

Integrated Approach Based on Tumor Niche and Metabolic Vulnerabilities
– Substances (Phytochemicals, Natural Compounds, Pharmaceuticals) – <stnv Basic Medical Laboratory>

Classification of Substance	Substance Name	Main Source	Prevention of Tumor Niche Formation (Cancer prevention / recurrence prevention)	Collapse of Tumor Niche (Therapeutic approach)	Metabolic Suppression of Cancer Cells / Cancer Stem Cells (Therapeutic Aid)
Polyphenols	Quercetin	Onion, green tea	○	○	○
	Fisetin	Mulberry leaves, strawberries	(○)	○	○
	Apigenin	Parsley, celery	(○)	○	○
	Apigenin → Apigenin	Dandelion coffee	(○)	○	○
	Luteolin	Garland chrysanthemum, celery	○	○	○
	Resveratrol	Japanese knotweed, red/black grapes	○	○	○
	EGCG(Epigallocatechin gallate)	Green tea	○	○	○
	Other catechins	Green tea, black tea	○	○	
	Curcumin	Turmeric	(○)	○	
	Genistein	Soybeans, soy products	○	○	
	Daidzein → Equol	Soy + gut microbiota	○	(○)	
Sulfur-containing Compounds	DATS (Diallyl trisulfide)	Garlic, chives	○	○	○
	DADS (Diallyl disulfide)	Garlic, chives	○	○	○
	Sulforaphane	Broccoli sprouts	○	○	○
	Onion A	Onion	○	(○)	
	PEITC(phenethyl isothiocyanate)	Cabbage, watercress	○	(○)	
	BITC(benzyl isothiocyanate)	Cabbage, papaya	○	(○)	
	Allyl isothiocyanate	Wasabi	○	(○)	
	Raphasatin	Daikon radish	○	(○)	
Indoles	DIM(Diindolylmethane)	Cruciferous vegetables	○	(○)	
	I3C(Indole-3-carbinol)	Cruciferous vegetables + gut microbiota	○	(○)	
Carotenoids	β-Cryptoxanthin	Paprika, mandarin orange	○		
Polyamines	Spermine / Spermidine	Wheat germ, natto, bell peppers	○		
Polysaccharides	β-Glucan	Mushrooms, seaweeds	○	(○)	
	Fucoidan	Brown algae	○	(○)	
Other Natural Compounds	Gingerol → Shogaol	Ginger	○	(○)	
	γ-Oryzanol / Ferulic acid / Phytic acid	Brown rice	○		
	Cannabinoids (CBD)	Hemp	○	(○)	
	Taurine	Seafood	○	(○)	○
Pharmaceuticals / Therapeutic Interventions	Disulfiram (ALDH inhibition)			(○)	○
	Metformin (AMPK activation)		(○)	○	○
	Ketone bodies (Metabolic environment shift)		(○)		○