

IMMUNE CELL DIFFERENTIATION OF T-CELLS

A.
Exposome:
 All environmental input into our immune system.
 Antigens Enter Immune System

- Leaky Gut – SIGA, Vit A
- Blood Brain Barrier
- Gums
- Lungs
- Skin

D.
 Vit A – SIGA
 Vit D
 GSH

Innate Immune System
 (any foreign tissue)

Antigen Presenting Cell

Adaptive Immune System
 (recognized foreign tissue)

B.

↓ T-Cell Receptor

Naive T-Cell

↓ TGFβ

Regulatory T-Cell

IL12

IL4

TH1

TH2
 TH-2 TH-17 TH-9 TH-22 TH-fc

C.

Cytokines

↓

INOS
 the demo guy

Tissue Inflammation
 Tissue Breakdown

↓
 Autoimmune Disease

Cancer

(all cancers driven by TH2 & TH17)

Heart Disease

Mood Disorders

Addictions

Obesity

(pro-inflammatory cytokines satiety center)

Pain of all types

Health Builders

E•NOS—vascular function
 N•NOS—nervous system

↔
 Nitric Balance

E.

↓ with
 Tumor &
 Resver

Methylation Cycle
 -homocysteine

Chronic
 “I don’t feel
 Gooditis”