## Optimal Nutrition for Healthy Minds

Presented at the MINDD International Forum on Children May 18, 2007

by Sally Fallon, President The Weston A. Price Foundation

# Which diet will ensure healthy bodies and minds in our children, generation after generation?

**USDA Food Pyramid?** 

Atkins Diet?

Zone Diet?

Vegetarian/Vegan?

Macrobiotic?

South Beach Diet?

Juicing?

Food Combining?

Metabolic Typing?

Even Lisa is confused!

### **Great Variety in Traditional Diets**

Some had no plant foods
Some had few animal foods
Some had mostly cooked foods
Some had large amounts of raw foods
Some had milk products; some did not
Some had grains; some did not
Some had fruits; some did not

What are the underlying characteristics of these healthy diets?

### 1. No refined or denatured foods

Refined and Denatured Food Components 1930's Refined and Denatured Food Components Today

Refined Sugar
White Flour
Vegetable Oils
Canned Foods
Condensed Milk

Refined Sugar
High Fructose Corn Syrup
White Flour
Pasteurized Milk
Skim and Low Fat Milk
Hydrogenated Fats
Refined Vegetable Oils
Isolated Protein Powders
Additives

## 2. Every diet contained animal products

**FISH AND SHELLFISH:** including organs, oil, bones, heads, etc. Weston Price found the best bone structure among those eating seafood

**BIRDS**: Chicken, ducks, geese, etc., including the organs, fat and skin.

**RED MEAT**: Beef, goat, sheep, game, etc., with ORGAN MEATS and FAT preferred.

**EGGS** 

## MILK AND MILK PRODUCTS REPTILES INSECTS

### **Animal Food Nutrients**

These nutrients are found only in animal products

Vitamin A

**Vitamin D** 

Cholesterol

Vitamin B12

Very Long Chain, Superunsaturated fatty acids (AA, EPA and DHA)

These nutrients are more easily absorbed from animal products

**Calcium** 

**B6** 

Magnesium

Iron

Zinc

Copper

MINDD Forum 07

## 3. Dr. Price's Key Finding

Primitive Diets contain 4 times the calcium and other minerals, and 10 times the fat-soluble vitamins as the modern American diet.

### Sources of Vitamins A and D

Insects Fish Eggs Fish livers

Fish Liver Oil Fish and Shell Fish

**Sea Mammals** 

Liver\* Organ Meats\*

**Eggs\*** Butter and Cream\*

Fat of birds\* (ducks, geese, chickens)

Fat of monogastrics (pig\*, bear, Guinea pig)

\* From pasture-fed animals

### The Fat-Soluble Activators A and D

A question arises as to the efficiency of the human body in removing all of the minerals from the ingested foods. Extensive laboratory determinations have shown that most people cannot absorb more than half of the calcium and phosphorus from the foods eaten. The amounts utilized depend directly on the presence of other substances, particularly fat-soluble vitamins.

It is at this point probably that the greatest breakdown in our modern diet takes place, namely, in the ingestion and utilization of adequate amount of the special activating substances, including the vitamins [A and D] needed for rendering the minerals in the food available to the human system.

It is possible to starve for minerals that are abundant in the foods eaten because they cannot be utilized without an adequate quantity of the fat-soluble activators.

