

Protein Is Not What I Once Thought It Was 59+ Years Ago

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Feeding Malnourished Children

Promoting Greater Protein Consumption



1966-1975



nutritionstudies.org

Whoops....More liver cancer among children
consuming more protein???



Supporting Evidence

(Aflatoxin Initiation—Protein Promotion)

Dietary Protein (%en)	Animals with tumors and hyperplastic nodules
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20% (regular)

30/30 (100%)

5% (low)

0/12 (0%)

Madhavan and Gopalan, 1968.
Confirmed by Wells et al, 1974.

← 47 years ago



Follow-Up Experimental Research (NIH Funded) (1969-1997)

Confirm Madhavan et al

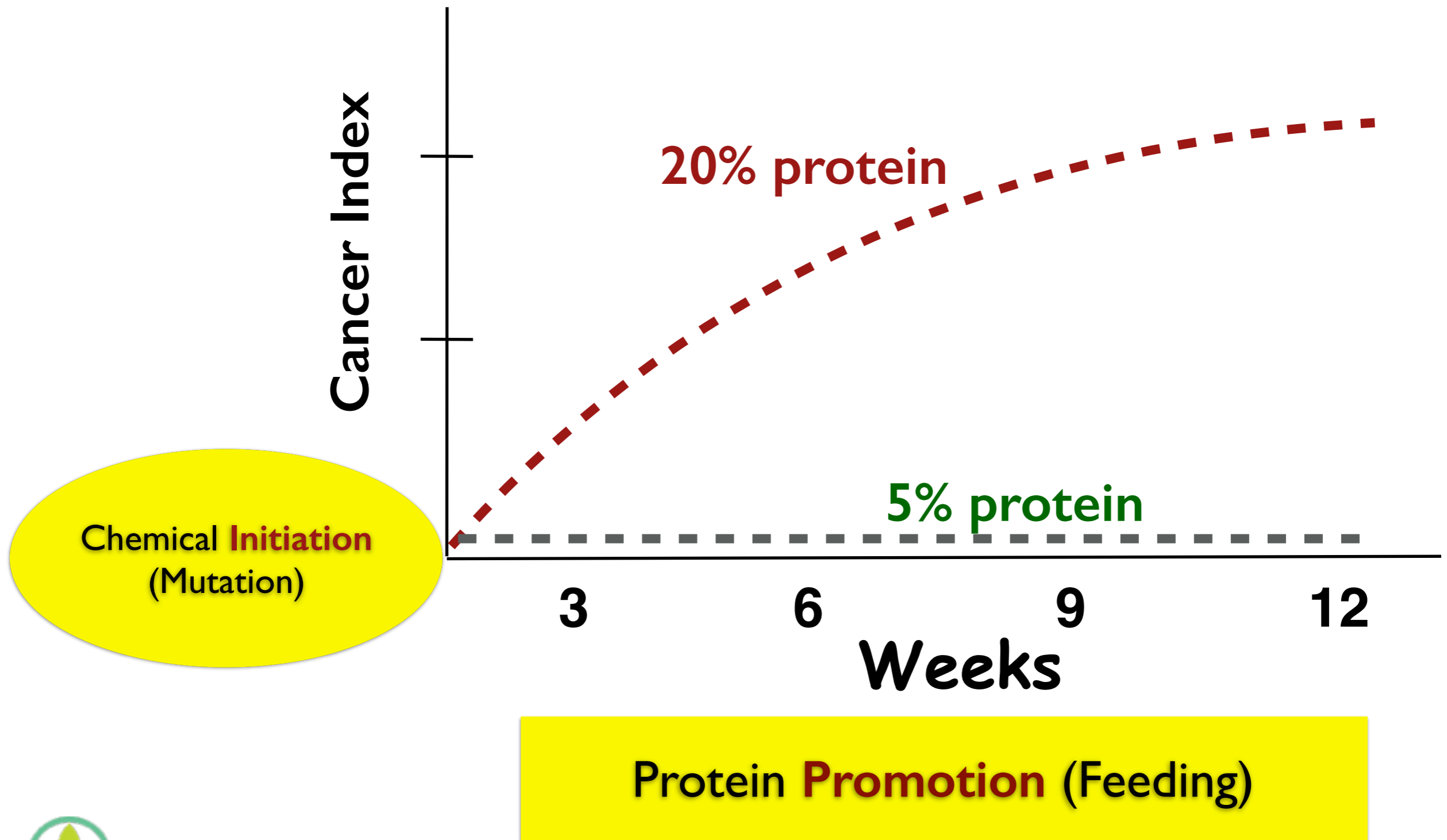
Determine mechanism ('**biological plausibility**')

