Olive leaf extract project ideas

Want to strengthen claims:

Energy, Appetite suppression, Weight loss, Lower cravings, Sleep efficiency

Compare between comvita OLE batches to determine if they are consistent, compare to other OLE on the market (different extraction methodology/ olive tree variety can effect etc) and pure oleuropein supplements.

Determine whether the oleuropein is the only necessary component for the health benefits of OLE or whether there are other essential compounds/ flavonoids etc (ie oleanolic acid, luteolin) that make a OLE better.

Whether extraction methods have an effect on the supplements efficiency.

Whether there is another essential compound for health that may differ in concentrations between OLEs.

Two parts to the study

1. questionnaire/food diary from healthy volunteers taking OLE or placebo/oleuropein. Take over 6 weeks period, washout and crossover.

2) in vitro study culturing healthy volunteers WBC’s with the OLE/supplements of interest. Followed by DNA microarray to determine what genes are up, down-regulated or unaffected.

Use methods similar to Stacey’s thesis but instead of looking directly at inflammatory markers would do a DNA array ie Affymetrix.

WBC taken from healthy volunteers, culture cells with phenolic compounds (pre-treatment approx. 6hours) and stimulate cells (LPS or equivalent). Will use different phenolic and OLE supplements to pretreat.

Do not need to create a hypothesis but can generate one from the results of the affymetrix array, it will show which genes/pathways are regulated.