

List of Thesis Revisions

Defence date: January 7 2016

Dr. Farah Hosseinian

Comment	Location of revision in thesis (page number)
Objectives: Need clarification. A long wordy sentence needs to be revised. You do not need references in objectives.	28
Explain why casein was used as a positive control (soy an alternative to dairy and meat)	6
Describe the strain of soybean used (Harovintin) in the Introduction and why it was used.	26
Add a table on of the nutritional content of soybeans.	Amino acid content pg 7
Add more references about the benefits of soybeans on disease states (eg. cancer, etc.).	2
Explain why glycinin bound to carbohydrates is anti-obesity in Introduction.	The binding of carbohydrates is not related to anti-obesity. Sentence restructuring for clarity on page
More information on phytoestrogens is needed, one bad and one good example to be added.	5
Materials and Methods: Provider an overview of how the tofu diet was prepared (pepsin and pancreatin). Is it tofu or soy milk? Make clear what is added to the diet.	31
Explain why 6 rats were used per group for protein analyses and 8 rats per group were used for RNA analyses.	Variation in population size due to limitation in sample availability
Must have consistency in reporting of the p-values. Usually less than 0.05 is enough.	Definition of statistical significance found in Methods section ($p < 0.05$).

Dr. Doug Johnson

Comment	Location of revision in thesis (page number)
READ THIS ARTICLE: http://www.nature.com/news/scientific-method-statistical-errors-1.14700	
Discuss the sex differences at the beginning of the Discussion.	76
Present separate sex data as well as the combined data (separate figure).	
Discussion: Specify the source of the soy seed used (eg. "breeder's seed") and the purity of the strain used in the Discussion.	29
Explain why a standard curve of pure protein was not used to gain the linear range of densitometry to make Western blots more quantitative.	87
Discuss male female differences in the PPAR α Western blots. One band in males vs two bands in females (Figures 3.12 and 3.14).	68
Mention that the largest use of soy in the world is for animal feed (pigs, chickens).	3

Chaowu Xiao

Comments	Location of revision in thesis (page number)
Some statements and descriptions are not accurate in the thesis (see further points).	
Give more details of the statistical methods. Have statistical analyses in a separate section of Chapter 2.	Statistical analysis section included in each sub-section of Methods
Page 2, Line 6: Soy does NOT contain all 20 ESSENTIAL amino acids.	
Page 2, Line 7 from bottom: "since approval of soy by FDA...": not a "few decades".	
Page 2, Last line: change.	
Page 3, Line 4: Results of metaanalysis health claim for soy intake by Health Canada: some of the statements (eg. decreased triglycerides) not in the health claim.	
Page 4: Change "South East Asian diets" to simply "Asian diets".	
Mention why measurement of PPAR α DNA-binding activity (functional assay) was not done.	90
qPCR: Specify if primers were for PPAR α 1 or PPAR α 2.	42

Explain what happened to the rats (in terms of weight gain) better.	
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Steve Gleddie

Comment	Location of revision in thesis (page number)
Explain variability within the SPI (Soy Protein Isolate) source (how many varieties does this come from), and why you chose Harovinton (genetically characterized and consistent in composition (fibre, ash, fats)).	26
Discuss variability between different soy strains.	Out of scope for this project
Specify whether 3T3-L1 mouse embryonic fibroblasts were derived from male or female mice.	Information is not available.
State recommended daily dose of soy protein (25 grams).	3

Bill Willmore

Comment	Location of revision in thesis (page number)
Figure 3.14, Page 71: Why present only PPAR α 2 densitometry data and not both PPAR α 1 and 2?	73
Figure 3.7, Page 55: Why star no treatment and not rosiglitazone?	58 P values are all relative to rosiglitazone. Description of stars is written in the caption.
Include β -actin loading controls in all Western blot panels in Figures.	70, 72
Figure 3.13, Page 69: Examine blot again to see if UCP1 has been altered in molecular weight (i.e. post-translationally modified).	No alternation in molecular weight was observed.
Explain why you used two different methods in RNA isolation (RNeasy Kit from QIAGEN and Trizol).	61

Jim Cheetham

Comment	Location of revision in thesis (page number)
Explain the difference between "healthy" and "unhealthy" adipocytes (fat content and size)	14
Provide table of amino acid content of typical soy.	7