Discovering a new world of nutrition principles—
it's all about science



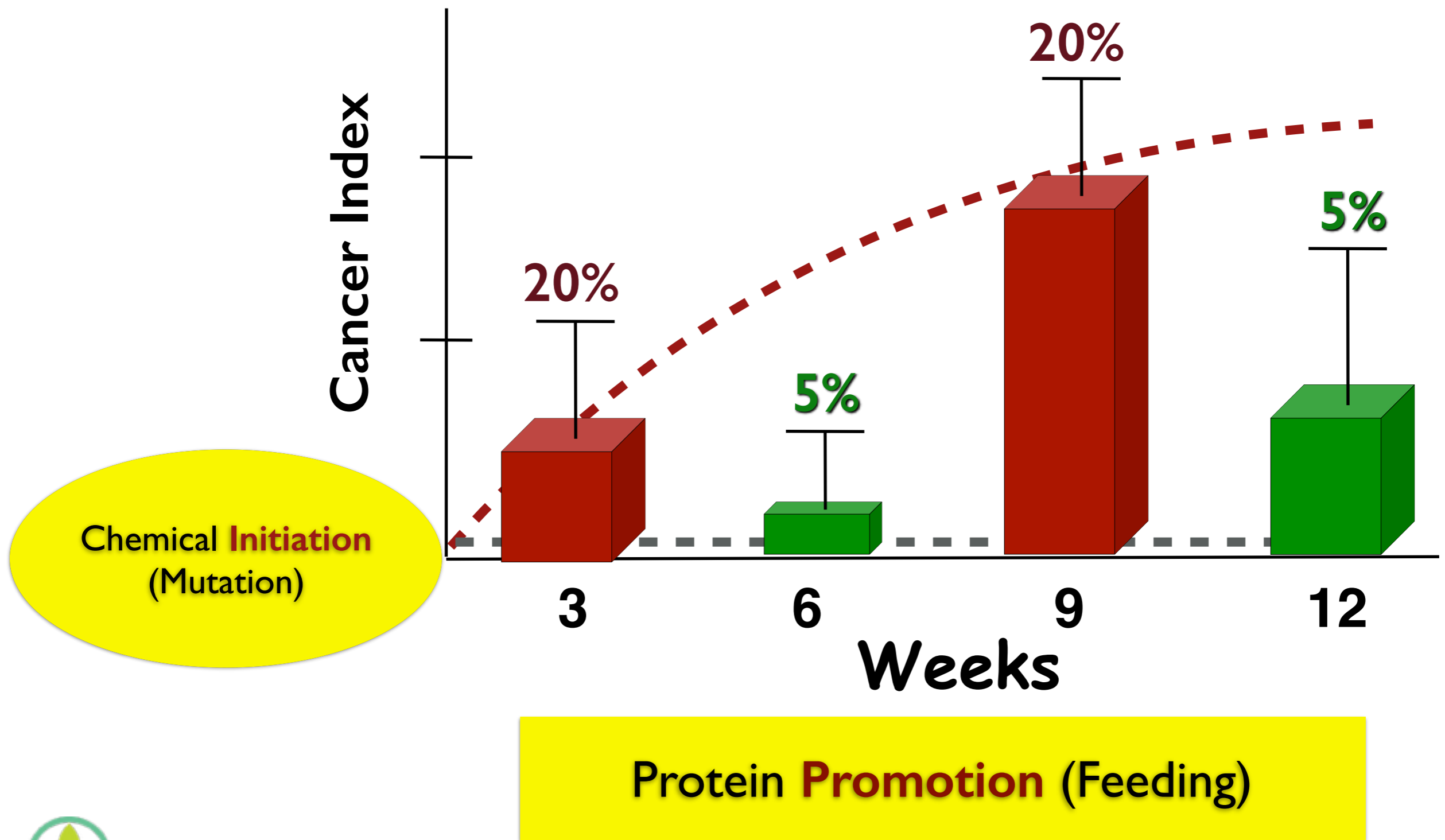
Dietary Protein and EARLY Cancer

(Appleton and Campbell, Canc. Res., 1983; Youngman and Campbell, J. Nutr., 1991, Youngman and Campbell, Nutr. Canc., 1992)

