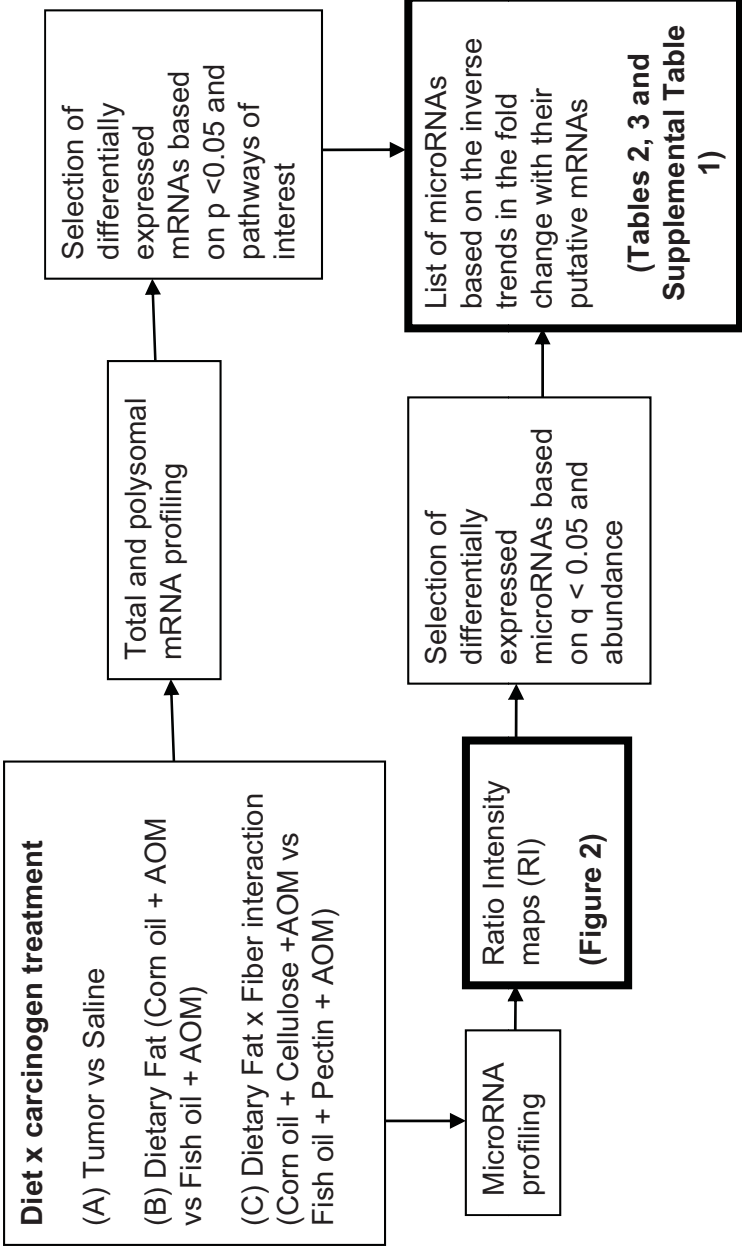
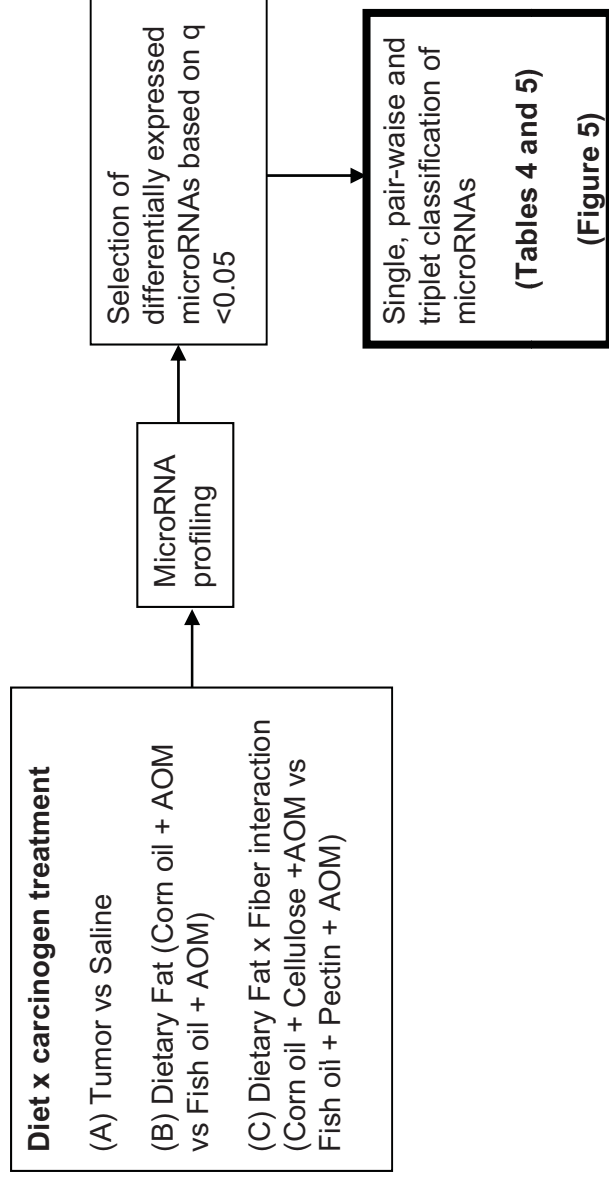


