TOP NUTRITION MYTHS

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MYTH #1: Dietary Cholesterol is Harmful

- **Scientific Report of the 2015 Dietary Guidelines Advisory Committee**: "Previously, the Dietary Guidelines for Americans recommended that cholesterol intake be limited to no more than 300 mg/day. The 2015 DGAC will not bring forward this recommendation because available evidence shows no appreciable relationship between consumption of dietary cholesterol and serum (blood) cholesterol, consistent with the AHA/ACC (American Heart Association / American College of Cardiology) report. **Cholesterol is not a nutrient of concern for overconsumption.**"
Dr. Nikolai Anchikov showed that feeding rabbits large amounts of cholesterol stimulated plaque build up in the arteries of the rabbits.
Rabbit Studies

• Rabbits are hindgut fermenting herbivores (vegan)
• Plant foods do not contain cholesterol
MYTH #2: Saturated Fat Causes heart Disease

Comment by Dr. Darius Mozaffarian, M.D. of Harvard School of Medicine in Journal of American Dietetic Association

“Although the paradigm that saturated fat is a major cause of CHD has become entrenched in the public and scientific consciousness over decades, modern nutritional evidence does not support a major effect of saturated fat on heart disease.”
The recommendation to limit dietary saturated fatty acid (SFA) intake has persisted despite mounting evidence to the contrary. Most recent meta-analyses of randomized trials and observational studies found no beneficial effects of reducing SFA intake on cardiovascular disease (CVD) and total mortality, and instead found protective effects against stroke. Although SFAs increase low-density lipoprotein (LDL) cholesterol, in most individuals, this is not due to increasing levels of small, dense LDL particles, but rather larger LDL particles, which are much less strongly related to CVD risk. It is also apparent that the health effects of foods cannot be predicted by their content in any nutrient group without considering the overall macronutrient distribution. Whole-fat dairy, unprocessed meat, and dark chocolate are SFA-rich foods with a complex matrix that are not associated with increased risk of CVD. The totality of available evidence does not support further limiting the intake of such foods.
Types of Dietary Fat

- **Polyunsaturated Fat**
  - omega 3 fat (fatty fish)
  - omega 6 fat ("vegetable oils")
- **Monounsaturated Fat**
  - omega 9 fat (olive, avocado, nuts)
- **Saturated Fat**
- **Trans (Transformed) Fat**
Polyunsaturated Omega 6 oils

- Cottonseed oil
- Soybean oil
- Corn oil
- Sesame seed oil
- Safflower oil
- Grapeseed oil
- Sunflower seed oil
- Rice bran oil

*Heat, light, and oxygen damage these fats*
Fact: Polyunsaturated Fats Lower Serum Cholesterol, but...

• Dietary polyunsaturated fatty acids and composition of human aortic plaques
  • C V Felton¹, D Crook, M J Davies, M F Oliver

• How long-term dietary intake of essential fatty acids affects the fatty-acid content of aortic plaques is not clear. We compared the fatty-acid composition of aortic plaques with that of post-mortem serum and adipose tissue, in which essential fatty-acid content reflects dietary intake. Positive associations were found between serum and plaque omega 6 (r = 0.75) and omega 3 (r = 0.93) polyunsaturated fatty acids, and monounsaturates (r = 0.70), and also between adipose tissue and plaque omega 6 polyunsaturated fatty acids (r = 0.89). No associations were found with saturated fatty acids. These findings imply a direct influence of dietary polyunsaturated fatty acids on aortic plaque formation and suggest that current trends favoring increased intake of polyunsaturated fatty acids should be reconsidered.
MYTH #3: Calcium Is The Most Important Thing To Build Strong Bones

- Exercise is by far the most important thing to build strong bones. (Wolff’s Law)
- Numerous minerals makeup bone: calcium, phosphorus, magnesium, boron, sodium, chloride, strontium, etc.
- Vitamin’s D and K2 regulate mineral uptake in bone
Wolff’s Law

- Dr. Julius Wolff (1836-1902)
- Bones will adapt according to the load placed on them
Among subjects supplemented with calcium citrate malate and vitamin D, a 20% higher mean protein intake was associated with favorable changes in total-body BMD.

In conclusion, we identified a positive association between dietary protein intake and change in total-body and femoral neck BMD in healthy older men and women supplemented with calcium citrate malate and vitamin D.
Bantu
How To Build Strong Bones

• Exercise, especially weight bearing
• Adequate protein- ~50% of bone is protein (bone matrix)
• Adequate Vitamin D- get tested, ideal levels will be ~50ng/mL. Obtain through sunlight or supplementation (cod liver oil or Vitamin D3)
• Vitamin K2- produced through bacterial fermentation in our guts and in the process of cheese making and a soy based product called natto. Edam and Gouda are rich sources. K1 is in leafy greens. Be careful supplementing if on blood thinners. Supplementing 200mcg/day.
• Magnesium- 80% of population deficient. Influences osteoblasts and osteoclasts, parathyroid hormone and active form of vitamin D (calcitriol). Strive for 1:1 ratio of magnesium to calcium.
• Factors that inhibit calcium absorption include fiber (insoluble?), oxalic acid, phytates, alcohol, refined carbohydrates
Structure

