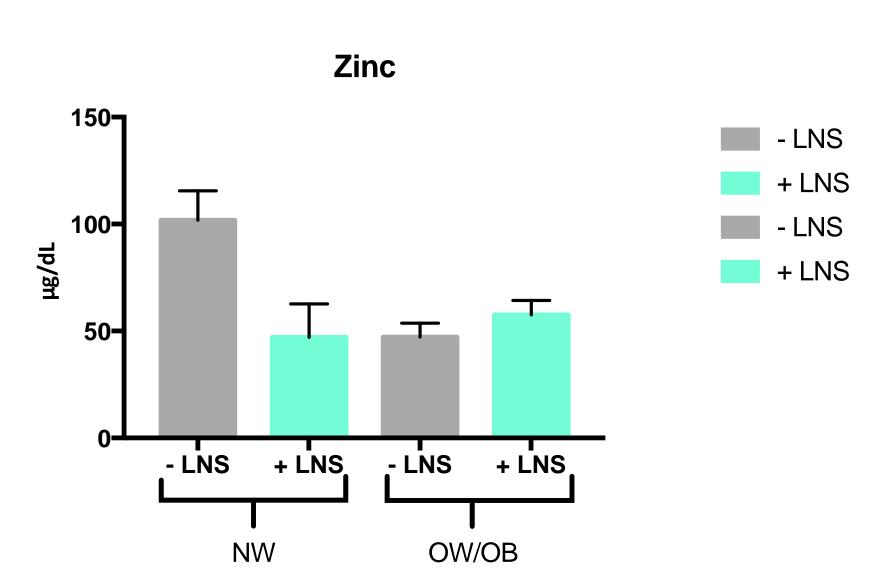


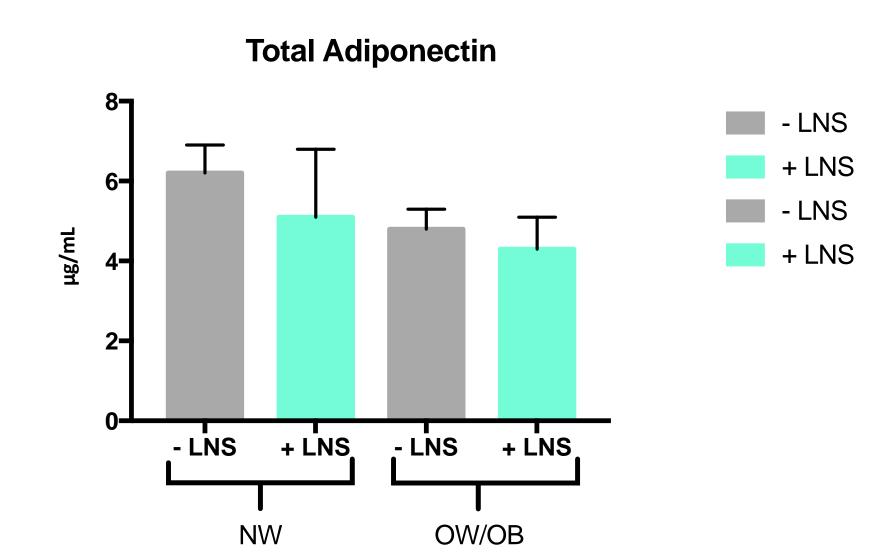


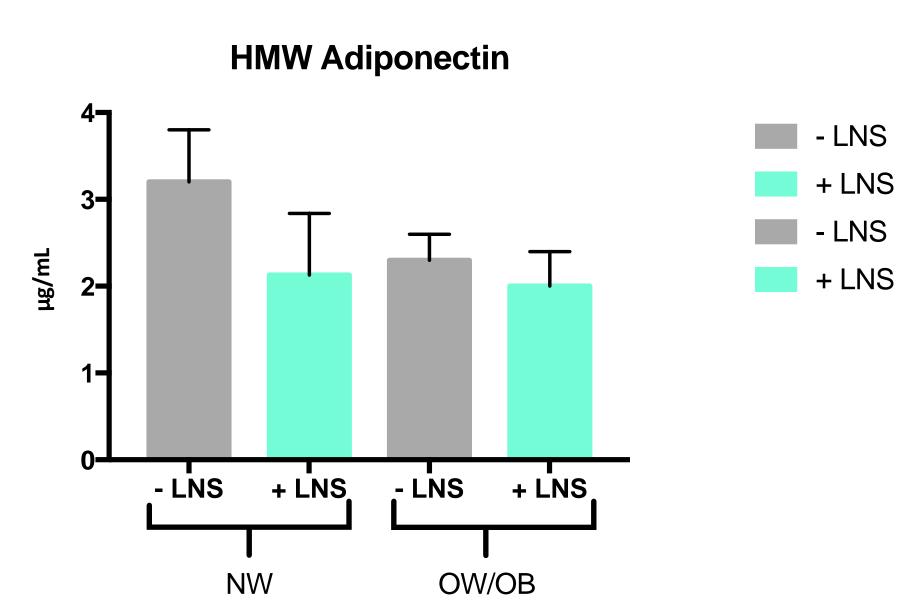
36 week data

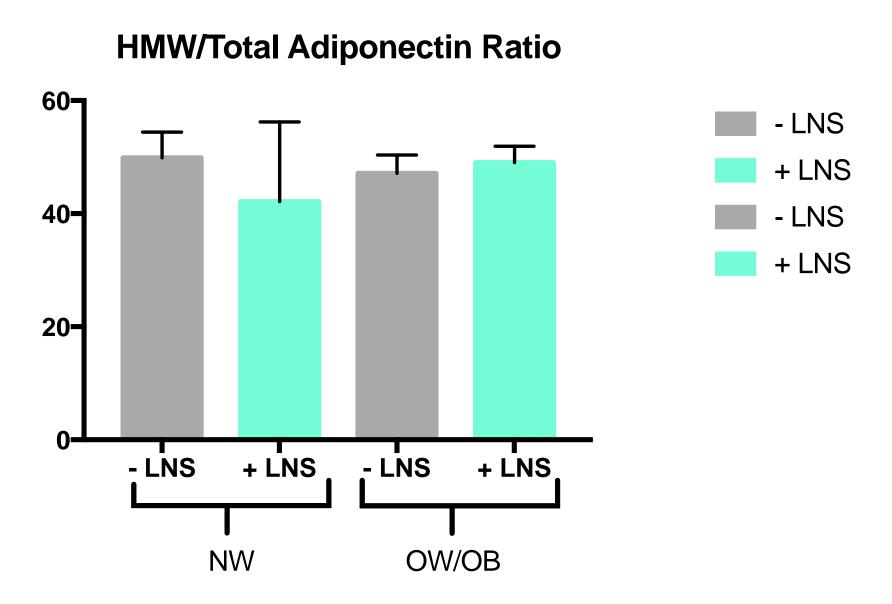


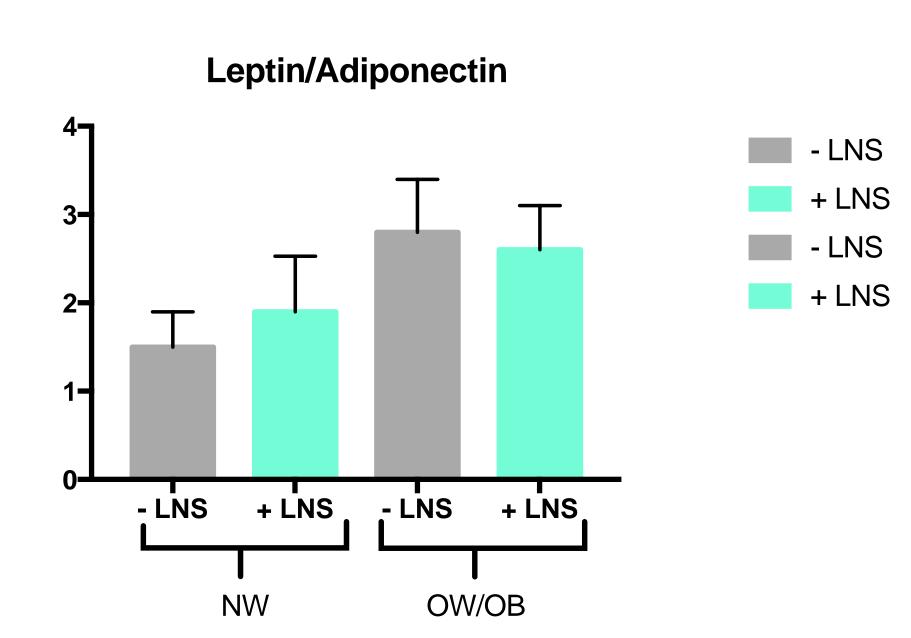


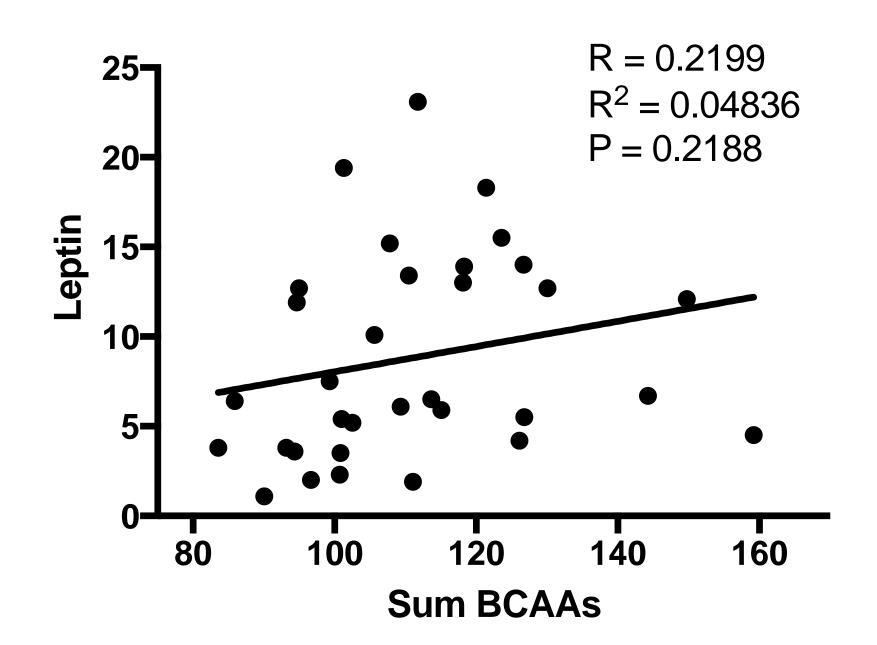


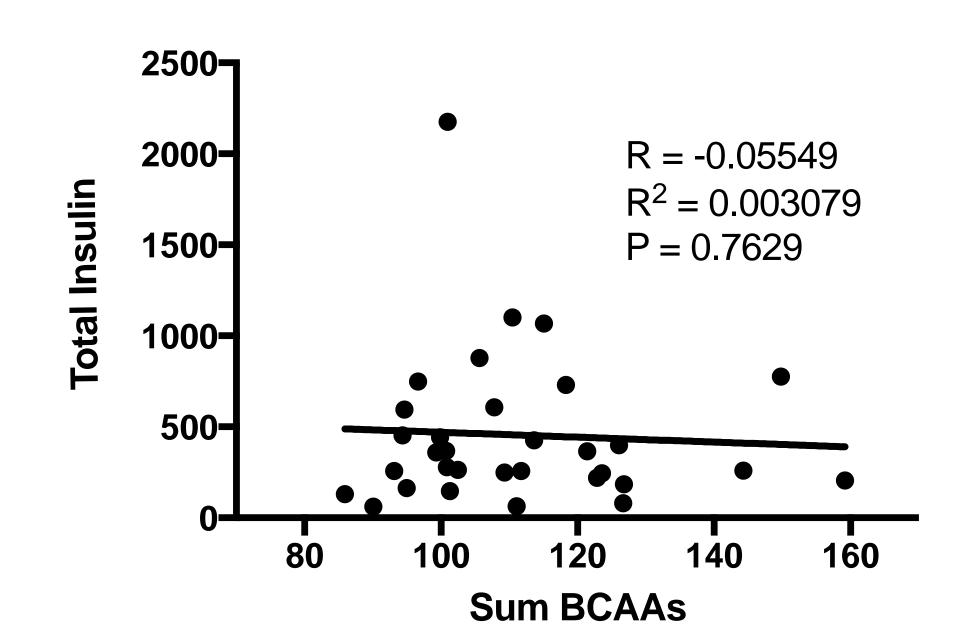


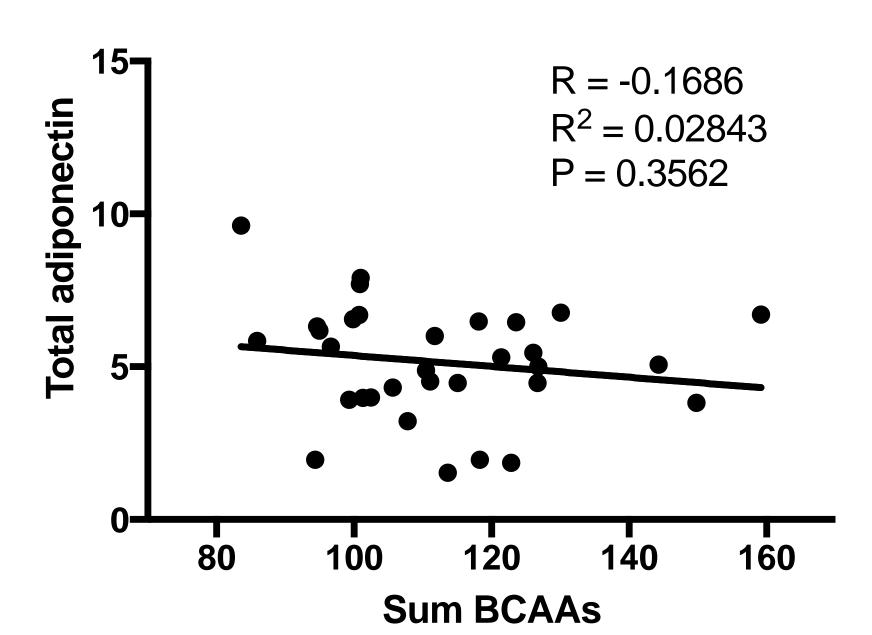


