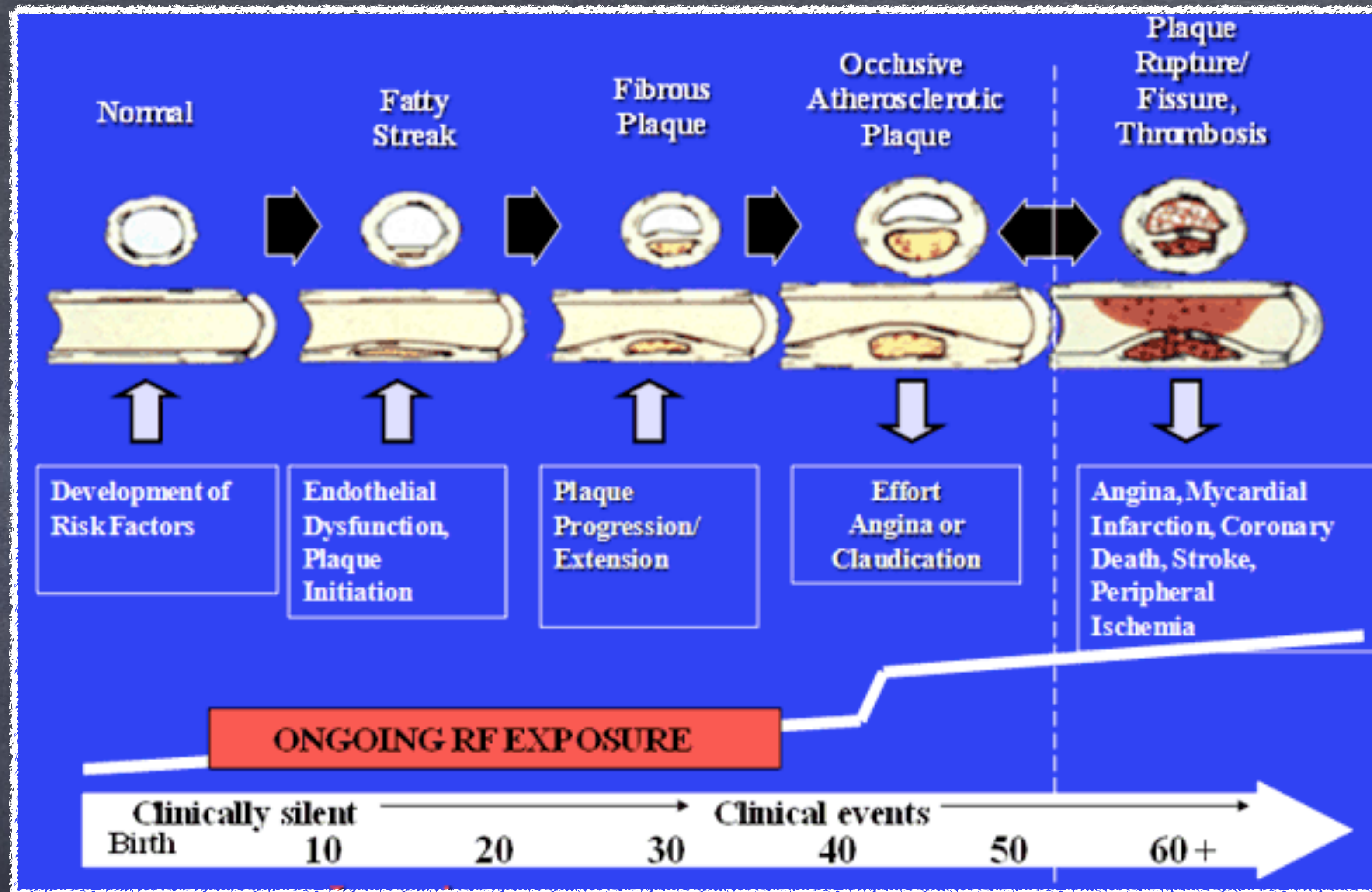


Growing healthy children: Plant based basics

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Co-Founder Plantrician Project