Building Frame

Bone frame
MYTH #4: Red Meat Causes Cancer

- October 2015, The World Health Organization classified red meat as a class 2a(probable) carcinogen.
- Conclusion from 300 nutrition studies reviewed by advisory board.
- Conclusion from one study stated, “Collinearity between red meat intake and other dietary factors (e.g. Western lifestyle, high intake of refined sugars and alcohol, low intake of fruits, vegetables and fibre) and behavioural factors (e.g. low physical activity, high smoking prevalence, high body mass index) limit the ability to analytically isolate the independent effects of red meat consumption”.
- Numerous studies show Americans with a high intake of red meat also do not exercise regularly, are more likely to smoke and drink, be overweight, eat less fruits and vegetables, and have poor sleep habits.
- Most Americans eat red meat on a white bun with french fries and a soft drink.
- High iron intake and over cooking could be a problem.
Myth #5: Artificial Sweeteners are Sugar Free
### Nutrition Facts

- **Serving Size:** 1 packet (1g)
- **Servings per Carton:** 200

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Amount Per Serving</th>
<th>% Daily Value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total Fat</td>
<td>0g</td>
<td>0%</td>
</tr>
<tr>
<td>Sodium</td>
<td>0mg</td>
<td>0%</td>
</tr>
<tr>
<td>Total Carb.</td>
<td>less than 1g</td>
<td>0%</td>
</tr>
<tr>
<td>Sugars</td>
<td>less than 1g</td>
<td></td>
</tr>
<tr>
<td>Protein</td>
<td>0g</td>
<td></td>
</tr>
</tbody>
</table>

*Percent Daily Values are based on a 2,000 calorie diet.

Ingredients: Dextrose with Maltodextrin, Aspartame, Phenylketonurics: Contains Phenylalanine

One packet contains less than 1 gram of carbohydrate SWEET AS 2 TSP. SUGAR
SWEET’N LOW®

ZERO CALORIE SWEETENER
A blend of nutritive and non-nutritive sweeteners

INGREDIENTS: Nutritive Dextrose, 3.6% Soluble Saccharin (36 mg per packet), Cream of Tartar, Calcium Silicate (an anti-caking agent).

Nutrition Facts: Serv. Size: 1 packet, Servings: 1, Amount Per Serving: Calories 0, Total Fat 0g (0% DV), Sat. Fat 0g (0% DV), Trans Fat 0g, Sodium 0mg (0% DV), Total Carb. Less than 1g (0% DV), Sugars Less than 1g, Protein 0g. Percent Daily Values (DV) are based on a 2,000 calorie diet.

Information: 1 packet contains the sweetness of 2 teaspoons of sugar.

Go to sweetnlow.com for great recipe ideas and premium offers.
Necta Sweet

INGREDIENTS: Sodium Bicarbonate, Sodium Saccharin, Silicon Dioxide, Povidone, Modified Cellulose Gum.
STEVIA IN THE RAW® IS A PRODUCT OF CUMBERLAND PACKING CORP.  
2 CUMBERLAND ST., BROOKLYN, NY 11205 USA

Nutrition Facts
Serving Size 1 Packet (1g)  
Servings Per Container 200

Amount Per Serving
Calories 0

% Daily Value
Total Fat 0g 0%
  Saturated Fat 0g 0%
  Trans Fat 0g
Sodium 0mg 0%
Total Carbohydrate Less than 1g 0%
  Sugars Less than 1g
Protein 0g

Not a significant source of calories from fat, cholesterol, dietary fiber, vitamin A, vitamin C, calcium and iron.

*Percent Daily Values are based on a 2,000 calorie diet.

INGREDIENTS: Dextrose, Stevia Leaf Extract

Stevia is naturally sweeter than sugar. So, like many zero calorie sweeteners, it is blended with dextrose, a natural ingredient. This helps create the perfect balance of sweetness, making it easier to both pour and measure.

SUITABLE FOR PEOPLE WITH DIABETES.

Each packet contains less than 4 calories per serving which the FDA considers dietetically zero.
Truvia™ sweetener comes from nature:
Rebiana comes from the sweet leaf of the stevia plant, native to South America. Dried stevia leaves are steeped in water, similar to making tea. This unlocks the best tasting part of the leaf which is then purified to provide a calorie-free sweet taste.

Natural flavors complement the clean sweet taste of Truvia™ natural sweetener.

Erythritol is a natural sweetener, produced by a natural process, and is also found in fruits like grapes and pears.

Nutrition Facts

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<tr>
<td>Total Carbohydrates 3g</td>
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<tr>
<td>Erythritol 3g</td>
<td>0%</td>
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<tr>
<td>Protein 0g</td>
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</table>

Not a significant source of calories from fat, saturated fat, trans fat, cholesterol, dietary fiber, sugars, vitamin A, vitamin C, calcium and iron.