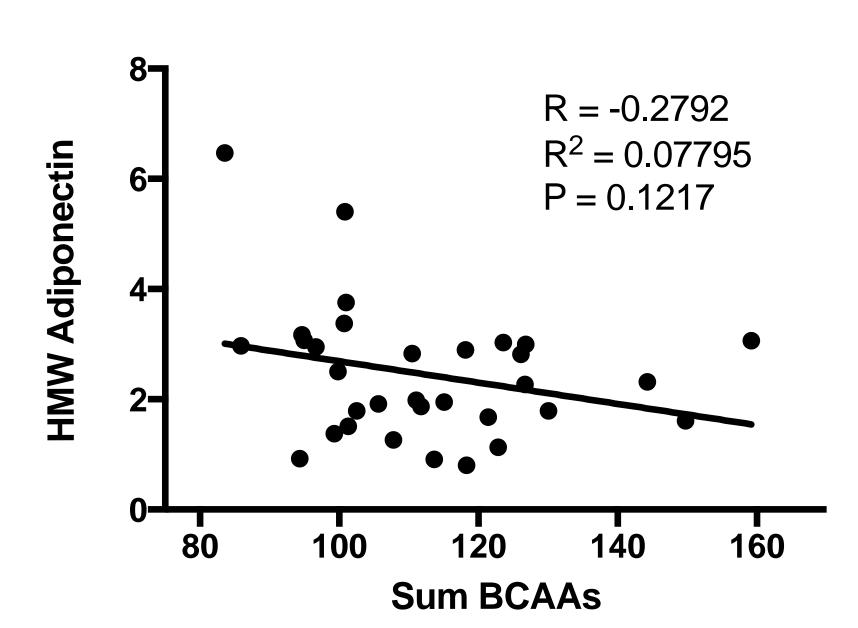


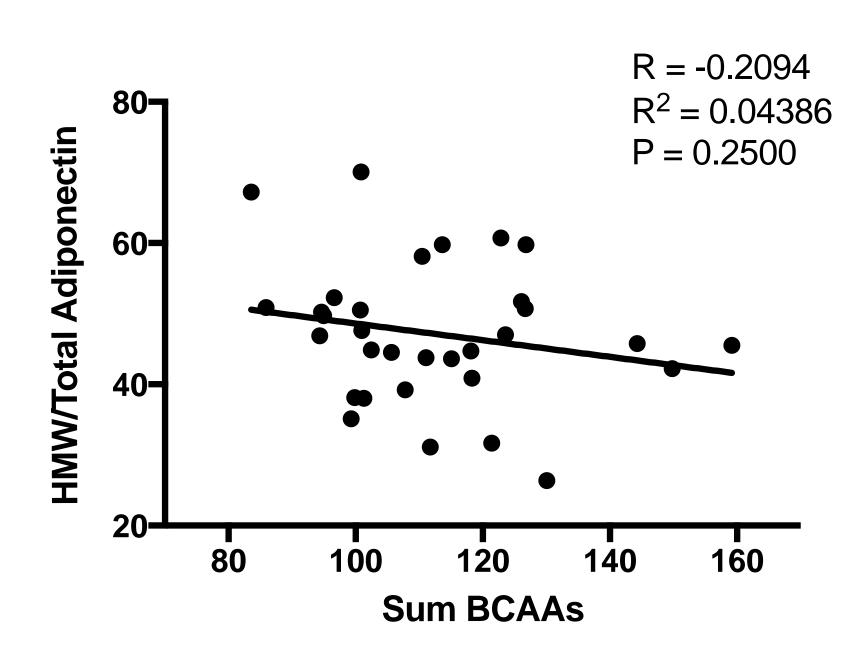


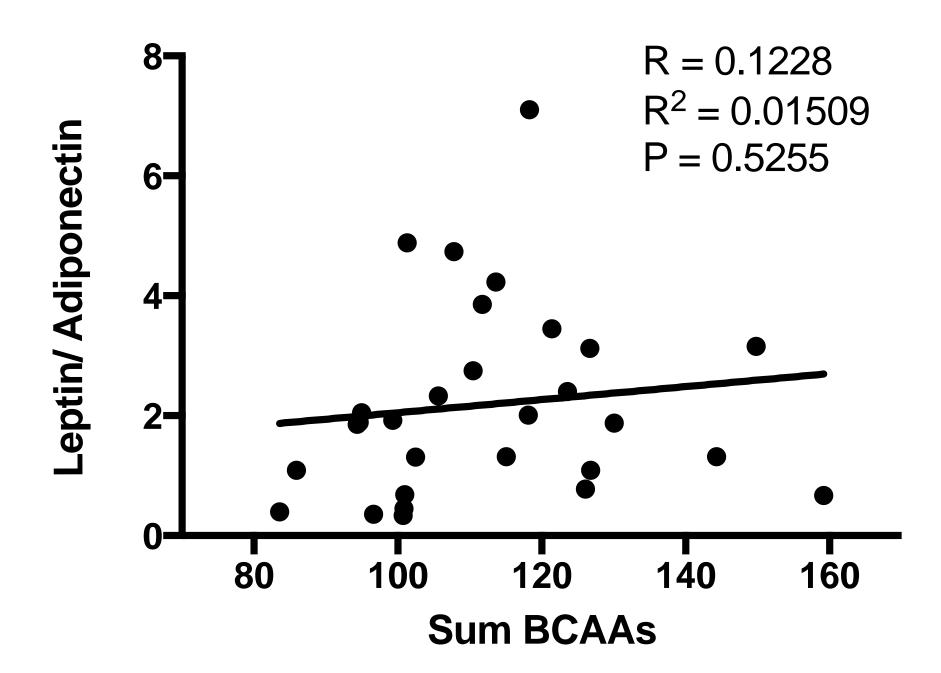


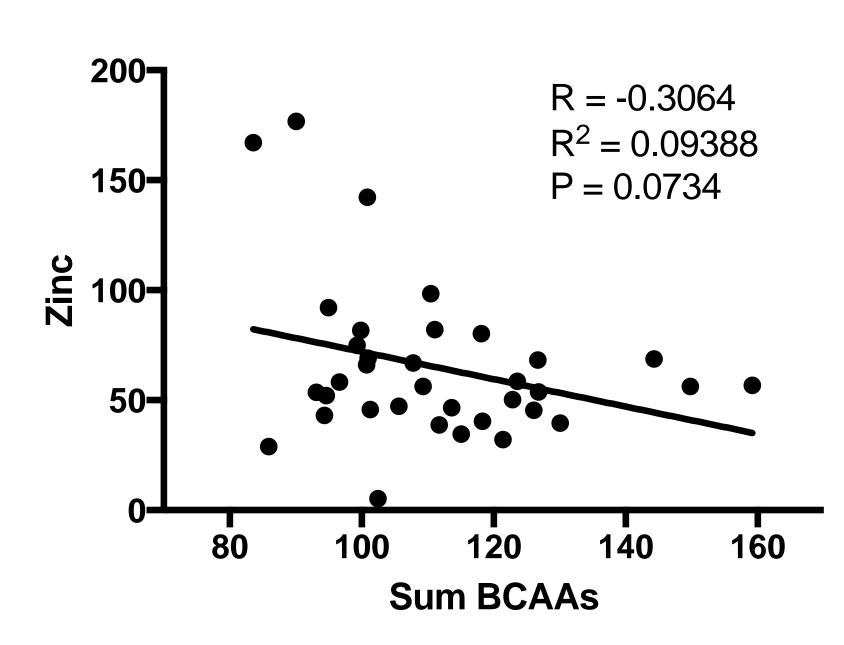


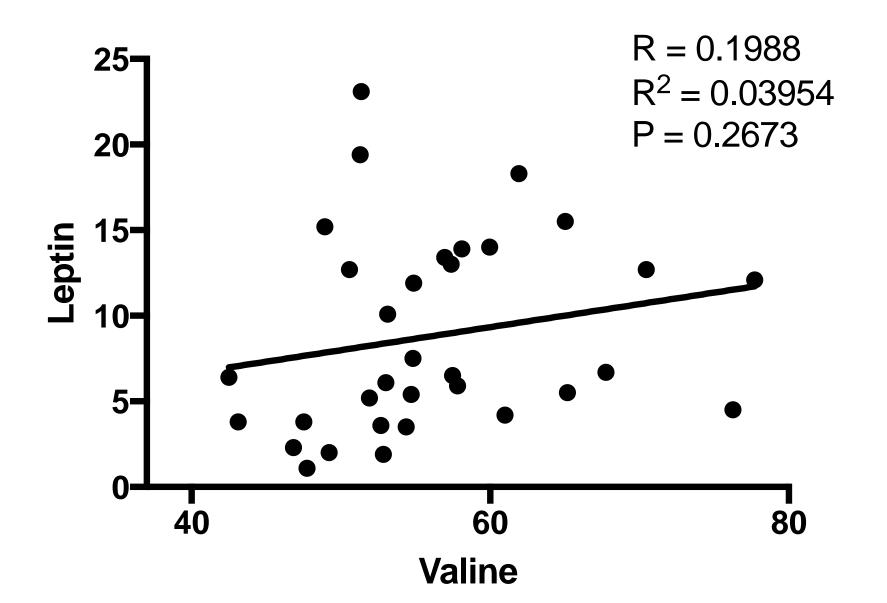


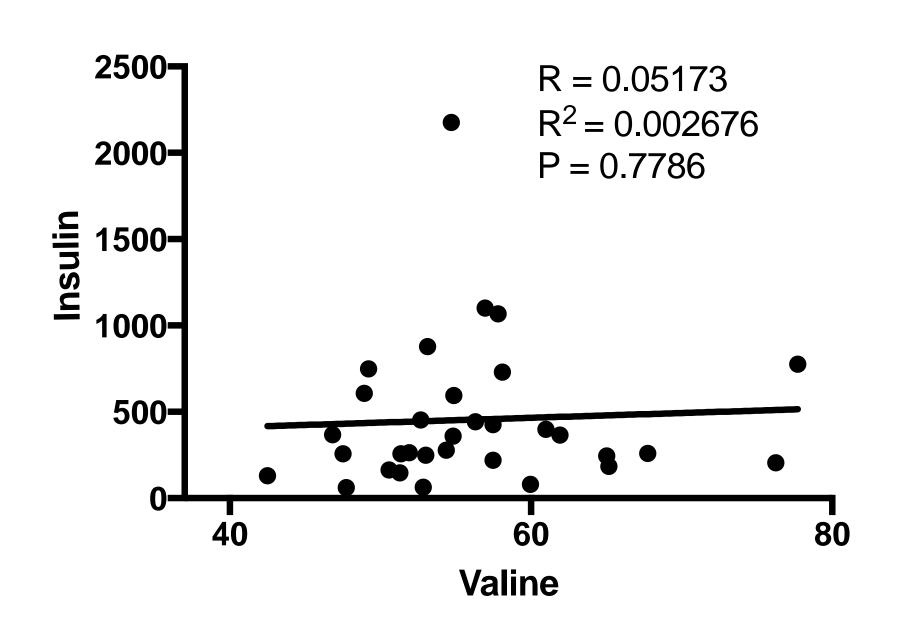


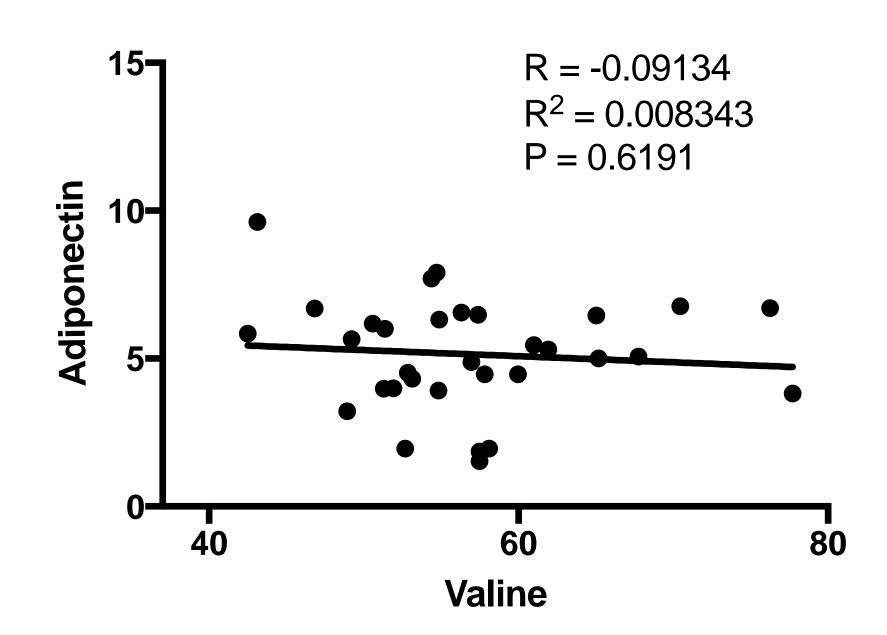


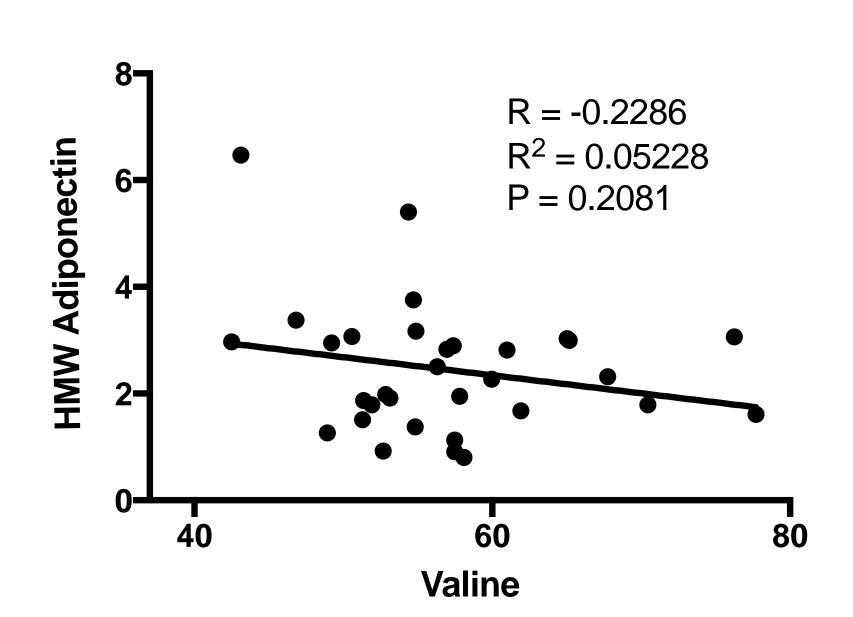