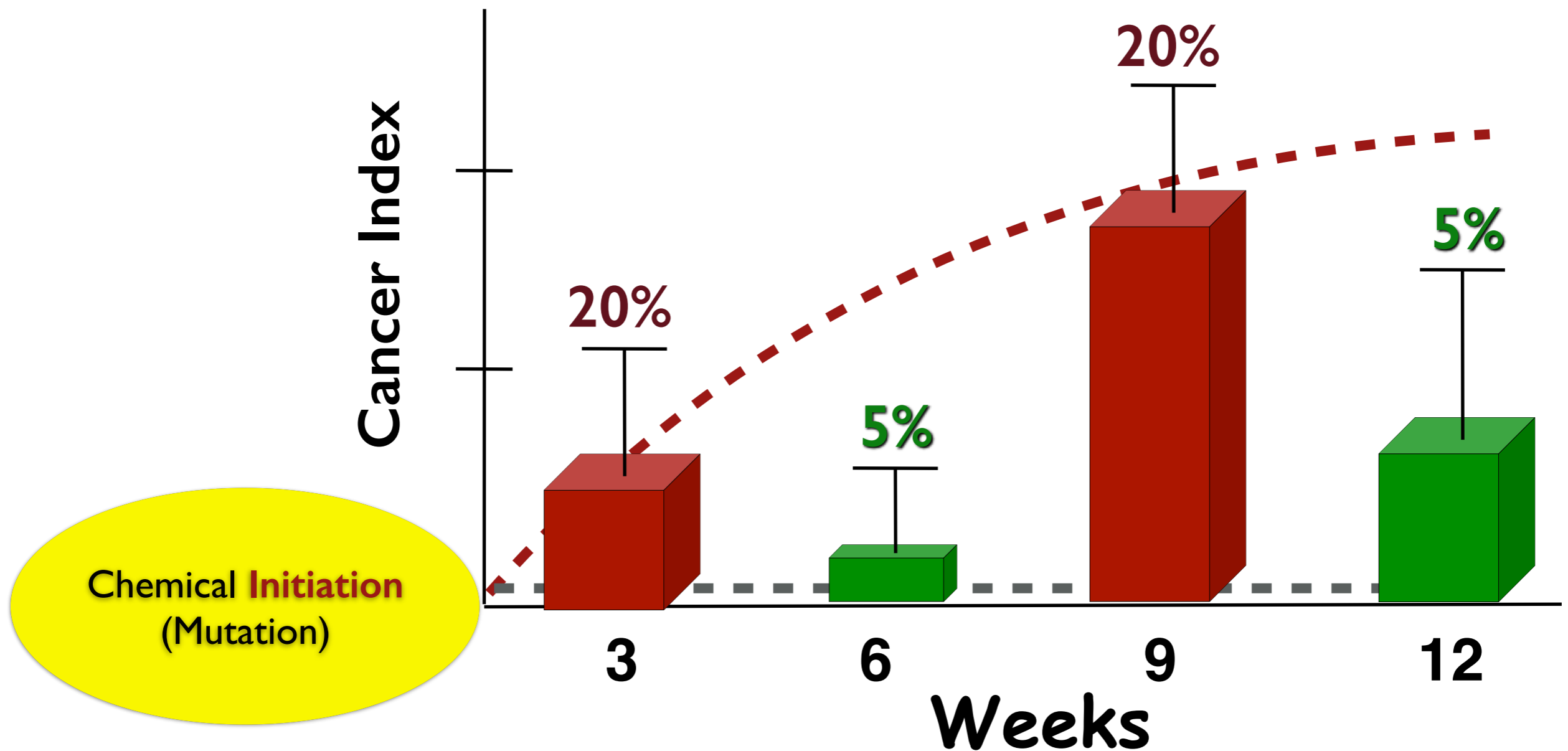


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Principle I: Nutrition Controls Cancer



Dietary Protein and Lifetime Cancer (Rats)

(Youngman and Campbell, Carcinogenesis, 1992)

Chemically Initiated: Nutritionally Promoted

Protein, %		# Animals	Tumor Severity*
5	All living at 100 weeks	60	248
20	All dead at 100 weeks	58	3321

* % incidence x tumor weight.

Experimental Protein is **CASEIN** (Main Protein of Cow's Milk)

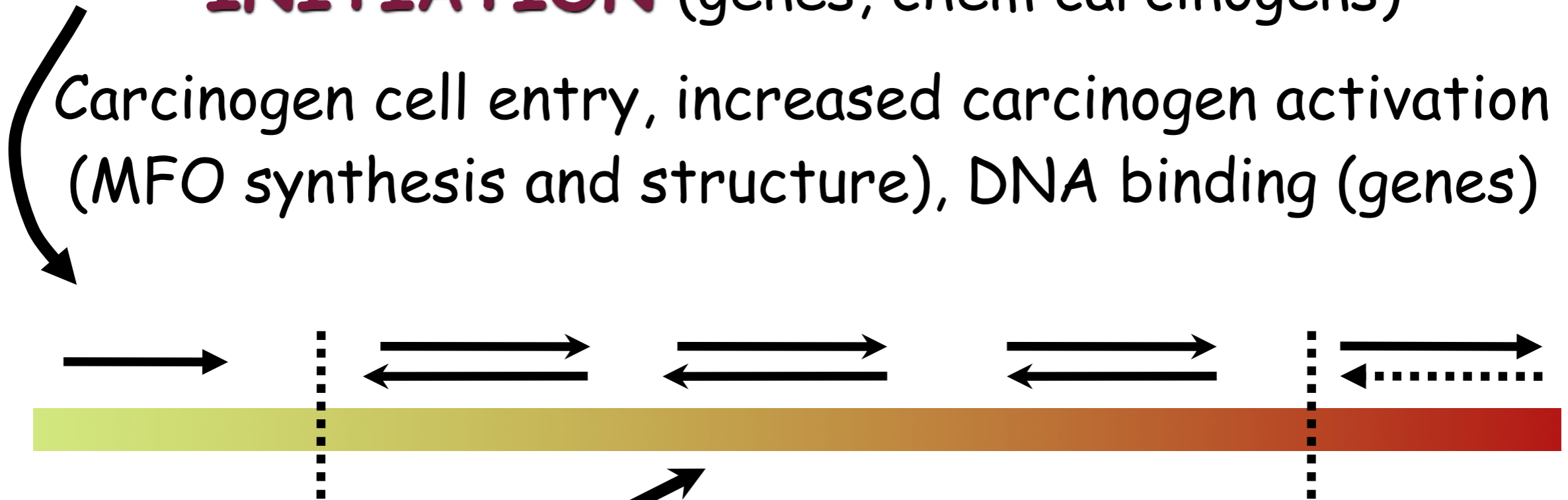
Principle 2: Animal Protein Functions
Differently From Plant Protein

Soy & **wheat** protein did not increase pre-cancer development, even at 20% of diet calories