You are what you ate,
You will become what you eat today

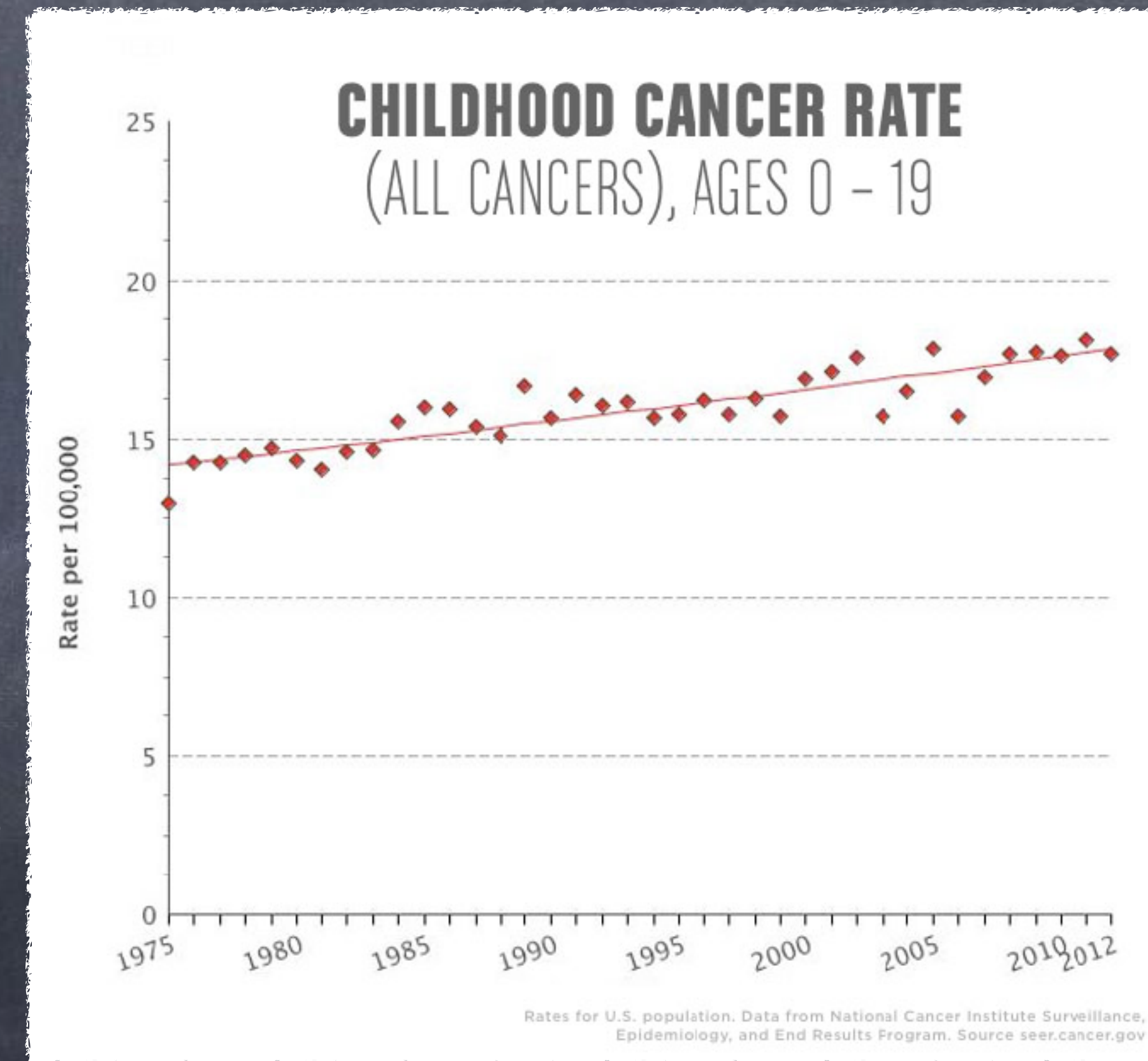


Disease Prevention Begins Early
10-20 years for disease progression

Dietary model to grow cancer

**Diet high in meat
(especially processed
and red meat), cheese,
and refined
carbohydrates**

**Low consumption of
vegetables, fruits, beans
lentils, nuts, and seeds**





KID'S MENU

KIDS EAT
1/2 OFF ON
SUNDAYS!

