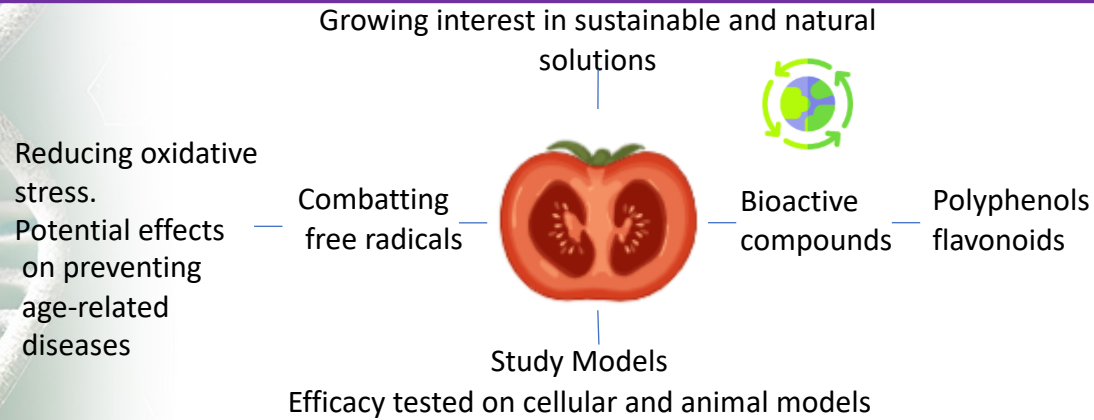


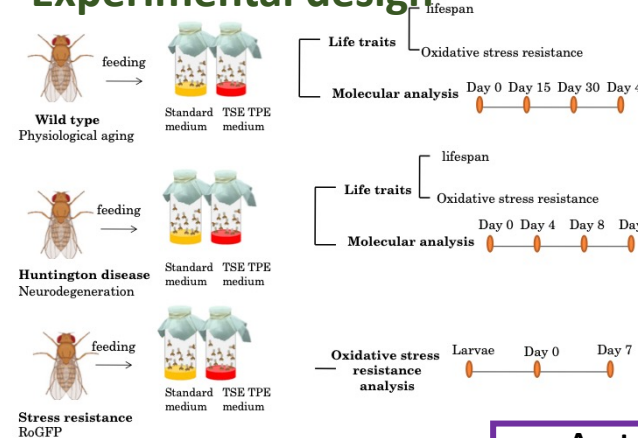
Effects of the Byproduct of tomato processing on Aging in *Drosophila melanogaster*

Maria Rosaria Carillo^{1,2}, Filomena Anna Digilio^{1,3}

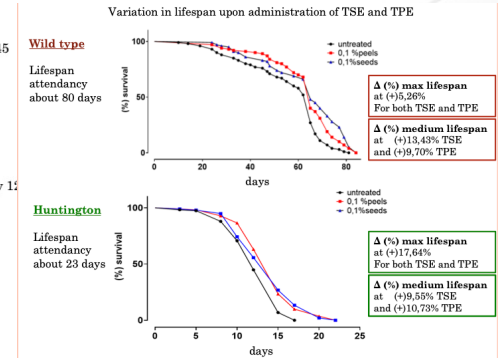
The **aim** of this work is the study of aging utilizing products derived from tomato-industrial waste in the model organism *Drosophila melanogaster*



Experimental design



Lifespan



Molecular analysis

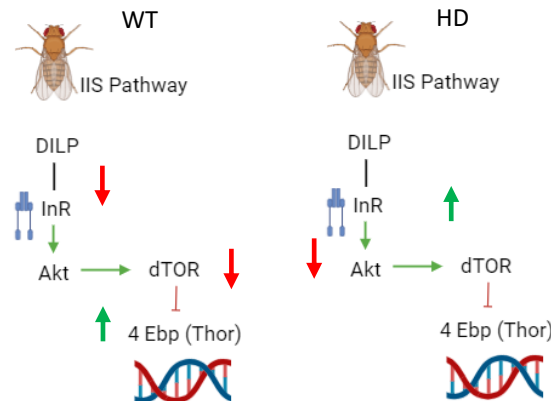
Aging related pathways

Change in gene expression after treatment compared to untreated

	Aging	Wild Type	Huntington
Oxidative stress regulation	Keap1	↑	↓
	Nrf2	↓	↑
Tissue regeneration	Dome	↓	↑
	Inflammation	↓	↑
Inflammation	Sirt 1	↓	↑
	Stress resistance	↓	↑

•TSE
•TPE

Insuline pathway regulation (IIS)



Autophagy regulation

Molecular analysis

Aging

Ref 2

Atg8

Gabarap

•TSE
•TPE

Wild type

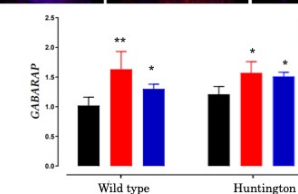
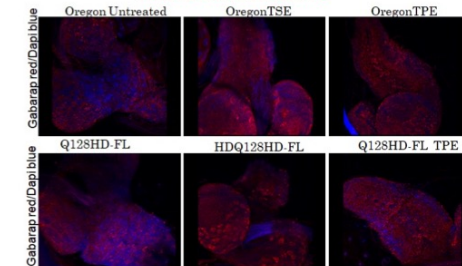
Huntington

Ref 2

Atg8

Gabarap

Immunohistochemistry



F. Anna Digilio