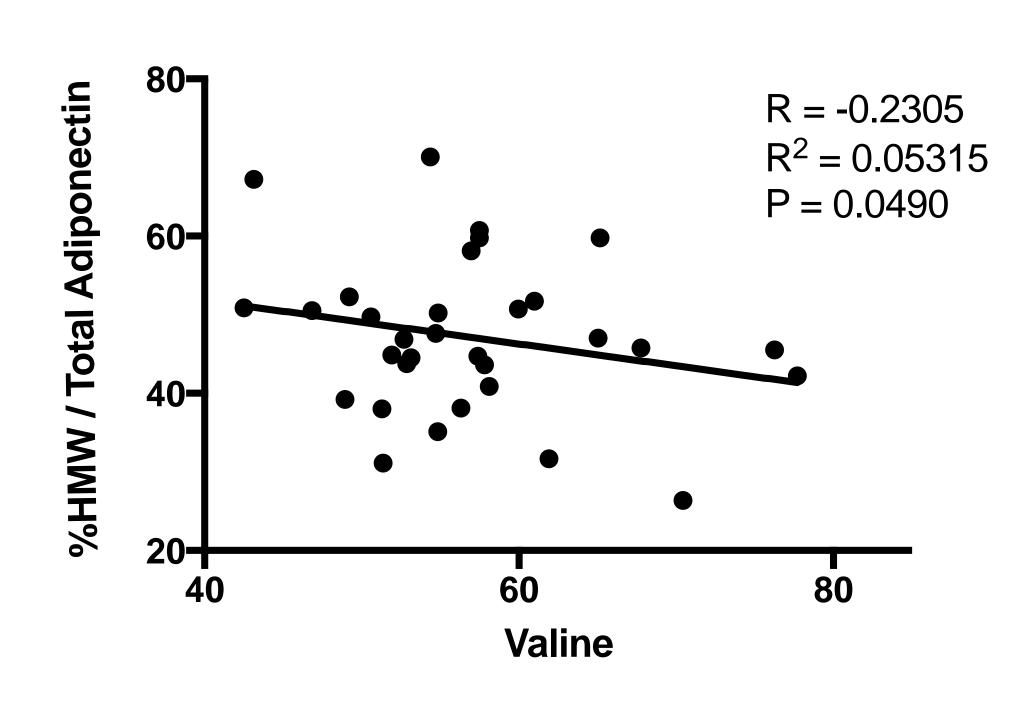


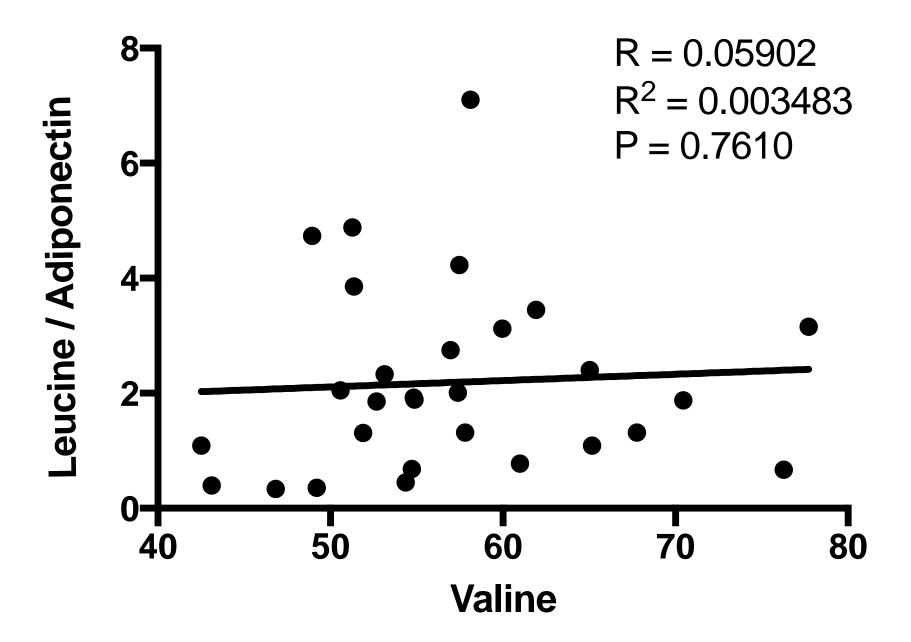


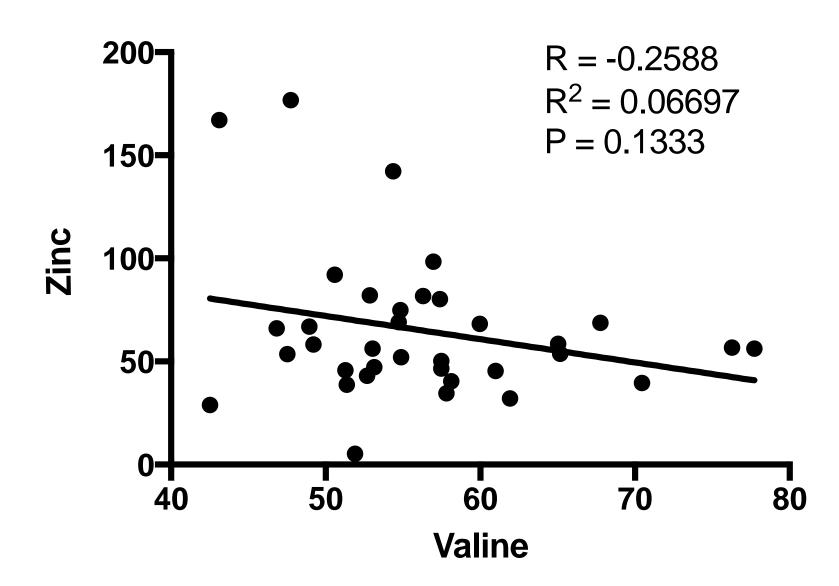


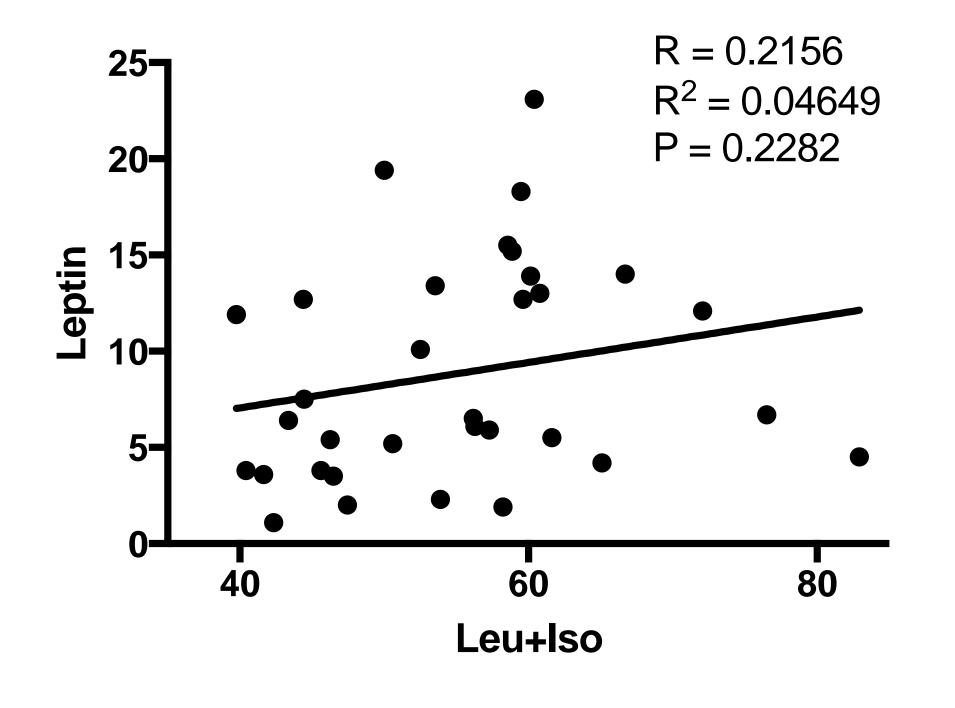


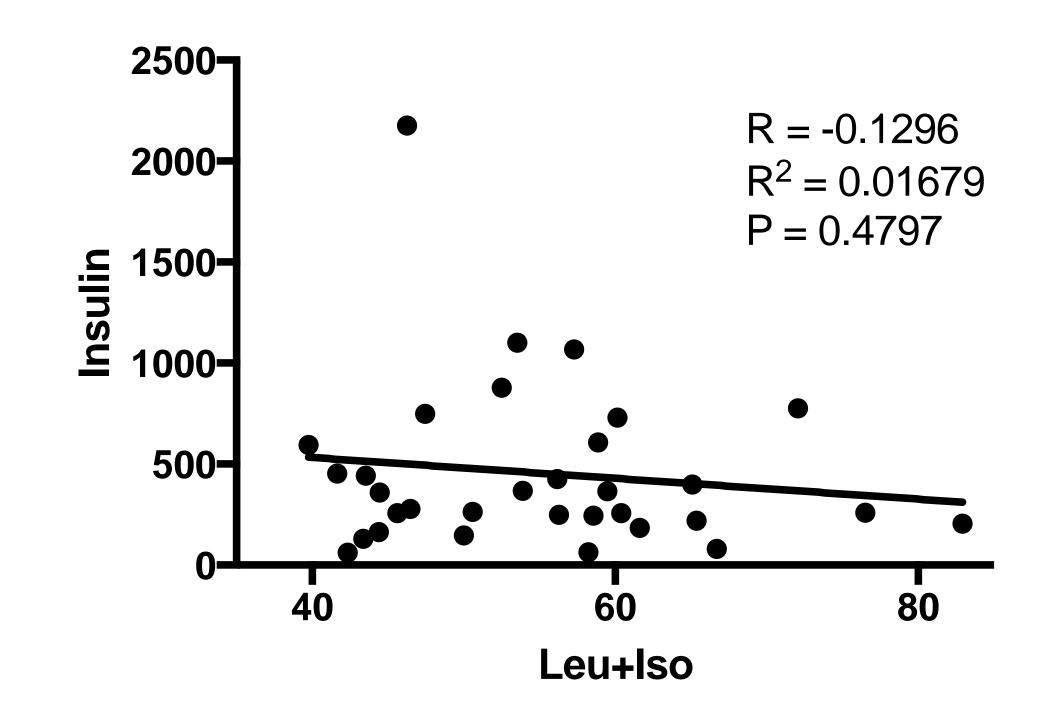


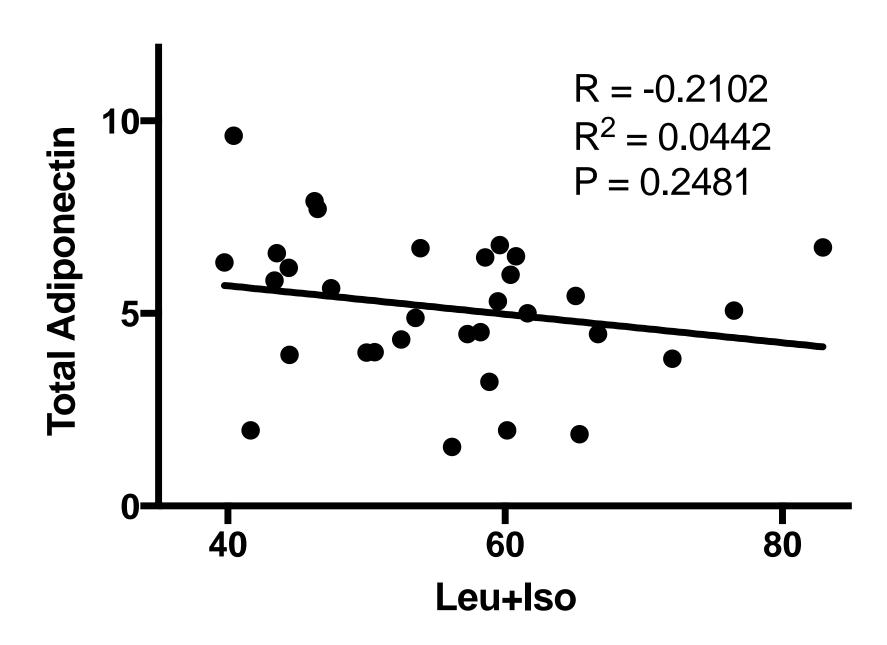


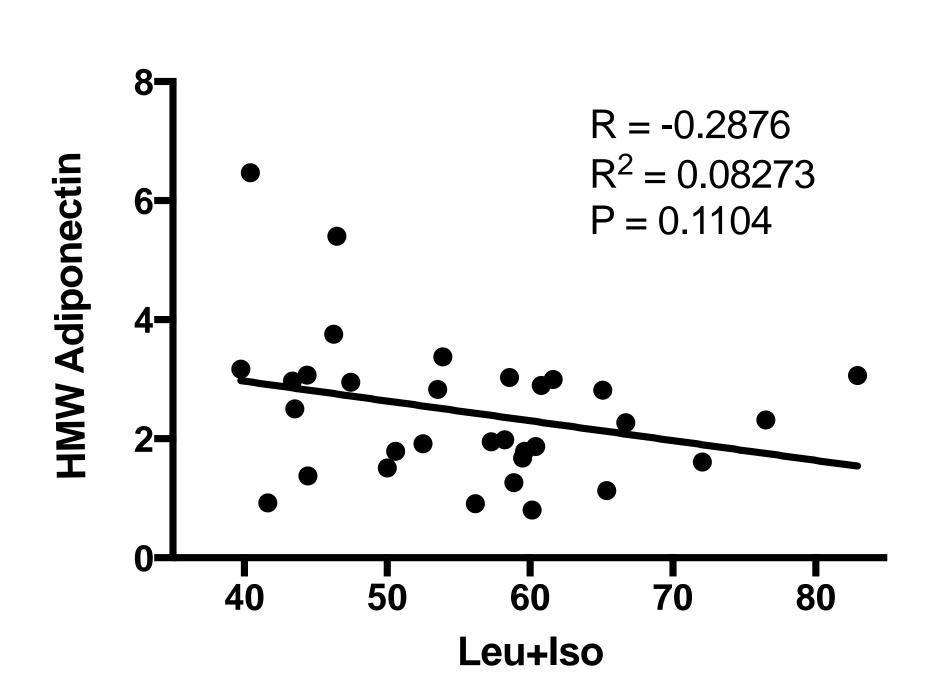


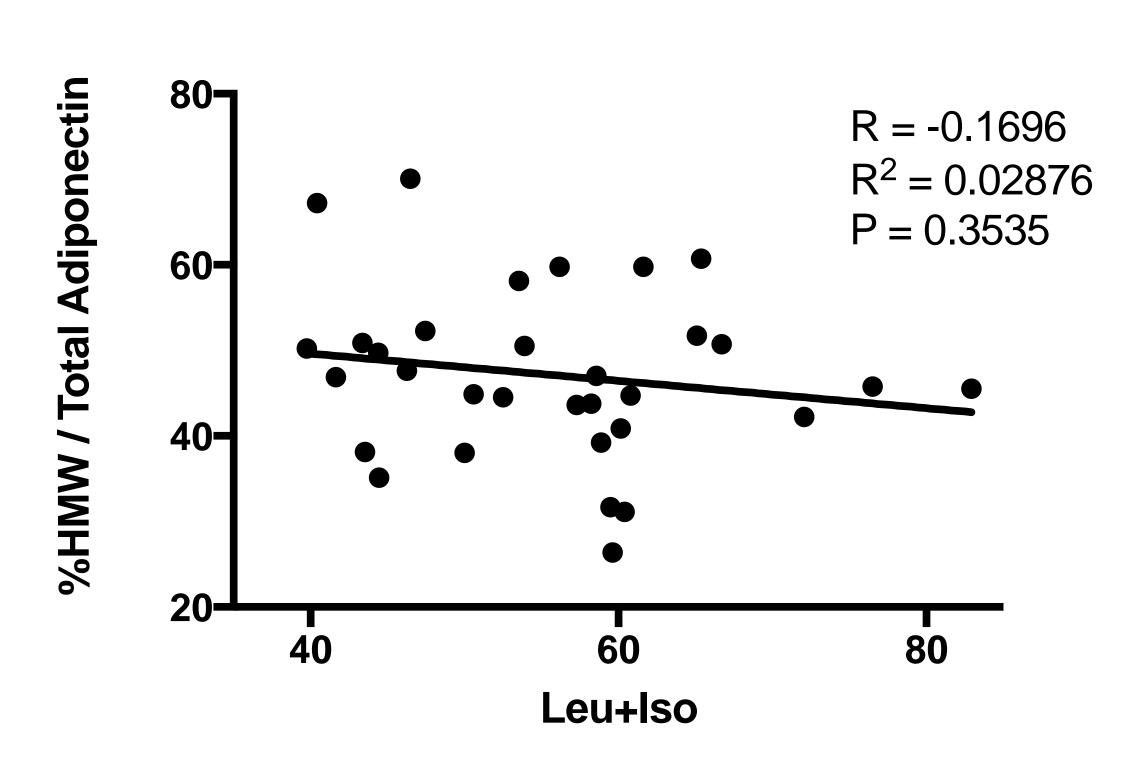


