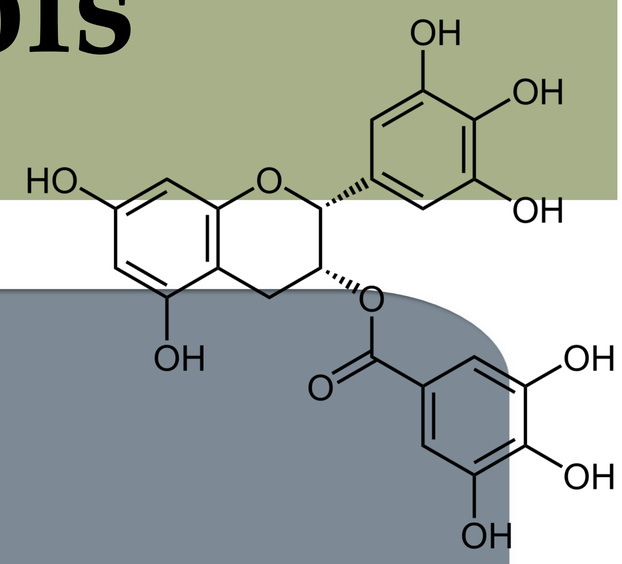
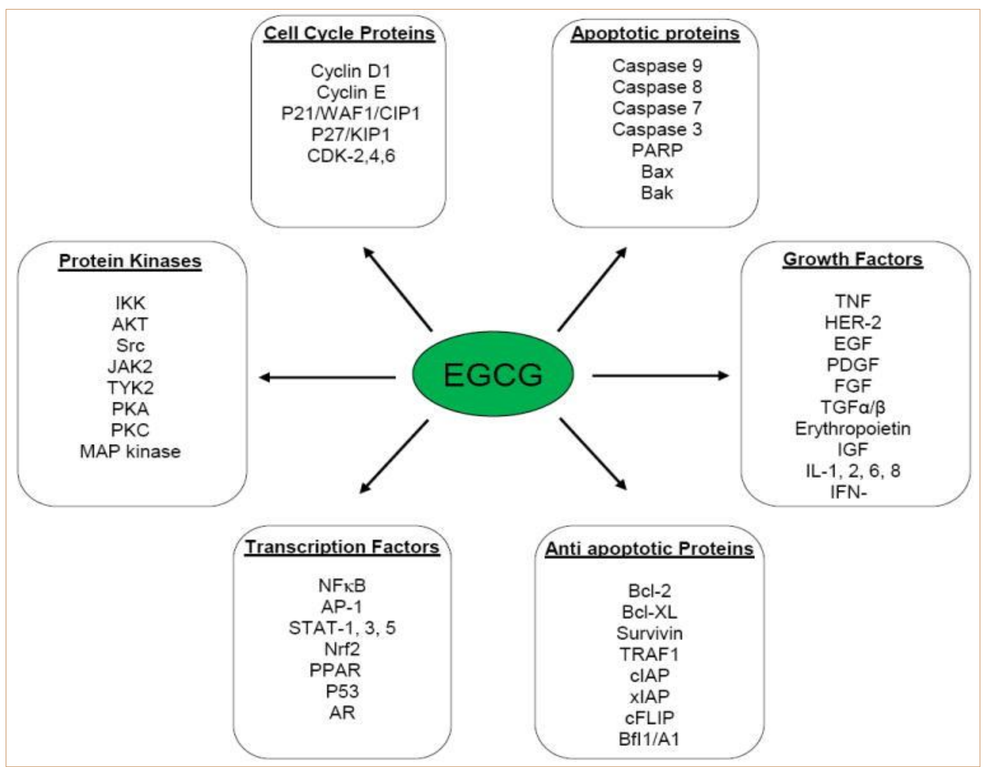
Nutrigenomic: Gene-diet interaccions in green tea polyphenols



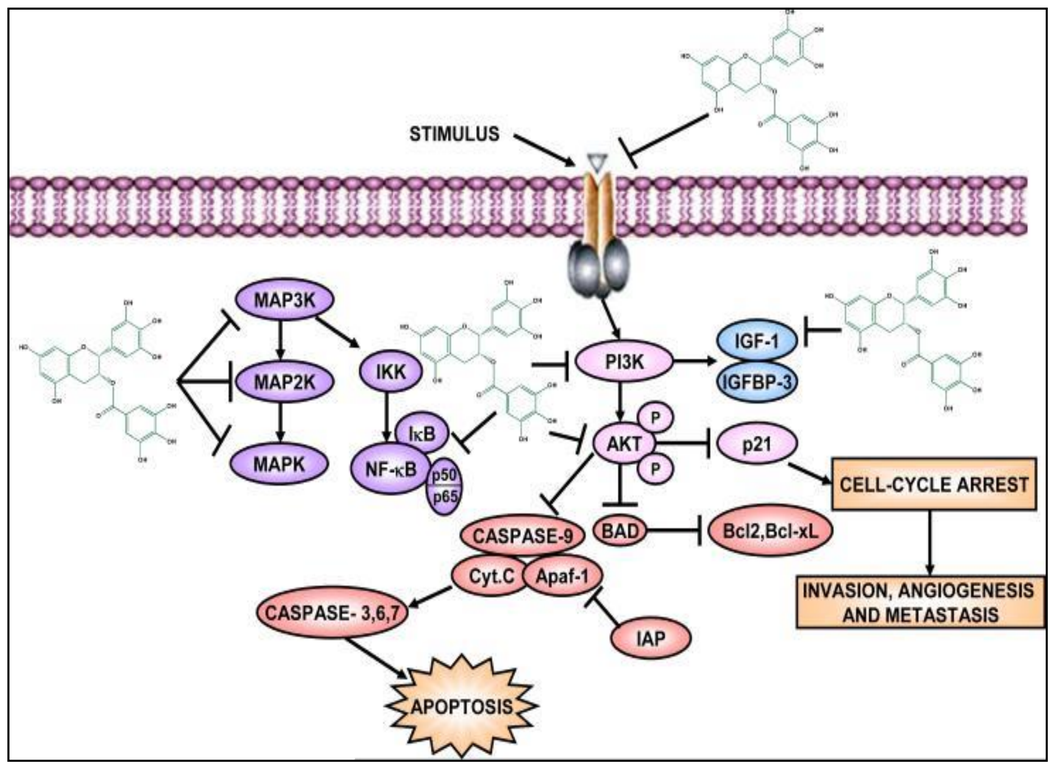
OBJECTIVES

- Have an overview of nutrigenomic
- Know the main bioactive component of green tea and its features.
- Understand the molecular signaling pathways and mechanisms of action relate to green tea polyphenol: epigallocatechin-3-gallate.
- Gene expression changes induced by green tea polyphenol epigallocatechin-3-gallate in n several cell lines of different cancer types.

Mechanisms of action of EGCG



Signal transduction pathways of EGCG



CONCLUSIONS

- Green tea polyphenols down-regulate the expression of genes involved in celular proliferation and they up-regulate apoptotic genes.
- EGCG could have an important role in cancer prevention.