## **Human gut microbiome across diets**

People: #People/OnofrioMazzarisi #People/SabrinaSpigno

## Point 1

1. SAD does not change, no need to go on

## Point 2

- 1. Fig5 with occurrence per diet just one of the diets needs to satisfy the occurrence criterion. The total occurrence selects points in the middle of the plot.
- 2. Fig5 with occurrence per diet All the diets need to satisfy the occurrence criterion independently.
- 3. New Figure 5: The behaviour of species occurrence per diet: instead of using the average abundance as a coordinate use the occurrence.
- 4. Same as before but using the geometric mean abundance among samples where the species is present as a coordinate

## Point 3

- 1. Select the species that occur in all (almost?) the samples (per diet or total)
- 2. compute the MAD (Mean Abundance Distribution) and the AFD (Abundance Fluctuation Distribution... or Alternative Fur Deutschland) from [Grilli 2020] we expect that MAD is Lognormal, AFD is Gamma.
- 3. Select species that are present in most of the samples (independently of the diet). Compare the species abundance variance within a diet, across different diets.