Principle 3: Nutrition Involves Countless Mechanisms

INITIATION (genes, chem carcinogens)

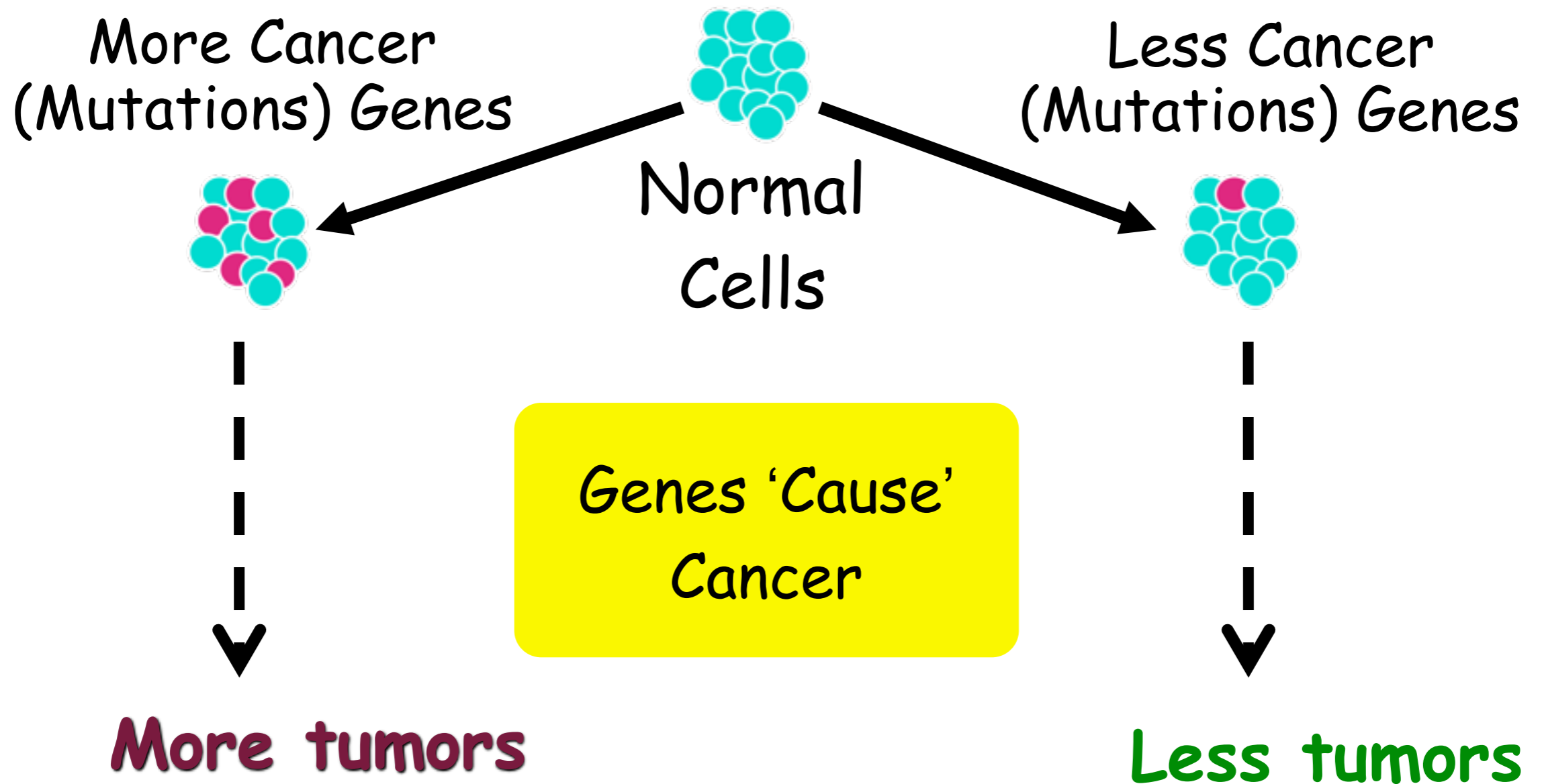
Carcinogen cell entry, increased carcinogen activation (MFO synthesis and structure), DNA binding (genes)



