

Mediation analysis

TASK 1 - Mediation analysis: File `diet2.dta` is a Stata database including information about several diseases and confounding variables (columns 1-16), nutrients (columns 17-26) and food consumption (columns 27-48).

Open an R Markdown document and perform the following tasks by writing comments to each step

1. Load data into R and save the information in an object called `diet`.
2. Let us imagine that researchers are interested in determining those nutrients and foods that are associated with colorectal cancer (variable `casoc`). Create another database called `diet.cc` removing missing of variable `casoc`

```
diet.cc <- diet[!is.na(diet$casoc),]
```

3. Create a table describing whether patient's characteristics are comparable among cases and controls (variables `edad`, `sexo`, `estudios`, `peso`, `altura`, `mets_10a`, `mets_5a`, `Diabetes`, `Hipertensio`, `Colesterol`). NOTE: use the function `export2md` to get a nice table into the .html output.
4. Create a table computing OR for control vs colorectal cancer for all variables but: `id`, `tipocancer`, `casom`, `casop`, `casoe`. NOTE: use the function `export2md` to get a nice table into the .html output.
5. Perform mediation analysis considering cholesterol as a mediator of the association observed between consumption of processed meat (variable `gra_conveniencefood`) and colorectal cancer (variable `casoc`). NOTE: adjust the models by `sexo`, `t_energy`, `BMIhoy` and `edad`.