KID'S MEALS

All kid's meals are served with French fries or potato chips, corn on the cob, apple sauce and a packet of Teddy Grahams!

BBQ RIBS	\$4.45
TOP SIRLOIN STEAK	6.95
HAMBURGER	4.25
CHICKEN TENDERS	4.95
CHEESE NACHOS	4.45
CHEESEBURGER	4.45
MAC & CHEESE	3.95
FISH & CHIPS	4.45
CHEESE QUESADILLA	3.95
CHEESE PIZZA	4.95
CORN DOGS	3.95
GRILLED CHEESE	3.95

FUN KID'S DRINKS

SODA POP (free refills)	1.25
Pepsi	Diet Pepsi
Sierra Mist	Mountain Dew
Dr. Pepper	Mug Root Beer
CHOCOLATE MILK	1.25
MILK	1.25
JUICE	1.25
Apple	Pineapple
Orange	Cranberry
BERRY LEMONADE (free refills)...	1.45
Strawberry	Raspberry
Blue Raspberry	Blackberry
MILK SHAKE	2.25
Chocolate	Vanilla
Strawberry	Coconut
Blackberry	Banana
Peach	Blueberry
Raspberry	

WAY COOL KID'S DRINKS

Teddy Graham Shake	2.45
Three Teddy Graham Bears stand guard over this Cinnamon Teddy Graham Shake.	
Oreo "Smash" Cookie Shake	2.45
Everyone's favorite cookie now in shake form.	
Reese's Nutty Shake	2.45
Get nutty! Our famous shake made with Reese's peanut butter and Hershey's Syrup.	
Root beer Float	1.95
Made with Mug rootbeer	
Tropical Fizz	1.95
A tropical blend of orange juice, cream, cherry & sierra mist.	
Billy's Fruit Smoothie	1.95
A healthy frozen blend of bananas, strawberries, oranges and pineapple juice.	