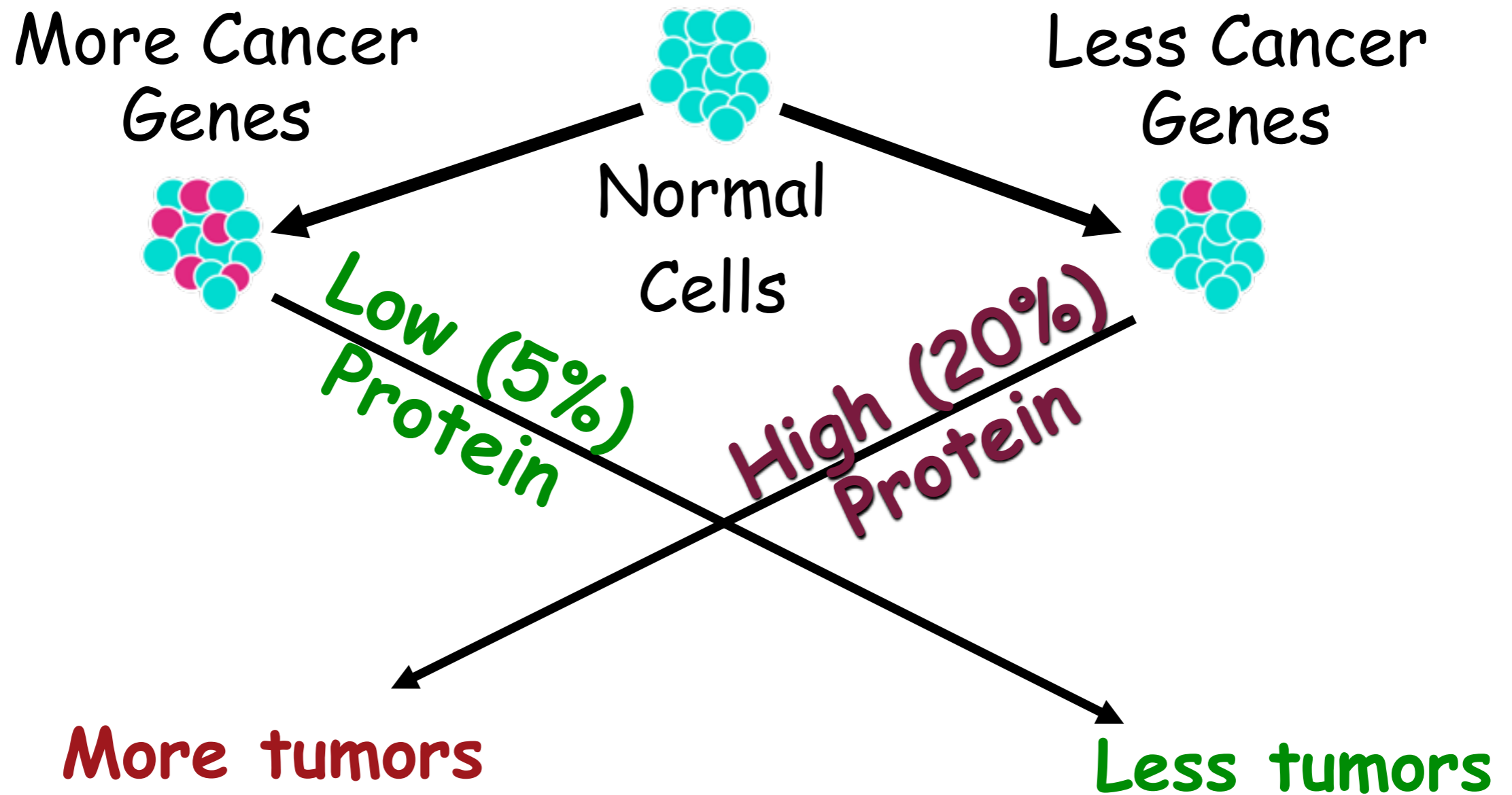
PROMOTION (nutrient imbalances)

Increased cell replication and IGF, decreased NK cell activity, oxidant activity

Genetics Or Nutrition? (Early 1980s)

