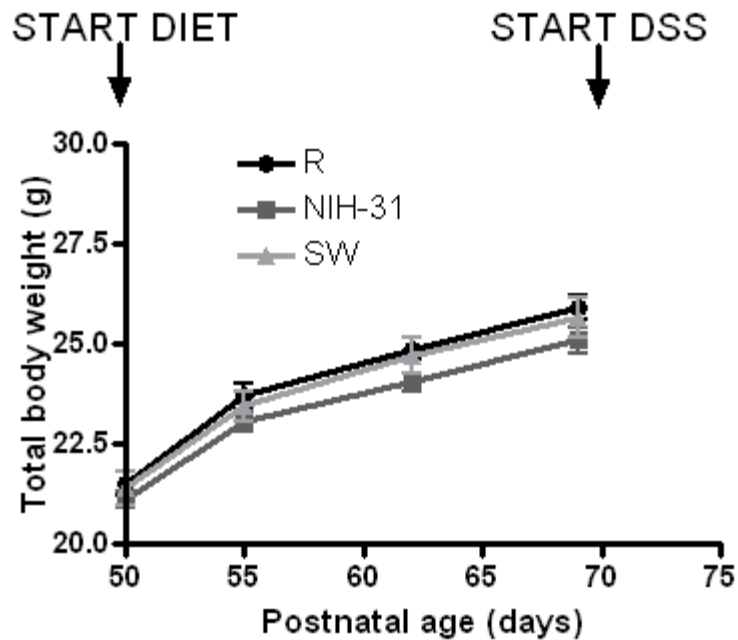
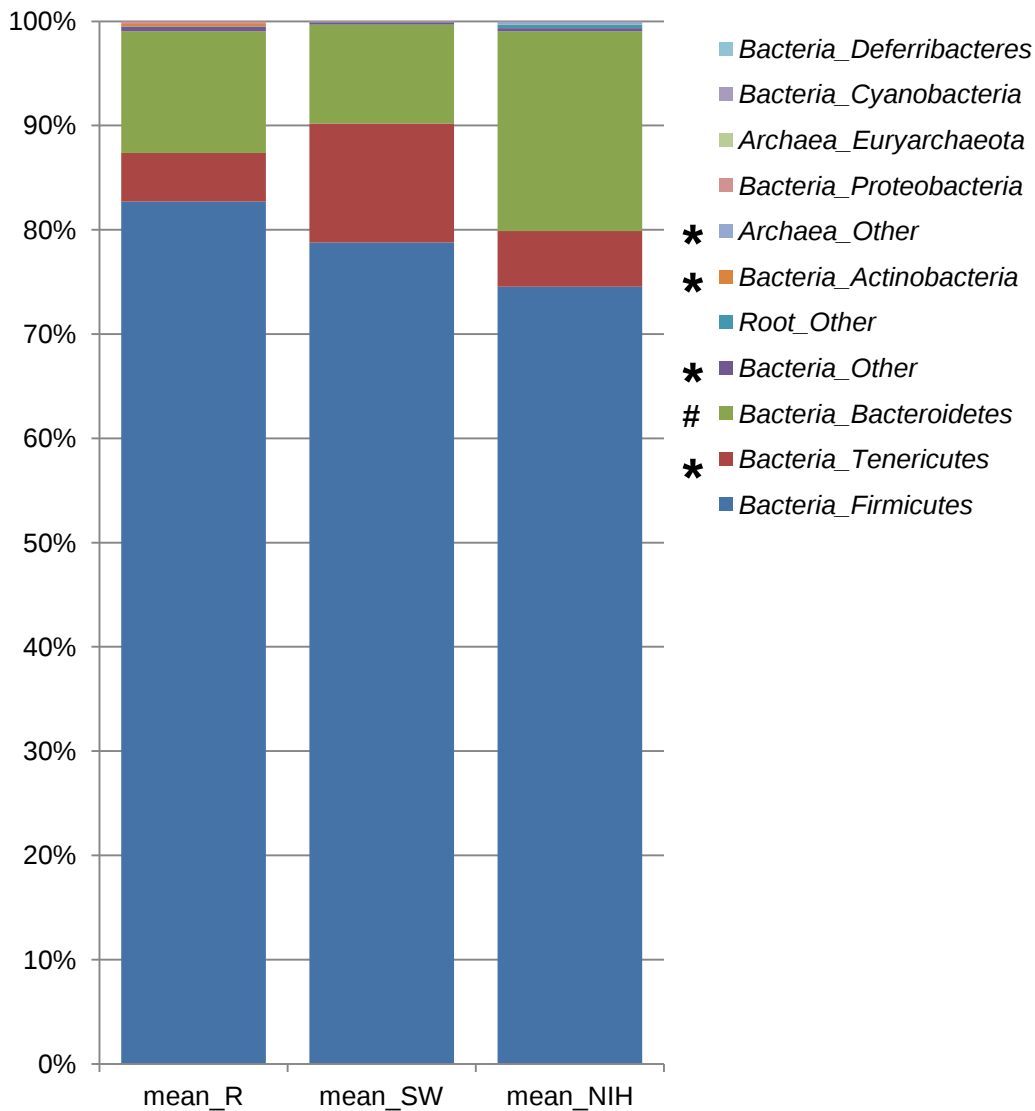
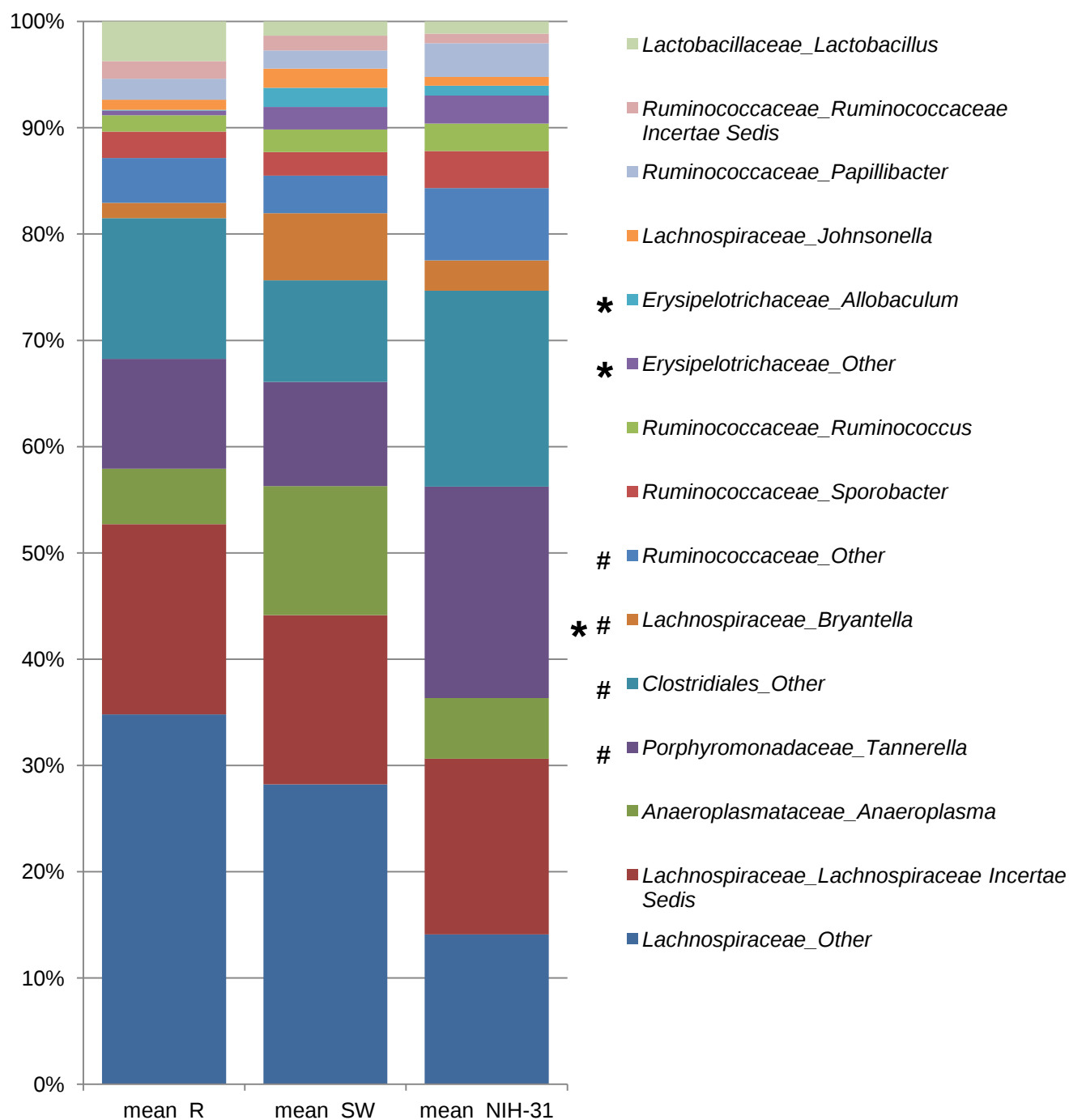




Supplementary Figure 1. There was no significant difference between the dietary groups during the feeding period (postnatal days 50-71). regular (R) chow; NIH-31 diet; switching (SW) diet group



Supplementary Figure 2. Abundance of the most predominant and ubiquitous phyla in the colonic mucosa of the different diet groups (R: regular diet, NIH-31: NIH-31 diet, SW: switching diet). Significant differences between the SW and control groups are highlighted ($p < 0.05$, *SW vs. R; #SW vs. NIH-31). There was a trend for *Bacteria-Tenericutes* increase in SW compared to NIH-31 ($p = 0.055$) as well. See Table 2 for numeric details.



Supplementary Figure 3. Abundance of the most predominant and ubiquitous 15 genera in the colonic mucosa of the different diet groups (R: regular diet, NIH-31: NIH-31 diet, SW: switching diet). Significant differences between the SW and control groups are highlighted ($p < 0.05$, *SW vs. R; #SW vs. NIH-31). See Table 2 for numeric details.