*Percent Daily Values are based on a 2,000 calorie diet.
Myth # 5: Eat Small Frequent Meals to Lose Weight

• Most often cited study to back up claim is a 1989 study in New England Journal of Medicine.
• Study compared eating 3 times/day to 17 times/day
• Conclusion showed those eating 17 meals/day had slightly lower insulin levels but no other statistical differences
• Calories and hormonal effects of food are most important variables in determining weight
• Small frequent meals can be helpful to those with adrenal issues or hypoglycemia
Myth #6: Low ____ Foods are Healthier Than Their Regular Counterparts

• Fat, salt (sodium), sugar are the 3 primary flavor enhancers in food
• Remove or reduce one and one of the others if not both gets added
• Th introduction of these foods began in the mid 1980’s prior to the explosion of obesity and type 2 diabetes
Myth # 7: Plant foods are Harmless

• Most plants contain compounds (anti-nutrients) that can have a negative impact on the health of that which consumes it

• Compounds include lectins, enzyme inhibitors, phytates, oxalates, goitrogens, tannins, etc.

• Grains, beans, and peas are most problematic foods

• Cooking, fermenting, sprouting, and soaking reduce these anti-nutrients

• People with digestive issues or autoimmune diseases are most susceptible
Is There Such a Thing as “Anti-Nutrients”? A Narrative Review of Perceived Problematic Plant Compounds

Weston Petroski and Deanna M. Minich

<table>
<thead>
<tr>
<th>‘Anti-nutrient’</th>
<th>Food Sources</th>
<th>Suggested Clinical Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lectins</td>
<td>Legumes, cereal grains, seeds, nuts, fruits, vegetables</td>
<td>Altered gut function; inflammation</td>
</tr>
<tr>
<td>Oxalates</td>
<td>Spinach, Swiss chard, sorrel, beet greens, beet root, rhubarb, nuts, legumes, cereal grains, sweet potatoes, potatoes</td>
<td>May inhibit calcium absorption; May increase calcium kidney stone formation</td>
</tr>
<tr>
<td>Phytate (IP6)</td>
<td>Legumes, cereal grains, pseudocereals (amaranth, quinoa, millet), nuts, seeds</td>
<td>May inhibit absorption of iron, zinc and calcium; Acts as an antioxidant; Antineoplastic effects</td>
</tr>
<tr>
<td>Goitrogens</td>
<td><em>Brassica</em> vegetables (kale, Brussels sprouts, cabbage, turnip greens, Chinese cabbage, broccoli), millet, cassava</td>
<td>Hypothyroidism and/or goiter; Inhibit iodine uptake</td>
</tr>
<tr>
<td>Phytoestrogens</td>
<td>Soy and soy products, flaxseeds, nuts (negligible amounts), fruits and vegetables (negligible amounts)</td>
<td>Endocrine disruption; Increased risk of estrogen-sensitive cancers</td>
</tr>
<tr>
<td>Tannins</td>
<td>Tea, cocoa, grapes, berries, apples, stone fruits, nuts, beans, whole grains</td>
<td>Inhibit iron absorption; Negatively impact iron stores</td>
</tr>
</tbody>
</table>
Between July 1976 and February 1989, 50 incidents of suspected red kidney bean poisoning were reported in the UK. Nine incidents in which nausea, vomiting and diarrhea developed within 1-7 h of ingestion, were confirmed by the detection of haemagglutinin in the beans. The diagnosis was made on a further 23 incidents on the basis of symptoms, incubation time and the description of preparation of beans prior to consumption. The haemagglutinin (lectin), which occurs naturally in the red kidney bean, is inactivated by thorough cooking of well soaked beans. In many of the outbreaks reported the implicated beans were consumed raw or following an inadequate heat process.
Myth #8: Acid reflux is caused by too much acid

- Acid reflux is primarily caused by a faulty LES (lower esophageal sphincter)
- Intra-abdominal pressure can create pressure on stomach forcing LES to not close properly
- Low stomach acid can cause food to sit in stomach too long combined with an overgrowth of bacteria can lead to fermentation
- Overgrowth of bacteria too far up the GI tract
Myth #9: The USDA’s Food Guide Pyramid Was Created To Promote Good Health

- Luise Light RD., was asked by the USDA to create a new healthy eating plan to replace the Four Basic Food Groups in the late 1970’s.
- Her original pyramid had fruits and vegetables as the base (5-9 servings), with grains and sugars at the top (2-3 servings).
- She has stated that her original pyramid was changed to curb the cost of the food stamp program. *(Also the USDA has to try and please too many people)*
- The Food Guide Pyramid was released in 1992.
- As Luise predicted obesity and diabetes rates have skyrocketed since its inception.
Book by Luise Light

what to eat

The Ten Things You Really Need to Know to Eat Well and Be Healthy!

Luise Light, M.S., Ed.D.