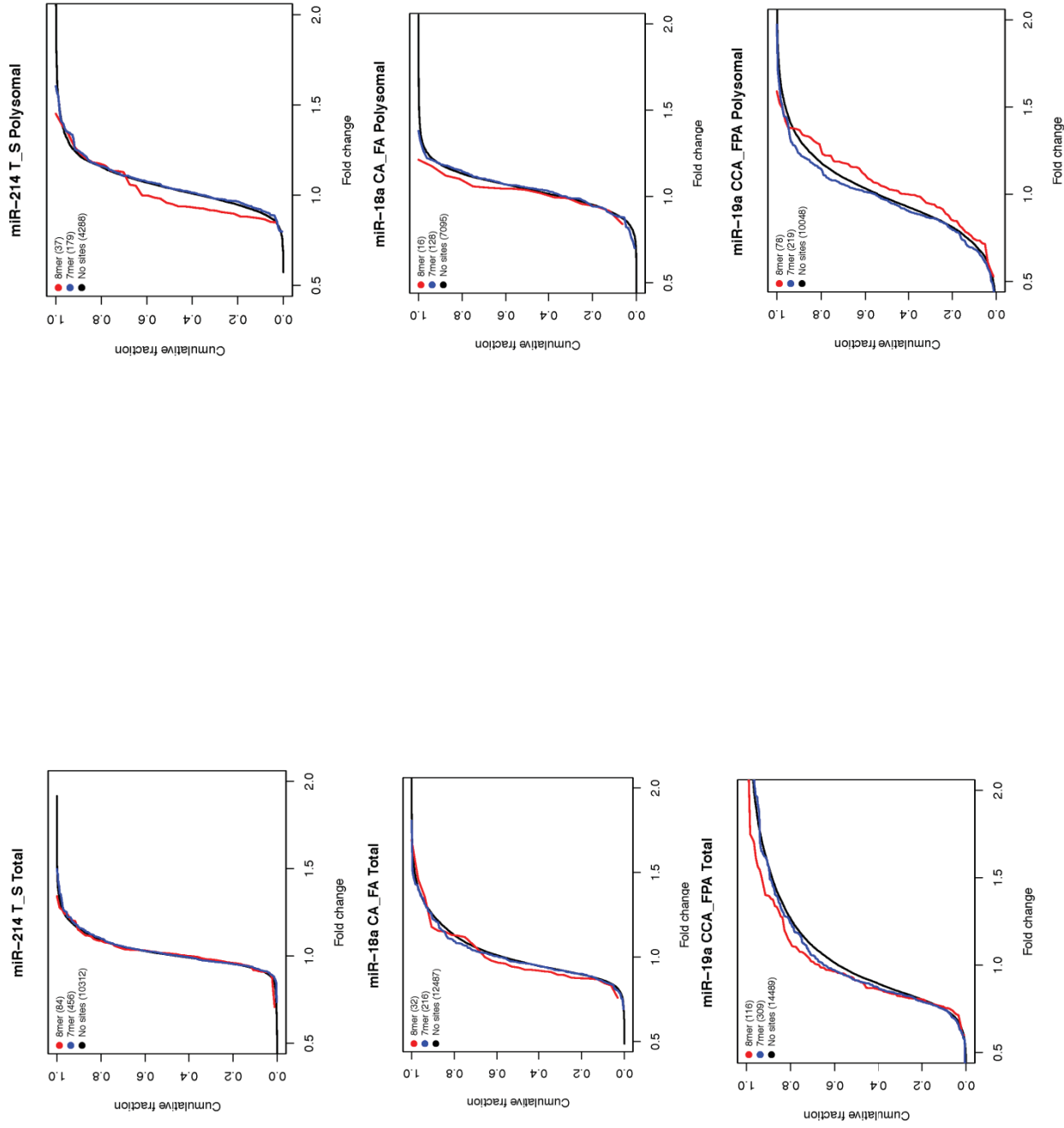
Supplemental Figure 1. Overview of analysis pipeline. (a) Selection of enriched microRNAs based on the significant enrichment of their target mRNAs using GSEA.



Supplemental Figure 1 (b). Selection of microRNAs based on coherent relationship with their target mRNAs.



Supplemental Figure 1 (c). Linear Discriminant Analysis (LDA) for classification of microRNAs



**Supplemental Figure 2. Cumulative distribution function analysis (CDF).** CDFs represent the fold changes for putative microRNA target lists partitioned by 8mer (red), 7mer (blue) and no microRNA-mRNA (black) seed pairing in the 3'UTR. CDFs for total and polysomal mRNA are shown for miR-214 in the tumor vs saline comparison, miR-18a in the corn oil+AOM vs fish oil+AOM comparison and miR-19a in the corn oil+cellulose+AOM vs fish oil+pectin+AOM grouping.