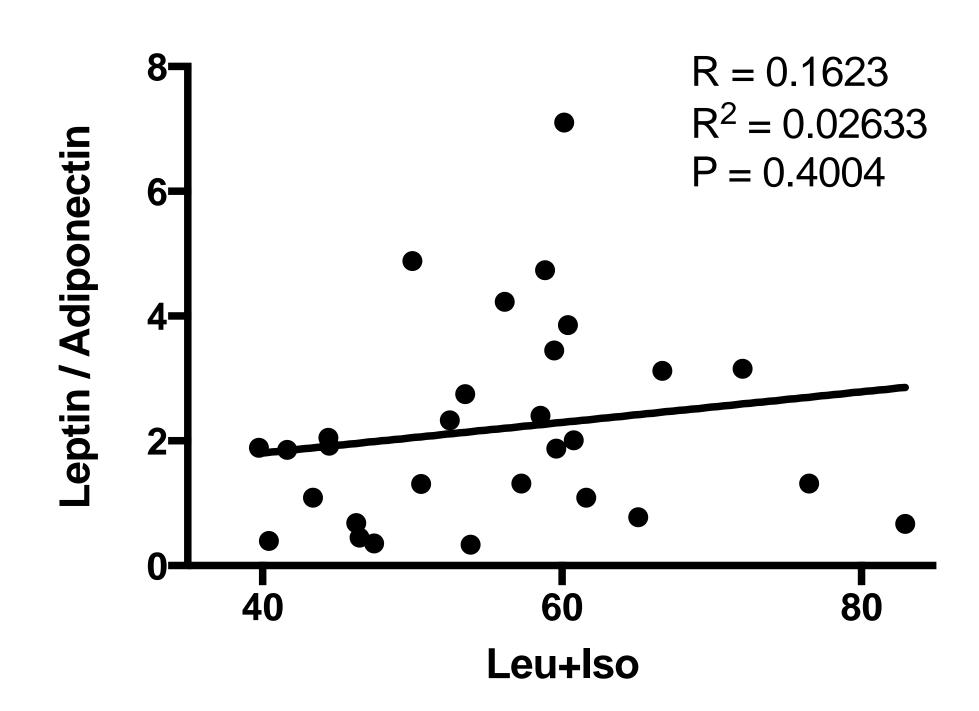


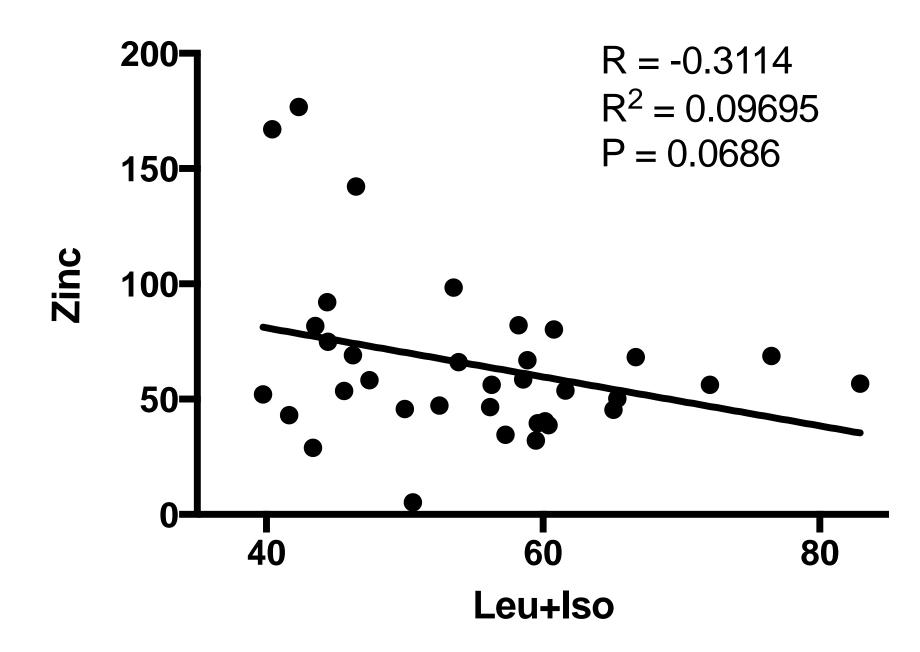


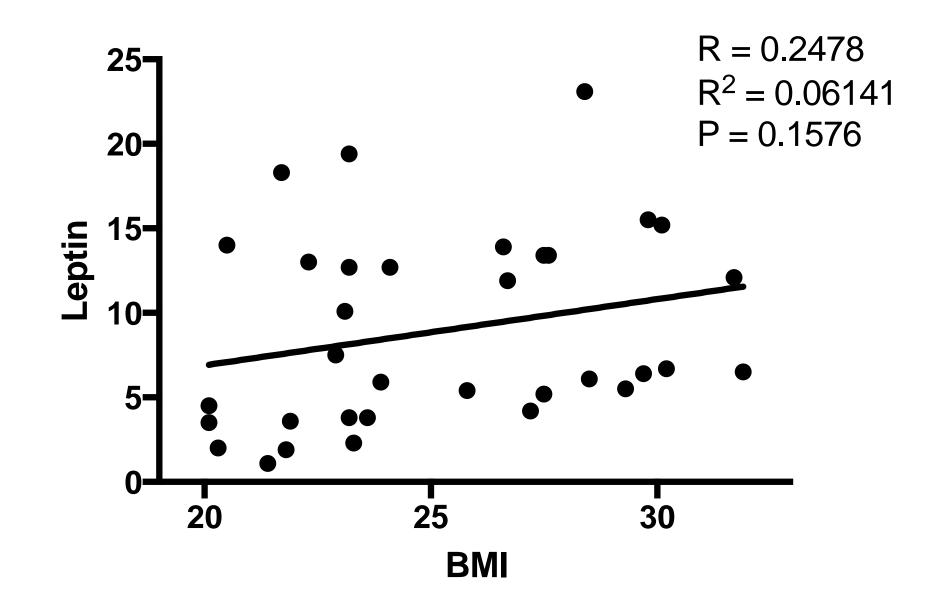


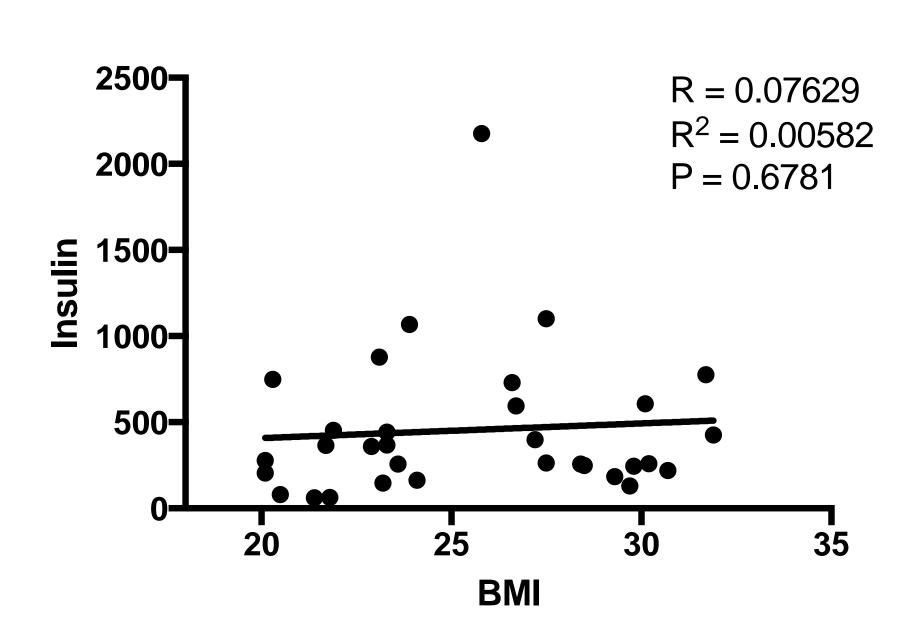


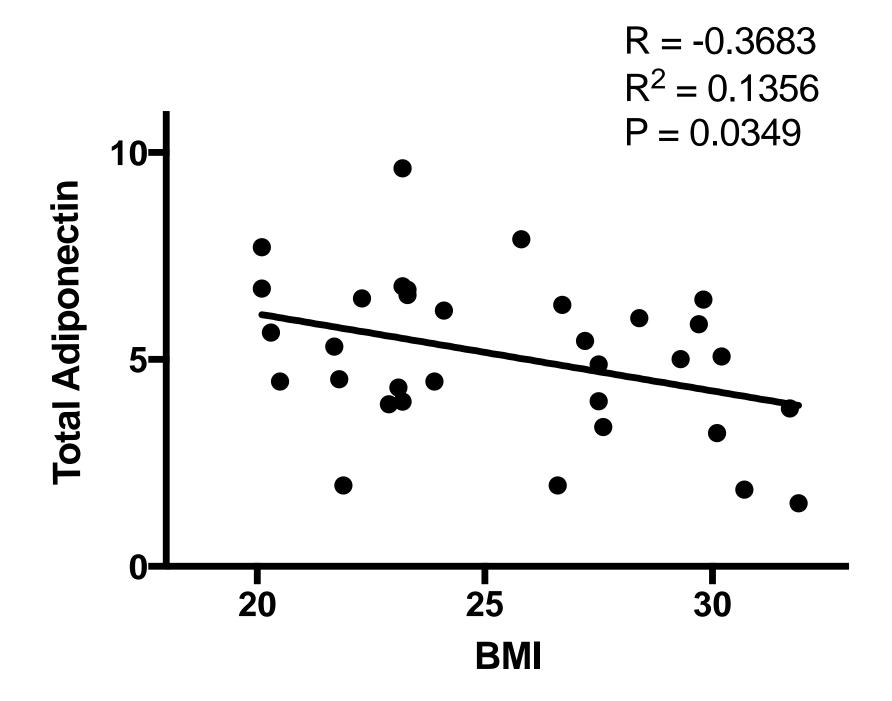


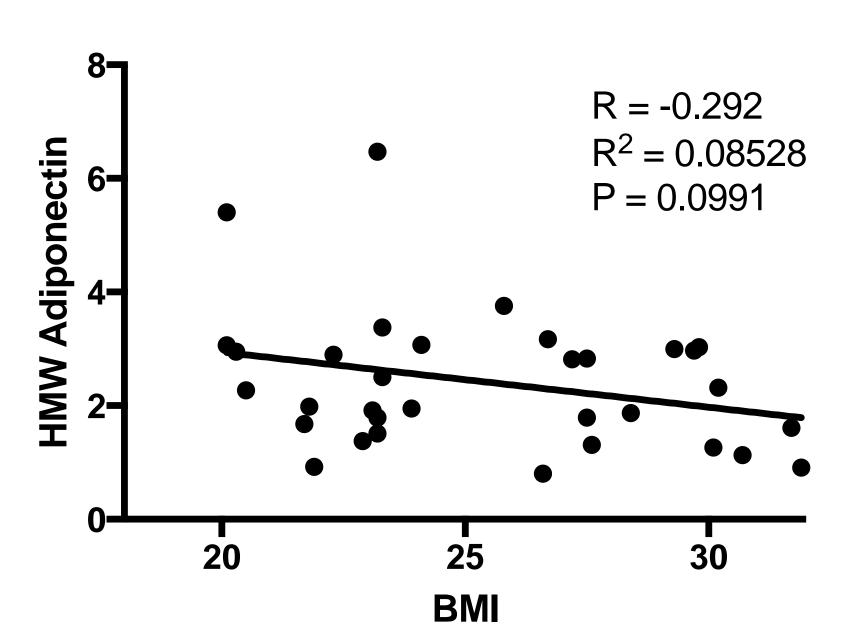


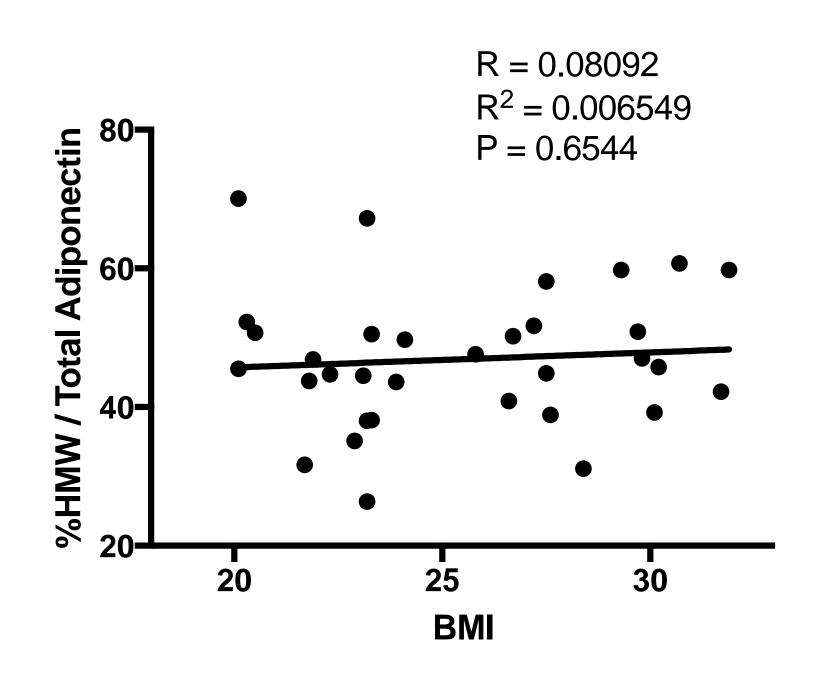


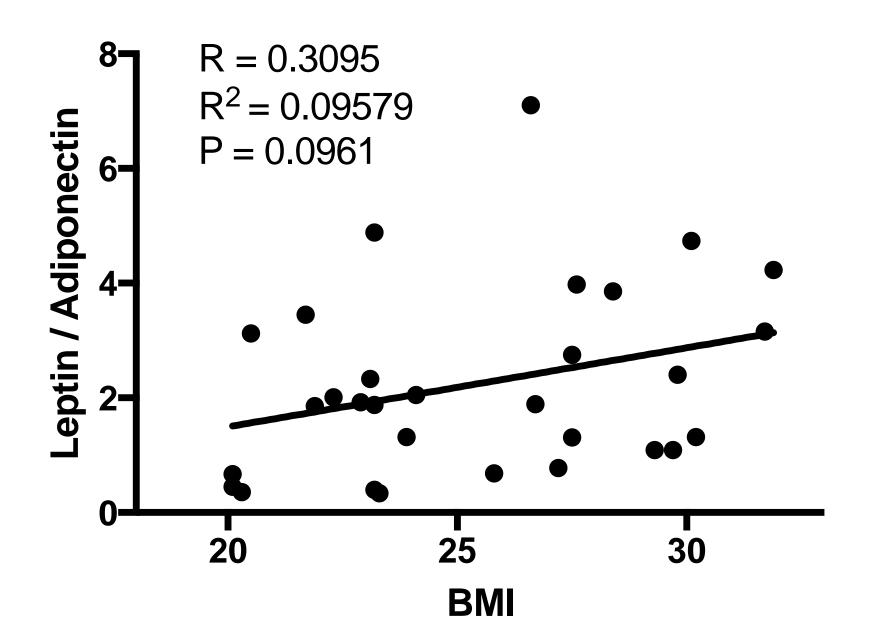


