Western children compared to amerindian Larger values equal greater gene abundance in Western microbiomes Glycosphingolipid biosynthesis – ganglio series -Various types of N-glycan biosynthesis -Glycosaminoglycan degradation -Lysine degradation -Other glycan degradation -Sphingolipid metabolism -Glycosphingolipid biosynthesis – globo and isoglobo series – Valine, leucine and isoleucine degradation -Phenylpropanoid biosynthesis -Galactose metabolism -Cationic antimicrobial peptide (CAMP) resistance -Cyanoamino acid metabolism -Inositol phosphate metabolism -Ascorbate and aldarate metabolism -Histidine metabolism -Amino sugar and nucleotide sugar metabolism -Pentose and glucuronate interconversions = Phenylalanine metabolism -Glyoxylate and dicarboxylate metabolism -Propanoate metabolism -Biofilm formation - Vibrio cholerae -Starch and sucrose metabolism -Folate biosynthesis -Two-component system -Fatty acid biosynthesis -C5-Branched dibasic acid metabolism -Oxidative phosphorylation -Glycerophospholipid metabolism -Streptomycin biosynthesis -Protein export -Monobactam biosynthesis -Pyruvate metabolism -Metabolic pathways -Glycine, serine and threonine metabolism -Fatty acid metabolism -FDR adjusted Glycolysis / Gluconeogenesis = p-value Pathway Alanine, aspartate and glutamate metabolism -0.01 <= p.adj < 0.02 Carbon metabolism ---- 0.03 <= p.adj < 0.04 p.adj < 0.01 Biosynthesis of secondary metabolites -Biosynthesis of antibiotics -Arginine biosynthesis -Nicotinate and nicotinamide metabolism -Pyrimidine metabolism -Biosynthesis of amino acids -Vancomycin resistance -Phenylalanine, tyrosine and tryptophan biosynthesis -Riboflavin metabolism -Lysine biosynthesis -Nitrogen metabolism -DNA replication -Cysteine and methionine metabolism -RNA degradation -RNA polymerase -Purine metabolism -D-Alanine metabolism -Mismatch repair -Drug metabolism – other enzymes -Fatty acid degradation -D-Glutamine and D-glutamate metabolism -Bacterial secretion system -Peptidoglycan biosynthesis -Methane metabolism -RNA transport -Lipopolysaccharide biosynthesis -Vitamin B6 metabolism -Phosphotransferase system (PTS) -Nucleotide excision repair -Terpenoid backbone biosynthesis -Homologous recombination -Aminoacyl-tRNA biosynthesis -Selenocompound metabolism -Biofilm formation – Pseudomonas aeruginosa --0.5 0.5 -1.01.0 Difference in logit-transformed KEGG pathway abundance