

# Endocrine-targeted therapy and diet interactions on gut permeability and the microbiome

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## Intestinal Permeability

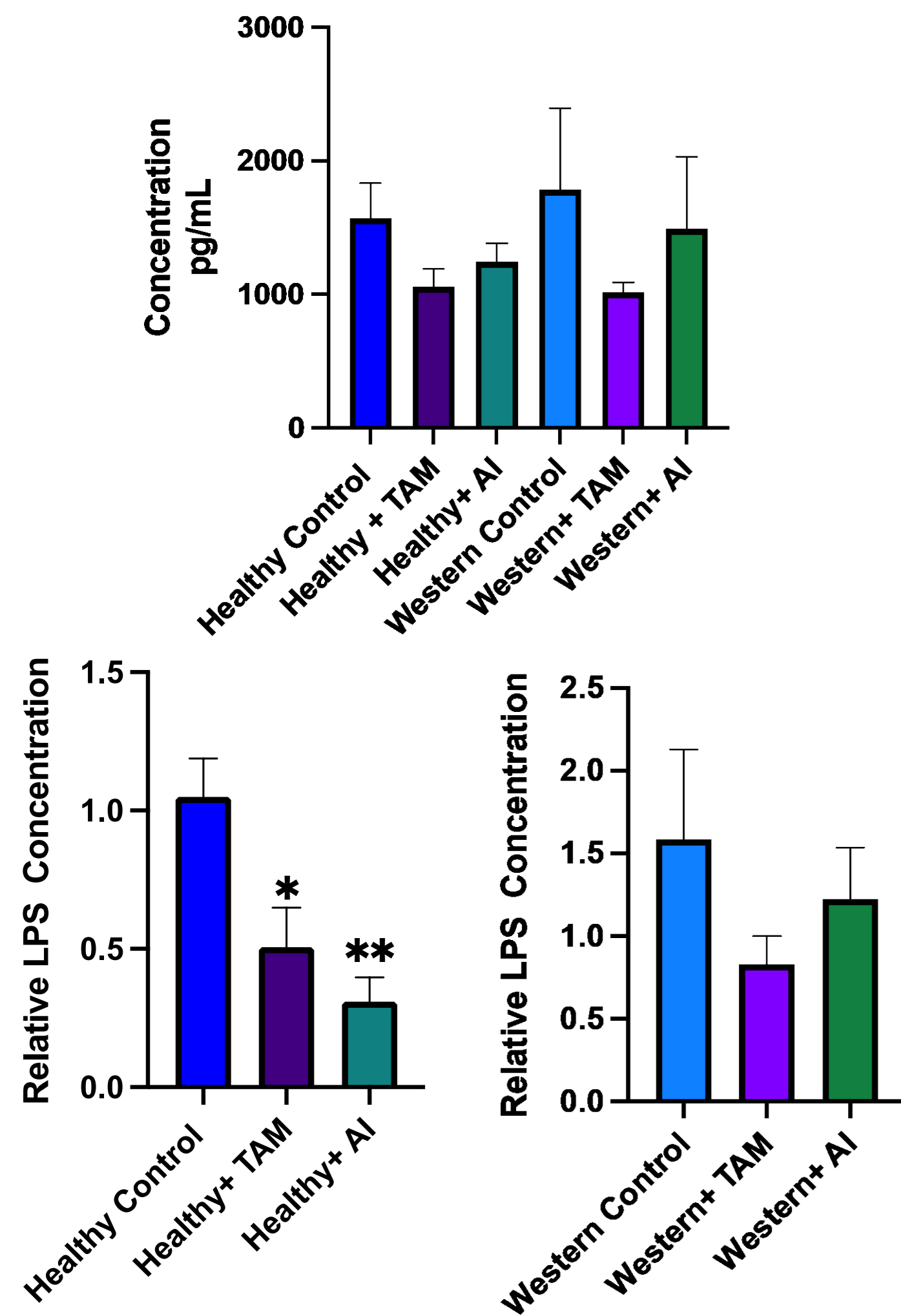


Figure 1 FITC dextran permeability assay, plasma LPS relative concentrations determined by ELISA, and Vevo Ultrasound Imaging revealed trends in intestinal permeability with diet and oral endocrine therapy treatment. n=9-10 per group  
**Oral endocrine therapies in conjunction with diet may affect intestinal permeability**