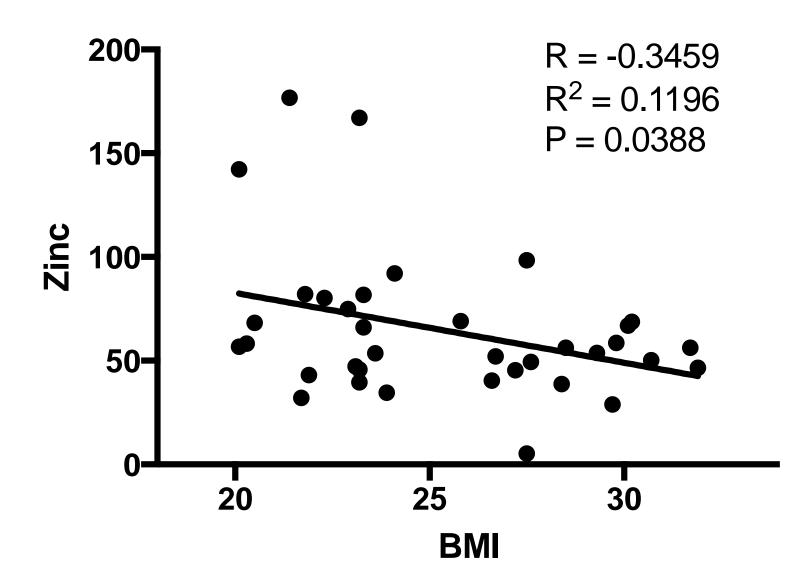












= NW ± LNS

E OW/OB -LNS

= OW/OB +LNS

Table 1. Maternal Characteristics ± Lipid Nutrient Supplementation (> 3 month prior to conception) in Normal Weight and Obese Moms									
	BMI (<	25) = NW	BMI (> 25) = OW/OB		P - value				
Maternal	-LNS $(n = 10)$	+ LNS $(n = 9)$	- LNS - $(n = 10)$	Arm 1 $(n = 10)$	LNS x BMI	LNS	BMI		