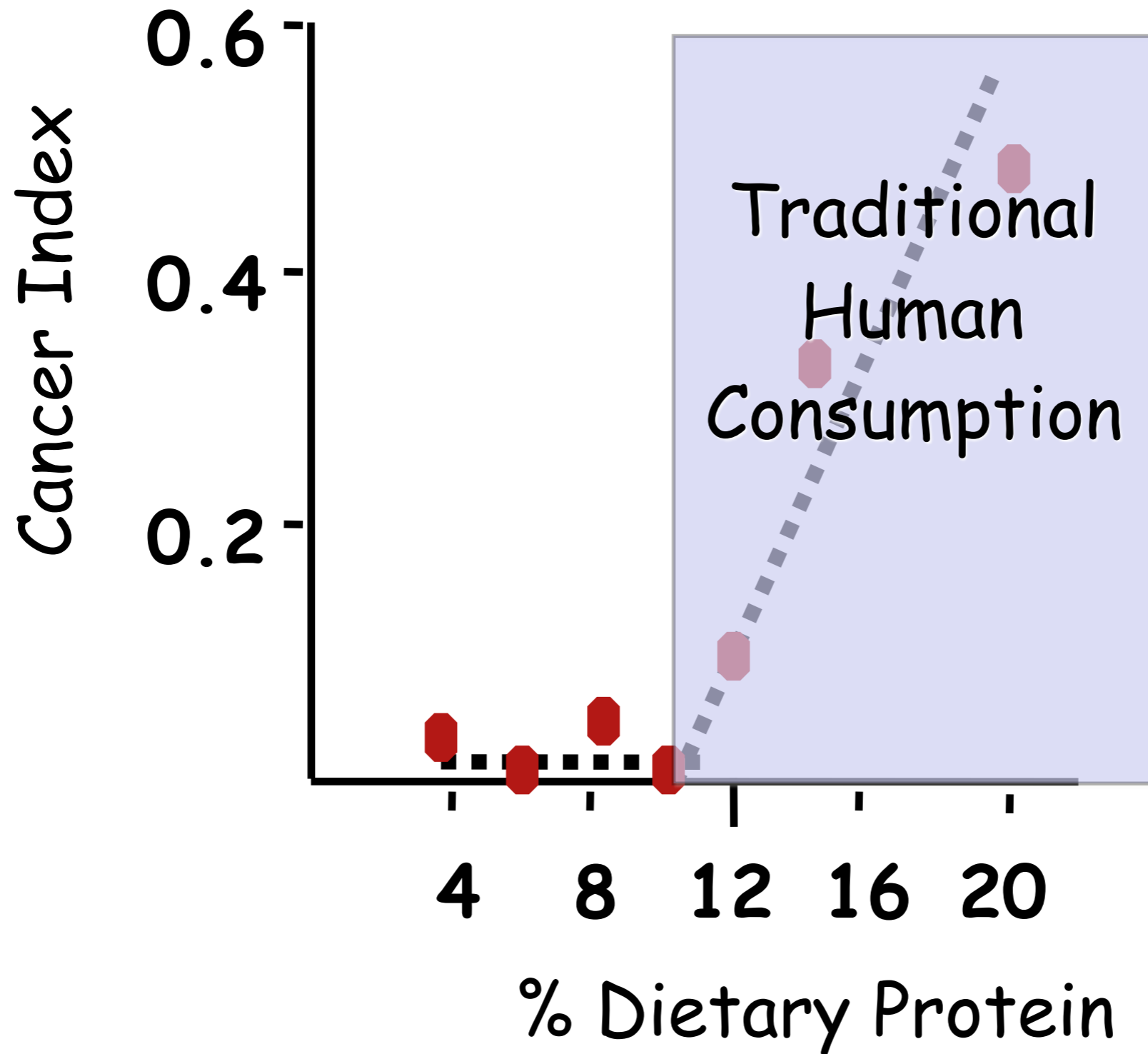


Principle 4: Nutrition Controls Genes Irrespective Of Mutagenic Dose



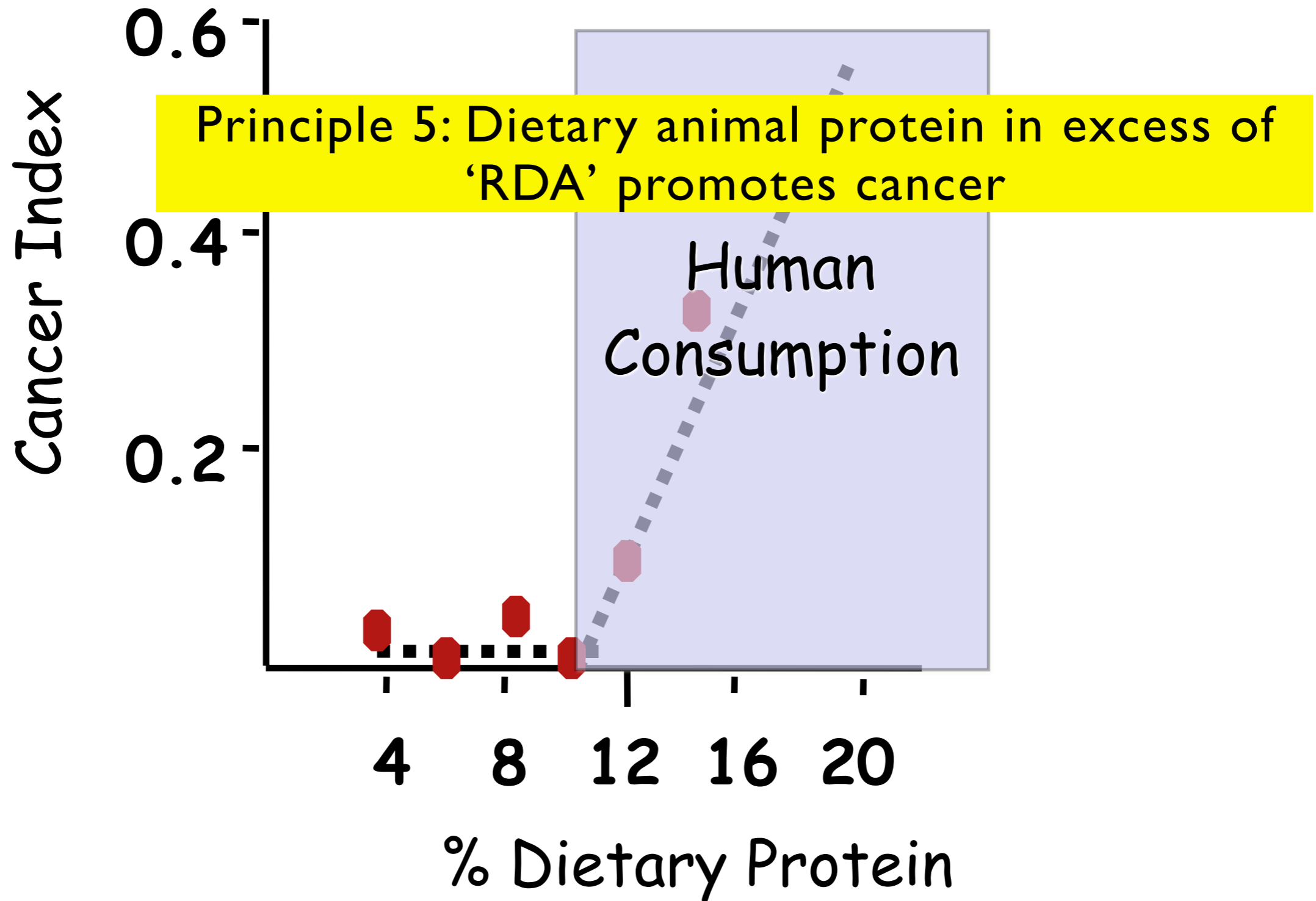
Dietary Protein and **EARLY** Cancer

(Dunaif and Campbell, J. Nutr. 1987)