Weston Price, DDS Nutrition and Physical Degeneration

### **Conversion Problems**

#### **Needed to Convert Carotene to Vitamin A**

Fats in the diet Thyroid Hormone

Enzymes (as yet unknown) Vitamin E

### Conversion & storage is difficult or impossible for

Babies and children Diabetics

Individuals with poor thyroid function

Individuals with poor liver function

Individuals with poor intestinal absorption

Individuals with high intake of sodium nitrites and nitrates

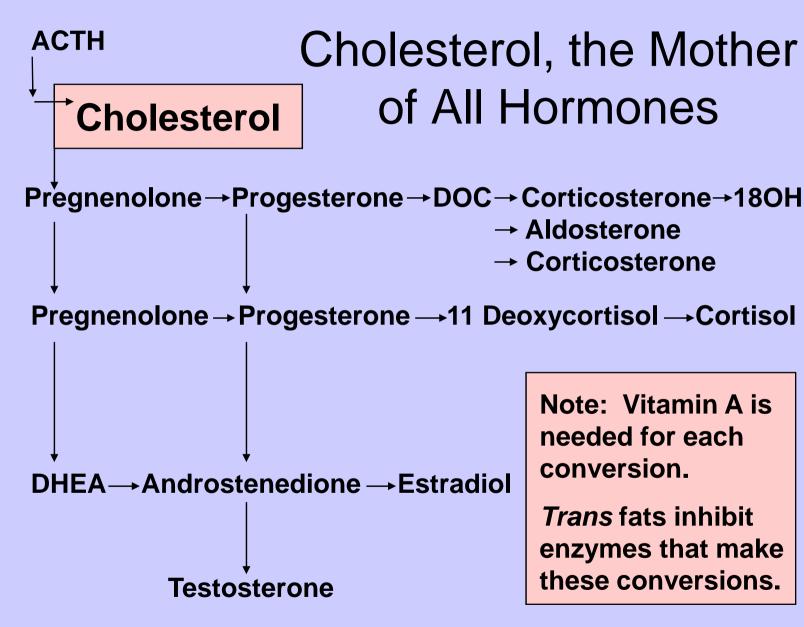
Individuals exposed to pesticides and other toxins

Individuals who consume lots of carotene

Even under optimal conditions, plant sources of carotene cannot supply sufficient vitamin A for optimum health.

### Vitamin A is Needed for

**Protein assimilation Calcium assimilation Proper growth** Prevention of birth defects **Proper function of the glands Thyroid function** Immune system function Production of stress and sex hormones Eyes, skin, bones



Note: Vitamin A is needed for each conversion.

Trans fats inhibit enzymes that make these conversions.

### Vitamin A Stores are Depleted by

Stress
Excess Dietary Protein
Cold Weather
Fever and Illness
Physical Exertion
Exposure to Toxins

### Vitamin D Myth

MYTH - To get adequate vitamin D, just expose your face and hands to sunlight for 10 minutes every day.

TRUTH - The body makes one form of vitamin D out of cholesterol by the action of UV-B sunlight on the skin. However, except in the Tropics, UV-B is available only at MID-DAY during the SUMMER months.

### Vitamin D

**FOOD SOURCES** - All healthy primitive groups, including those living in the tropics, had rich dietary sources of vitamin D, such as marine oils, shell fish, insects, lard or butterfat.

**NEEDED FOR** - Healthy bones, proper growth, mineral metabolism, muscle tone, insulin production, reproduction, immune system function; vitamin D regulation of calcium metabolism essential for healthy nervous system and cell function.

**RECEPTORS** - Vitamin D receptors found in almost every cell of the body.

#### **SYNTHETIC (VEGETARIAN) VITAMIN D2 = Toxic**

Causes softening of the hard tissues (bones) and hardening of the soft tissues (organs, arteries). Added to soy, rice, almond and oat milks.

VITAMIN A: Cod Liver Oil, Liver, Fish Eggs, and Butter and Egg Yolks from Grass-Fed Animals

Provides "marching orders" for stem cells needed for fullest expression of neurological development

Protects intestinal mucosa

Essential for mineral metabolism—zinc and iron

Required for hormone production

**VITAMIN D**: Cod Liver Oil, Lard, Fish Eggs, Shrimp, and Butter and Egg Yolks from Grass-Fed Animals

Plays a role in cognitive function

Required for healthy nervous system

Helps make important neurotransmitters that protect against depression

## Sources of Fat-Soluble Activators in the Traditional American Diet

Also:
Organ meats
such as liver,
and contained
in sausage,
scrapple,
liverwurst,
etc.

### Price Factor or Activator X

**CATALYST:** Discovered by Weston Price, a potent catalyst for vitamin and mineral absorption.

**GROWTH:** Important factor in the growth of children; has potent curative powers.

**SACRED FOODS:** Found in foods considered sacred by primitive populations--liver and other organ meats from grazing cattle; marine oils, fish eggs and shellfish; and butter from cows eating rapidly growing green grass.