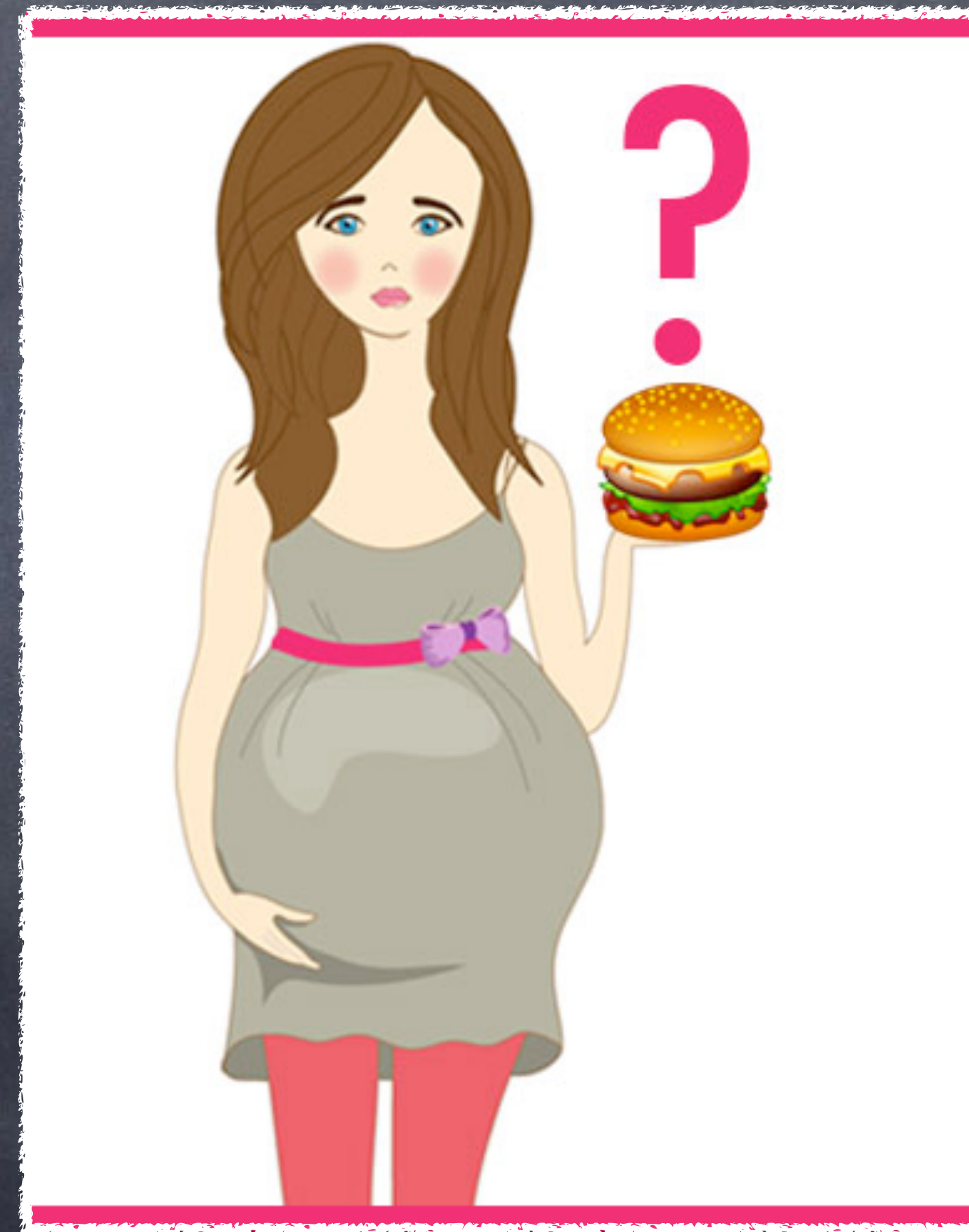
Begins before birth

- Epigenetics
- Diet of the mother affects 2 generations
 - High fat maternal diet changes fetal microbiome
- Diet of grandparents influence gene expression for disease risk, weight, stress response, mental health
- Exercise results in lighter weight babies