## Gut Microbiome

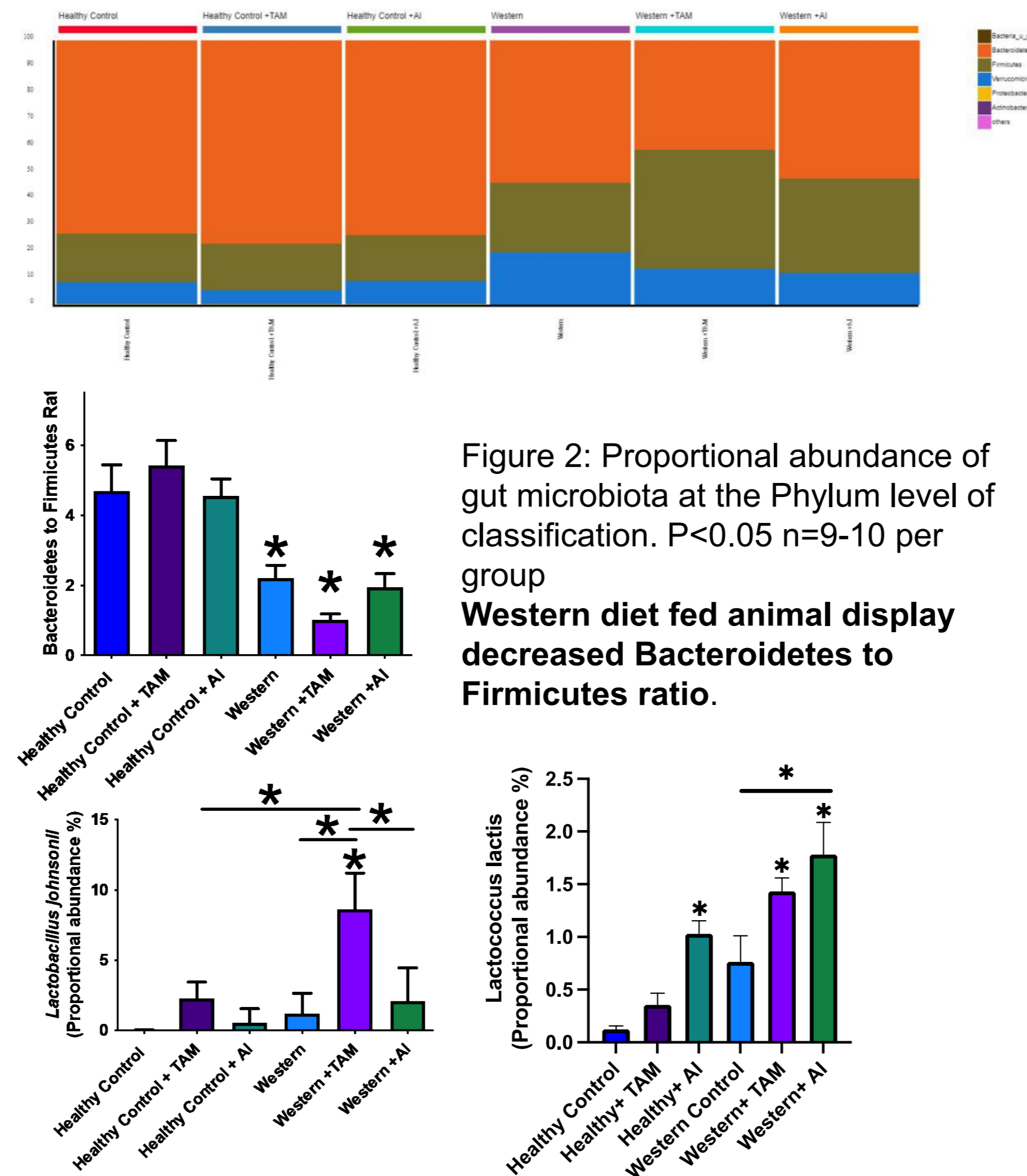


Figure 2: Proportional abundance of gut microbiota at the Phylum level of classification. P<0.05 n=9-10 per group  
**Western diet fed animal display decreased Bacteroidetes to Firmicutes ratio.**

Figure 3: Administration of tamoxifen citrate increased probiotic gut populations in Western diet fed animals  
P<0.05 n=9-10 per group  
**Tamoxifen citrate administration in Western diet-fed animals led to an increase in gut *L. johnsonii* and *L. lactis* abundance.**

## Proposed Mechanism

