To determine the most effective solvent for gingerol/shogaol extraction from Rhizoma Zingiberis Suspension was sonicated for one hour at room temperature to analyze differences between the gingerol/shogaol content of fresh ginger and ginger dietary supplement capsules.

- Comparative chemical analysis of gingerols and shogaols in fresh ginger and dietary supplements provided insights into their extraction and stability.
- Water proved most effective in extracting fresh ginger, while methanol was effective in the extraction of ginger capsules and DCM did not yield complete extraction.

Procedure
1. Five hundred grams of ginger samples were grounded separately from the capsules, rinsed, and mixed with solvent.
2. Replicate dilutions were performed to ensure complete extraction.
3. The mixture was filtered to remove solid particles, and the solution was evaporated.

Conclusion
Ginger is a potentially very effective phytotherapy in treating a wide variety of illnesses. Efficient extraction of potentially and practically beneficial compounds from ginger is an important step in our understanding and efficient use of its medicinal properties. This project found that 80% methanol/20% water mixture was the most effective solvent in the extraction of the four investigated compounds. Methanol proved effective in the extraction of ginger capsules and DCM was effective in extracting fresh ginger.

References