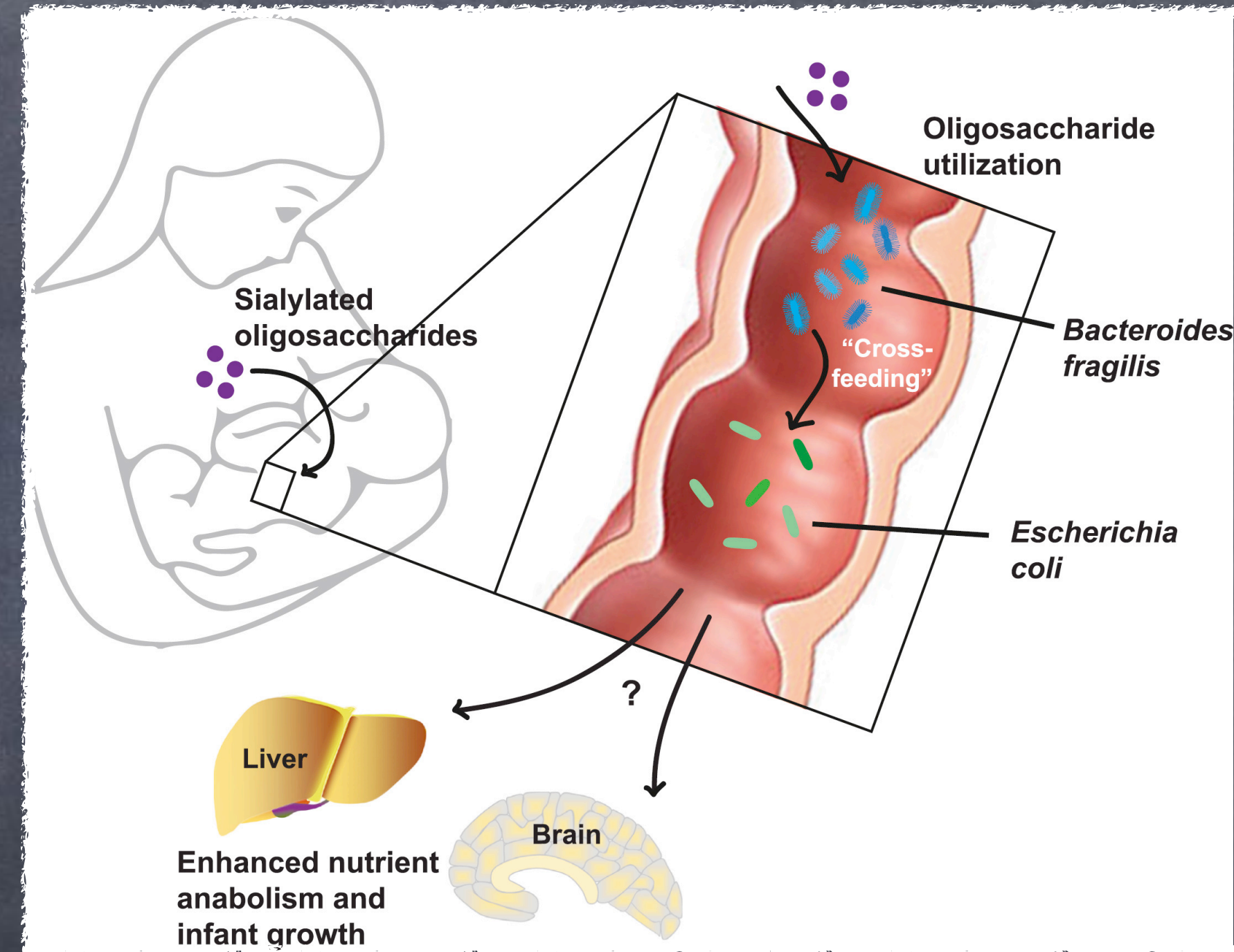
Animal products

- Higher levels during pregnancy: Associated with increased premature birth and neonatal death
- Children increased risk of overweight in women ate 1 pound AP per day. Also increased blood pressure, IGF-1, cortisol
- Single meal of AP doubles cortisol in 30 minutes, every portion $\uparrow$ 5.4% cortisol every serving greens $\downarrow$ 3.3%



Breast feeding

- Breast Feeding
 - Promotes optimal weight and protects against obesity even in mothers who are obese (Yeung et al. 2017)
 - Transfer of microbiome in breast milk, enhanced nutrient and organ composition
 - Enhanced immune function and disease resistance
 - Improved cognitive development



Optimal weight

Association between childhood weight and adult cancer with 9% increased risk for every 1 point increase in BMI

Dairy consumption linked to increased weight, BMI, early menarche and increased risk for adulthood cancers (anabolic hormones, IGF-1)

Plant based diet in children aged 2-3 resulted in increased microbiome diversity and shift away from typical western microbiome (Smith-Brown et al. 2016)

Healthy microbiome produces short chain fatty acids, improves metabolism, and nutrient utilization



Smith-Brown, P., et al. "Dairy and plant based food intakes are associated with altered faecal microbiota in 2 to 3 year old Australian children." Scientific reports 6 (2016): 32385.
Liu, Ruixin, et al. "Gut microbiome and serum metabolome alterations in obesity and after weight-loss intervention." Nature medicine 23.7 (2017): 859.
Jeffreys M, Smith GD, Martin R M, Frankel S, Gunnell D. Childhood body mass index and later cancer risk: a 50-year follow-up of the Boyd Orr study. Int J Cancer.2004;112: 348-351.

What about Dairy?

2017 study and others strong association with epidemic of acne
May be related to infant apnea, even mothers consumption increases babies casomorphin levels
Contributing factor in Type 1 diabetes including bovine insulin in infant formula (genetics+gut+dietary factors)---sharp rise in China 33%
Finnish case control trial of 690 children with Type 1 DM, risk doubled with introduction of cow milk before 2 months
Large prospective trial Diabetes Autoimmune Study in the Young concluded: cows milk may be diabetogenic when consumed throughout childhood and may impact both early and later stages of T1 D development
Breast feeding is protective



Common misconceptions

- They will be deficient in calcium and protein
- They will not get enough nutrients
- What will their friends say?
- Children don't like vegetables: Dr. Antonia Demas research: Children who prepare their own food are willing to eat their own dishes even if they contain vegetables they don't like







Thank You!