Dietary Protein and **EARLY** Cancer

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NUTRIENT COMPOSITIONS*

COMPONENT	PLANT	ANIMAL
Antioxidants	Only Made By Plants	Almost None
Complex Carbs	Only Made By Plants	None
Vitamins	Made By Plants	Almost None
Fat	~9-11%	~15-20%
Protein	~9-11%	~15-20%

***PROCESSED FOODS are varied, likely worse**



NUTRIENT COMPOSITIONS*

COMPONENT	PLANT	ANIMAL
Antioxidants	Only Made By Plants	Almost None
Principle 6: Animal protein harm composed of two parts: direct and indirect (i.e., displacement of foods that ought to be consumed)		
Fat	~9-11%	~15-20%
Protein	~9-11%	~15-20%

***PROCESSED FOODS are varied, likely worse**

Hypothesis: Whole Food, Plant-Based Diet Prevents, Suspends and/or Cures All

(Peer-reviewed research findings: refs mostly in "The China Study")

Cancers

Cardiovascular Diseases

Multiple Sclerosis

Kidney Stones

Osteoporosis

Diabetes (I and II)

Rheumatoid Arthritis

Obesity

Erectile Dysfunction

Macular Degeneration

Hypertension

Acne

Migraine

Lupus

Depression

Alzheimer's Disease

Cognitive Dysfunction

Pain



Hypothesis: Whole Food, Plant-Based Diet Prevents, Suspends and/or Cures All

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Cancers

Macular Degeneration

Principle 7: WFPB nutritional effect is broad

Multiple Sclerosis

Acne

Kidney Stones

Migraine

Principle 8: WFPB nutritional effect is rapid

Diabetes (I and II)

Depression

Rheumatoid Arthritis

Alzheimer's Disease

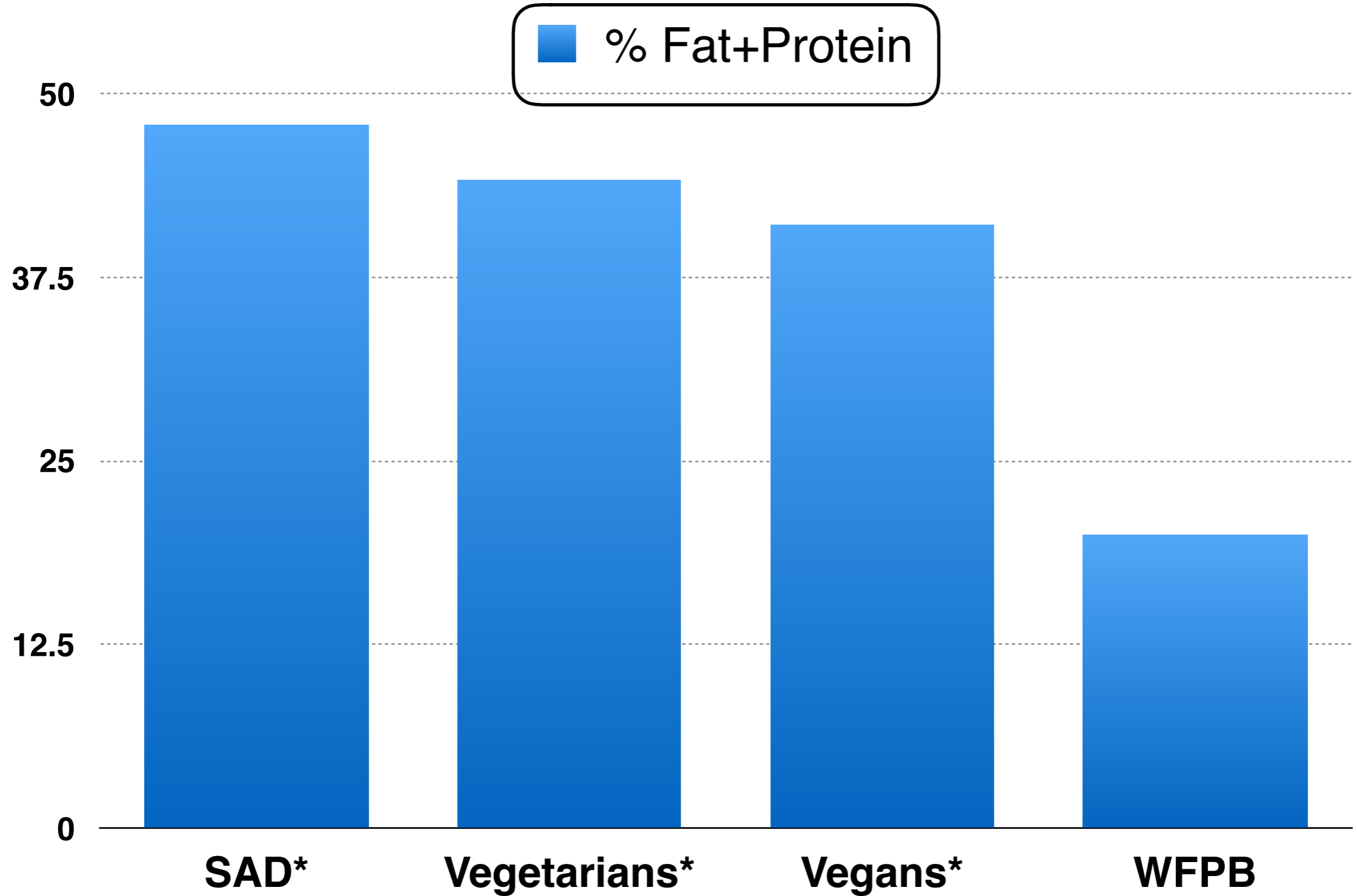
Principle 9: If sustained, WFPB nutritional effect may treat, not only prevent, existing disease