**BASIS:** Green growing plants which have an unknown factor that animals transform and store in certain fatty tissues.

**PRIMITIVE DIETS:** All healthy primitive groups had a source of the Price Factor in their diets.

### Key Nutrients for Brain Development Activator X = Vitamin K2

Involved in synthesis of myelin sheath

Supports learning capacity

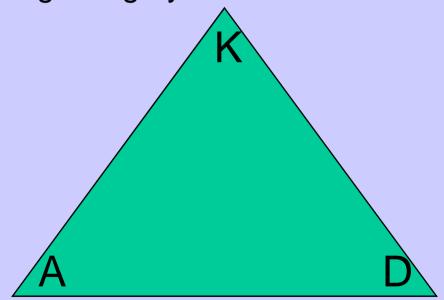
Plays important role in growth, especially in facial development

Needed for deposition of phosphorus and calcium in bones and teeth

Prevents calcification and inflammation of the arteries and other soft tissues

### The Synergy of Vitamins A, D and K

Vitamin K activates proteins after signaling by Vitamins A and D



Vitamins A and D tell cells to make certain proteins

MINDD Forum 07

### Food Sources of Vitamin K

**TESTED SOURCES** 

Natto (fermented soy)

**Goose Liver** 

Cheeses

Egg Yolk

Butter

Chicken Liver

Fatty Meats

Sauerkraut

OTHER PROBABLE SOURCES

Goose, Duck and Chicken

Fat

Crustacean "Butter"

(Hepatopancreas)

**Bone Marrow** 

Other Organ Meats

Fish Eggs

Fermented Cod Liver Oil

# High-Vitamin Cod Liver Oil and High-Vitamin Butter Oil Provides Synergistic Combination of A, D and K

Dr. Weston Price found that high-vitamin cod liver oil given with highvitamin butter oil was a very powerful combination for mineral absorption. He used this combination to treat tooth decay, bone and growth problems, arthritis and many other disease conditions.

### How Much Cod Liver Oil?

**MAINTENANCE DOSE** for adults provides **10,000 IU** vitamin A per day, from 2 tsp regular cod liver oil or 1 tsp high-vitamin CLO.

PREGNANCY AND LACTATION: 20,000 IU vitamin A per day.

**ILLNESS AND SURGERY:** Those recovering can take higher amounts - even up to **90,000 IU** per day for a short period of time.

**BABIES AND CHILDREN** should receive **5,000 IU** vitamin A per day from cod liver oil.

**BOOKS ON INFANT FEEDING:** Before 1950, recommended 2 teaspoons cod liver oil for babies 3 months and older.

**SYNERGY:** Cod liver oil works synergistically with saturated fat. The best combination is cod liver oil in a diet containing butter from grass-fed cows.

HIGH-VITAMIN BUTTER OIL: Recommended in addition to CLO for pregnant, nursing women and those with health problems.

**CHOLINE:** Liver, Egg Yolks

Essential for neurological development

Needed for making connections in the brain

When absent during critical periods or development, neurological development is permanently impaired.

Liver and egg yolks are weaning foods in almost all traditional cultures and are considered brain foods

DHA (an omega-3 fatty acid): Cod Liver Oil, Liver, Butter, Fish Eggs, Egg Yolks

Essential for neurological development

Synthetic form now being added to baby formula to make "smart" babies

**ZINC:** Red Meat, Liver, Shell Fish

The intelligence mineral

Essential for neurological function

Works synergistically with vitamin A

Depleted by oral contraceptives

When zinc is deficient, copper predominates, leading to "racing mind syndrome," characterized by racing thoughts, inability to concentrate, difficulty focusing

IODINE: Seafood, butter, seaweed

Essential for neurological function

Deficiency leads to mental retardation

CHOLESTEROL: Raw milk, animal foods

Essential for neurological development

**Essential for memory formation** 

Mother's milk (and other mammalian milk) contains a special enzyme that ensures complete assimilation of ALL the cholesterol in the milk. Pasteurization destroys this enzyme.

Soy infant formula contains NO cholesterol

**TAURINE and CARNITINE:** Amino acids found only in animal products

Important for mental function

Infants cannot make needed amounts as adults can

### Liver: No food higher in nutrients

<u> </u>				
Per 100 g	Apple	Carrots	Red Meat	Liver
Phosphorus	6 mg	31 mg	140 mg	476 mg
Iron	.1 mg	.6 mg	3.3 mg	8.8 mg
Zinc	.05 mg	.3 mg	4.4 mg	4.0 mg
Copper	.04 mg	.08 mg	.2 mg	12 mg
Vitamin B2	.02 mg	.05 mg	.2 mg	4.2 mg
Vitamin A	0	0	40 IU	53,400 IU
Vitamin C	7 mg	6 mg	0	27 mg
Vitamin B6	.03 mg	.1 mg	.07 mg	.73 mg
Vitamin B12	0	0	1.84 mg	111.3 mg

Eat liver fried, grilled, with bacon, in sausage, pate and liverwurst.