Characteristics Age	23.8 ± 1.4	, ,	24.7 ± 1.3	25.7 ± 1.5	0.728	0.728	0.333		
Parity	1.6 ± 0.2	1.4 ± 0.3	1.6 ± 0.3	1.5 ± 0.3	0.863	0.605	0.863		
Prepreg Ht	146 ± 1	145 ± 2	145 ± 1	142 ± 2	0.559	0.305	0.295		
Prepreg Wt	47.6 ± 1.1	47.1 ± 1.5	60.8 ± 1.6	58.6 ± 1.6	0.571	0.384	<0.0001		
Prepreg BMI	22.3 ± 0.4	22.3 ± 0.4	28.8 ± 0.7	28.9 ± 0.6	0.892	0.935	<0.0001		

Table 1. Maternal Characteristics ± Lipid Nutrient Supplementation (> 3 month prior to conception) in Normal Weight and Obese Moms									
	BMI (<25) = NW		BMI (> 25) = OW/OB		P - value				
12 Weeks	- LNS $(n = 10)$	+ LNS $(n = 9)$	-LNS (n = 10)	+ LNS $(n = 10)$	LNS x BMI	LNS	BMI		
Total Adiponectin (µg/mL)	6.8 ± 0.8	5.02 ± 1.67	5.6 ± 0.8	4.3 ± 0.5					
HMW Adiponectin (µg/mL)	3.2 ± 0.3	3.32 ± 1.11	3.7 ± 0.4	2.6 ± 0.4					
% HMW / Total Adiponectin (μg/mL)	55.9 ± 3.2	67.54 ± 22.51	70.1 ± 4.8	59.0 ± 5.4					
Leptin (ng/mL)	10.8 ± 3.4	4.2 ± 1.4	14.0 ± 3.2	11.5 ± 2.8					
Leptin / Adiponectin Insulin (µIU/mL)									