Erectile Dysfunction

Pain



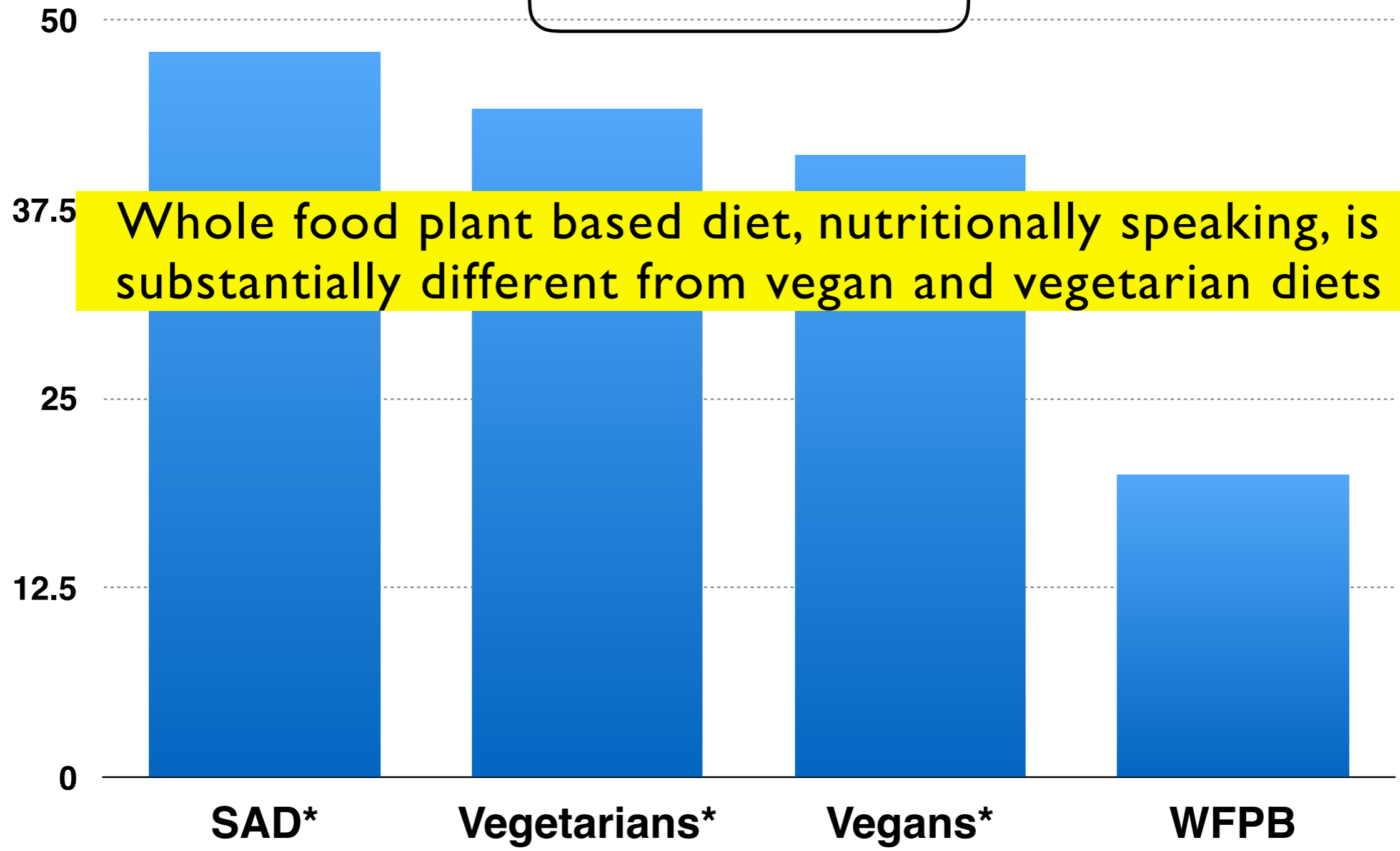
Macronutrient Comparisons



* 65,000 subjects (Davey et al. *Publ.Hlth.Nutr* 6:259, 2002)

Macronutrient Comparisons

■ % Fat+Protein



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Why is the WFPB story not better known?

Because large human studies have not included WFPB subjects, mostly because of the paradigm that promotes reverence for animal-based protein

Thank You