### Calcium

PRIMITIVE DIETS: At least 1500 mg per day

US GOV'T RECOMMENDATION: 800-1200 mg per day

#### 1500 Mg Calcium is in:

- 5 Cups Whole Milk = 805 calories
- 7-8 Ounces Cheese = 900 calories
- 40 Carrots = 1680 calories
  - 9 Cups Ice Cream = 2517 calories
- 32 Chocolate Cupcakes = 4117 calories
- 4.5 Cups Almonds = 4077 calories
- 78 Slices Whole Wheat Bread = 4305 calories

# Rat Studies of Dr. Ernest Scott and Professor Lowell Erf, Ohio State University, 1931

Whole Raw Milk	Good growth; sleek coat; clear eyes; excellent dispositions; enjoyed being petted.
Whole Pasteurized Milk	Rough coat; slow growth; eyes lacked luster; anemia; loss of vitality and weight; very irritable, often showing a tendency to bite when handled.

### Guinea Pig Studies of Dr. Rosalind Wulzen and Alice Bahrs, Department of Zoology, Oregon State College 1941

Whole Raw Milk	Excellent growth; no abnormalities
Whole Pasteurized Milk	Poor growth; muscle stiffness; emaciation and weakness; death within one year. Autopsy revealed atrophied muscles streaked with calcification; tricalcium deposits under skin, in joints, heart and other organs.

American Journal of Physiology 1941, 133, 500

### Foods to Avoid

SOY FOODS: Block zinc; no cholesterol; endocrine disruption; manganese overload

MSG: Interferes with neurological function; may cause permanent damage of the hypothalamus

**EXTRUDED BREAKFAST CEREALS: Contain neuro-toxins** 

COMMERCIAL FRUIT JUICES: Loaded with Cholinesterase Inhibitors

TRANS FATS: Interfere with neurological development of the Infant; inhibit hormone production

PROCESSED FOODS: Garbage!

### Avoid Low Blood Sugar!

You can't think when your blood sugar is low!

Associated with hyperactivity, violence, inability to concentrate

Fats slow down the rush of sugar to the blood

ALWAYS eat plentiful fats with and adequate protein with every meal.

### Foods for Gut Health

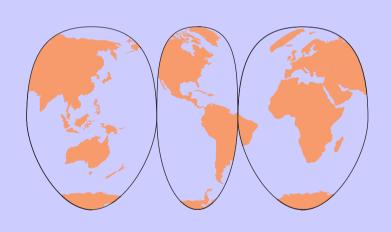
RAW MILK: Puts no strain on digestion, digests itself! Can be extremely useful in treating autism.

RICH BONE BROTHS: Magical healing to the gut

LACTO-FERMENTED FOODS AND BEVERAGES: Provide good bacteria, lactic acid, enzymes for digestion

PROPERLY PREPARED WHOLE GRAINS: Grains much be soaked or sour leavened first or they will cause problems; no grains of any sort before at least one year.

# Resources The Weston A. Price Foundation www.westonaprice.org



Quarterly Magazine
Informational Brochures
Yearly Shopping Guide
Annual Conference

**Local Chapters** 

### Summary

## Traditional diets *maximized* nutrients while modern diets *minimize* nutrients

#### TRADITIONAL DIETS

Foods from fertile soil

Organ meats over muscle meats

Animal fats

Animals on pasture

Dairy products raw and/or fermented

Grains and legumes soaked/fermented

Bone broths

Unrefined sweeteners (honey, maple syrup)

Lacto-fermented vegetables

Lacto-fermented beverages

Unrefined salt

Natural vitamins in foods

**Traditional Cooking** 

Traditional seeds/Open pollination

#### MODERN DIETS

Foods from depleted soil

Muscle meats, few organs

Vegetable oils

Animals in confinement

Dairy products pasteurized

Grains refined, extruded

MSG, artificial flavorings

Refined sweeteners

Canned vegetables

Modern soft drinks

Refined salt

Synthetic vitamins added

Microwave, Irradiation

Hybrid seeds, GMO seeds